

DR. JAMES E.
MCDONALD'S
FIGHT FOR
UFO SCIENCE



Firestorm



Foreword by
Dr. Jacques Vallée

Ann Druffel

We often hear "why don't scientists of renown take UFOs seriously?" Atmospheric physicist James E. McDonald was just such a scientist — and he did take UFOs seriously. And now for the first time we learn the inside story of his struggles, failures and triumphs in this stirring biography, deftly researched and superbly written by well-respected researcher Ann Druffel on the basis of complete access to his private files. Whether the reader be a skeptic, an enthusiast, or simply curious, Druffel's riveting account of McDonald's challenge to the government and scientific communities is a significant chapter in the UFO debate that must not be missed!

— Hal Puthoff, Ph.D.,
Director, Institute for Advanced Studies at Austin

As a scientist who knew and greatly admired Jim McDonald and who has praised his outstanding ufological activities in hundreds of college lectures around the world, I read this book with great interest and enthusiasm. Ann Druffel really did her homework going through an enormous quantity of material. Jim was the epitome of persistence, courage, comprehensiveness, and genius. His much too early death deprived his family and the world of an outstanding contributor not only to atmospheric physics, ufology, and the use of science for the benefit of mankind. He was unselfish in his cooperation with others and was an inspiration to those of us younger than he was. Ann has done a splendid job of documenting his interactions with other much less courageous scientists such as J. Allen Hynek. I was particularly impressed with the treatment of his suicide about which there have been many false speculations. One can only wonder what Jim would have thought about all the revelations of the government cover-up that have been provided by documents obtained under Freedom of Information and from various archives. The book is very well referenced. I would give it 5 stars. A must read.

—Stanton T. Friedman, nuclear physicist,
author of *UFOs, The Real Story, Top Secret/Majic*

Firestorm is an intensely compelling account of the efforts of one man to create a climate where unorthodox thinking could safely flourish. Ann Druffel deserves high marks for pulling together a vast mass of hitherto disconnected information about McDonald's fight for an unbiased look at a taboo topic. She interviewed family, friends and colleagues and sifted thru his private journals and other personal papers to recreate in page-turning detail a little-known period in American ufological history. It's a bravura performance; don't just buy a copy, lobby your library to do likewise.

—*UFO Magazine*

...especially interesting reading, ...truly an outstanding job.... *Firestorm* is a fascinating look into the mind, thoughts and actions of atmospheric physics professor James McDonald as he excelled at science while simultaneously becoming the outstanding leader within the field of U.S. ufology before his tragic demise in 1971. The field of ufology owes a great debt to Ann for her diligence and persistence in gathering together the whole story of McDonald's combined UFO and science careers, and presenting it so interestingly. The book is also a repository for in-depth descriptions of many of the classic UFO events of the 1950s and 60s.

— Dr. James Deardorff, retired atmospheric scientist,
Oregon State University

A riveting read! The book is great and shows how McDonald in the last analysis was brought down by his unflinching belief in the honesty of others which reflected that of his own. Based upon personal journals, lectures and inputs from friends and opponents, Druffel provides readers with a masterful biographical legacy of McDonald's brilliant contributions to science and his focused yet futile attempts to obtain scientific recognition of the UFO phenomenon in the face of dogmatism and government opposition. A job well done.

—Raymond Fowler, author of *The Watchers* series,
The Allagash Abductions

During a 1966 TV program on NBC-TV, NYC, with Betty and Barney Hill, Dr. Carl Sagan, et al., I perceived Dr. Jim McDonald as intellectually brilliant, buoyant, and verbally blunt in his comments to those of us who lacked his courage to confront the "establishment" about UFO reports. Ann Druffel not only has defined the man, but she also has described, in detail, his mission. Perhaps future historians can use her monumental book to assess Dr. McDonald's work—and life—as a megastep for the scientific investigation of the extraterrestrial presence.

— Dr. R. Leo Sprinkle, pioneer UFO researcher,
psychologist, and author of *Soul Samples*

This book offers a treasure trove of information about one of the most fascinating periods in UFO history and one of its leading figures, Dr. James E. McDonald. Thoroughly researched and heavily documented.... Ultimately it is a sad and tragic story. However, for those of us who lived it, the time was exciting and McDonald was a knight in shining armor.

—Richard H. Hall, CUFOS, former member of NICAP

Firestorm

**Dr. James E. McDonald's
Fight For UFO Science**

Ann Druffel

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This book is dedicated by Ann and Charles Druffel
to their daughter, Charlotte Bridget Bressler.

*The night started at sea and the fire brought crowding,
They say that her beauty was like music and love...
Like a gong that has rung, or a wonder told shyly,
And oh! she was the Sunday in every week.*

—From an English translation of the Irish Gaelic ballad,
“AR EIRINN NI NEOSFAINN CÉ HÍ”

Acknowledgments

This book has brought joy to me. The idea for it came as I archived Dr. James E. McDonald's voluminous UFO files, which his family had carefully guarded in their Tucson home. The work was accomplished under a grant from the *Fund for UFO Research*, and as they were deposited in the Personal Collections section of the University of Arizona Library, Tucson, the idea of writing a biographical account of McDonald's study of the UFO question occurred to me, spurred on by a deep sense of McDonald's influence on my own research life.

McDonald's early death indescribably affected his family, his academic colleagues and his numerous friends. To us in the UFO field, it was so unexpected and tragic that many of us could not get over our grief. The field seemed abruptly cut in half, never to mend. While working on this book, though, I sensed the grief might end. This has indeed occurred, at least for me, for Jim McDonald is now shared with the world—the man his academic colleagues knew and loved, the scientist who interacted with the UFO field during those magical years. Jim McDonald lives on in the transcendental realm but also lives now in written history, incomplete though it may be.

I thank Betsy McDonald for her constant help and encouragement in the archiving of the files, for numerous interviews and for helping to transcribe four handwritten journals McDonald left behind. Thanks to my editor, Brian Crissey, and to my agent John White, whose tenacity brought about the publication. Thank you, Dr. Jacques Vallée, for writing the "Foreword" and for contributing information which serves as balance to certain controversies in UFO research history. Thank you, all of McDonald's academic colleagues at the Institute of Atmospheric Physics and various Departments of the University of Arizona at Tucson who granted me interviews or otherwise helped with documentation: Drs. Paul E. Damon, Benjamin Herman, *Philip Krider*, Richard Kassander, Paul S. Martin, *Al Mead*, William Sellers, Dean Staley, Cornelius "Corny" Steelink, *Raymond M. Turner*. Thanks to his colleagues in other university and government settings who kindly gave interviews: Professor *Charles B. Moore*, Margaret Sanderson-Rae, James Hughes, *Ethel Carpenter*. I thank our colleagues in the UFO research field: *Drs. Eugene Epstein, Eric Kelson, Mark Rodeghier, Dave Saunders, Bert E. Schwarz, Robert M. Wood*, and to Ted Bloecher, *David Branch, Paul Duich, George Earley, Idabel Epperson, Marilyn Epperson, Richard H. Hall, Rex E. Hefflin, Henk Hinfelaar, Brenda Hinfelaar, Gordon Lore, Marty Lore, Bill Moore, Paul Norman, Roy*

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Thank you, my writing buddies, for your constant help: Dorothy Shapiro, Alice Nordstrom, Helevi Nordstrom, Elton Boyer, Dr. Louise Ludwig. And a special thanks to my sweet husband, Charles K. Druffel, a true UFO skeptic who recognized in Jim McDonald a genuine manifestation of the reality of the UFO phenomenon and who, a few months before his own passage into the transcendental realm, accomplished a final edit, with his own red pencil, of the voluminous manuscript. Thank you all, and joyful reading.

Author's Note

Each chapter of this book is preceded by a few lines of Irish folk song lyrics. Dr. James E. McDonald was deprived of his Irish heritage, due to circumstances beyond his control and never experienced "the joy of being Irish." In spite of this, he was like the Irish in temperament—humorous, persevering, fearless, deeply concerned for other human beings. Like most people with Irish backgrounds he had a darker side, that which Oscar Wilde calls "the brooding Gael"—a melancholy musing which surfaced at times. Many Irish balance their two-sided natures with faith and facile emotions; McDonald could not do either, for reasons that will be made clear. It is hoped that the Irish lyrics at the beginning of each chapter will bring a measure of comfort to those who loved him. McDonald was more than a brilliant scientist; he also had a poetic side. He read voraciously from world literature in all its forms and collected lists of his favorite passages. Selections from these quotes also precede each chapter, so that the reader can sense the heart of the man and contemplate what might have been.

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Foreword

by Dr. Jacques Vallée

"You've betrayed your responsibility to science, Allen," said the tall, intense man with black hair, pounding the astronomer's desk. "You should have spoken out years ago!"

The contrast between the two adversaries was striking. Seated behind the desk was an older man with a goatee speckled with silver hair. His eyes narrowed as he registered the insult.

"You just don't understand the situation, do you, Jim?" He replied, managing to hide his emotions by drawing several puffs of blue smoke from his pipe. "Where were you when I tried to get support from the academic community?"

The conflict between these two men, J. Allen Hynek and James McDonald, illustrates a great lesson about the potential of science to explore the unknown and its relevance to the modern world. The book you are about to read tells their story and draws that lesson.

Time and again in scientific history, new phenomena come to the attention of researchers or old phenomena suddenly appear in a new light. The resulting increase in knowledge gives us new hope, because it brings a realization that intellectual progress continues to be made, and that greater understanding of nature is always possible. At times, however, all that new knowledge also brings new concerns: If the phenomena do not fit well within the accepted framework, people raise strong doubts about the nature of the discoveries and their relevance. Society has a great deal of resistance to change; it may even reject the reported new facts on philosophical, religious or political grounds.

Over the last fifty years we have witnessed the emergence of such a new phenomenon — or was it an old phenomenon seen in a new light? It aroused public passion and created an immediate controversy within the technical community. That controversy centered on unusual flying objects. It continues to this day. And Dr. James McDonald, who was the most vocal champi-

on for their physical reality, embodied every facet of the challenge they posed to the scientific establishment.

Pilots and military personnel began reporting UFOs during World War Two. The sightings reached such peaks between 1947 and 1952 that official commissions were hurriedly put into place and forceful attempts were made to explain the observations in terms of natural effects or manufactured objects.

By the early '60s a few scientists had become involved in analyzing the cases, but the descriptions were so strange, the objects so elusive, and the political implications so troubling that academics rejected the notion that science would ever be advanced by a full-scale effort to research UFOs. A few hardened skeptics, led by Donald Menzel and later Carl Sagan, militantly fought any attempt to place the best cases under the scrutiny of analysis. Without embracing such an extreme position, most researchers rested comfortably in the knowledge that the U.S. Air Force had an ongoing study group, known as Project Blue Book, which kept watch over the reports. They went on with their own business.

The heated exchange I described above took place at Dearborn Observatory on the Northwestern University campus, just North of Chicago. I was a witness to that explosive argument. I had met Dr. J. Allen Hynek in 1963, at a time when he had already served for many years as the top scientific consultant to Blue Book. He was a patient and contemplative astronomer who did not want to rock the boat. When UFO sightings became so numerous and so well documented that classical explanations failed regularly, he could have blown the whistle, as I often urged him to do, on the complacency of the military establishment, but he feared isolation and believed that he would have been ostracized and ridiculed by more senior voices in science if he did so. Better to stay quiet and at least preserve the data, he argued, until people were ready to hear what he had to say.

Dr. James E. McDonald is the subject of this book. He was the man who burst on the scene at that point, demanding action, digging into the cases with great energy, exposing the false explanations. He was an atmospheric physicist from the University of Arizona with a formidable reputation as an independent thinker, an expert on weather modification who had successfully fought the military on the implementation of missile bases, a first-class researcher and teacher. His stormy, passionate life and his fight with the more conservative segments of the scientific community have never been described in full detail and an account of his involvement with the UFO problem is long overdue. It illuminates some of the unsavory aspects of scientific life, at a time when the American public is beginning to question the ethics of many academic pursuits and their relevance to their own life.

As a young computer scientist at Northwestern University with a long-term interest in the UFO problem who was privileged to know both of these men, I

tried to moderate their debate. Unfortunately their conflict ran far deeper than my ability to bring about a lasting reconciliation. It left me with a feeling that an opportunity had been missed, and with a painful lack of closure. Therefore I am grateful to Ann Druffel, a careful and knowledgeable researcher, for her marvelous reconstruction of the world of Jim McDonald, his epic fights with the skeptics, his repeated efforts to bring his data before the Air Force, NASA and his complacent colleagues, and his occasional brushes with the more fanatical, irrational believers. She describes his private anguish and his public energy, his heroic attempts to shake his peers into action. She deals poignantly with his eventual failure.

At a time when a few gutsy sociologists are becoming interested in documenting the human aspects of science, its controversies and its conflicts, and the personal motivations that shape it, the tragic life of Jim McDonald is a precious source of data. It is highly relevant to our time in other ways as well.

Some 30 years after the events recounted so well and so vividly in this book, the scientific community is once again challenged by the continuing presence of unidentified phenomena in a sky newly crowded with the devices of modern technology. The issues are as vexing as ever, but the attitudes of the scientific world have not changed very much from the shameful denial and the closed-mindedness of an earlier period. The skeptics are not the only ones to blame for the lack of good research: Some of the more ardent believers in extraterrestrial visitors are also busy rewriting the history of the field to serve their own biases. Wild rumors about the early, formative years of the phenomenon, the decisions of the government and the reactions of science are being manufactured and circulated every day. In all this confusion, Ann Druffel's work rises above the noise to remind the reader of the stark reality of the scientific and political context. It forces us to reassess much of what we have learned over the last two decades. It reminds us of the opportunities that have been lost.

Did James McDonald underestimate the subtlety and the complexity of the UFO phenomenon? Was Allen Hynek right to warn him that his blunt, forceful approach would lead nowhere? Would an alliance between these two men have produced, as I once hoped, the germ of a unique scientific breakthrough? We may never know the full answers to these questions, but Ann Druffel, who patiently tracked down and interviewed many of those who witnessed this drama, pushes us closer to the answer by bringing the protagonists back to life for us in these pages. As I read her book I felt I was sitting with them again, listening to their heated arguments.

The lesson Jim McDonald taught us is an important one, and it should not be forgotten: Science is made up of mysteries and of challenges that require more than good work. They demand energy, integrity, focus. They are to be

tackled tirelessly. Some of these challenges touch on the extreme borders of our comprehension. They mock our efforts to force them into the rational framework of today.

From the moment when their confrontation began at Dearborn Observatory, Hynek and McDonald certainly had diverging views about the appropriate policies to deal with UFOs, but they did agree on one thing at least: They shared in the certainty that one day science would take notice, and that its very fabric would be altered irreversibly when it began to understand the UFO phenomenon with all its implications.

Another one of Ann Druffel's discoveries came as a special source of fascination to me: She found out that Jim McDonald had kept a diary or, more precisely, a series of four journals.

Over months that stretched into two years, she carefully transcribed this text, edited it, and selected the salient parts for us. As a source of information about one of the major mysteries of our time it is remarkable. It also shows how a great scientist tackles a new problem. I had kept a journal myself during that period, and it is with special trepidation that I compared Jim's entries with those I had made. Ann was kind enough to allow me access to the transcribed text, which I perused in her study in Los Angeles, sitting at the keyboard of her Macintosh computer. Jim's descriptions of shared events often dovetailed with mine, and our impressions of other people correlated well, even when our opinions differed about what should be done. I found it a sobering experience to read his reactions to these moments, revealed at last through his own words.

James McDonald's diary makes it clear that he ran into precisely the kind of doctrinaire skepticism about which Allen Hynek had warned him many years before. Perhaps it is to his credit that he still went ahead with his crusade. But his tragic end contains a warning: *The notion of academic purity is nothing but a charming myth.* We must deal with a scientific establishment that is extremely reluctant to take stock of new, disturbing phenomena, just as the Church of the Middle Ages refused to consider that the Earth might be revolving around the sun. The learned clerics would not even look through the telescope. Contemporary academics do not behave much better: They refused to study the UFO cases selected by McDonald, just as they rejected Hynek's pleas to let him publish his best data in their official journals. A world where people like Allen Hynek are ignored, a world where someone of the caliber of James McDonald is left to die alone and misunderstood, is a world crying out for drastic reform of its intellectual institutions. The issue goes far beyond the question of knowing whether or not there are unidentified flying objects, and where they may originate. What is at stake here is our own spirit, and the uncertain future of human intelligence.

The Man Who Was Afraid of Nothing

*Slowly, slowly walk the path, and you might never stumble or fall,
Slowly, slowly walk the path, and you might never fall in love at all...*

—“Golden”

*One nourishes the tree of science without knowing which branch
will bear the apple.*

—R. H. Ellis

Prepare for an adventure into the unknown. Between 1966 and 1971 a scientist of impeccable credentials and international reputation dared to openly study one of the major riddles of our age—unidentified flying objects (UFOs).¹ Dr. James E. McDonald was an atmospheric physicist, whose many brilliant accomplishments in the field of cloud physics and weather modification were greatly respected by his colleagues. Braving criticism, he forged ahead for five incredible years, studying UFOs, which he considered a scientific question worthy of serious attention. With his high-level contacts in government, the military services, and in the scientific establishment, he seemed on the verge of unlocking much of the mystery which has puzzled the world since 1947.

McDonald's fight to bring respectability to a subject besieged by ridicule might read like science fiction, but every word is true. He shone the light of pure science onto this most difficult of subjects and wrested media attention away from the kooks and contactees who were blighting it.

In 1992 Dr. Jacques Vallée, another fine scientist and author of several fine books on the UFO subject, was often critical of James McDonald's methods but nevertheless described him as being “afraid of nothing.”² Hence this chapter title—and McDonald's unwritten epitaph. Although he died tragically in 1971, McDonald's spirit is still with us.

1. All acronyms defined in parentheses are listed in the Glossary, page 587.

He is remembered by scientists and other professional researchers who quietly probe the UFO mystery today. His spirit also exists subliminally for others, many of whom are only dimly aware of his name.

McDonald's friend and colleague, Dr. Paul E. Damon of the University of Arizona, feels that McDonald's intense interest in UFOs may have started in the early fifties at an international meteorological conference in Italy. There had been a new report of an Italian UFO sighting, which intrigued McDonald.³

He discussed the sighting with some senior colleagues at this conference. They reminded him that the United States Air Force had a group, Project Blue Book, that was specifically in charge of investigating UFOs. These colleagues reasoned that, if there were anything to the report, the Air Force would have found this out and would have alerted the scientific community. This satisfied McDonald for a while, but in 1958 when public UFO reports in his own home town of Tucson began to come to his attention, McDonald's curiosity was piqued. And when his friends and colleagues also began to confide their own sightings to him, he felt it was vitally necessary to study the question.

As an atmospheric physicist, McDonald looked for physical data which would prove the existence of unidentified flying objects. Through his years of effort he found evidence which pointed to the physical reality of UFOs—not solid proof, but enough evidence to convince him that the problem should be accepted by scientists as a serious question. His death at the age of 51 stunned his friends and colleagues, but he left behind a magnificent legacy.

Although McDonald's involvement in the UFO field has been written about previously by a few authors,⁴ a biographical account of his total involvement in the UFO research field has never before been written. His efforts were swept from the public mind in a calculated manner, as we shall demonstrate. This book will hopefully revive his memory and renew the importance of his research. Hopefully, too, in the not too distant future, a united effort will be put into effect which will establish beyond doubt whether or not unidentified metallic aeroforms are flying in Earth's atmosphere.

James E. McDonald was born in Duluth, Minnesota, on May 7, 1920, of Irish-Scandinavian heritage. He was a lean six-footer, whose dark hair and blue eyes favored his Celtic background. During his service in Naval Intelligence during World War II he formed friendships and contacts which later

2. Vallée, Jacques, *Forbidden Science: Journals 1957-1969*, Berkeley, California, North Atlantic Books, 1992, p. 186.

3. Author's interview with Dr. Paul E. Damon, 27 February 1994.

4. Notably Jacobs, Dr. David Michael, *The UFO Controversy in America*, Bloomington & London, Indiana University Press, 1975.

served him well in his efforts to persuade high-level officials in government and science to treat the UFO question seriously. His keen intellect—which was close to genius, although he never himself believed it—impressed all who knew him.

During World War II, McDonald met Betsy Hunt. Both had joined the U.S. Navy at the start of World War II when they were both at MIT as part of their Navy duties. In the early days of the War he was an instructor in aerology at MIT, and she was one of his students, enthralled by his “love of words.” Betsy was a diminutive, lively young woman from a working-class background, who was serving in the WAVES. She was his first and only love. During the war, they married and afterwards had six children—two sons and four daughters.

In early 1954, McDonald was selected by the University of Chicago to help establish an Institute of Atmospheric Physics (IAP) in Arizona. A wealthy Arizona rancher, Lewis L. Douglas, was involved in its beginnings. Arizona is a state with unique atmospheric properties. The University of Arizona at Tucson was selected as a logical site for the new Institute, and the University of Chicago sent McDonald down to get the facility started. He served as Associate Director under another older scientist, who was in charge of cloud experiments in Chicago. The scientists who became involved in the new Institute sought to provide a scientific program for gaining insights into the fundamental physical processes of the atmosphere, one result of which might be the development of efficient rain-making mechanisms.

McDonald quickly discovered that being Associate Director wasn't much to his liking. His forte was active research, not administrating. He suggested to the University of Chicago that Dr. A. Richard Kassander come to Arizona to be the Co-Associate Director for Administration, and he would be the Co-Associate Director for Science. Kassander was a close friend who had attained his doctorate at the same time as McDonald.

McDonald embraced Arizona enthusiastically. He scouted out Tucson for a suitable house for his wife, whom he called “Bets,” and their children, and on April 13, 1954, he wrote to Kassander,

After quite a fair amount of hunting, I ran down a small want ad and found what I feel is a rare gem.... Has three bedrooms, kitchen, 14x28 living room, plus an attached guest room with bath. It, like the porch, opens onto a large flagstoned terrace. Has a carport, and scads of flowers and shrubs.... I didn't think there were many flowers growable here, but was I ever wrong.



FIGURE 1. The McDonalds' spacious, rambling home, set amid desert landscaping in Tucson, Arizona.

McDonald bought this house, which, in 1954, was on the fringes of Tucson; Kassander followed soon after with his own family. Some of the McDonald family still live in their rambling home (see Figure 1). McDonald loved to hike in the hills and mountains around Tucson, where several of the Institute's smaller facilities were later built. He grew to know the Rincons, the Catalinas, and other nearby ranges intimately. He formed a hiking club with his associates and often took his two growing sons along on the day-long hikes. His family, too, hiked together often, Betsy enjoying the outdoor activity as much as McDonald.

Another desert lover was Dr. Paul S. Martin, a paleo-ecologist who first met McDonald in the summer of 1956 when Martin came to Tucson on a visit, looking for employment at the University. IAP was still in the process of being built, and Martin found McDonald in a temporary office, called "the Barracks." The two scientists had a lively discussion about the summer monsoon season—daily brief thunderstorms which provide lightning shows for Tucson residents, rancher and city dweller alike. Martin became a university faculty member in 1957 and established what became known as the Geochronology Laboratories.

"When people come to Tucson they're not really sure they're going to stay," muses Dr. Martin. "This is a new part of the country, which has few traditions and such a strange environment that it takes a newcomer quite a while to get a sense of what the land is all about. My experience with people here is that they have an extraordinarily fascinating environment to live in and have a very poor idea of what it's all about. But McDonald took to it."⁵

Betsy McDonald loved Arizona, too. Blessed with a remarkable intellect, she looked after the home and children. She had a B.S. degree in food chemistry from the University of California at Berkeley, and insisted on feeding her husband and their children only balanced, wholesome meals. She devoted herself to raising the "perfect family," and thought that six children was a perfect number.⁶

Both McDonald and Betsy were voracious readers. His interests extended into philosophy, politics, psychology, sociology, and a myriad of other subjects. He invented games to encourage his children to study far beyond their courses at school. Consequently, they absorbed challenging concepts in the course of their daily lives. Dinner time was never dull. Even when some of the children were still very young, mealtime discussions revolved around not only science but social issues, including the Cold War, civil defense and civil rights. Later, subjects such as the draft, the Vietnam War, the feminist movement, and other numerous questions were topics of conversation.

McDonald was already noted in his field for brilliant research and had a score of impressive papers published in scientific journals. His personality seemed suited for the administrative duties associated with the important new facility. His nature was intense, and he spoke out bluntly whenever he felt the situation demanded it, but with his friends and family, his colleagues and the public, McDonald was a congenial man with a unique, sometimes impish, sense of humor. His powers of verbal persuasion were strong and persistent. Even Co-administrative work, however, proved not to his liking. He longed to go back to pure research and to be freed from supervisory responsibilities on other scientists' research. On March 1, 1957, he sent this memo to the Institute:

Because of strong personal desires to devote much greater attention to active research within the Institute, I have asked the President of the University to accept my resignation from the position of Scientific Director.... I have also strongly urged that Dr. A. Richard Kassander...be named Director at this time. It is with real pleasure that I am able to report that President Harvill has taken the second step concurrently with accepting my resignation. Dr. Kassander's outstanding abilities will enable him to absorb quite easily those additional burdens that he assumes at this time.⁷

McDonald was now free to do what he loved best. He was put in charge of the cloud-physics program and continued to contribute ingenious research which

5. Author's interview with Dr. Paul S. Martin, 16 July 1994.

6. Author's interview with Betsy McDonald, 7 December 1992.

7. Memo dated 1 March 1957, in McDonald's Personal Collection, University of Arizona at Tucson Library.

touched on every aspect of atmospheric physics. He also freely contributed ideas, which others took on as projects. His impeccable credentials earned him an international reputation. His title was changed to Senior Physicist, the position he held for the rest of his life.

He was a brilliant teacher; he taught everything from undergraduate to post-graduate meteorology classes and guided students through their own doctoral work. McDonald loved words, but he also had a gift for explaining the most complicated scientific theorems in simple terms. The University of Arizona developed full-blown undergraduate and graduate curriculums in atmospheric physics, and it was McDonald who started it all. His brilliance puzzled some of his colleagues, for they never saw him using notes for his classes. It is laughingly said that he must have had notes hidden under the table in front of him, his lectures were so logically given. He provided summaries of these lectures for his students, but he didn't speak from these notes; he spoke off "the top of his head."

"He loved to teach, and he loved people who would learn," relates Betsy McDonald. "He was constantly helping the children with their school work, whenever they asked."

"He would get down on your level," relates his daughter Jan. "I remember a fifth or sixth grade science fair project that I did with his help. The other kids were planning complicated projects they got out of science workbooks, using test tubes, dials, and lots of paraphernalia. Dad said, 'Ask a simple question about something in your life—something ordinary that you're curious about—and then figure out a way to try to find out more about it.' He felt that curiosity was the heart of science, and even the simplest questions a child might have about the world were important.

"The question I asked was about human hair—whether its color and texture have anything to do with how strong it is. This probably interested me because of my own wispy hair. He helped me design an experiment that involved collecting hair from different people and testing it with nickels piled up on a little tray. It was nothing fancy at all. Well, the class...thought this was so goofy! They were doing real experiments they got out of books. But Dad's approach was, 'This is real science. It doesn't necessarily require complicated equipment. It requires a question that you really want to answer.'"

"Also, he talked about creativity in science," adds Betsy McDonald. "That it often does come from extraneous thinking.⁸ Scientists don't always know how they get the ideas that come to them."

8. "Extraneous" in this context means "random," "involuntary," or "chance," and may at times even verge on "intuitive," such as in the case of Einstein, Edison and other scientific geniuses.

McDonald's attitude about science was both common-sensible and sophisticated. He knew how to make meteorology and related subjects interesting to his students. In periodic exams, he asked sensible questions, such as "How would you explain to somebody the idea of barometric pressure?" Down-to-earth questions translated into good teaching.

By 1971 he had 50 technical papers published in prestigious scientific journals such as *Nature*, *Science*, and the *Journal of Atmospheric Sciences*. These were all based on original research he'd accomplished on numerous aspects of the Earth's atmosphere. McDonald also wrote another 60 semi-technical papers based on other projects. These appeared in publications such as *Scientific American*, *Weatherwise*, and the *Bulletin of The American Meteorological Society*. Although these were less technical, they were no less scientific. Some of his papers were co-authored with colleagues at the Institute of Atmospheric Sciences, such as Drs. Kassander, Dean Staley, and Benjamin Herman. Besides McDonald's impeccable scientific contributions, he wrote several articles which appeared in lay publications like *Saturday Review*. His writing style was flawless, flowing, and simple, and he brought to the attention of the public many subjects pertaining to Earth's atmosphere and related fields.

Together with two other scientists, he wrote a glossary of 7,000 meteorological terms still in use today. Even here, his mischievous humor asserted itself, for in the glossary McDonald distinguished between a prognostic chart, which gives the distribution of meteorological parameters a meteorologist believes will occur at a future time—say 48 hours beyond the present—and an "agnostic" chart, which "nobody believes." He also contributed a chapter in a textbook on meteorology—a piece which is still considered the classic explanation of cloud physics for beginning students of atmospheric physics.⁹

Besides his technical papers, McDonald frequently wrote reviews of scientific literature which were published in refereed journals, as well as numerous "Letters to the Editor" on various aspects of atmospheric sciences, some of which caused lively controversies in the field. In all, 231 items appear in his bibliography, which was compiled in 1990 by Valerie Vaughan, who at the time was a librarian at IAP.¹⁰

McDonald's keen intellect was widely recognized by his colleagues, but he invariably shrugged off praise; he simply did not want to hear it. To his own

9. McDonald, James E., "The Physics of Cloud Modification," Chapter in *Advances in Geophysics*, Academic Press, Vol. 5 1958, pp. 223-303

10. Vaughan, Valerie, "Science and Conscience: An Annotated Bibliography of the Writings of Dr. James E. McDonald," April 30, 1990. Vaughan, at the time, was the librarian for the Institute of Atmospheric Physics.

mind, the main reason for existence was to obtain knowledge. His longtime secretary and assistant at the Institute, who has academic degrees from two universities, was Margaret Sanderson-Rae. She describes the way his mind worked:

"He could be having a conversation with you, and you could say something which would spark a thought in his mind about an aspect of the world, be it politics, be it a natural phenomenon, whatever," Sanderson-Rae laughs. "He'd realize there was something about it he did not know. He was going to have to find out...and he'd take off for the Science Library."¹¹

James Hughes, a longtime friend who later became his contract monitor at the Office of Naval Research (ONR) states:

*I regarded him as a highly competent scientist, and one who very thoroughly checked everything he did. He was very intolerant of sloppiness in scientists. He was very dependable and trustworthy. I was in a position in the ONR where people wrote various research proposals to me. Every once in a while, I'd want an opinion on some scientific subject, or where we stood in the field of Cloud Physics, and I could depend on McDonald for trustworthy information.*¹²

Another friend and colleague, Dr. Cornelius "Corny" Steelink, remembers. "He was a very serious guy, totally immersed in science, worked 25 hours a day, seven days a week. He had probably the most curious mind of anyone I've ever met in my life. The guy was intensely interested in all sorts of phenomena, and he used his energy and drive to explore whatever interested him. He applied himself, of course, to the UFO thing with an intensity that absolutely left us all exhausted.... It's interesting, how he brought the same type of investigative science to UFOs that he brought to everything."¹³

His colleague Dr. Dean Staley, tells of McDonald's background in intelligence work:

*During WWII, he was a cryptographer in the Navy... There was a book I was showing him called *The Codebreakers*, a kind of a definitive work, and we were looking at some of the pictures in there and Mac said, "Oh, I remember that guy," and so forth. And he went on to point out that he, himself, "was just one of the flunkies." But he would have had to have the highest I.Q. to get into that particular military specialty. The crux of it was he was one of the guys working on a separate piece of the problem. They needed a lot of different people to*

11. Author's interview with Margaret Sanderson-Rae, 16 July 1994.

12. Author's interview with James Hughes, 21 December 1994.

13. Author's interview with Dr. Cornelius Steelink, 20 July 1994.

handle different things. I don't think they handed him something and said, "Here, McDonald, solve the Japanese J-1 code."'¹⁴

But cryptography was really not to McDonald's liking, though he did his work well, out of a sense of patriotic duty. He preferred working on whole puzzles, the solving of which he was totally responsible, and from which he could learn new things. He once remarked to Dr. Staley that he didn't like working on man-made puzzles such as crosswords and chess. He preferred to work on nature's problems.



FIGURE 2. In a semi-technical article intended for public information, McDonald described the shape of raindrops as "like a hamburger bun."

His quest for knowledge was endless. He studied the advisability of seeding hurricanes, the Earth's electric charge as related to thunderstorms, the climatology of arid lands—an almost endless list of scientific subjects. In a semi-technical article intended for public consumption, he explained the shape of raindrops.¹⁵ (See Figure 2). It was of McDonald's impeccable research on the shape of raindrops, which had also been published in a technical form in a leading meteorological journal,¹⁶ that his friend Dr. A. Richard Kassander states

14. Author's interview with Dr. Dean Staley, 28 February 1994.

"What he postulated there was to the surprise of a great many people, who said, 'Why didn't I do that?'" It was good research, but research that could not have been done by just anyone."¹⁷

McDonald's endless curiosity even attacked the question of the physical factors which produced home runs in a baseball game. Jim Hughes relates:

When McDonald was at the University of Arizona, there was a man by the name of Lou Battan, who was Head of the Department [of Meteorology]. McDonald complained to him that "Editors are sitting on [UFO] information—why didn't editors of newspapers let out the stories of reputable citizens who'd reported they'd seen amazing unidentified objects in the sky?" He was complaining about it and comparing it with baseball. Why did baseball get so much attention?

Lou Battan said, "Have you ever been to a baseball game?" And McDonald said, "No." So Lou said, "Let's go to a baseball game." So McDonald went with him, and he didn't care which side won. He wasn't interested in that stuff. But he got very interested in what the tip speed of the bat had to be to get a home run!

When McDonald's interest in baseball became known, various teams started delivering bats and baseballs to him. He got the university's baseball team involved, and had it hitting baseballs, measuring bat-tip speed.

"The Cleveland Indians wintered in Tucson," continues Hughes, "and he got some of their heavy hitters and measured tip speeds on their bats."

After extensive research, during which McDonald even used some of the University's professors as bat-swingers, he concluded that the most important factor in achieving home runs was indeed the tip speed of the bat. Although most home-run hitters at the time typically used very heavy bats, McDonald's research proved that lighter ones achieved greater speed in the swing. His conclusions were quoted widely in newspapers of the time. Today, many home run hitters use lighter bats.

15. For an example of McDonald's clear, often amusing writing style for the general public, see "The Shape of Raindrops," *Scientific American*, February 1954, Vol. 190, No. 2. The introduction to this article reads: "[Raindrops] are not handsomely tapered but often resemble a small hamburger bun. This unpoetical form, frozen by high-speed photography, is analyzed to reveal the forces that mold it."

16. McDonald, James E., "The Shape and Aerodynamics of Large Raindrops," *Journal of Meteorology*, Vol. II, #6 (Dec. 1954), pp. 478-494.

17. Author's interview with Dr. A. Richard Kassander, Jr., 19 November 1993.

"He wrote all this up...and attributed it to ONR support," Hughes concludes, chuckling.¹⁸ "And I didn't care about that. It was good, solid physics, and I closed my eyes to it."

McDonald's mind was endlessly roving; he retrieved ideas as if out of the blue. Dr. Paul Martin describes how McDonald became intrigued with the loudly voiced dilemma of Arizona ranchers whose perception of local monsoon thunderstorms was that "it rains everywhere but on my land."

"This started McDonald on an analysis of the probability of a storm event which has storm cells distributed across the landscape," explains Martin. "[The precipitation] doesn't fall in a continuous blanket of rain all over the county, leaving a particular rancher with the impression that, although it is raining buckets, he isn't getting any and everybody else is."

McDonald dove into a study of these ranchers' statements. "The statistics of the problem indicate there'll be a number of ranchers in the same boat, and it's just the way the storms are distributed relative to one's perception," recalls Martin. "He wrote a little paper on that... No one went to the trouble of submitting papers [on these kinds of problems], but Jim did."¹⁹

"And then he wrote a little paper on the abstract idea of how big a body of water it would take, in a desert region like Arizona, to evaporate enough moisture to increase rainfall downwind of the reservoir," continues Martin. "People believed that if we put in more dams and reservoirs on the Colorado River, and other parts of the Southwest, we'd increase the probability of rainfall, because more moisture would evaporate on these reservoirs, and that would add to the opportunity for storm systems to bring more rain back down out of the skies. And without trying to recall the details of the argument, which had some good mathematics in back of it, [McDonald calculated] to appreciably help rainfall in this state, we'd have to construct reservoirs that would cover something like a tenth or more of the area of Arizona...from Yuma to Tucson would have to be under water, to make it rain enough in **Cochise County** to make a difference in the rainfall records." Martin laughs as he recalls the controversy. "That was an unforgettable publication that debunked the idea of reservoirs helping make rain."²⁰

18. McDonald's home-run research was never published in a scientific journal, although it was cited and gained wide publicity through newspaper accounts. By the time he finished the study, his inquisitive mind had latched on to other problems. However, an article appeared in the *Arizona Alumnus*, Vol. 39, #4, April 1962, pp. 6-7, which referred to his study on home runs. The full ONR baseball manuscript has never been made available to the public.

19. McDonald, James E., "It Rained Everywhere But Here!" —The Thunderstorm-Encirclement Illusion," *Weatherwise*, Vol. 12, #4 (Aug. 1959).

McDonald was first and foremost a laymen's scientist. He felt keenly that science was to serve the people, not to exist in ivory towers. Not only was he curious about numerous unanswered questions in pure science and worked with diligence to solve them, but he was equally attracted to controversial situations hinging upon both science and the social order. In 1960, when the United States Air Force decided to ring Tucson and other American cities with Titan and other defensive missiles (ICBMs), he fought for two full years against these plans.

He was astounded that the Air Force was not addressing the simplest of problems—that if missile silos are placed upwind of a city, and if these silos are hit by enemy missiles, the prevailing winds would blow the resulting radioactive debris over the city, killing the entire populace. He pleaded eloquently for the Air Force to change its plans and, at the very least, to put the silos downwind of major population centers. Then, if the silos were destroyed in a nuclear war, the radioactivity would be carried away from the city instead of toward it and the population would have a chance to survive.



FIGURE 3. In a room designed originally as a memorial for McDonald, his most important works are displayed in a locked cabinet.

20. McDonald, James E., "The Evaporation-Precipitation Fallacy," *Weather*, Vol. 17, #5 (May 1962), pp. 168-170, 172-177.

The Air Force ignored McDonald's logic. He intensified his fight and formed a committee to change the Air Force's plans. He was opposed by many influential people who were worried about the growth in Tucson, for building missile sites meant jobs and a booming economy. Nevertheless, "The Committee Against Ringing Tucson With Missiles" included the Mayor and other dignitaries. Even **Arizona's Senator Barry Goldwater**, whose political views were almost diametrically opposite to McDonald's, eventually lent support.

McDonald took his fight to the halls of Congress, testifying on the matter at a Congressional hearing, but by that time the Air Force plan was a *fait accompli*. Tucson and a dozen other American cities were ringed with atomic missiles. Later, the Air Force apparently saw the error of its ways; when defensive silos were constructed near subsequent cities, the missiles would have to be placed downwind. McDonald was never given full credit for the Air Force's change of mind, but this did not bother him. To his mind, some American citizens would at least have a chance to survive an atomic war, in the event one broke out.

With his mind continually active, McDonald lived fast. His speech was often hurried, as if the physical part of him was straining to keep up with his remarkable mind. When he found a scientific problem which puzzled him, he would explore it until he found the answer. If the papers he wrote on these projects were not immediately accepted by scientific journals, or needed further polishing, he would often leave them in his files and go on to the next problem that caught his attention. He never allowed any of his work to be published until he was satisfied that it was written as perfectly as possible. Consequently, by June 1971 there were about 70 unpublished research papers in his files which had not been honed to his satisfaction.

Besides his published work on atmospheric subjects, he wrote over 40 papers on his UFO research. Time was the only thing he lacked. He gave some of his friends and colleagues the impression that life was short and that too much was calling out for attention.

Unlike many scientists, he ranged far from his own field of atmospheric physics to accomplish significant research in peripheral subjects. Perhaps it was this endless curiosity that attracted him first to the subject of UFOs. He quietly studied Tucson UFO reports for eight years and came to the conclusion that a small fraction (from 0.5% to 2%) of the reports could not be explained in terms of conventional objects, even after exhaustive investigation. When he discovered that the question of UFOs was being neglected by science and government alike, his innate sense of fairness was offended. He felt the public had the right to know.

Besides his major scientific works which are preserved reverently in the Institute (See Figure 3), he left behind voluminous files related to his UFO re-

search. They include 600+ case reports he had meticulously researched; his library of UFO books, some heavily annotated; hundreds of pages of formerly classified government documents; a multitude of handwritten and typed pages which were apparently initial drafts for a comprehensive book on UFOs which he had planned to write—and his journals.

McDonald's four handwritten journals detail events during his years of UFO research. The journals are composed of hundreds of handwritten pages, describing conversations, events and personal UFO sightings confided to him by scientific and military colleagues. For over 20 years, they lay among his UFO files, their value unrecognized.

In his UFO talks before scientific groups, of which he gave hundreds between the years 1966 and 1970, he often spoke extemporaneously for an entire hour from one-half page of handwritten notes, and usually provided his audiences summarized, multi-page "handouts" of the material he'd covered. Besides his brilliant lectures, his formal talks at scientific conferences, and the multitude of scientific projects published in scientific journals and textbooks, McDonald contributed to atmospheric sciences in other ways. From the earliest years of the Institute, the history of climate in Arizona had intrigued many of the scientists there.

McDonald offered Rod Hastings, an historian, a summer job to go out and look into the history [of the Arizona climate]," relates Richard Kassander. "Originally the idea was that while a few old timers lasted, it would be highly desirable to get interviews with them, as to their reflections on the climate, and what it was really like. Such as the member of the Mormon Battalion [who] wrote that anecdotal information, could be very, very useful. And Mac was an imaginative guy in trying to get to these people before they died, to get their recollections, which were generally good and consistent. I think if one considered the product of breadth and depth of a person's scientific knowledge, Mac might have been the best scientist I ever knew.

Dr. Benjamin Herman, who is now the Director of IAP, was James McDonald's first graduate student. His regard for McDonald is evident:

McDonald was the most thorough scientific researcher I have ever known," Herman states. "When he started on a problem and researched it, by the time he was finished, he probably knew more than every expert in the world on that problem. He researched every detail, and he did not just talk without understanding what he was talking about. He left no stone unturned. He had insight that just wouldn't quit.

In my opinion McDonald was the closest thing to a genius, if he wasn't a genius, that I ever saw. He staggered you. You could go in to Mac with a problem, and before you finished explaining the problem he would have a method or solution for you, and you hadn't even fully explained the problem yet. The guy's insight was unbelievable; he would just run circles around us mortals here. And yet in the end he was very, very mortal in that it was this brilliancy that really did him in, because it led him into all these controversial issues....

Dr. Bill Sellers, a Meteorology Professor at the University of Arizona at the same time McDonald taught there, and who holds a dual position as Full Professor of Atmospheric Sciences and IAP researcher, states:

I always admired him. I thought he was a wonderful person. It would be wonderful to have him still around. We used to have department hikes which he pretty much was in charge of, and we'd go hiking up into the Catalinas or the Rincons. He was a terrific hiker; he liked to do it.... So he was unifying the Department, probably, more than any other faculty member ever has. Just talking to him in general, he'd show a keen sense of humor. I can't recall any particular incidents right off hand. You should have asked me 30 years ago.

At this point Dr. Sellers laughs lightly, thinking about the young people with whom McDonald's wife Betsy worked diligently in activist causes, and whom McDonald himself knew well.

He was just a pleasant person. He always had a short haircut and was always very neat-looking. It was sort of hard to picture him with the guys with beards and long hair, but he seemed to relate pretty well to them.

Dr. Sellers is referring to the swirl of agitation, dissent, picketing and civil activism which were very much a part of campus life during the '60s. Betsy McDonald was very much involved in all of this. McDonald, too, had deep feelings about civil rights, the Vietnam War, and the use of napalm and chemical warfare. Occasionally, he expressed his opinions at "speakouts," but for the most part kept to the background, for his concern about the UFO question occupied much of his spare time during the last half of the 1960s. His UFO involvement was in addition to his own professional responsibilities as Senior Physicist of the Institute and as a Professor of Meteorology.

McDonald and Betsy were humanists and keenly aware of their responsibility toward all other human beings. Like many scientists, he was not intellectually convinced of the existence of a Supreme Being but was curious about what other scientists believed. The McDonalds' conversations with Sellers did not involve UFOs; Sellers had little interest in the subject. McDonald, however, had several

long discussions with him during the late '60s, inquiring closely why Sellers, a Baptist, thought as he did about God.

"He seemed to want to believe in a higher authority than man, but couldn't. He may not have been searching for something beyond man, but he certainly was very inquisitive about what other people believed and what they thought," states Sellers.

My contacts with him, other than the recreation from the hiking, were very much professional. I stayed out of the Titans and the UFOs. I didn't personally feel that they were worth the effort he put into them. Other people believed differently.

From these comments of McDonald's closest colleagues at IAP, it is plain that James E. McDonald was a complex man caught up in a complex world. He seemed to burst upon the UFO scene in June 1966, but actually his entrance into the field was far from sudden. Before he ever spoke out publicly on the subject, he silently worked with the directors of the lay research organization, National Investigations Committee On Aerial Phenomena (NICAP), headquartered in Washington, D.C. He was the first eminent scientist to work closely with civilian researchers toward a common goal.

During his eight quiet years studying local reports, he became known to Arizonans as an approachable, courteous professional who did not laugh at their UFO reports but instead doggedly studied each event which came to his attention. He found conventional answers to most reports, as all good researchers do. He found that about 0.5% to 2% of all raw reports could not be explained, no matter how thoroughly he investigated them. Gradually he came to realize that similar, mystifying cases were occurring worldwide.

After eight years, he decided to go public with his interest and to tap his many scientific, governmental, and military sources in probing for the truth. His original plan turned out to be ironic: He thought, by devoting the summer months of 1966 to the subject instead of going on vacation, that he could persuade his peers that the subject should be investigated openly and fairly by government agencies, branches of the military, and the scientific community combined. His plans for a summertime of research stretched into five long years, during which he became the chief scientific spokesman on the subject. In spite of his family and professional responsibilities, he publicly went out on a limb, disregarding the professional and financial risks involved.

James McDonald had seemingly boundless energy. His *modus operandi*, even for a scientist, was incredibly thorough, as he became fully aware of stunning cases which were being passed off by the Air Force's Project Blue Book as stars, meteors, balloons and the like. If he had lived out a normal life span,

the UFO field today would be very different from the chaos into which it has been tossed. At the very least, he might have been able to help put together a nationwide monitoring network, to bring us closer to a solution of the puzzle of these unknown objects.

The following chapters will attempt to place in logical sections the chaotic controversy into which he was swept. It would be impossible to tell the full story of his involvement in UFO research, even in the thickest of books; this is merely a beginning. Other books by other authors hopefully will follow, and the basic scientific facts which were uncovered by McDonald in his efforts to unlock the riddle of UFOs might some day be developed into proof. Some day, it is hoped, competent science writers will relate the entire story of his life in *Atmospheric Physics*; this present book must necessarily be limited to his study of the UFO question.

We begin the adventure, joining James E. McDonald as he brought the bright light of pure science to the UFO question. It is a trip into the hidden world in which he moved. You will read portions of his journals, view his persuasive maneuvers among powerful men and women of science, the military and government. Darkest of all, you will be at his side during the attacks by those who sought to silence him. Parts of this book might be difficult to believe, but every word is true, from his own files and journals and from those who knew him best.

It is the chronicle of an intellectual giant who took on an incredible task—a fearless fighter who seemed on the verge of accomplishing what no one else has ever been able to do. Above all, it is the story of a compassionate man, a man with human failings, who was caught in the middle of mystery and intrigue.

I wonder other than MUFON's
debates are there any active serious
people in other UFO? I seem to
remember that not some words, but set up
on
of him
that

Queries, Inquiries and Questions

*"On Raglan Road, of an Autumn day, I saw her first and knew
That her dark hair would weave a snare, that I might one day rue."*

—from "Raglan Road"

*"Science may be advanced by rejecting bad hypotheses as well
as by forming good ones."*

—H. A. Newton,
1886 AAAS address, re. origin of molecules.

McDonald and his family had been in Tucson for four years, when his interest in the UFO question seemed to burst forth suddenly. Before he began to investigate local sightings personally, he had accepted the official "explanations" which the Air Force disseminated widely every time the news services picked up on a particularly interesting report. A few objective civilian research groups were actively working on the UFO problem in those early days, chief among them the National Investigation Committee On Aerial Phenomena (NICAP), the Aerial Phenomena Research Group (APRO), and CSI (Civilian Saucer Intelligence). They were on the scene around the country where public reports originated. These volunteer investigators competently documented every report which came to their attention; their conclusions frequently were very different from those of the Air Force.

Two brief examples may illustrate the problem: On July 3, 1954, nine greenish spherical UFOs entered a restricted flying area, were detected by an Air Defense Command radar 20 miles north of Albuquerque Field in New Mexico, and were also sighted visually. A radar station message concerning this was accidentally intercepted at Chicago Midway Airport by an airline employee. The Air Force quickly hushed up the event.¹ And on July 14, 1952, six fiery red objects, estimated as 100-foot diameter, startled Capt. William B. Nash and Second Officer William Fortenberry as they flew a Pan

American airliner en route to Miami. The discs flew in precise formation and executed incredible maneuvers impossible for any known or experimental U.S. aircraft.² The USAF quickly explained the report in conventional terms.

Some reports McDonald investigated received wide publicity. Consequently, he became aware of multiple UFO encounters which occurred in and near Levelland, Tex., in the evening and early morning hours of 2-3 November, 1957. These dramatic incidents began just one hour after the Russians had launched their second dog-carrying satellite! Drivers on Texas highways near Levelland reported that their cars were approached and/or overflowed by a large, elliptical object. The huge UFO sometimes looked like "a great ball of fire," sometimes like an unlighted opaque object, and sometimes was seen pulsing between these two phases. Its near presence apparently affected the electrical systems of cars and trucks on the highway as well as two grain combines in a field. In most of the cases the electromagnetic (EM) interference ceased after the object passed.

I hear
main
people say
this.

Headlines screamed all over the nation, but the Air Force promptly wrote off the sightings as "ball lightning." McDonald wondered about this "explanation," for in 1957 ball lightning was not generally accepted by scientists, even though the phenomenon was commonly experienced by pilots and by individuals living in mountainous areas. But for the American public and the scientific establishment, the Air Force "explanation" for the Levelland sightings sufficed.

McDonald had himself seen a bright, anomalous object in the daytime sky when he first came to Tucson in 1954. He was driving with four other meteorologists on a highway between Tucson and Nogales near sunset. As they drove, they could see the Santa Rita Mountains to the south and east. During part of the trip, they viewed a shining object, with the appearance of aluminum, hovering high over the Santa Rita mountains to the south and east. In spite of their combined expertise, none were able to identify the object. McDonald checked with the Astronomy Department when he arrived back at the University and learned that the object was not Venus or any other star or planet. He checked through a number of possibilities, including balloons, but none of them fit the facts. At this point, McDonald wrote a letter to the Air Force, carefully outlining the facts of the sighting and the efforts he had made to identify the object. He even asked the Air Force if the objects could possibly be "flares."

1. *The UFO Evidence*, Edited by Richard H. Hall, Wash., D. C., Published by National Investigation Committee on Aerial Phenomena, 1964, p. 85.
2. Keyhoe, Maj. Donald E. (USMC, Ret.), *Flying Saucers From Outer Space*, New York, Henry Holt and Company, 1953, pp. 57, 124-36.

McDonald received an answer from the Air Force. They were unable to identify the object, their letter stated, but they "were happy to receive such a thorough account from an expert observer." The Air Force promised that their "analysts" would look into the matter and report back whatever they found out. They never did. McDonald never spoke publicly of this sighting, but it continued to puzzle him.

"To his family and the public, he'd say, 'I've never seen a UFO,'" relates Betsy McDonald. "If anybody would ask him, 'Have you ever seen a UFO?' his answer was, 'No,' meaning he'd never seen an unidentified craft. He might have seen an aluminum object, but he didn't know what it was at that time."

To McDonald, the term ⁽¹⁾"UFO" was reserved for craftlike, unidentified objects which were seen at close range by credible witnesses. The 1954 incident, however, probably served as a subtle factor in his later decision to devote time and energy to studying UFO events.

From 1954 to 1958, he relished his work at the growing IAP, enjoyed the camaraderie of his colleagues, such as Dr. Cornelius "Corny" Steelink, a professor in the chemistry department. Steelink and he taught Sunday school together in an "essentially humanist" way. These were "the salad days" for the McDonalds. The six children, with their two caring parents, were considered the ideal family, and they formed many deep, lasting friendships in the Tucson community.

He left no diaries about raising his family, but his first handwritten journal gives us clues about his first UFO investigations. The earliest notes available concern a mechanical engineer named Jack Craig from Bisbee, Arizona, a town about 90 miles southeast of Tucson. Craig had called McDonald on February 16, 1958, describing an object which he'd seen the previous November or December—a black, wingless object approximately 100 ft. across and 10-15 ft. high, flying about 300 feet above the ground. It emitted white smoke for a brief time, but no flame or lights were seen. It climbed higher as it flew south over Mexico, and disappeared into the distance.

This first account was fragmentary, but the second unexplainable case which came to McDonald's attention was far from brief. It was reported by dozens of citizens to Tucson newspapers, radio and TV stations and was of such broad interest and complexity that it presented a challenge to him. His first journal, which includes a four-part account of his investigation of this event, is 44 handwritten pages long; it also contains other cases he investigated from 1958 to 1962. This journal is written in his precise script, and gives valuable insight into his methodical mind.

Between about 5:35 and 6:00 A.M. on April 1, 1958, hundreds of people in and around Tucson observed a group of unusual aerial objects pass over the city and disappear in the east over the Rincon Mountains. The anomalous set of objects was followed minutes later by at least two separate groups of military jets. Local newspapers of April 2 carried accounts of the observations by several different individuals at fairly widely scattered points. McDonald wrote in his journal:

The reports were sufficiently similar in nature to suggest that some actual phenomenon had been observed, optical or otherwise, so I contacted those persons whose reports had been described in the press.... [B]y the time that I had interviewed, chiefly by telephone, some twenty persons, a barely consistent pattern seemed to be emerging.

[B]y using newspapers in Tucson and in five communities throughout southeastern Arizona and local radio and television stations.... I obtained a total sample of seventy-five interviews plus five letters from persons too far from Tucson to be interviewed.³

The sheer amount of work he describes so easily might seem exhaustive, but McDonald was attacking what he considered an interesting scientific question. In his opinion, the large number of independent observations—from localities extending about 25 miles in a north-south direction and 70 miles in an east-west direction—removed all suspicion of “hallucination” as a causal factor.

Individual accounts differed in details, but this did not surprise him, given the anomalous nature of the event. In general, however, the observers saw several rather small silvery or golden oval-shaped “objects” in the eastern sky prior to sunrise, which on that date occurred at 6:12 A.M. Nearly every observer was impressed by the leisurely pace of the objects. Many reported no discernible motion over several minutes, while others who watched them longer described very slow eastward drift. The majority of witnesses described the objects as well-defined, with definite outlines.

Using triangulation, McDonald calculated that the objects were at least 25 miles away from the observers. Dr. A. Richard Kassander describes the precision with which McDonald went about calculating their altitude.

“He was extremely clever in how he would go to a person’s house and find out which window they were looking through, and whether they saw the objects near a telegraph pole, or a tree, so he could get some sort of an angle,”

3. From an untitled 38-page paper found in McDonald’s files, p. 1. It is very likely that McDonald planned to finish the paper but never had the time, for it is heavily edited and annotated in his own handwriting, ready for re-typing.

relates Kassander. "And then after about 20 or 30 of these interviews, the lines would converge at a point where they would become very significant."⁴

Because of the oval shapes of the objects, one observer felt positive that he was viewing parachutes from some aircraft in difficulty over the Rincon Mountains, but other interviewees who were working beside this observer independently pointed out that the shape of standard parachutes probably could not be distinguished at such a distance. The officials at nearby Davis-Monthan AFB promptly "identified" the first flight of anomalous objects as "possible jet aircraft," but many witnesses whom McDonald regarded as reliable, professional observers were vehement in stating that what they viewed could not possibly have been aircraft or contrails from aircraft.

The mysterious group of objects was seen by ten groups of multiple witnesses. McDonald interviewed each witness carefully, and at every sighting location he determined angles of elevation by using a transit. Since the "official" answer that was being bandied about by the Air Force was that the objects were either clouds or vapor trails, McDonald could have easily concurred. Instead, intrigued by the professional attributes of many of the witnesses, he could not let go of an unanswered question.

McDonald was an expert interviewer—courteous, interested and willing to listen as long as the witness was credible. When several observers were being interviewed, as at their place of business, he interviewed each one separately when at all possible, in order to maximize independence of observations. He did some of the interviews in his IAP office, where his secretary, Margaret Sanderson-Rae, heard many of these conversations.

"He was very careful never to ask leading questions," states Sanderson-Rae. "He never led them into answers that he wanted. It's how you ask a question. The person you're talking to wants to please, and so they come across with the answer that you wanted. He was very careful not to do this. He went at it scientifically. He didn't go at it with preconceived notions."

Newspaper accounts of the April 1, 1958, occurrence referred directly or indirectly to "flying saucers" or "UFOs," but McDonald noticed that of the 75 witnesses he personally interviewed, only about five referred to them in such terms. Most observers simply described what they saw and that was the end of their comments, aside from asking McDonald what he thought they were. He was non-committal; it would be weeks before he would allow himself to form even a tentative hypothesis.

4. Author's interview with Dr. A. Richard Kassander, Jr., on 19 November 1993.

Of the 75 witnesses, McDonald felt reservations concerning the reliability of only two. There was also a 76th witness, whom he kindly never named, who gave a report which McDonald concluded was hallucinatory. This witness referred to "a luminous ball, one third the size of Mica Mountain,"⁵ which penetrated the mountain and emerged a dirty brown color on the far side!

Of the remaining 73 accounts, McDonald noted that a number were vague and fragmentary, but he also noted that the witnesses themselves told him that their own observations were poor. He also noticed what he called "an interesting reluctance" on the part of many regarding publicity. This was intriguing, and he questioned the witnesses about it. They made it very clear that they didn't want to be subjected to the media's typical handling of UFO reports—the levity or ridicule which was almost invariably incorporated into news stories or headlines.⁶

"This seems unfortunate," wrote McDonald, "for observations of any unexplained phenomenon are of some kind of scientific interest and should be received and disseminated in this spirit, when not obviously hallucinatory."

Several observational shortcomings become glaringly evident to James McDonald, while interviewing the April 1 witnesses. He learned that very few laymen understood the concept of "angular size." Of those who did, almost all seriously overestimated angular size.⁷ McDonald solved this problem by asking them to pick out some visible object of similar angular width, once he'd clarified this term. He would then measure that object with instruments and obtain a better estimate.

He met similar difficulty in obtaining witnesses' estimates of elevation of the object, "elevation" meaning the number of degrees an object is located up from the horizon. When the term was explained to them, some witnesses did well and others did not. He noticed, as do most good UFO researchers, that a true elevation angle of 15°-20° is usually reported as about 45°. A third difficulty he encountered was the fact that only a small number of the observers had immediately checked the exact time of the overflight. "Time-fixes to within one minute would have been extremely helpful," he wrote.

5. A prominent peak near Tucson.

6. To a certain extent, this is still true.

7. This difficulty had been evident since the first UFO researcher interviewed the first witness in the late 1940s! When asked to describe the apparent size of the object in the sky, many witnesses give a numerical estimate, such as "about 50 feet across." When it is explained that "apparent size" means the area of sky the object filled, many witnesses will say, for example, "about the size of the moon, or a grapefruit," not realizing that the angular diameter of the full moon at zenith can be covered by an aspirin tablet held at arm's length! It is the problem of apparent size.



If I write on iPhone app that sends these reports to MUFON, I want all this information attached. I can get angle of the phone. IP

I can get an angle

McDonald also wrestled with the problem of azimuthal position, that is, at what compass point the objects were visible. Only a few observers had the presence of mind to step into a position where several easily-remembered foreground objects could be lined up, to serve later as reliable reference points in discerning position and motion. Finally, only one or two thought to make even a crude sketch to assist in recalling details. "Needless to say," wrote McDonald, "none of these shortcomings is really surprising considering the adventitious nature of all of these observations." Terms like "adventitious" in McDonald's writings are not unusual. Anyone wishing access to his files should bring along a dictionary. His vocabulary was prodigious, both in the printed and written word.

It is fascinating to compare this patient McDonald—who was attempting to derive scientifically usable information from non-scientific, lay observers—with the McDonald his colleagues knew and loved.

"He was a joy to have lunch with," states his friend Dr. Dean Staley. "He could be seemingly at ease and capable of small talk.... Then things would come up and he was always interested in the physics of them. For example, if a question came up about the efficiency of an air filter, he would start working on it in terms of the diameter of the fibers that made up the filter and how efficient they should be in collecting dust, given a certain flow rate of dust through the filter. And he would start working this out in his head and get at the heart of the physical problem that was involved.

"I miss that kind of thing," Staley says, "and his interesting sense of humor. Mac could be very puritanical when perceiving lapses of scientific rigor or ethics, but had little of the traditional sense of puritanism. One day at lunch one of our colleagues arrived at the table with his tray, and on the tray was a large, impressive German sausage." McDonald looked at the sausage and made a rather direct remark about what those sausages were called in the Navy. That time, it was the lunching professors who laughed.

"But on the other hand," Staley continues, "he drove fast, and had the capability of frightening people. When he was the passenger, other people didn't drive fast enough. [Dr. Gerard] Kuiper came here around 1960 with his entourage and was setting up his Lunar and Planetary Laboratory, which used facilities on Kitt Peak. There was, at that time, just an old road leading up there. McDonald drove Kuiper over there and scared the daylights out of him. They drove out there at 70 or 80 miles an hour."

The credible UFO witnesses whom McDonald interviewed in those early years never saw his impatient side. He was invariably cordial and listened to what they had to say. This was because he was studying the UFO question, and

how better to study it than by listening to rational observers who'd seen them? The impatient part of his nature was thrust aside in the learning process.

— He obtained precise meteorological conditions and possible optical explanations for the April 1, 1958, Tucson sighting. Weather Bureau records for that date showed completely clear skies for the six hours preceding the 6:00 A.M. observation with visibility at 60 miles. He also checked the temperature, dew point, relative humidity, and surface and upper level winds.⁸

The Weather Bureau's regular morning rawinsonde balloon was released at 4:10 A.M. and burst at 5:34 A.M. at about 90,000 feet altitude, almost one-half hour before the first observation of any unusual aerial phenomena in the Tucson skies. McDonald did not consider it further.

In his write-up of the investigation, McDonald specified the upper layers of atmosphere, the conditions under which jets would form contrails and even the length of contrails which would be left. The information is too technical to include here, but suffice it to say that, "applying Appleman's standard criteria for prediction of contrail-formation regions," McDonald concluded that contrails over Tucson that morning were inevitable only from 35,000 ft. to 53,000 ft., and that low humidity in the lower stratosphere would produce only short contrails.⁹ Observers who saw what they regarded as jets, apparently pursuing the anomalous set of objects, reported only short contrails.

McDonald also considered the possibility that refractive effects—i. e., mirages—of the type frequently seen in the Southwest near dawn might have contributed to the April 1 phenomena but promptly disproved that explanation.¹⁰ He had read some of the writings of Dr. Donald H. Menzel, who was a Professor of Astronomy at Harvard and a Senior Scientist at the Smithsonian Astrophysical Observatory.¹¹ Menzel was strongly against assigning any credence to UFOs. One of his favorite "explanations" was "mirages," but this explanation never fit the facts of the best sightings. The fact that he was

8. McDonald, *op. cit.*, p. 5.

9. *Ibid.*, pp. 5-6.

10. "First, the angular elevations of the phenomena sighted were nowhere much below 2°." McDonald wrote. "This is, of course, too large an angular elevation to fall into the category of surface mirages. Second, no inversions of even a weak nature were present in the 0500 sounding—certainly nothing capable of yielding total refraction angles of 3° to 6° such as would be required to fit an hypothesis that the image of the sun was somehow being refracted over the eastern horizon by density discontinuities in the free air. This pair of circumstances considerably simplifies interpretation here, for it completely removes necessity of considering refraction effects."

11. For a later Menzel work, see *The World of Flying Saucers: A Scientific Examination of a Major Myth of the Space Age*, Garden City, NY, Doubleday & Company, Inc., by Donald H. Menzel & Lyle G. Boyd, esp. pp. 63-66.

obliged to ignore most of the observers' statements to squeeze them into his "mirage" rationalization never troubled Menzel.

The winds at higher levels for that day also worked against an explanation of "wind-blown" objects. Although the winds were strong at upper levels—from 7,000 to 10,000 feet—groups of multiple witnesses had seen the objects hover for several minutes at a time. McDonald also made systematic inquiries to determine all air activity occurring near Tucson during the entire period of the observations. It was clear that if the first set of anomalous objects (which passed over between 5:35 and 6:00 A.M.) were aircraft, they were either helicopters at moderate range or jets at very high altitude. There had been no helicopter flights that morning, but helicopters were really not a plausible explanation anyway, since their angular size, at the distance reported by the observers, would have been just at or below the resolution limits of the human eye.

This left high-altitude jets as the only other type of conventional aircraft which might possibly explain the first set. McDonald queried all four possible sources of local information, but none shed light on the problem. The Air Force radar station on Mt. Lemmon, an AF radar installation about 30 miles north-northeast of Tucson, had logged two flights of one or two jets each, but the anomalous group had five or six objects in loose formation. McDonald experienced his first tangle with Air Force officialdom when he tried to get radar information from Mt. Lemmon. The Operations Officer, a Captain Murphy, told him that "they had no fixes of any kind that weren't accounted for." He also told McDonald he had no information on the six jets which had followed just minutes afterward! "But there's nothing there that weren't our own," he said.

McDonald pursued the issue. Murphy, apparently backed into a corner, stated, "Even if there had been anything there, I can't say anything about it since radar information is classified!" McDonald carefully wrote down this conversation and placed after it the first of the very few exclamation points which appear in his journals. He also wrote down the conundrum: "But he'd just said they had no fixes there that weren't accounted for." This was the first of many puzzling remarks McDonald was to encounter while attempting to get radar confirmation on Tucson sightings.

Persisting, McDonald went higher up. He phoned Lt. Colonel Robert C. Smith, Mt. Lemmon's commanding officer. Col. Smith also denied radar readings on the anomalous flight of objects.

"I'm not pulling the wool over your eyes," Col. Smith told him. "There's so much traffic through here that it's fantastic." He listed the various air fields and airlines around Tucson and told McDonald that planes came through at fantastic

speeds and altitudes—such as F-104's and B-58's. In addition, there was unusual traffic coming from California, he said, "experimental planes, etc."

McDonald apparently insisted, because Col. Smith agreed to check once again and phone back "on an unofficial basis." But it was the same story. At 5:20 A.M. two jet aircraft had passed over at 35,000 feet west-bound, and at 6:00 A.M. one or two others had passed over at the same altitude west-bound. Col. Smith theorized that the unidentified objects viewed between 5:40 A.M. and 6:00 A.M. were "probably test stuff—higher speed aircraft." He also told McDonald that "people get fooled, by objects like balloons."¹²

McDonald still persisted and was given the extension of a **General Wilson, Commander, 36th Air Force Division**. General Wilson, he was assured, could check to see if there had been a Strategic Air Command (SAC) exercise with aircraft in those numbers. However, when McDonald stated to a representative at **Davis-Monthan (D-M)**, an Air Force base just south of Tucson, that the **Mt. Lemmon radar had failed to detect the overflight**, he was told that "**Lemmon radar might not know about SAC exercises going on.**"¹³ When McDonald called General Wilson back, he wasn't available; **Sgt. John W. McDonald** of the **Central Air Traffic Control** took over. The Sergeant stated that D-M did not receive all flight plans and that only two agencies had records—local air traffic control monitoring flights originating from or terminating at Tucson and **Tucson Radio Control (TRC)**, which monitored through-flights.

McDonald called TRC and learned that only a log of radio contacts was kept. In fact, between D-M, TRC and the CAA he was given conflicting information.¹⁴ The Sergeant McDonald to whom he spoke had been quoted in the April 3 *Tucson Star* and had told reporters that F-102 jet fighters, "presumably from **George AFB at Victorville, California**," fly over Tucson and always in groups of four. He intimated that they could be flying as high as 50,000 to 70,000 feet. McDonald clipped items about this event from local papers, underlining the words "presumably" and "50,000 to 70,000 feet" and, in a margin of one of the photocopies, noted the sunrise point as being 5° north of east (see Appendix Item 2-A, page 528).

12. McDonald's first journal, p. 39.

13. In the words of the late **Elton Boyer**, who was a consultant on this book, a professional pilot extremely knowledgeable in aviation affairs, and a man who often flew into the Tucson area, "If the Lemmon guy had said anything to McDonald about SAC exercises, he would have been severely dealt with by **General Le May**, who was deadly on security."

14. *Ibid.*, p. 41.

Even though he received no satisfaction from official sources, McDonald continued undaunted. He called the Sergeant back a few days later to inquire about regulations governing flights above 30,000 feet. He again received conflicting information from D-M and the Civilian Aeronautics Administration (CAA). The CAA representative called D-M himself, checked with the Operations Officer and called McDonald back, stating, "[The Sergeant] must be wrong."¹⁵ Aircraft flying over 29,000 feet had many complicated rules that were different from those for ordinary jet flights. McDonald's notes on these conflicting conversations are completely objective. However, he would have been less than human not to feel some frustration.

"He did feel that he was not getting the straight stuff from the Air Force," states Dr. Dick Kassander. "And since that was not only a matter of Davis-Monthan, the supposition might reasonably be made there were things that, as a matter of policy, the Air Force did not wish discussed."

McDonald's confidence that "the Air Force was taking care of things" began to crack when he first met this resistance from Air Force officialdom. Friends in the D-M tower had told him unofficially that when an object reported as a UFO was caught on radar there, higher officials would subsequently deny it. This situation only served to increase his interest in UFOs. UFO sightings were to him only subjective, anecdotal reports, no matter how multiple and credible the observers might be—the same attitude any objective researcher would take. However, if a radar lock on the same target could be confirmed, the subjective reports took on a type of objective reality. This is precisely what he was seeking. It could answer his basic question: Were physical, unidentified objects operating in Tucson skies?

As regards the April 1, 1958, objects, Air Force personnel at D-M south of Tucson denied observing the "principal phenomena," as James McDonald termed the first set of anomalous objects. D-M confirmed, however, that they had viewed a flight of five or six jets at 6:10 A.M. traveling east, but had no radio contact with them. He was informed that through-flights of high-altitude aircraft are not required to establish radio contact with the ground.

Only one source in the area, the Tucson Municipal Airport, had monitored aircraft movements in the Tucson area on that April 1st morning. At 5:45 A.M. a Tucson woman phoned the Weather Bureau, based at the airport, to report some unusual objects low over the Rincon Mountains east of Tucson. Three Weather Bureau staff members went outdoors and studied the group, which was comprised of one large and four small white objects. The Bureau was again alerted when the same woman phoned in again about 6:00 A.M. to report

15. *Ibid.*, p. 41.

that six other objects had just passed overhead. Three Weather Bureau personnel once again stepped out to examine these and concluded that they were jets.

A large number of Arizonans saw this flight of six jets, heading east or east-southeast, pass over the city at about 6:10 A.M. However, McDonald, in spite of his best efforts, could find no official agency who could identify these jets, which were apparently following the same path the "principal phenomena" had taken just minutes before.

This was the first prolonged period of frustration McDonald experienced from lack of cooperation from officialdom. Dick Kassander, his longtime friend and colleague, relates. "Some of these observations were really quite uncanny. They were very interesting. He'd say, 'If I asked the Air Force whether they saw anything on the radar they would say 'no,' when immediately before he'd talked to a friend who was on the radar who said, 'Hell, yes!'"

"Then there were pilot reports," Kassander continues. "Those were the toughest of all to argue against, because these guys were skilled observers and there were a number of them. [With] the pilots, it was, 'You're damn right I saw it! And it was on the radar.' And these fellows had no ax to grind one way or the other, and were not likely to be fooled by the sorts of phenomena you frequently see in the sky." In McDonald's first journal, however, there are no notes regarding any confirmations on radar of the April 1 sightings; neither are there notes of conversations with "friends" or "pilots." The reason for this will become abundantly clear in later chapters—he kept confidential material to himself.

McDonald was forced to conclude that confirmed aircraft movements over Tucson early on April 1 failed to provide any positive information bearing on the nature of the "principal phenomena," as he termed it. Two military operations offices, two control towers, a radar station, and a radio navigational facility "cooperated" by offering what they claimed was all available information, yet none of it clearly established that the principal phenomena were extremely high-flying aircraft.

In McDonald's unpublished paper concerning the April 1 overflight, lack of space precluded giving detailed information from each of the 75 witnesses, although his first handwritten journal contains most of it. Instead, he chose to cite enough observations to illustrate the different kinds of reports he received. The earliest observation was made within a minute or two of 5:35 A.M. by Mrs. D. K. Wood of Tucson, who had just returned from driving her husband to the bus. Just as she returned home she detected six pencil-shaped white streaks in formation, at 8° elevation, 110° azimuth, ESE, as checked later by McDonald with a transit he set up in her yard. She'd seen these streaks just above a neighbor's television antenna, and McDonald ascertained that the angles were reliable to about 2°. Each streak was about 5° in apparent length, grouped into two

irregular V-formations. She watched them about two or three minutes and could not detect any motion, nor did they evaporate or shift position, as they would if they had been contrails.

The streaks were silvery white, strongly suggesting that they were sunlit. At 5:35 A.M., the sun was 9° below the eastern horizon. In order for any object seen at 8° elevation to be sunlit, McDonald calculated its altitude would have had to be about 25 miles high. No groups of experimental planes were known to fly at 130,000 feet, plus their lack of movement made it difficult for him to accept them as jets. If their luminosity was due to direct sunlight, they could not possibly have been conventional aircraft. He thought it regrettable that no information was at hand concerning the manner of their disappearance, for he received no other reports closely similar to Mrs. Wood's. Whether the unidentified woman who had phoned the Weather Bureau at 5:45 A.M. saw these streaks, McDonald could not pin down, for the Bureau hadn't taken down her name or address. The Weather Bureau and the CAA confirmed the 6:00 A.M. set of high-flying jets but later denied seeing the earlier overflight of anomalous objects.

While Mrs. Wood was viewing the six motionless "streaks" in the sky, two Greyhound buses were taking civilian personnel to the Army Electronic Proving Ground (AEPG) at Ft. Huachuca. The buses were heading east on the Benson Highway, and a number of people on these buses observed unusual aerial phenomena. H.A. Ide, a member of the civilian scientific staff at AEPG, viewed six oblong objects for a full 25 minutes, beginning at 5:40 A.M. When first detected, the objects were at elevation 25°-30°, heading east-southeast. Ide felt fairly certain that they were reflecting sunlight when he first detected them; he did not believe they were self-luminous.

The first four objects Ide saw were in a loose formation, with two others behind; they held this arrangement throughout. Ide first thought they were specks of cloud but then noted that the sky was cloudless. They appeared to have blunt ends and no wings. The one in the rear looked larger than the others, but when they had passed on ahead of his bus, he could see that this appearance resulted only because two of them were very close together. Each object had an angular width of about one-half the diameter of the full moon.

McDonald interviewed all the bus passengers who saw this 5:40 set. Dean K. Wood described them as somewhat oval in shape, long axis horizontal, and sharply outlined. Two other witnesses were LeRoy Gaskins, a former Navy seaman, and Eugene Ford, a former military pilot, both of whom independently reported that these objects were not aircraft. Neither witness had any idea what they could have been.

Why did she make for her information to be withheld?
It's understood by the people want to remain
anonymous. On the plane, I could simply read on 23 that
I placed the pieces of paper in a bag from Washington, but didn't
display identity.

Ford illustrates the type of witness which impressed McDonald the most—professional, objective, unable to understand the experience of seeing something unidentifiable. Ford, like most of the others, had been reluctant to talk to the media but trusted a scientist who showed interest. The following entry from McDonald's journal regarding Ford's testimony is a sample of his careful notes:

Eugene Ford: a pilot during war.... About 15-20 miles noted unusual "cloud formations"... Were 4 in a group. Flat, like a saucer.

Off to left of group was one @ 3 X larger.... Sun reflection made it bright white, but not shiny. Seemed much larger than any plane he'd ever seen. Squashed ball, symmetrical. Fuzzy edges. Shape doesn't match vapor trails.

Couldn't see any motion. Doesn't understand this.... Appeared to get smaller as if receding.... Did get lower on horizon, as if were receding.... Looked up & saw group of jets. Altogether different.... Obviously moving & overhead, heading east.

The lead Greyhound bus had a flat tire a few miles east of Tucson and was overtaken by the second bus. While passengers were standing around outside, many observed six high-flying jets heading east at about 6:00 A.M. They seemed to be pursuing the first unidentified set of whitish, oval objects. Everyone who saw them were definite that these were six jets, heading in the same direction as the first six unidentified objects. These jets were leaving fairly short vapor trails. The anomalous objects were just disappearing over the Rincon Mountains to the east when the six jets came over.

At 5:40 A.M., when Mr. Ide first detected the unidentified objects, the sun was about 8° below the horizon. At that moment, the lowest altitude at which an object could be sunlit when passing overhead was 40 miles. This raised the objects' estimated altitude to 215,000 feet! If Ide and other witness on the buses were correct in attributing their silvery-white appearance to reflected sunlight, these objects were at altitudes not attainable by any known aircraft.¹⁶ On the other hand, if the objects were self-luminous they were also not conventional aircraft.

The witnesses on the two buses saw the anomalous set of objects only about five minutes after Mrs. Wood was observing the six motionless streaks from her back yard, and three Weather Bureau personnel were observing five objects due east, very low on the horizon. The peculiar fact, McDonald wrote, is that the 5:40

16. The X-15 experimental plane was the only one ever flown at altitudes like this, but it always flew singly.

A.M. set of objects seen by Ide, Ford and the others could not be identified with either of the two other sets.

Concerning the observations made by Weather Bureau personnel at Tucson Municipal Airport, McDonald made detailed reconstruction of events and was led to the almost certain conclusion that the first set of objects seen by Weather Bureau personnel was between 5:45 and 5:50 A.M. Bruce Morrow, Ivan Robert, and Eileen De Laurentis were the three observers. McDonald interviewed all by phone, and also interviewed De Laurentis in person at the Bureau under conditions where transit checks could be made. Five objects were seen, four smaller objects in a formation and a larger one which gave De Laurentis the impression that it was two not-quite-resolvable but separate objects. Persistence of the objects had led the three observers to conclude that they must be jet contrails seen end-on.

McDonald calculated, however, that if the objects were jets flying in the contrail zone at the determined distance, their angular size would be just at the resolution limit of the human eye, and this did not match the much larger size (10-15 minutes of arc) given by the multiple witnesses on the buses.

But suppose the objects were jets, as the Weather Bureau and military people were stating. Where would they have had to be located to be sunlit at 5:45? The sunrise point lay about 390 miles east of Tucson at that time. Since contrails could not have been formed at altitudes any higher than about ten miles on that particular morning, McDonald conservatively estimated the altitudes at which jets could be sunlit. By a complicated calculation, using the curvature and the radius of the Earth, he placed the hypothetical jets at 110 miles east of Tucson at 5:45 A.M. and managed to calculate that the objects seen by the Weather Bureau personnel might possibly have been contrails from jets seen end-on.¹⁷

Despite his arduous reasoning, however, he was unable to come to the conclusion that the Bureau observers saw contrails. "My reasons are photometric rather than geometric, and they are much more subjective than are the above, rather convincing geometric arguments," he wrote. He began systematically looking for contrails a bit after sunset to study the luminosity of contrails seen at low angles against the twilight sky, and he did watch several jets forming short contrails comparable to those of April 1, westward near sunset. He found it extremely difficult to discern such contrails even at angular altitudes of 5°-6°, while the Weather Bureau personnel had viewed their "contrails" at less than 2.5° elevation. McDonald's calculations left him with strong doubts that contrails 100-150 miles away could be spotted so plainly.¹⁸

17. McDonald's unfinished paper on 1 April 1958 Tucson sighting, p. 26.

Likewise, he could not account for some of the other witnesses' observations. Ide's and Wood's sightings could not be equated to "jets," for they were seen under conditions where they could not possibly have been sunlit. On the other hand, whatever Ide and the other witnesses on the buses saw might be matched crudely with the geometry of the Weather Bureau observations. If Ide's objects, heading easterly at high speed, had been viewed by the Weather Bureau personnel toward the end of Ide's sighting, their path might have carried them to such a position that at 5:45 A.M. they would have appeared, to the Bureau staff, to lie low over the Rincons.

In addition to the confirmed 6:00 A.M. passage of six military jets which were apparently following the "principal phenomena," there were two other flights of military jets which overflowed Tucson: one comprised of from four to six jets at about 6:10 A.M. (confirmed by Davis-Monthan AFB) and another group of eight jets which overflowed between the 6:00 A.M. group and the 6:10 A.M. group! The complexity of the April 1, 1958, sightings was a credit to McDonald's tenacity.

To summarize this complex case, a group of five or six anomalous objects were seen flying high over Tucson by ten groups of multiple witnesses each. McDonald demonstrated, through scientific measurements and mathematical calculation, that the objects were flying at too high an altitude to be jets or any type of known aircraft. McDonald could have just as easily accepted the simple answers officialdom was giving—but he could not accept an answer which did not fit all the data which reliable, careful witnesses gave him.

He also checked out the possibility that the unexplained sightings were some type of secret experimental craft being tested at a distant Air Base, but without success. Learning from these early Tucson sightings, he developed the habit of checking carefully wherever he could to rule out this possibility on the UFO sightings he was investigating. His secretary, Margaret Sanderson-Rae,

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18. If anyone doubts McDonald's ability as a thorough investigator even when he was being "subjective," consider the following footnote he wrote in his unfinished paper about his own experiments in viewing vapor trails low on the horizon after sunset: "It is known that the threshold brightness-contrast for, say, 50%, probability of detection of objects rises rapidly with decreasing angular size. For background sky luminance of about 0.1 candle per square meter (order of horizon sky luminance at this solar depression angle), an object of one minute angular width must have a brightness roughly one order of magnitude greater than the sky. If one knew the water content and size of water particles constituting the contrail, then one might...compute the apparent brightness of the contrail and predict the probability of "seeing" the contrail. I have not attempted to make such a calculation since particle size information is not at hand, and size effects can greatly influence the scattering pattern in such cases as these." His entire paper is filled with similar scientific terms, which the author has attempted to simplify for the sake of readability and general interest.

often heard him trying earnestly to obtain information from Air Force and other military sources.

"He always examined every report to be sure that there was nothing going on at the time," Sanderson-Rae states. "He sent out a lot of correspondence to the various AF bases. He'd get a UFO report and then he'd want to know what were you doing, something that would tie into this, that would make this a logical explanation."

In the course of the April 1 investigation, he interviewed a Hughes Aircraft plant guard, Jack Estes, who also told him of another entirely separate UFO sighting which had occurred to a friend, Kenneth Harayda. Harayda and another adult witness had viewed a large, cylindrical object which traveled low over the ridge of a hill near Nogales, a town adjacent to the Mexican border. McDonald was intrigued enough to investigate this incident also. The witnesses described how the object had traveled along the hill, then disappeared over the crest, travelling south. It was so near that they could see what seemed to be "windows" in the side of the craft. McDonald was impressed enough by the case to take Betsy to the site and show her where the incident had occurred.

"Mac took me down to those hills on the way to Nogales, and he walked on those hills and showed me where a reliable witness saw this cigar-shaped object that flew over this hill," Betsy McDonald relates. "Low, as I remember, and it went over on the other side and disappeared. As I recall, it went south, toward the Mexican border. But what was important, this seemed to be a case that was very instrumental in Mac's thinking about continuing research on UFOs, because he felt that this was a case that he could not explain. There were other cases, too, but this is the one that I remember that he used to explain to me why he thought that he should look into these cases."¹⁹

The fact that McDonald left his 38-page paper on the April 1, 1958, sightings unfinished does not mean that he did not finish his investigation of the puzzling event. His notes are very complete, including his attempts to confirm whether or not experimental aircraft were involved. It was one of 70 unfinished papers, on numerous aspects of atmospheric physics, left in his files. He had worked zealously on the problem for months, could not solve it, and went on to another. Dr. Kassander, who was then Director of the IAP, describes McDonald's research method in vivid terms:

"As far as getting into the literature in a tiger fashion and being able to learn very sophisticated concepts and being able to apply them to things he was con-

19. Interview with Betsy McDonald, 22 December 1994. To date, the investigation of this seminal case has not been located in McDonald's files.

cerned with, I've never seen his equal.... He was enormously respected for what he did. He just went out and did his thing and let the chips fall where they may—which, of course, is what is sometimes loosely called academic freedom.”

McDonald became overwhelmed with UFO sighting reports, once it became known in Tucson that a scientist was interested in receiving reports. **Most of the witnesses reporting strange objects in the sky simply wanted to know what they had seen.** With his broad knowledge and ceaseless inquiry, he solved about 98%-99.5% of the reports which came to his attention. He was usually able to demonstrate to the witnesses' satisfaction that they had viewed conventional objects under unusual conditions. These objects included stars, planets, satellites, balloons, and bright meteors.

At the same time that he was doing internationally recognized work in atmospheric physics and working on UFO reports in his spare time, he was also fighting problems on the campus of the University of Arizona.

“He was one of a group of people who were grating on the nerve ends of society,” states colleague Dean Staley. “Locally, they were trying to get more faculty involvement in the government of the University.... There are still people in the Physics Dept. who talk about how some of the faculty of that time had a lot of guts. The University was evolving rather rapidly in the late ‘50s and early ‘60s, and [University President Dr. Richard] Harvill, I think, was one of the guys who was really responsible for it becoming more of a research university, but he was also a bit of an autocrat, and so McDonald was at odds with him.”

Except for his good friend Dick Kassander, McDonald did not generally respect administrators, but he maintained his sense of humor. He enjoyed immensely a quip by Dr. Gerard Kuiper: “An assistant dean is a mouse training to become a rat,” and he included it in his list of favorite sayings.

In order to devote time to his numerous projects—scientific and non-scientific—McDonald had to be what is popularly referred to as a workaholic. Dean Staley comments how he worked day and night, and through the weekend. This had been going on since 1954 on atmospheric projects and, if anything, it increased when he developed interest in the UFO question. McDonald was repeatedly stonewalled by the military at D-M, but always found it hard to believe that the military would fabricate a story. Yet, what he found was directly opposite.

As a result of his growing interest, he began reading voraciously in available UFO literature and slowly made contact with competent lay researchers who had been working on the problem since the early 1950s [See Chapter Five]. He put in prodigious time and effort on promising cases but was also willing to listen to any UFO report as long as it came from a person who spoke

Page strongly suggests a provision to identify UFOs would be highly useful.

rationally and clearly. There is a normal human tendency to misidentify conventional objects in the sky. Venus and Jupiter were often reported as UFOs—as well as other astronomical objects. The following entry in his first journal illustrates the care with which McDonald investigated every report and how he was able to solve the majority of them:

Mrs. H.E. Orth, [address deleted]. Friday at 0410 A.M. got up to air house & saw light north of east (ENE). Like a moon partially hidden by clouds. Looking thru screen door. Opened it. Saw again and then was gone. No comments on shape. I checked moonrise.

Is 0220. She agreed could be a good explanation.²⁰

In the midst of his early UFO research, McDonald became involved in the Titan missile controversy between 1961-63. He was not only concerned about the civilian population which could be wiped out in a nuclear war, but his own family was in danger. His responsibility as a father, as well as a scientist, drove him forward. Researching all aspects of the problem, he became an expert on civil defense in the process.

"Congressmen and Senators—**Morris Udall**, Hayden, all the big shots at that time—considered the missile sites so close to Tucson as a big plum," relates Dr. Dean Staley. "But McDonald saw that it was foolish. And he was at odds with the *Arizona Daily Star* which at that time was run autocratically by William R. Hearst wannabe William R. Matthews. People like Matthews and others would call up Kassander and essentially say, 'Fire the guy!' ...or they'd want Kassander to give McDonald some message to lay off. And Kassander would tell them, 'Well, here's his number. You call him.'"

The Titan missile fight gradually resolved itself, not to McDonald's satisfaction, but beyond the point where he was able to do anything more about it (See Chapter One). He returned to UFO research in his "spare time." Most witnesses who called him were honestly concerned that they had seen something strange, but McDonald quickly solved most of the reports. Most of the witnesses accepted his explanations gratefully. Besides the plethora of identifiable natural objects, however, there were also hoaxes which muddled the investigative process.

On June 28, 1962, McDonald was called at his home by witnesses who were viewing an orange-yellowish object in the sky maneuvering at a low altitude, then ascending into the clouds. A number of observations of similar luminous objects had been reported in the past month, and McDonald wasn't going to let this chance pass by. With Betsy and three of their children, he trooped to the

20. McDonald's first journal, 1958-62 notes, p. 8.

rooftop of the U. A. physics building to observe the object. Armed with binoculars and a small telescope, McDonald and his family watched the object for 15 minutes as it slowly floated downward, eventually disappearing behind other buildings. His own description, as reported in the June 29, 1962, *Tucson Star* and *Tucson Citizen* newspapers, was decisive and crisp:

It was an orange-yellow luminous object.... It appeared below and left of the Pole star and slowly and fairly steadily rose with a sort of westward trend.... It began to descend all the way down to the horizon until our vision was obscured by university buildings....

He requested both newspapers to include a notice to the public that he wished to hear from other observers. Twenty-three persons phoned him, thirteen of them giving descriptions of the June 28 object, four for the night prior, and one for two nights earlier! The details fit a pattern, and he solved the mystery within a few hours. The same day he hand-typed a letter to the *Citizen* on his own time, explaining the sighting in detail.

Five university students told McDonald that they had seen "three fellows lugging a bunch of gear, including inflated plastic bags" across Speedway Blvd. north of the campus on the night of the sighting and watched them fashion a curious brand of homemade balloon. The bags were plastic tubing of the sort which dry cleaners use to cover cleaned clothing, but the "jokers" were using a 30-foot strip. This was arranged into a donut-shape with a top handle. "At opposite ends of one diameter were hung lanterns..., with four candles inside each paper-covered form, thus giving us our 8-candlepower UFO," McDonald wrote in his buoyant style. "The inflating gas was ominous. Natural gas from some stove line, nicely inflammable and held in large quantities in these long tubes!"

Solving the puzzle wasn't enough for him this time. He asked the campus police to be on the lookout for the "balloonists," who apparently had been launching the contraptions on a nightly basis for over a month. "I've suggested that...they give these fellows a gentle suggestion that the fire danger involved...is a bit too great to keep it up. For instance, all Wednesday night reports, plus corresponding winds, suggest that it went out of sight to the northeast, i.e., towards the Catalinas [Mountains], now in state of extreme fire danger."

McDonald did not know it then, but hoax balloons were plaguing the entire nation. In California, this author and other researchers were receiving frequent reports of "candle balloons" made from six-foot plastic bags, supported upright by balsa wood or soda straw frameworks. Candles placed around the bottom filled the bags with hot air and enabled them to rise and drift with surface winds for 15-30 minutes. The California balloons were just as dangerous as the methane-gas balloons of Tucson. The **FAA (formerly CAA)** finally es-

tablished a regulation against launching them, citing danger of interference with low-flying aircraft as well as the fire hazard.

McDonald's humanity was evident in his letter to the *Citizen*. He mentioned the name of only two of the students who had given him information, but withheld the name of a third who requested that his identity not be revealed. He'd learned from the students that the hoaxers were very matter-of-fact about the whole thing. One of the three quoted one of the hoaxers, "Well, that'll be up there all night, we might as well go home." The launchers then left, leaving the balloon drifting toward the dry-brush Catalina Mountains!

McDonald kept on the case, and very soon the hoaxers were identified as three U. of A. engineering students who were working in Tucson for the summer. They lived just north of the campus, and had been launching variations of the "balloons" for a year and a half, not only at night but in broad daylight! When caught, they had a curious attitude.²¹ "We hope people realize from this that all of our generation isn't apathetic," one stated. "But when we sent up one of our balloons the other night, about 15 other students rode by and were totally amazed that somebody would do something other than just ride around in cars!" They claimed they launched the balloons with various light-mechanisms to "track them" and get information about the winds, but also admitted that "there was some fun involved in riding around town looking at people watching the "UFOs" in amazement. When McDonald learned the identity of the hoaxers, he wrote one brief sentence in his journal: "Sat 11:30. Met the three boys at their house." We have no hint what McDonald said to the three young hoaxers, but of one thing we can be sure: the candle balloon activity stopped abruptly.

McDonald, who was usually able to make lemonade when handed a lemon, learned a valuable fact from the candle-balloon spree: The average laymen who see unusual sights in the skies describe what they see without embellishment. It was this assessment of the accurate observing ability of non-scientists that convinced McDonald that UFO reports were not hallucinations or flights of imagination. He concluded that UFO witnesses, for the most part, were honest individuals attempting to describe as best they could the appearance of unidentified objects in the skies.

He also realized two other important facts: Out of the hundreds of reports he investigated and identified between 1958 and 1965, between 0.5% and 2% were unidentifiable even to expert observers such as pilots, tower control operators and law-enforcement officers. This small fraction defied explanation even after exhaustive investigation, and generally involved reports of craftlike machines which performed maneuvers which seemed to violate the known

21. *Tucson Citizen*, July 2, 1962.

laws of physics. Also, the curious block he'd run into while seeking radar confirmation from the Air Force challenged him, for the doors of officialdom had always been wide open to him before.

None of the cases he encountered during those eight quiet years was of any real significance in the UFO field, but the small fraction of unsolved cases intrigued him. He had learned from other researchers that they had also found that unexplained "two percent." Through correspondence and phone conversations with NICAP's Director and Assistant Director, Major Donald E. Keyhoe, (USMC, Ret.) and Richard H. Hall, as well as other NICAP personnel, he concluded that NICAP's staff and its nationwide subcommittees were very competent investigators, even though many of them were non-scientists. They were, however, professionals in other fields of endeavor.

McDonald's nonstop reading also led him to the international field of ufology. In journals like the British *Flying Saucer Review* he discovered that civilian researchers were doing thorough, objective work, and also were finding an unidentifiable 2%. In the UFO research community worldwide, a few lone scientists were quietly serving as consultants and researchers, but the scientific establishment was ignoring the problem.

Dr. "Corny" Steelink was one of the friends and colleagues to whom McDonald confided his concern about the UFO question. Most of his campus colleagues knew of his interest, but inwardly he was agonizing over whether he should go public.

"When you go public, you finally stake your scientific reputation," explains Dr. Steelink. "He knew what he was risking. He kept asking, 'Should I go public?' He asked me and other people, too. He knew that what he was doing was right, that it was a legitimate investigation. He only agonized about the type of flak he would get, which might distract people from the real object of the work and put him in a class of flakes and nuts. He wasn't."

By the spring of 1966, McDonald became convinced that the UFO question was being wrongfully ignored by the scientific community, and that this situation had been brought about by ridicule and lack of real knowledge. No other scientist with his particular skills and reputation was publicly doing anything about it. He decided it was up to him.

Confronting the Incompetents

*Inch by inch, row by row, going to make this garden grow,
All it takes is a rake and a hoe and a piece of fertile ground....*

—from “The Garden Song”

*He had been eight years upon a project for extracting sunbeams
out of cucumbers which were to be put in phials hermetically
sealed, and let out to warm the air in raw inclement summers.*

—Jonathan Swift, *Voyage to Laputa*

The eight quiet years drew to a close. No one knows exactly what “last straw” prompted James McDonald to go public about his interest in UFOs. However, he was greatly irritated by the Air Force’s explanation of a spate of sightings which occurred in 1964-65 and which became known as “the Michigan sightings.” On April 10, 1966, he wrote his contract monitor, Jim Hughes, at the Office of Naval Research (Moore, Charles B.ONR) in Washington, D.C. In an informal letter, McDonald told Hughes that he had decided to try to convince the National Academy of Sciences (NAS) to fund a quiet one-man study of the UFO question. Through the assistance of his good friend, Dr. Thomas Malone, who had been his professor of physics at MIT, the Committee of the Atmospheric Sciences had been influential in getting the NAS to say “yes” to a low-keyed study.

In the meantime, Rep. Gerald Ford, with whom NICAP worked quietly but closely, was asking for a full Congressional hearing on the subject of UFOs. Many of Ford’s Michigan constituents were demanding that Project Blue Book and the entire UFO question be studied. The Michigan sighting flap, which started in 1964 (and continued into 1966) was showing no signs of going away. Ford’s constituents, many of them NICAP members, were criticizing the careless way in which local sightings were being written off, even though many were “close encounters” in which unidentified aerial craft were seen within 500 feet, these being reported by

totally reliable observers. The very day McDonald was expecting his NAS grant to go through, the Air Force decided something must be done to quiet the public's outcries, effectively killing McDonald's NAS grant.

"Things were shaping up to permit me to do some kind of a low-keyed study with NAS support when Rep. Ford's Congressional noises led to some changes," McDonald wrote Hughes. "The net result has been that DoD [Department of Defense] has gone to NAS to get suggested names and universities to participate in some kind of a UFO study."

"I understand I'm at the head of the list of those who might tilt with the little green men," wrote McDonald to Hughes lightheartedly. "But to date I've heard nothing from DoD or USAF.... My own suspicions are that my Titan activities may make me less than the Air Force's ideal candidate to check up on this problem. But in any event, something is cooking on this long-standing problem."

Hughes wrote to McDonald, indicating great interest in "remote-sensing" of the atmosphere, and suggesting that laser observations of anomalous clouds, as well as underwater sonar anomalies, might possibly eliminate some unidentified sightings. He asked McDonald if he could spare the time to examine the Project Blue Book data and give ONR some assessment of the aspects of the problem (see Appendix Item 3-A, page 529).

"Since you will be doing these things in our behalf, it will be legitimate to charge your time and travel against our contract," Hughes wrote. McDonald wrote back to Hughes, outlining preliminary plans for a Blue Book trip. He planned to meet with Maj. Quintanilla, who was head of Blue Book, plus other officials at the Foreign Technology Division (FTD) at which Blue Book was based. For the first time, a top scientist was about to throw all his energy into investigating the UFO question.

He began a second journal, a collection of 33 handwritten pages, which he kept between 1966 and 1967. He was apparently not susceptible to the human foible of slanting his writing upward or downward when writing on unlined paper. Handwriting experts state that a definite upward slant to handwriting denotes a happy or contented mood, while a downward slant indicates despondency or depression. McDonald's handwriting was generally arrow-straight, indicating that his mental processes were tightly controlled, and his emotions subdued.

In this second journal, the writing is smaller than in the first, at times almost microscopic. In his published works, his vocabulary was limited only by what was between the covers of the dictionary, and the grammar, spelling, and phraseology were all virtually perfect. In his journals, however, he abbreviated frequently, deleted prepositions and articles, and otherwise made his chroni-

cles concise. He also used acronyms of governmental and scientific agencies, organizations, and facilities. The "Glossary of Acronyms" on page 587 is intended to help guide the reader through this alphabet soup.

At the top of the first page he jotted the number "201" giving no hint as to the location of the previous "200" pages. However, his early UFO investigative notes, which comprise his first journal, add up to about 160 pages. He may have estimated the number of these pages, written prior to March 1966, and simply started his second "journal" with "201." These 66 pages (33 pages back and front) record his activities in the UFO research field from April 5, 1966, through July 12, 1967—day-by-day accounts of conversations, trips, events and rare personal comments, all UFO related. They also contain detailed accounts of sightings confided to him by scientific colleagues.

There is almost no mention of his usual professional responsibilities or research—these are in his multitude of published papers and notes preserved at IAP and in the University of Arizona Library at Tucson. The first entry of his second journal seems almost precognitive, because much of his UFO work revolved around radar-visual cases, which seemed to hold out to him hope of obtaining physical evidence of UFOs:

4/5/66 Relevant check with Atlas & FAA traffic controller re. kinds of spurious echoes one can get under given conditions.

He eagerly looked forward to visiting Project Blue Book. Since early 1948 the U.S. government had given the Air Force the responsibility of handling UFO reports from both military and public. Blue Book was the third project which had been set up to do that, its predecessors being Project Sign and Project Grudge. All three projects had come to the conclusion that there was nothing to UFOs—that they were all the result of misperceptions of conventional aerial and atmospheric phenomena, hallucinations, or hoaxes. At least that's what they told the American public!

There were two particular cases which intrigued McDonald, and which he planned to look up at Blue Book. The first was a report by Maj. Rudolph Pestalozzi, a Tucson resident. Pestalozzi had been an air intelligence officer who, from about 1950 to 1960, was stationed at Davis-Monthan (D-M) AFB, just south of Tucson. Upon occasion, in the course of his duties, Pestalozzi made "Air Intelligence Information Reports" regarding UFO sightings by military personnel. He'd talked with McDonald on more than one occasion about a sighting on which he stated he'd "filed the thickest report he'd ever filed on a UFO." The main observers were the crew of an airborne B-36 which was passing over Davis-Monthan AFB at the time of the encounter. Pestalozzi said he also had seen the objects near the B-36 while he was standing on the steps of the Base Hospital with another airman. The two ground-based witnesses saw two round,

Um, the author clearly hasn't read Rupert's book and his "estimate of the situation"

metallic UFOs approach the airborne B-36 and overtake it at 3-4 times its speed. Reducing speed, they paced the aircraft for approximately 3-5 minutes. One object flew behind the port side of the aircraft while the other stationed itself on the starboard side, fitting rather snugly between the right engine and the leading edge of the tail.

The 10-man crew, thoroughly shaken up, requested permission to land at Davis-Montham after the UFO departed, and Pestalozzi personally interrogated them. All but the pilot had ample time to get to the starboard side of the B-36 to view the UFO up close. The object was symmetrically convex top and bottom, about 10-12 feet thick at the middle, quite sharp at the edge and approximately 20-25 feet in diameter. The crew stated that the object did not interfere with the navigation and radio equipment on their aircraft.

To the best of his recollection, Pestalozzi thought the incident had occurred in June 1953. The B-36 was on route from Carswell AFB in Texas headed to March AFB in California at the time of the sighting. He suggested that the incident was probably in the files of Project Blue Book under those names.

Another case which was very much on McDonald's mind in June 1966 was the Portage County case. It had occurred in the early morning hours of April 17, 1966, and involved the sighting of a large, glowing UFO which was chased by two Sheriff deputies in an official cruiser from Portage County, Ohio across the state line into Pennsylvania. The two initial witnesses were Deputies Dale Spaur and "Barney" Neff. Deputy Sheriff Robert D. Wilson was radio operator on duty at Portage City about 5:00 A.M. when Deputy Spaur called in to report that he and Neff were chasing a "UFO" southeast on Route 224. It was disc-shaped and about 30-45 feet in diameter, when first seen hovering overhead. It lit up the area all over the car "as bright as high noon." Spaur, who was driving, began a close pursuit of the object at speeds varying between 80-105 m.p.h.

He traveled along several state highways in his pursuit of the object, and as he neared the Pennsylvania state line the UFO changed speed, direction, altitude, and brightness. Its speed was sometimes too great for the pursuing cruiser; the object stopped at least two times and waited for the officers to catch up with it! Once across the state line, Spaur, Neff, and two other patrolmen watched the UFO hover over Conway, Pennsylvania. Greater Pittsburgh Airport was called during the chase, and the tower confirmed the object was being observed on their radar screen.¹

1. Later, however, the Airport denied that they had seen the UFO on radar, angering the police.

In Salem, Ohio, two officers heard the chase on their station radio. About 6:30 A.M. an unidentified voice broke into their reception. They heard snatches of a conversation, "I'm going down to look at it...I'm right above it, and it's about 45 feet across...something trailing behind it, like a ball of fire." The voice came in louder than regular police traffic, and seemed excited. About ten minutes later, two Salem, Ohio, police officers returned to the station and reported that they had been watching military jets following a UFO going south-east, presumably the same one Spaur and Neff were chasing. Was this unidentified voice the pilot of a military jet which had been seen in the vicinity of the object?

Spaur and Neff ran low on gas during their long chase, and they were forced to return to Portage. The glowing object had led them far outside their jurisdiction. At the Sheriff's station, personnel on duty noticed that the two men were unusually serious. Spaur, who was normally well-poised, stuttered when he spoke, and his hand trembled as he smoked a cigarette. The next morning, Monday, April 18, 1966, he was interviewed on the phone by Maj. Hector Quintanilla, then Head of Project Blue Book. Apparently Spaur did not catch the major's name, for he described in a written statement to a civilian investigator that he'd received a phone call from a man "claiming to represent the U.S. Air Force."

"What was this mirage you saw?" Quintanilla queried Spaur at the very start of the phone call. He suggested outright that Spaur had been viewing a satellite! This first phone "interview" was about 2-1/2 minutes long. Quintanilla phoned him again on Thursday, April 21, asking essentially the same questions. This second call lasted about 1-1/2 minutes.

"Each time, the interviewer [Quintanilla] seemed to want me to say I had only seen the UFO for a few minutes," stated Spaur. "[When I tried to tell him] how long I had seen it, he did not ask any further questions about my sighting." Yet Spaur and Neff had chased the object through several counties! Spaur's partner, Wilbur L. (Barney) Neff, was not contacted at all by phone. Another policeman, Officer Frank Panzanella of the Conway, Pennsylvania P. D., who also viewed the object, was interviewed by a USAF representative one month after the event. This Air Force investigator was also abrupt and hurried. He merely asked him for a typed statement and stated he didn't care whether or not Panzanella signed it or not.

William Weitzel, a fine civilian researcher with NICAP, investigated the Portage County case thoroughly and sent copies of all documentation on the case to NICAP headquarters. NICAP had sent copies to McDonald for evaluation. They included written statements by most of the law enforcement witnesses, a 17-page transcript of a public statement by Maj. Quintanilla, sketches of the objects by the witnesses, and a statement and sketch of the object by Patrolman

Wayne Huston of the East Palestine, Ohio, Police Force, who watched the UFO over Conway, Pennsylvania. Huston had witnessed it flying overhead while in radio contact with Spaur and Neff. He had pursued it with the two officers to Conway. Other sketches and descriptions of the object were given to Weitzel by police officer Henry Kwiatanowski and other lawmen who had viewed the object from widely spaced cities and locations. McDonald's file on the Portage County case eventually grew to one inch thick.

The Portage County case caught the attention of the nation's media, particularly the press, probably because of the multiple witnesses of good reputation in different locations in two states, all law enforcement officers with excellent observational powers.

Chief Gerald Buchert had submitted to NICAP a photograph of the UFO he'd taken. Quintanilla dismissed the photograph out of hand, since it didn't show any features other than a blob of light. He explained to Chief Buchert that what he had photographed were "atmospheric fluctuations distorting the image of Venus."² On May 10, 1966, a hearing was held by Blue Book in the Portage County Court House. The transcript of this hearing exists in McDonald's file but is marked "not for publication." Among the participants were Maj. Quintanilla, Spaur and Neff, Panzanella, H. Wayne Huston, Weitzel, the Chief of Police, and Mrs. Gerald Buchert. Later, Quintanilla stated at the hearing that he "simply collects testimony and never doubts an observer's words," and then in an interview for the Portage County *Record-Courier* he stated that an unpleasant aspect of his job is telling observers that they didn't see what they thought they did.

The Portage County and Pestalozzi reports were on McDonald's mind as he made his plans to visit Project Blue Book. He also intended to ask about other documented reports which he'd received from NICAP. In early June he traveled to Washington, D.C., to speak with Jim Hughes, his ONR contract monitor. The funding for McDonald's cloud physics and climate-modification projects at IAP was partially derived from grants from ONR. Hughes was a good friend of McDonald's and of others at IAP. They had a smooth working relationship; McDonald trusted Hughes' judgment not only so far as his funding was concerned but in other matters as well. He was concerned about "jurisdictional questions," such as whether or not he might be interfering, because of Navy contracts, with the functioning of another military agency. Hughes reassured him there was no problem.

2. NICAP's photo analyst also came to the conclusion that Chief Buchert's photos did not corroborate the law enforcement officers' sightings. This was due, however, to the considerable distance from which the unidentified object was photographed and does not reflect on Buchert's honesty.

There was also the problem of funding James McDonald's summer UFO study. Raising six children on a professor's salary, his finances were limited. McDonald's main wealth lay in the eminence with which his work was regarded in the scientific and academic communities. He broached the idea to Hughes that his initial Blue Book trip might be charged to his current ONR funding grant, in addition to the search for data which Hughes had specifically requested. They came to the conclusion that studying Project Blue Book reports in general fell under the province of atmospheric physics. He was given the OK to charge the trip to ONR.

He gave Hughes a run-down on his recent efforts. He asked if there was any chance (underlining the word "any" in his journal) to tackle UFOs directly on an ONR grant. Hughes suggested that the subject of "radar angels" might be regarded as related to UFO research—that is, types of UFO-like blips sometimes reported by radar operators, and McDonald agreed to check. He told Hughes that he anticipated that he would be spending only the summer on the UFO question; if he found good evidence that UFOs were a legitimate scientific question, McDonald assumed that scientific interest in the subject would follow naturally, and that numerous scientists would become publicly involved with adequate funding from government and other sources.

At lunchtime, McDonald went to the NASA cafeteria and was soon joined by Dr. Mac C. Adams and other NASA personnel. A discussion on aerodynamics ensued, and McDonald skillfully led the conversation onto the subject of UFOs. Dr. Adams listened as he explained his interest, then interrupted to ask what he thought UFOs were. McDonald replied, "Non-terrestrial."³ He told Adams that his feeling was that "unidentified flying objects" were NASA's concern, not the Air Force's. He told them about Rudy Pestalozzi's case, and both NASA scientists immediately asked if the starboard object had thrown off the trim of the plane—in other words, had the witnesses detected any turbulence that would indicate that a large physical object was flying close to this B-36? This was one question McDonald had not asked Pestalozzi; he put it on his mental list to check.

Very few people were aware that McDonald had, in February 1966, convinced influential colleagues in the National Academy of Sciences to fund him in a quiet, one-man study of UFOs, but that the promise of funding had been retracted when the Air Force officially announced that it had decided to fund a

3. McDonald, second journal, reverse side p. 8. "The term 'non-terrestrial' as used by McDonald did not necessarily equate with 'extraterrestrial.' McDonald was always very careful in his phrasing. By 'non-terrestrial' he meant that the appearance and maneuvers of UFOs, as reported by credible observers, did not fit any conventional phenomena known to exist on Earth.

study with government funds. This announcement had apparently taken the NAS by surprise, and they had informed McDonald that they could not fund him in his one-man study, since to do so would be presumptive criticism of the Air Force. The government's announcement, coming suddenly on the heels of McDonald's successful appeal for NAS funding may be construed as coincidental (See Chapter 11).

Later that afternoon, McDonald spoke to Al Eggers in the NASA office; Eggers asked how one could attack the UFO problem scientifically. McDonald told him about areas where repeated sightings were happening. He suggested that mobile teams could be rushed, equipped with spectroscopes, magnetometers, precision cameras, and other monitoring equipment. This seemed to satisfy Eggers.

"NASA can't support a literature search," he informed McDonald, "but it might be different if action could be taken in terms of direct attack of some kind on the problem."⁴

"The all-important next step is to escalate conviction on the fact of UFOs," said McDonald.

"I understand that," Eggers replied. "Would you be prepared to come here to NASA and give a very scientific discussion, aimed at tearing apart existing explanations in terms of conventional phenomena?"

McDonald accepted. He was eager to tear into current theories that some scientists were putting forward to explain UFOs. In particular, he felt that the writings of Dr. Donald Menzel, explaining away all the reports, were illogical and misleading. He had solid scientific data by which he could rebut Menzel, and he was eager to begin. Leaving the NASA office, he wasn't too sure that Eggers thought UFOs were of potential NASA importance.

McDonald broached the UFO subject with other colleagues. On April 28, 1966, he had a visit from Charlie Moore of Socorro, New Mexico, a longtime friend and confidante and with Martin Uman from Westinghouse. The two scientists had attended a conference of the Institute of Electronic and Electrical Engineers (IEEE) and stopped by to visit. Uman had become interested in UFOs and thought that ball lightning may account for many cases. He had even written Dr. J. Allen Hynek on it and had sent him a recent paper he'd prepared, but had received no answer.

Since Hynek was the official scientific consultant on astronomy for Project Blue Book, Uman thought he was the logical person to whom to send

4. *Ibid.*, p. 9.

This is a good question. It's not easy to have evidence of a hypothesis. A solid test needs a test.

his paper. The main problem with Uman's hypothesis, the three scientists realized, was that reports of ball lightning were, at that period of time, in the twilight zone and just beginning to be studied by scientists. Many establishment scientists regarded them with the same ridicule and neglect they paid to UFOs. Uman assured McDonald that he would be interested in participating if McDonald's plans to investigate UFOs took off.

Moore told McDonald that he had spent three hours with Hynek in February, before the troublesome Michigan "flap" began.⁵ He related how Hynek had "let his hair down" expressing distress over the way the Air Force was handling the UFO problem. He had told Moore that he "kept running into a curtain of secrecy, and that they keep pressuring him to go along with their official position." Blue Book's handling of a September 1965 Exeter, New Hampshire, case was bothering him particularly.⁶ McDonald asked Charlie Moore why Hynek didn't simply ignore the Air Force and make public statements on his dissatisfaction.

Moore speculated that Hynek might be enmeshed in AF politics and might possibly be dependent on them for support. Hynek had an astronomical facility near Las Cruces, and that's where Moore and Hynek had met for their recent visit. Moore had known Hynek for 17 years and respected him. He told McDonald that he felt Hynek did a lot of full investigation on Blue Book cases and was doing a good job.⁷ The three men talked all the way through supper and later at a local bar about UFOs. This was the first of many late-nighters McDonald would pull, talking far into the night, during the next five years.

In early April, McDonald discussed the UFO question with Drs. Lou Bat-tan and Ben Herman, both colleagues at the Institute of Atmospheric Physics (IAP). Both had the highest regard for McDonald. They expressed reservations regarding his growing interest but nevertheless listened carefully as McDonald outlined the research he'd done so far and his plan to visit Blue Book. In an interview for this book, Dr. Ben Herman explains:

Jim never looked to build something where there was nothing. There were scientists right on campus that ridiculed him, and yet people who worked for these scientists were giving him UFO reports. ...[Gerard] Kuiper, an astronomer...was saying, "How come my people never re-

5. The word "flap", as used in UFOlogy, is defined as a marked increase of UFO reports in a localized area during a comparatively short period of time. A "mini-flap" can occur within a few square miles and last a few days to a month, but mostly "flaps" occur within a larger area and can last from several weeks to over a year.

6. For a full, objective account of this well-documented case, see *Incident At Exeter*, by John G. Fuller, New York, A Berkley Medallion Book, G. P. Putnam's Sons, 1967.

7. McDonald, second journal, reverse p. 2.

port them? They've never seen any." But they had given Mac reports but they'd said, "Don't use my name!"

Another reason Herman listened so carefully to his mentor and friend who had guided him through his own doctoral studies was that he knew McDonald was not saying that UFOs were definitely from outer space, as he was later quoted. Herman knew that McDonald's feeling about UFOs being "non-terrestrial" boiled down to the most careful of hypotheses.

"His exact words always were, 'the most likely of a whole group of unlikely explanations is that they are from outer space,'" states Herman. "He never said he believed that this was the case.... A lot of people were saying, 'They're not from outer space, period....' Mac wouldn't say that, because Mac was a scientist, and unless you can work something out scientifically...you can't say definitely yes or no. But [some] scientists, nevertheless, appreciated and understood what he was doing and did not ridicule. They realized that there were problems....

"I don't believe these things were from outer space," Herman continues. "However, I do believe there's a lot of unexplained things that have not yet been scientifically explained, and I think that's exactly what Mac was doing."

Lou Battan listened carefully, too, as McDonald told him that Charlie Moore had confided a 1949 sighting to him (see Chapter 6). This impressed Battan; he was willing to listen and to concede that, if James McDonald saw a scientific problem in UFOs, there must be something to it. McDonald's journal entry concerning this April 1966 discussion noted: "Even L[ou] and B[en] seem to be getting the picture."⁸

On Sunday, May 8, 1966, one day after his 46th birthday, James McDonald called his mentor and friend, Tom Malone, who lived in Connecticut. Malone had been his major professor at MIT and was now an executive in Traveler's Insurance. Malone kept up with scientific work, as well, and was active in the American Meteorological Society (AMS). It is apparent from the frequent conversations with Malone which are recorded in McDonald's journal that he depended upon Malone's advice on many subjects, and UFOs were no exception.

He outlined recent developments to Malone and mentioned a new book he'd just read by Dr. Jacques Vallée, a well-respected scientist who was publicly involved in UFO research in France.⁹ Furthermore, he told Malone, he had come across more evidence that the Air Force was doing a "sloppy" job in

8. *Ibid.*, p. 3.

9. Vallée, Dr. Jacques, *Challenge To Science*, (Original title *Anatomy Of A Phenomenon*), New York, Ace Books, Inc., Henry Regnery Company, 1966.

1st another thing for security

their UFO investigations, springing perhaps from a lack of real interest in the reports which kept flooding in to them.

He told Malone about a recent Congressional hearing at which both J. Allen Hynek and Hector Quintanilla had testified. The content of the hearing was in large part restricted, but McDonald had learned, to his astonishment, that Maj. Hector Quintanilla, Head of Project Blue Book, could not answer specific questions about the July 1952 Washington National Airport flap! On several successive nights, UFO activity in the vicinity had alarmed the government to the extent that military jets were sent up to try to identify the intruders. The UFOs had even overflown the White House—air space which is off limits to all air traffic. The July 1952 sightings had garnered headlines in newspapers all over the country.

McDonald also asked Malone if he thought he should try to interest the NAS again, to get the UFO question out of Air Force hands so that the projected government university teams would not have to answer directly to the Air Force. Malone offered to talk with John Coleman, a high official at NAS.

McDonald confided that he not only wanted to view Blue Book files personally, but he also wished to get to a good library like the Congressional or the New York City Public Library to check pre-1940 observations.¹⁰ Early sightings of UFO-type phenomena intrigued McDonald. He told Malone about a 1904 observation by the crew of an American ship, the U.S.S. Supply, and added that many observations were reported in books, newspapers, and other records back to the 19th century and even earlier. He pointed out that Dr. Hynek hadn't looked into any early sightings.

In spite of his best efforts, McDonald was not able to influence the NAS to take the UFO question out of Air Force hands. Tom Malone phoned John Coleman as he promised, but was given almost no time to fully state his reason for calling. J. R. Sievers, another of McDonald's highly placed contacts, felt that it would be in order for McDonald to talk personally with Brian O'Brien, who had chaired an *ad hoc* committee under the USAF Science Advisory Board (AFSAB) looking into the UFO problem. Coleman concurred with this. The Air Force had not yet contacted NAS, however. Colonel Stein, the Assistant Secretary to the AFSAB, who'd been given the job of pursuing McDonald's suggestions, was out of town. McDonald seemed stymied by foot-dragging, as far as the Air Force and the NAS was concerned. But he'd met resistance of all kinds before, and he persisted.

10. McDonald, *op. cit.*, reverse p. 3.

On May 11th McDonald called Brian O'Brien. The Air Force consultant told him that he understood the Air Force was going ahead with their plans to set up university teams and expressed surprise that James McDonald himself had not yet been asked to participate. O'Brien said that he felt UFOs needed better study, but that he was sure that, whatever universities were granted the projected \$500,000 of government money, they would "find nothing to it." McDonald reminded him that UFOs had been reported for centuries, and were not just a new phenomenon, as most people believed. O'Brien countered that "it was useless to check old observations. [The] story grows with the retelling," he said.

McDonald asked O'Brien if he could recommend getting a small panel—on a summer-study basis—to go over the "old stuff." "A panel reviewing important past sightings could advise optimal design of new investigations and would be able to provide stronger motivation for it," argued McDonald. O'Brien doubted the effectiveness of looking at "old stuff" but agreed to bring up the idea with the Air Force at Wright-Patterson AFB, when he'd be out there on May 18-19. After their phone call, McDonald sent O'Brien a letter dated 5/11/1996, outlining his suggestion for a summer-study panel.¹¹

In spite of some success, McDonald's concern about the way the UFO question was being neglected by science and government continued unabated. On May 10th he viewed an evening television program titled "CBS Presents: UFO—Friend, Foe or Fantasy," which discussed the recent Dexter/Hillsdale, Mich., sightings which had caused a hullabaloo in the press and which had gotten Hynek in dutch with the public when he suggested publicly that people possibly were seeing "swamp gas" (See Chapter 4). Walter Cronkite was the program's master of ceremonies. McDonald got the general impression that CBS was saying that UFOs were imaginary. His journal describes "CBS Presents" in his unique abbreviated style:

Had a batch of people on. Frank Mannon, Dexter, Mich[igan], said he saw object descending, & as came to tree-top level, blue light went on. "Came down at a 45° angle." Mannon was bitter at public trespassing on property. "Wouldn't report another UFO if it came down beside that well." Visible over 4 hrs.¹²

McDonald found that the girls at Hillsdale College were convincing witnesses on the "CBS Presents" program, but he was much less convinced by Dr. Donald Menzel's attempt to explain UFOs as spots of light induced by atmospheric inversions. McDonald's description of the CBS program continued:

11. *Ibid.*, p. 5.

12. *Ibid.*, p. 4.

*[Lt.] Col. [Lawrence] Tacker [former Head of Project Blue Book] assured USAF hiding nothing. Contactees—Adamski, etc. Giant Rock, Calif. convention. NORAD. Capt. Gary Reese, USAF satellite radar-tracks. Space-Tracking Network, Colo. Springs, covers 100,000 ft. to 2,000 miles.... Said no UFOs seen.*¹³

The media had spoken. Credible citizens who witnessed UFOs were being frustrated and ridiculed. "CBS Presents" might possibly have been the spur that convinced McDonald that someone would have to learn how to use the media to get objective UFO information out to the viewing public in a capable manner.

In mid-May Tom Malone called him. He said that Brian O'Brien had talked over McDonald's letter with an Air Force general and then had phoned Malone, saying he wanted to get going on McDonald's ideas right away. He still didn't like the "panel" idea but wanted James McDonald to help lay down some guidelines for the university investigation teams that would be selected. McDonald concurred that this was at least a way to get started; he had lots of specific ideas. "However," he told Malone, "the USAF won't be able to induce competent people to do the investigation work unless the climate of thinking changes on the UFO problem." Malone felt the same way but agreed that one had to start wherever one could.¹⁴

On the 27th of May, McDonald's efforts to obtain funding for his summer of UFO research paid off in a small way when Gerard Kuiper, the NASA astronomer who headed up the university's Astronomy Department approved a small NASA grant—\$1,300. Kuiper's personal reaction regarding UFOs was still doubtful, but he agreed to have McDonald speak to a NASA group whom he would call together at the University. He stressed his own opinion, namely, if McDonald could prove that one observation was genuinely non-terrestrial, he could be interested in the subject, but hundreds of bad reports were unimpressive.¹⁵

McDonald re-doubled his efforts. He added the Dexter/Hillsdale sightings to his list to check out at Blue Book, for witness Mannon's frustration, expressed before millions of viewers, had touched him. Mannon represented the public who were being treated unfairly by the Air Force. He phoned Mannon but he wasn't home. McDonald quotes Mrs. Frank Mannon:

"If it's about 'that object,' he wasn't talking to anybody about it. You have to call his lawyer." I expressed regrets and she opened up a bit

13. *Ibid.*, reverse p. 4

14. *Ibid.*, p. 5.

15. *Ibid.*, p. 7.

*about "people tormenting us," phoned all the time, left beer cans, etc. I pointed out my interest [was] only scientific but said I understood and closed call.*¹⁶

This short entry tells much about McDonald's interviewing skills. He listened to witnesses closely, empathized with their difficulties, and was usually able to gain their trust within minutes. During his extended telephone interviews he was able to perceive quite accurately whether the witness was intelligent, well educated and trustworthy or, on the other hand, inconsistent, dishonest or a publicity seeker. It was plain to him that the Mannon family had suffered an unusual amount of ridicule and harassment, not only by their fellow townspeople but by Air Force investigators as well. Dr. Hynek's "swamp gas" explanation had added immeasurably to the ridicule they had sustained. Mrs. Mannon was adamant, and McDonald hadn't the time to go through attorneys to get statements from witnesses. Too many other promising cases begged for attention.

One thing remained—getting permission to visit Project Blue Book. It would mean gaining entry into Wright-Patterson AFB in Dayton, Ohio, and plowing through Air Force files, some of which he fully expected would be classified. McDonald at the time held no security clearance; his research projects at the Institute and his ONR contracts did not require it. He decided that he would ask Brian O'Brien to clear the way for him.

The very next day O'Brien called him to say that Blue Book would be glad to have McDonald come for a visit any time! He suggested that McDonald contact Brig. Gen. Arthur Cruikshank, the Commander of the FTD, based at Wright-Patterson AFB. Project Blue Book was one of the multiple projects Cruikshank was in charge of. McDonald quotes O'Brien:

*"You should be sure to talk with Dr. Anthony J. Cacioppo, (Caw Chee Oh' Poh), who'd been Chief Scientist at FTD for the past year. He's a mathematician who has become interested in certain areas of psychology. He was with Goodyear Rubber, but FTD persuaded him to join staff."*¹⁷

Never one to ignore a potential contact, McDonald spelled out Cacioppo's name phonetically in printed caps so that he would be sure to pronounce it correctly. His skills in the fine points of professional contact were unmatched.

O'Brien warned McDonald that no one he knew in the Air Force seemed interested in studying old reports. McDonald privately doubted that he'd pressed the issue with them! However, O'Brien told him he wanted McDonald

16. *Ibid.*, reverse p. 7.

17. *Ibid.*, reverse p. 5.

to think about how best to set up the research teams and that he, himself, thought those people should be able to get out into field quickly. He hinted that McDonald, and his University of Arizona colleagues, might share in the government contract.¹⁸

McDonald stressed his doubts again that "good people" (meaning objective scientists) would participate in the university teams program. O'Brien countered, saying they'd had pretty good luck in the past in persuading competent scientists to help when the Air Force needed it.

"Some of us feel that we should try to help the Air Force when we can," said O'Brien. Inexplicably, he made no mention of his conversation with Tom Malone, in which he had told Malone that he wanted to engage McDonald as a consultant to work up guidelines regarding the university investigative teams. He seemed, instead, to be indirectly asking McDonald to give him all his ideas voluntarily.

O'Brien also threw in the information that he had been speaking recently with John Coleman of NAS. McDonald got an uneasy feeling that perhaps "the Titan factor" was involved. He'd been on the lookout for signs that he still might be *persona non grata* with the Air Force. However, Brian O'Brien had opened doors to Blue Book, and McDonald wasted no time phoning Cruikshank. The General courteously invited him for a three-day visit. Cruikshank assured him that all Blue Book files were non-classified, that he could see anything in them that he wanted, and that he should be able to talk with both Maj. Quintanilla and Dr. Cacioppo.

McDonald set about planning the trip. He phoned Jim Hughes and asked if it was OK to use ONR funds to include a stop-over at Chicago, to visit J. Allen Hynek. Hughes okayed this; McDonald's journal specifies:

Send Jim a report. Put title page on it and some kind of cover such as usually employ. He said only Lathrop and he need know of this. I p. o.¹⁹ may make sense to use ball lightning as focus of attention, but we really didn't pursue this point.²⁰

McDonald was left with the feeling that the arrangements for using ONR funds for his UFO study trip to Dayton were a "bit awkward," but there was little he could do about it.²¹ The next day Dr. Cacioppo's secretary phoned, asking for McDonald's Social Security number. She said it was for the purpose

18. *Ibid.*, p. 6.

19. "p. o." is McDonald's shorthand for "pointed out."

20. *Ibid.*, reverse p. 6.

21. *Ibid.*, reverse p. 6.

of obtaining a "clearance" for McDonald's perusal of Project Blue Book files. McDonald objected, informing her that Gen. Cruikshank had stressed that all Blue Book reports were non-classified. The secretary stated she'd been told that McDonald had asked to see classified files, hence the need for a clearance. McDonald pressed the issue, and the secretary backed down. "Well," she said, "I'm not sure just what is involved. It's possible that the clearance is only for the purpose of getting you on the base."

On June 6th McDonald boarded a Constellation to Dayton. As he sat in the big triple-tailed jet, he started writing a backlog of notes in his journal, using telephone jottings and brief notes he'd crammed into his pockets from time to time. His own outstanding memory filled in the spaces. Working fast but efficiently, he also read a transcript of NICAP investigator William Weitzel's taped interview between Maj. Quintanilla and Deputy Dale Spaur regarding the Portage County sighting. He looked up in his astronomical ephemeris the rising point of Venus on the evening of that sighting in case Quintanilla should try to blame that planet for the Portage County cruiser chase. He also confirmed that the satellite which was passing overhead during the sighting was too small and high to be seen visually. He was ready to confront Quintanilla with cold, hard facts.

When McDonald reached Dayton, he was met by a staff car from FTD, but his luggage was lost. It was not the last time during the next five years that he would encounter this particular trouble, but as time went on the losses would become more suspicious in nature. This time the airline found his bag; it had been re-routed to Columbus, Ohio, and was returned to him late that night.

Up early the next morning, McDonald entered FTD at 8:45 A.M. He received his clearance badge and met the Blue Book staff, which was composed of Maj. Quintanilla, a Sgt. Jones and Mrs. Stanscombe, a civilian secretary. McDonald, who had just two working days to determine the quality of UFO investigation by the Air Force over the past 19 years, tore into his task. He spent the morning interviewing Quintanilla, and, to paraphrase Jacques Vallée's eloquent assessment, "An entire era came to a crashing end."²²

McDonald listened while Quintanilla talked—at first. The major assured him that he [Quintanilla] was the one in United States Air Force who now knew more than anyone else about UFOs. He assured McDonald that Project Blue Book was the only government office that received and worked on UFO reports. He also showed him the university-teamwork statement draft. McDonald studied the draft swiftly but thoroughly, noting a disturbing

22. Vallée, Jacques, *Forbidden Science: Journals 1957-1969*, Berkeley, Calif., North Atlantic Books, 1992, p. 186.

phrase that smacked of censorship. He decided to keep this opinion to himself, for the time being.

Instead, he expressed interest in the work of the Robertson Panel. He'd seen the "de-classified" version of the so-called Robertson Report which NICAP had distributed, but, like all other UFO researchers, he'd been dismayed by the heavy censoring this official UFO document had undergone. "Robertson Report" was the shortened title used in UFOlogy for the "Report of Meeting of [three words blacked out] on Unidentified Flying Objects Convened by [five words blacked out] January 14-18, 1953." Quintanilla obligingly gave McDonald an uncensored version of the Robertson Report! There was not one line blacked out. McDonald was inwardly startled but kept a poker-face. He thanked the secretary and asked for a Xerox copy to take home to Tucson. He was assured that this could be done but that it would take a little time.²³

As McDonald read through the uncensored version, he took complete notes that would live for posterity, fully aware that he was the first person outside the military-government complex to see the full and complete text. The full title was plainly visible: "Report of Meeting of Scientific Advisory Panel on Unidentified Flying Objects Convened By Office of Scientific Intelligence, CIA, January 14-18, 1953." McDonald had just discovered that the CIA had called this meeting together, not the Air Force, as the censored version had intimated.²⁴ For the first time, a U.S. civilian held proof in his hands that the Air Force was not the only government or military agency actively interested in UFOs!

The Robertson Panel had been long on talent but short on information and scientific interest. Five eminent scientists had participated; the panel had been headed by H.P. Robertson, a specialist in mathematical physics at the California Institute of Technology (Caltech). The Panel met for four days to "study the UFO problem." Afterward, they were expected to report adroitly on any implications UFOs might hold for science as well as potential hazards they might pose to the U.S. government. They spent the fifth day writing their conclusions. Consultants—but not full participants—to the Panel included then-head of Blue Book, Capt. Edward J. Ruppelt,²⁵ and astronomer J. Allen Hynek.

23. McDonald, *op. cit.*, reverse p. 10.

24. A full report on the current available version of the Robertson Report was written by the author (AD) for the Center for UFO Studies in 1975, when the report (probably the version McDonald was given to read at Blue Book in 1966) was de-classified late in 1974, apparently in response to her FOIA request. However, the full Report is not yet available, especially some material cited in "Tabs" (Appendices) to the Report. The "Tabs" on the de-classified version were obviously re-numbered to conceal information the CIA is still not willing to release.

The Robertson Panel concluded that UFOs held no potential scientific value and did not constitute a threat to the United States. It recommended that the subject be de-mystified and debunked under an official media program. The Panel's stated motive for recommending this action was to prevent the possibility that a potential enemy of the United States might create a false UFO flap which could clog the communication channels of the military and the government. If such overloading should occur, the Panel reasoned, a potential enemy could derive a distinct advantage if it wished to start a nuclear war.²⁶

McDonald went to lunch with Quintanilla at the Officer's Club but his mind didn't stop working. He brought up the Portage County case, and Quintanilla told him that the deputies had viewed a satellite. McDonald countered that the deputies had reportedly pursued a large, glowing craft over several counties, crossing the state line from Ohio into Pennsylvania, and that their report was backed by multiple witnesses, mainly law enforcement officials, some of whom had joined the chase. Quintanilla continued to insist that they'd viewed a satellite. When McDonald brought up the fact that the satellite that had gone over during the time of the sighting was too small to be seen visually, Quintanilla mentioned that the deputies might have also been viewing the planet Venus! McDonald pulled out his astronomical ephemeris from his briefcase and showed Quintanilla that the position of Venus in the morning sky on the date of the sighting was nowhere near where the deputies had sighted the object. The major didn't back down. "Quintanilla's insistence re. satellite incredible," McDonald wrote later in his journal.²⁷

That afternoon, McDonald read about 80 case reports which had flooded into Blue Book during the period of the Washington, D. C. National Airport

25. Ruppelt, Edward J, *The Report on Unidentified Flying Objects*, Garden City, NY, Doubleday & Company, Inc., 1956, 17 chapters; 243 pp. In this objective, well-written book, Capt. Ruppelt, former head of Project Blue Book before Tacker and Quintanilla, addressed the problem of UFOs as a scientific question, earning the respect of objective researchers. However, the book came out in a "new, enlarged edition" from the same publisher. This edition also bears the date 1956, but has three additional chapters and 277 pages. The text of the revised version (p. 243) states, "Four years have passed since the first 17 chapters of this book were written." The three added chapters completely take away the objective tone of the first edition. For example, the mysterious "Lubbock Lights" are explained as night-flying moths! Since it takes an expert in UFO literature to tell these two editions apart, Ruppelt's true objectivity and his real contributions to the UFO research field were essentially masked. It is felt strongly by veterans in the field that Ruppelt was forced to revise his book. He died in 1960, barely four years after the revised edition appeared.

26. In 1953, it was still possible for an enemy to effectively "block" telephone communication channels of our defense organizations. Later, technology advancements rendered such communication tie-ups impossible. Reference: Personal letter to author from Dr. Samuel A. Goudsmit, a member of the Robertson Panel, dated 19 March 1975.

27. McDonald, *op. cit.*, reverse p. 10.

This is another possible explanation for why all the secrecy. Not all this doesn't make sense. A false flap would require sightings...

sightings, July 1952 to June 1953. He was shocked at the low level of research apparent in these reports. When Blue Book closed for the day, McDonald wasn't finished with Quintanilla. He requested that the major take him to Dr. Cacioppo's office, where he spent about 45 minutes, querying the head scientist about other military or government agencies which might be interested in UFOs. Dr. Cacioppo also assured him that the Air Force Project Blue Book was the only official office that received and investigated UFO reports. Cacioppo also expressed confidence that Quintanilla was doing a good job as head of Blue Book. McDonald listened, saying nothing, while Cacioppo stated that many UFO witnesses had psychological problems, also that there are many kinds of sensory malfunctions among the populace, and that sensory deprivation of one kind or another leaves a witness's mind to "fill in the picture." In other words, in Cacioppo's opinion most UFO reports were mainly imaginary, even among military pilots.

McDonald, pursuing the issue as tactfully as he could, learned that Cacioppo had only looked at six UFO cases in depth! By "in depth," Cacioppo meant that he had read those Blue Book files! One was the Portage County case. McDonald was inwardly disturbed by Cacioppo's lack of knowledge. He wrote to him a few weeks later in an attempt to educate him, saying, in part:

I'm enclosing some material bearing on a single UFO incident, the Portage County, Ohio, case of April 17, 1966.... Maj. Quintanilla went to Ravenna and interrogated Dale Spaur and other members of the Portage County Sheriff's office.... I believe you should read this enclosed 17-page transcript....

Mr. [William] Weitzel, a member of the Pittsburgh NICAP affiliate, has just sent me a 128-page final report on the Portage County case. It is very detailed, very comprehensive. I understand that a copy has also been submitted by him to the Project Blue Book office, so you may wish to glance at the full report.²⁸

While at Blue Book, McDonald also looked for the Hopkinsville, Ky., sighting which had been investigated by Isabel Davis, a New York member of NICAP. The case was a strange one, dealing with the experiences of a family who'd reportedly been besieged for hours by strange beings, after a large UFO landed in a gully nearby. The mountain men shot at the creatures repeatedly from the shelter of their cabin, but bullets apparently had little effect on them; upon being struck by gunfire, the creatures would fall backward, recover, and charge the cabin again! McDonald ordinarily did not discuss UFO "occupant" cases. ²⁸ I think this supports the drone hypothesis: Obviously robotic/non-human in nature.

28. Letter in McDonald's files, under "Cacioppo, Dr. Anthony J", University of Arizona Library Personal Collections.

publicly; such incidents were often replete with psychological implications which McDonald felt did not fall into his area of expertise. He had high regard for Isabel Davis's research ability, however, and considered her report an objective, thoroughly documented account. However, the Blue Book staff apparently couldn't locate the case!

Cacioppo was vague on the details of both Portage County and Hopkinsville, whereas McDonald was familiar with every detail of both cases. He told Cacioppo that he thought Blue Book's "explanation" of the Portage County case—i.e., a satellite—was absurd. Cacioppo then proposed that the deputies might have been chasing the moon, mistaking it for a UFO! McDonald pointed out the absurdities of this explanation and then opened up a discussion of Maj. Quintanilla's shortcomings, as well as those of the major's predecessor at Blue Book, Lt. Col. Lawrence Tacker, USAF.²⁹

He also pointed out that a cover-up vs. foul-up debate was raging in the UFO field and detailed NICAP's growing evidence that the government was deliberately concealing information on extremely interesting UFO reports, including UFO photos. He added that he himself did not think the USAF was deliberately covering up significant information, but that he was finding overwhelming evidence that the Air Force was badly neglecting the situation. He told Cacioppo that UFO reports from credible observers should be studied objectively and openly in scientific circles.

Cacioppo agreed that what was needed was the university-team approach and that full access to Blue Book files would be offered to any such group, once the universities had been selected. McDonald brought up the censorship implication which he had noted in the preliminary draft of the work statement.

"That's only to avoid conflicting PR releases," assured Cacioppo.

In response to this assurance, McDonald later wrote rather sardonically in his journal, "Yeah!"³⁰

From his motel that evening, McDonald called Isabel Davis about recent cases on which she had worked. He wanted to be positive of his facts, if he should find these cases in Blue Book files the next day. It was then close to 10:00 P.M., but the inexhaustible McDonald called Jim Hughes and spent 47 minutes reviewing the day's happenings. He carefully noted that the call to Hughes cost \$12.00. Hughes tried to act as a brake for McDonald's irritation at Project Blue Book personnel, pointing out that the USAF at least deserved

29. Tacker, Lt. Col. Lawrence J., *Flying Saucers and the U.S. Air Force*, Princeton, NJ, D. Van Nostrand Company, Inc., 1960.

30. McDonald, *op. cit.*, p. 11.

credit for maintaining UFO files. He pointed out that the basic problem was: **How to get the facts about UFO reports out fastest to the scientific community.** McDonald agreed.

The probability that McDonald would be offered a consulting arrangement with the Air Force was discussed, and Hughes advised his friend to be sure of getting a "board of review" clause in the agreement to avoid any censorship in any work he would do for the military. At 11:30 that night, after further mulling over the problems he had encountered that day at Blue Book, McDonald, instead of sleeping, read the two items that Maj. Quintanilla had permitted him to take to the motel.

The first was an official Air Force document titled *Project Blue Book: Special Report 14, 5 May 1953*. McDonald noted in his journal that the document was about one inch thick and was "Copy No. 55." He read the entire document handily. He found it and the other document, *Project Grudge—1 August 1952*, both fascinating and described them as follows:

(1.) [Report No. 14] Full of statistical tables in misevaluated observations. Last sentence of Summary. "It is emphasized that there has been a complete lack of any solid evidence & physical matter, in any case, of a reported unidentified flying object." Is last copy of Report 14 that Q's office has!! Yet loaned.

(2.) Project Grudge—dated 1 Aug 52. Signed by Ed Ruppelt. Is c. 2-2 1/2" thick. Bound with a shoelace. Dog-eared. Largest section is Hynek's. Admits many are not astronomical in nature & repeatedly indicates warrant more attention. So big can't abstract here, but clearly reveals that already by 1949-50, USAF had in-hand reports documenting non-conventional nature of objects.³¹

The next day, June 7th, McDonald arrived early at Blue Book. Sgt. Jones and Mrs. Stanscombe were there, but the major had not yet come in. McDonald attacked the files again, but Isabel Davis's account of the Hopkinsville occupant case couldn't be located. He did find the August 13, 1960, Red Bluff, Calif., report, however. This intriguing case had been reported by law enforcement officers, and had been carefully investigated and documented by a NICAP

31. *Special Report 14* Quintanilla had loaned McDonald was later de-classified and made available to civilian researchers, as was *Project Grudge*. A full text of *Report 14*, together with some of the important tables and figures, appeared in a soft cover book, *Flying Saucers: An Analysis of the Air Force Project Blue Book Special Report No. 14 Including the C.I.A. and the Saucers*, by Leon Davidson, White Plains, NY, 1976. However, McDonald had taken many notes on the version he had been loaned, and later demonstrated that Davidson's de-classified copy differed in certain respects from the classified copy he had seen.

Subcommittee in Northern California headed by Paul Cerny. Yet Blue Book carried the case as a refraction of some astronomical object. McDonald disagreed:

*Clearly wrong. Officers first thought it was an airliner about to crash. Illustrates [Isabel] Davis's important point that in contrast to theory that observers are prone to unconventional interpretations, they almost always first put some very conventional interpretation. Hynek's phrase, "escalation of hypotheses" is good.*³²

While McDonald was looking through the Red Bluff file, Sergeant Jones pointed out that Dr. Hynek had not yet studied the reports in that particular file, so they were not yet fully evaluated. McDonald learned from Jones that, each month, Hynek came down for a day. If he disagreed with Quintanilla's explanation of a certain sighting report, he would make a pencilled annotation suggesting what he considered a better explanation. He had begun doing this in January 1966. The preceding year, Hynek had only spot-checked each month's batch. McDonald went through a "Hynek-checked month." On one report the astronomer had penciled "insufficient data" in place of Quintanilla's unreasonable explanation of "aircraft," which was some improvement, McDonald wryly noted in his journal. In another report, Hynek had pencilled "Capella" in place of "Jupiter," neither of which seemed reasonable to McDonald. Aside from these notations, Hynek seemed to have let many absurd explanations pass without comment. McDonald wondered just how many such absurdities Hynek was filtering out.³³

(sounds somehow important) ↓

While this was going on, Maj. Quintanilla arrived with First Lt. Bill Marley in tow. McDonald was introduced to Marley, but Quintanilla cut any conversation short. It was apparent Marley was there to listen only. In fact, a letter written on August 2, 1967, by Brig. Gen. William C. Garland, USAF to the Commander of the FTD, speaks of "Marley's briefing" (see Appendix Item 3-B, page 530). Marley sat in a chair in a corner the entire afternoon and watched McDonald. As McDonald went through Hynek-checked case after Hynek-checked case, his irritation grew. Project Blue Book files were much worse than he had expected.

The morning's work included a 20-minute discussion with Quintanilla and Sgt. Jones, who had been at Blue Book for three years and thought highly of Sgt. Moody, whose place he'd taken. "Moody's a 'good man'!" he told McDonald. McDonald disagreed, pointing out absurd explanations he'd found in cases provided by Moody. He bluntly told them that the observations in Blue Book files and the whole picture of UFO activity strongly indicated a non-terrestrial origin. "You've been involved in a foul-up," he informed them.

32. McDonald, *op cit.*, p. 12.

33. McDonald, *op cit.*, reverse p. 12.

While Lt. Marley watched from his corner, McDonald decided to try to track down Rudy Pestalozzi's report, in which he had become vitally interested and had even discussed with NASA personnel. Working from Rudy's estimated date of June 1953, Quintanilla, Jones and McDonald searched through all the 1953 cases arranged chronologically, and in another cross-file which McDonald guessed was geographical. They failed to find the B-36 case about which Pestalozzi had told him. McDonald did come across another B-36 case which had also been reported by Pestalozzi, involving a May 1, 1952, observation by a master sergeant of two UFOs pacing a B-36 as it passed over Davis-Monthan AFB. He asked for a Xerox, which was given him.

He asked Quintanilla to take him to General Cruikshank again and spent 50 minutes with the General. He did not waste any time.

"The Air Force is in a bad spot," he warned the General. "You're going to have a lot of difficulty getting out of it!"

He told Cruikshank about the cover-up vs. foul-up controversy, and indicated that the absurd explanations that had been given to stunning observations by thoroughly credible observers tended to feed the cover-up hypothesis. Cruikshank replied, quite convincingly, that there was no cover-up in FTD, and again assured him that there was no other UFO program in the U. S. Air Force. McDonald responded that he was pleased to hear the General's assurances, but that he reserved "1% probability that someone else was interested."

He told Cruikshank that he was willing to help FTD with its UFO investigative problem and to brief the Air Force *ad hoc* panel, which was still meeting under Dr. O'Brien. However, McDonald stressed, UFOs seemed to be an international problem, and he feared a security bottle-up. At this point the conversation got around to the Cold War and the defensive missile buildup in the country. Cruikshank stated that he had been involved in siting missiles in Kansas; it became clear to McDonald that the General was not aware of his Titan fight in Tucson. Cruikshank then stated that he felt the best place in government to study UFO reports was "right here in FTD" because the Air Force had detection capabilities not available to others.

"That may be true in the short run, but not in the long," responded James McDonald. "Any radars you have, NASA can get. Other military services might be interested in UFOs besides the Air Force. I'm right now pursuing ONR channels."³⁴

McDonald continued pointing out more reasons why UFO research should not be strictly limited to Air Force control. It had become apparent to

34. *Ibid.*, reverse side p. 12.

him, as it had to other researchers, that the UFO problem was worldwide and he knew that U Thant, then Secretary General of the United Nations, was actively interested in the question. McDonald also mentioned a colleague who had told him that the chief Russian scientist in UNESCO was actively studying Russian reports.

He also told Cacioppo that Rep. Edward Hutchinson of Michigan had sponsored a resolution in the House of Representatives. Many of Hutchinson's constituents were distressed over Hynek's "swamp gas" blunder and the mishandling of other recent Michigan sightings. McDonald confided that he could not understand Hynek's handling of this and other matters, but that he'd be seeing him the next day at Northwestern University and would find out. Then, the conversation grew even more blunt.

"Maj. Quintanilla is not competent," McDonald told Cruikshank. "However, he shouldn't be held accountable for it. Someone in the Air Force chose him for the job and that superior made the mistake."

"Blue Book is a very low-priority project," Cruikshank responded. "There are 200 projects going on in FTD, and Project Blue Book is only one of them. Frankly, Dr. McDonald, I've never heard of any scientist who held the view you do."³⁵

Ignoring the General's attitude, McDonald asked him another question. "There are pre-1947 reports, did you know that? This is not a new phenomenon." As with Brian O'Brien, the question didn't lead anywhere.

About 11:00 A.M. McDonald returned to the Blue Book office, accompanied by Quintanilla, who'd been left cooling his heels and shut out of his own regular 30-minute session. He was surprised that Cruikshank had talked with the visiting scientist so long. "The General never lets anyone stay over 30 minutes," he told McDonald.

Immediately upon his return from Cruikshank's office, McDonald phoned Rudy Pestalozzi. Since he was having trouble locating Pestalozzi's report, he feared the story had been garbled. When he got him on the phone, there was a very poor connection, but McDonald persisted, explaining what was happening. Pestalozzi informed him that the May 1952 B-36 case they'd found in the files was a different one from the sighting he'd previously described. "Great!" thought McDonald.³⁶

35. *Ibid.*, p. 12.

36. *Ibid.*

He asked Pestalozzi whether the other case date, May 1, 1952, gave him any clues. Pestalozzi decided that the case he was referring to perhaps was not June 1953 but June 1952. McDonald then asked him regarding aerodynamic disturbances, pointing out that NASA people whom he had told about the sighting had brought up that question. Had the close proximity to the object thrown off the "trim" of the plane? No, Pestalozzi replied, and that had puzzled the crew, because the presence of a large airborne object so close to the B-36 should have caused at least some turbulence.

At McDonald's insistence, Quintanilla and Sgt. Jones continued to search for Pestalozzi's B-36 case. To McDonald's amazement, there were nine files-full of July 1952 sightings and four or five files-full for August 1952, all over the U.S! In spite of their best efforts, however, they could not find Pestalozzi's sighting. McDonald asked them to keep a sharp lookout for it and, a few days later, wrote Quintanilla a three-page letter reminding him. He later received from Pestalozzi, in July, a written report of the incident, including sketches of the B-36, the two UFOs, and their trajectory around the aircraft (see Appendix Item 3-C, page 531).

He looked again for the Hopkinsville file, which General Cruikshank had mentioned reading. Quintanilla searched, too, but was apparently unsuccessful. At 11:45 the major said he wasn't going to lunch, and Sergeant Jones accompanied McDonald down to the Officers Club. When they returned, the 480-page Hopkinsville file was on Quintanilla's desk. McDonald had the distinct impression that the major had been studying it while he and Jones were gone. Part of the pages seemed to have been removed. McDonald noted that Lt. Marley was still sitting in the corner.

McDonald asked for and received four "ball lightning" files. "Wow," he remarked later in his journal.³⁷ This reaction was due to the fact that the Blue Book staff were apparently "identifying" some UFO reports as ball lightning, even though the phenomenon was not yet accepted by mainstream science! He confronted Quintanilla with a couple of other cases to which the major had assigned exceptionally absurd explanations and commented later on the major's response:

He's impossible. He assured me that inversions can make star images go up and down & into clouds & dart off horizontally! I p. o. one labeled "aircraft" where "bright light came down at slope, then stopped and went back up same glide path." He argued, etc. I got more blunt and later really bored in 'til he said, "Well, Dr., I guess I'm just incompetent."³⁸

37. *Ibid.*, reverse p. 12.

38. *Ibid.*

McDonald didn't answer when Quintanilla stated this. Sgt. Jones banged away at his typewriter, distressed for his boss. Mrs. Stanscombe became upset and left the room. Lt. Marley listened quietly in his corner.³⁹

At about 2:30 McDonald saw Dr. Cacioppo again and was offered three arrangements: 1. Consultant to FTD; 2. Summer employment; 3. A contract in the Fall. McDonald pointed out his apprehension concerning a security bottle-up and added that he'd require a "board of review" clause in any contract he might sign, to insure that he would be free to use information he might discover for his own purposes. He again emphasized the incredible foul-up in the Blue Book operation. Cacioppo told him that he had decided to bring in three more people for an FTD review of Blue Book—an electrical engineer, a meteorologist, and a physicist. McDonald concurred that this was an excellent idea.⁴⁰

His visit at Blue Book completed, McDonald left about 4:15 P.M. and caught an Air Force bus to the Dayton airport terminal. He was remembering that in NICAP's publication, *The UFO Evidence*, there were two whole pages of public denial by the AF that Blue Book ever covered up anything! In particular, a July 19, 1952, denial rang in his head: "There is no truth to allegations that the Air Force withholds or otherwise censors information vital to public understanding or evaluation of the nature of unidentified flying objects (UFO)."⁴¹

Thinking back how he had taken the word of his senior colleagues long ago, when he'd been at the Italian conference and had been reassured that the "Air Force was investigating UFO reports and had the situation well in hand," McDonald felt renewed shock at the incompetence he had just seen with his own eyes. Flying to O'Hare Airport in Chicago on his way to Northwestern University, McDonald spent the time making notes on his two days at Project Blue Book, arming himself with data. He had confronted Quintanilla; he was now preparing for his first encounter with Blue Book's consultant, J. Allen Hynek.

39. *Ibid.*

40. *Ibid.*

41. *Ibid.*, p. 13.

Note:
these
were two
cases that
McDonald
had
experience.
I wonder
why he
wouldn't
have
brought
on another
astronomer.
Almost
makes it
look like
he said
2/3 adds
against
McDonald

McDonald Enters the Ring

*The rollin' of the sea, it's beckonin' to me,
Singin' "Come my son, I'll show you things you've never seen before.
I'll set your spirit free on the winds of history,
So hoist your sails and chart your course and go out and explore...*
—from "The Rollin' of the Sea"

Problems cannot be solved until they have been discovered.
—Edwin G. Boring,
Life Book on Eye and Vision

McDonald had never met J. Allen Hynek personally. He had called the well-known astronomer some days before, however, and set up an appointment to discuss UFOs in general. Now his reasons for visiting were more urgent. From the evidence he'd uncovered at Blue Book the day before, he was now convinced that Hynek was at least partially responsible for the incredible lack of attention that science was giving the UFO question.

Before his first visit to Blue Book, McDonald had discussed the role Hynek was playing in UFO research with NICAP's Dick Hall. Hall was well impressed with Hynek's aide, Bill Powers, who was also an astronomer; he'd seen him at work investigating recent Ohio sightings. Hall felt that Hynek did much of his own investigations via teletype and telephone. He only occasionally got out in the field, and for the most part depended on Powers and other reliable sources. On a more positive note, Hall informed McDonald that Hynek had given a talk a day or two before in Houston, stressing some twenty cases reported by astronomers that demanded attention.

Hynek apparently was more than a bit embarrassed about the media uproar his "swamp gas" explanation had caused. NICAP had obtained detailed reports from Michigan police officers who had viewed disc-shaped,

solid objects—certainly not marsh gas! Hall himself had queried Hynek on the prominent astronomer's wire-story quote that maybe "the observers should be investigated." Hynek had explained to Hall that the press had misquoted him.¹

When McDonald had called Hynek before going to Blue Book, the astronomer was congenial. He asked McDonald if he knew Coral and Jim Lorenzen, who were the directors of the Tucson-based UFO research organization, APRO. Hynek felt the Lorenzens "were the most scientific of any 'club members' he'd ever met." McDonald also had met with the Lorenzens and was impressed by certain aspects of their research. He told Hynek that he felt NICAP's overall approach was better than APRO's.² McDonald

Hynek had never visited NICAP Headquarters, had never met Major Keyhoe, and preferred to avoid him because he felt Keyhoe was "a bit extreme." McDonald countered by saying that he admired Keyhoe's and Dick Hall's approach to the problem. Trying for common ground, McDonald brought up the Air Force's plans for a \$500,000 "university team" study. Hynek said he didn't know anything specific about it, stating that, in spite of being official Air Force consultant on UFOs for the past 18 years, he was not privy to their plans.³ Hynek

We can assume that McDonald, during this preliminary phone conversation, was willing to believe that Hynek was simply a man caught in a difficult position—until he saw at Blue Book all the good UFO cases that Hynek had dismissed with absurd explanations. As a consequence, when McDonald arrived at Northwestern University's Dearborn Observatory, he was determined to come to an understanding. Hynek, however, kept him waiting. His secretary explained that he was busy making up grade lists for his Astronomy A-20 class.

"I bowed out to give him 20 minutes and waited on a breezy drive north of the Observatory," McDonald wrote in his journal. After Hynek finally joined him, the two scientists walked to the new lake-edge Lindenheimer Observatory of which Hynek was Director, and which housed two large telescopes for student use.⁴

Hynek undoubtedly hoped that the visit would be pleasant, but McDonald had no such idea. He pressed Hynek almost immediately for answers to various public remarks Hynek had made about UFOs and to which McDonald objected. Hynek held off answering. A few minutes later, Bill Powers and Jacques

1. McDonald, James E., third journal, p. 2.

2. *Ibid.*, reverse p. 8.

3. *Ibid.*, p. 8.

4. *Ibid.*, p. 13.

Vallée drove up in Jacques's car and all four returned to Hynek's office. Only cryptic notes appear in McDonald's journal up to this point, but it is only logical to wonder whether Hynek was waiting for "backup" before attempting to deal with this persistent, questioning bundle of energy.⁵

What transpired afterward was not cryptic. He described his visit to Blue Book and immediately questioned Hynek about the current Blue Book report evaluations. Why had Hynek let Quintanilla's absurd "explanations" stand without correcting them? And why had he failed to alert the scientific community about what was going on during the past 18 years?

Hynek's answers didn't satisfy him, so McDonald pursued the issues. He pointed out specific "explanations" Hynek had overlooked, such as the August 13, 1960, Red Bluff, Calif., case, which Blue Book carried as a refraction of some astronomical object. "This was clearly wrong," McDonald stated. Police officers had been witnesses to the event, and they had at first thought the fiery object was an airliner about to crash. He reminded him of another case, where Hynek had penciled-in "Capella," (a bright star) in place of Quintanilla's "Jupiter" explanation, but neither was reasonable. He accused Hynek of by-passing many other explanations, which were just as "patently absurd."⁶

In his 1992 book *Forbidden Science: Journals 1957-1969*, Jacques Vallée, an eye witness to this historic meeting, writes that McDonald "verbally attacked" Hynek, demanding to know how the astronomer could have remained silent so long.⁷ McDonald's accusation that Hynek had failed, not only in his responsibility to the Air Force but also in his responsibility to science, might rightfully be viewed as an "attack." However, from McDonald's point-of-view, his questions stemmed from logical apprehension about Hynek's silence on the valuable data in Blue Book files, and his failure to alert his scientific colleagues about it. This inaction, said McDonald, had allowed the public, as well as scientists, to think that the UFO problem was being competently handled.

McDonald told Hynek that scientists had been led to believe that the Air Force had the best of scientific advice on each case report received and that adequate scientific study had been brought to the problem. Bill Powers entered the discussion at this point and asked McDonald why he hadn't spoken out until now. McDonald replied that although he'd interviewed many witnesses, until a month previous he'd not studied the problem intensively and, above all, had no idea of the volume or the quality of Blue Book data which he had al-

5. *Ibid.*, reverse p. 13.

6. *Ibid.*, reverse p. 11.

7. Vallée, Jacques, *Forbidden Science: Journals 1957-1969*, Berkeley, CA, North Atlantic Books, 1992, p. 186.

ways assumed Hynek was examining.⁸ He cited an article in a 1953 issue of *The Journal of the Optical Society of America* in which Hynek had referred to a number of cases which were easily explained by conventional causes, but had written nothing about the hundreds of unexplained cases at Blue Book. Hynek at this point became slightly defensive, stating that Quintanilla had always overruled him, whenever Hynek ruled more scientific studies.

"Then why didn't you take the problem to General Cacioppo, the chief scientist at FTD, where Blue Book offices are housed?" asked McDonald. To his astonishment, Hynek replied that he never went to Cacioppo.⁹

Jacques Vallée attempted to intervene, arguing that Hynek would have been dropped as Air Force consultant if he'd spoken up. McDonald bluntly indicated "So what!" or words to that effect. Powers attempted to explain that Hynek's nature was different, that he was not "brash" like McDonald. McDonald replied he was merely reacting to his two days at Blue Book where he'd gotten a good look at the mine of information Hynek had been in touch with all these years.¹⁰ Hynek then admitted that he was probably a cautious and somewhat timid person, but that his colleagues in astronomy were almost unanimously scornful of UFOs.

"Maybe physicists are different," he suggested. "You are the first scientist with a 'union card' who'd ever said there might be anything to it." James McDonald agreed, but said that none of his colleagues had ever seen the Blue Book data, either.

Hynek pointed out that, during the 1953 Robertson Committee study, a half-dozen eminent scientists had studied the UFO problem for four days. McDonald replied that the panel had looked at only 20 cases, while Blue Book had 10,000. Even in 1953 evidence for the reality of UFOs was already very impressive, he continued, and since Hynek had already been Air Force consultant for five years in 1953, he should have pushed for adequate scientific study at that time. Hynek replied, "I was very small potatoes then."¹¹ He admitted feeling "overawed" by the eminent scientists who comprised the Robertson Panel. Attempting conciliation, he showed McDonald a May 24, 1966, letter which he'd written to Air Force Secretary Harold Brown, as evidence of his present concern and efforts.¹²

8. McDonald, second journal, reverse p. 13.

9. *Ibid.*

10. Appendix Item 4-A, see page 532.

11. McDonald, *op. cit.*, reverse p. 13.

12. On June 18, 1966 Gordon MacDonald, McDonald's colleague at the NAS, informed him that Hynek's letter had stirred no action at Secretary Brown's office.

This is different from if it can't be therefore if only "This is fear of ridicule This is fear of opening arguments are establishment"

The heated discussion toned down a bit while the four men took an extended lunch. McDonald outlined his plans to bring scientific, military, and government attention to the UFO problem. He urged Hynek, Powers and Vallée to do all they could to push on all fronts. Vallée said he had a friend in France close to de Gaulle and thought he might bring this up when he went to France in the summer. McDonald strongly concurred.

The conversation turned to another touchy subject—UFO occupant cases. All four scientists realized that rational and stable witnesses were reporting these, as well as the more “acceptable” craftlike devices seen at a distance. Vallée pointed out that the September 1954 “UFO wave” in France had brought 200 occupant sightings to the attention of French mathematician Aimé Michel, but that Michel had hesitated to put these all in his book, *Flying Saucers and the Straight Line Mystery* lest the sheer number dampen scientific interest.¹³ Vallée said that, in his considered opinion, there were now about 1,000 occupant cases in the literature. None of the four scientists rejected these reports out of hand.¹⁴ It was McDonald’s contention, however, often expressed in later public talks and scientific papers, that such cases contained psychological implications which he himself was not professionally trained to handle.

McDonald also confronted Hynek with the “swamp gas” explanation that had been widely touted by the media. In the case of the Hillsdale College reports, the site over which the strange, glowing machine had hovered for four hours was a well-manicured lawn where receptions were held! Michigan constituents of Rep. Edward Hutchinson had besieged him in such numbers that he had called for a Congressional inquiry into the manner highly publicized sightings had been handled in Hillsdale, Michigan, a town in Rep. Hutchinson’s Congressional district.

At the urging of NICAP, McDonald had gone to see Hutchinson personally, a few days prior to his Blue Book visit. He first talked to some of his Congressional contacts about Hutchinson’s interest. They felt that Hutchinson, who was a Republican in a Democratic-majority House, had only a small chance of getting his resolution accepted. McDonald had then gone to Rep. Morris Udall’s office, whom he knew personally as a fellow Arizonan. Udall, who barely knew Hutchinson, nevertheless phoned Hutchinson’s office to introduce McDonald and to explain his interest in Hutchinson’s resolution.

13. Michel, Aime, *Flying Saucers and the Straight-line Mystery*, New York, Criterion Books, 1958. Translated from the French and edited by the Research Division of Civilian Saucer Intelligence (CSI) of New York.

14. McDonald, *op. cit.*, p. 14.

Hutchinson had told McDonald that he had introduced the resolution because constituents in his 4th District were annoyed about Hynek's "swamp gas" explanation because no swamp existed at the Hillsdale sighting location. He had a 24-page report from a competent source who had investigated the situation. Hutchinson admitted, however, that he didn't personally "believe in UFOs" and was "really amused to find a scientist who did." Not taking offense, McDonald assured Hutchinson that he approved of his resolution. He obtained copies of it, mentioned NICAP's work, and offered any further help that he could possibly give the Congressman.¹⁵

All this was in the background, when McDonald confronted Allen Hynek about his "swamp gas" explanation at their June 8th meeting. Hynek told him he'd gotten the swamp gas idea from University of Michigan scientists and merely suggested it to the media, where it was immediately embraced as the true cause of the sightings by skeptics and debunkers. (It also went down in UFO history as a major blooper.)

McDonald, Hynek, Vallée and Powers talked until well into the afternoon. McDonald hoped he had accomplished his mission of convincing Hynek to put his reputation and experience behind a common effort. On the way to the airport he stopped at a campus co-op and purchased a Northwestern University sweat shirt for his daughter, Gail. While waiting at O'Hare for his plane, he phoned Tom Malone and filled him in on his visits to Blue Book and Hynek.

Regarding this initial contact between Hynek and McDonald, Vallée wrote in his 1992 book, *Forbidden Science*: "A major event has happened.... We have just had lunch with McDonald today, and it is clear that an entire era has come to a crashing end. This man has many contacts, many ideas, and he is afraid of nothing."¹⁶

In subsequent references in *Forbidden Science*, however, Vallée referred to McDonald's "vitriolic attacks" on Hynek, and likened him to "a bull in a china shop." In sharp contrast, McDonald's frequent journal notes about Hynek reveal that he simply thought that Hynek should have been much more forceful and influential in the UFO field before 1966 and later.¹⁷

The unfavorable descriptions which Jacques Vallée later wrote in his journals probably stemmed from Vallée's own loyalty to his mentor, J. Allen Hynek, an acceptance of Hynek's gentler personality, and an understanding of "the politics of science." On the other hand, McDonald either had no tolerance

15. *Ibid.*, reverse p. 8.

16. Vallée, *op. cit.*, p. 186.

17. Letter from McDonald to Hynek, July 1970, Appendix Item 4-A, see page 532.

for politics of science or simply worked around it. Consequently, he turned his indomitable energy and talents everywhere he could, trying to pry loose scientific interest and funding toward the UFO question, efforts which Vallée interpreted as "a bull in a china shop." Vallée from the beginning had relentlessly pursued the truth of UFOs himself, and did not fully appreciate McDonald's intense nature.

The initial meeting with Hynek only strengthened McDonald's resolve to spend part of his summer vacation checking pre-1940 observations, for Hynek showed little interest in these. There was not only a stunning 1904 sighting involving a U.S. military ship, the U.S.S. Supply, but many other early reports, resembling "UFOs," which had occurred back in the 1800s and even earlier.

Several days after his meeting with Hynek, McDonald called his colleague, Charlie Moore, regarding some balloon-flight data. McDonald hoped that the data might clarify Blue Book's evaluation of the classic Mantell case, in which a National Guard aviator had crashed to his death while attempting to chase a huge, luminous UFO which had hovered high over Godman Field, Ky. Hynek had okayed an explanation of "Venus" for the UFO, but Moore was almost certain that Mantell had been directed by the Godman Field personnel on the ground toward a high-altitude Skyhook balloon, at the time a Navy classified research project. Moore told McDonald that the Skyhook incident had been hushed up because they "didn't want it out that the Navy had killed a man."¹⁸

McDonald was satisfied that Moore's balloon-flight data explained the Mantell incident, and he did not investigate it further.¹⁹ He then took the opportunity to tell Moore about his visit with Hynek. Charlie Moore admitted that he had not told McDonald everything he knew about Hynek's reasons for not speaking out more publicly. Hynek had told him that, with two youngsters in college, he needed the consulting money the Air Force paid him. Moore doubted that what he referred to as McDonald's "jolt" would keep Hynek permanently off the fence.²⁰ Hynek, in his own way, was protecting his family by hanging fast to his career.

This just reinforces my
reason to stay a backer.
I never want to be in a position
where someone depends on me, such that
I have to sacrifice my beliefs.

18. McDonald, *op. cit.*, p. 17

19. In a phone interview with Professor Charles B. Moore on 27 September 1994, and in later correspondence, Moore told the author that he thought Mantell had probably been killed trying to chase a Skyhook balloon. Moore stated that a Skyhook launched from central Minnesota on 6 January 1948 went toward the south and, based on trajectories of subsequent flights and reports from observers in Tennessee and Kentucky, he believes this balloon probably passed over Kentucky during the next day. Observers' reports from Kentucky suggest that the balloon probably passed 30 miles or so southwest of Godman Field, Kentucky, the military base which was vectoring Mantell in toward the huge, unidentified "UFO." The Skyhook flights had a naval classification of *confidential* at the time of Mantell's tragic death.

20. McDonald, *op. cit.*, p. 17.

The irony of this was that, at the time, McDonald himself had three youngsters at the university and three more coming up in high school. He could scarcely be blamed for not accepting Hynek's excuse as an acceptable reason for inaction. He was slowly forming an opinion that he would hold to the end of his life, in spite of repeated efforts to work it through. That opinion was that J. Allen Hynek was part of the UFO problem, not part of its solution. *Here's the rub. Hynek was able to get at some of the data by being mindful of the politics.*

A few days later, Hynek and John G. Fuller—a well-known journalist who'd just written a book about the well-documented Exeter, N.H., sightings²¹—attended a meeting of the American Optical Society at the Stamford Nature Center in Connecticut; the meeting was “staged” to promote Fuller's new book. Normally, about 50 persons attended such meetings but this day 150 showed up. Hynek had given a talk and had recommended: *I dislike that he was dishonest but he redeemed himself w/ CUFOS.*

- immediate study, in depth, of the whole UFO problem
- search for patterns, using data-analysis techniques via computers
- establishment of a UFO Center at a major university.

During his talk, Hynek stated that a “leading scientist” had recently come to his office and “berated him” for not previously announcing the conclusion that these objects were extraterrestrial. There followed an ambiguous sentence about “the scientist withholding judgment until he examined all the facts,” but the source did not make clear whether this sentence applied to Hynek or McDonald.²²

Hynek's main conclusion was that the UFO problem needed serious attention, but that it had taken until now for scientists to begin studying the problem adequately. He also told the Stamford audience that “at a recent meeting between a scientist, a statesman, and one of the most influential statesmen in the world, ideas were generated that may lead to some important developments before the year is out.” McDonald realized that the “most influential statesman” was probably U Thant, who at that time was Secretary General of the United Nations.²³ He was fully aware of U Thant's deep interest in the UFO question and, apparently, so was Hynek, even though U Thant's interest was not publicly known at the time.²⁴

21. Fuller, John, *Incident at Exeter*, NY, G. P. Putnam's Sons, 1966.

22. We do not know if the source quoted Hynek correctly. McDonald never publicly made conclusive statements that the UFO phenomenon was extraterrestrial. In his writings, he referred to the ET hypothesis as “the least unsatisfactory hypothesis,” “the least unlikely hypothesis at present,” and similar qualifying phrases. In private, however, McDonald felt that the objects were possibly ET, and his overwhelming need to solve the question sprang partially from his concern about this.

23. McDonald, *op. cit.*, p. 19.

The information about Hynek's Stamford talk was given to McDonald by a source who shall remain nameless.²⁵ This source, who was the publisher of an influential magazine, hotly differed with McDonald, concerning UFOs. "He asked how I could listen to those guys at NICAP. I said I'd spent a number of days at NICAP and I had respect for them," McDonald wrote in his journal. "I said I'd have a copy of *The UFO Evidence* mailed to him directly."²⁶ McDonald thought highly of this NICAP publication, regarding it as the most objective, fact-filled book concerning UFOs that had been published up to that time. He both recommended it to, and had copies sent to, scientists, military personnel and government officials.

Regardless of his disagreements with Dr. Hynek, McDonald felt that Hynek's protege, Jacques Vallée, was contributing much to the objective study of UFOs. He called Vallée toward the end of June to ask about UFO cases in Europe which might show an association between power outages and UFOs, for McDonald had deep interest in NICAP's discovery that sightings of round, glowing UFOs had been seen near the power lines associated with the great Northeastern blackout of 1965. Vallée told him that there was only one known European case of this sort, a 1961 sighting that had occurred in Yugoslavia. A radio station's transmissions were blotted out by a strong, unknown radio frequency at the same time as a dark gray cloud passed over the town.²⁷ Lights also flickered and went out at the transmitter station and, even more oddly, sodium-vapor lamps sitting on a shelf began to glow with no electrical connection at all!²⁸

Vallée also told McDonald that he was going to France to meet with a small group of scientists who were quietly studying UFOs. Vallée commented, "They would lose their jobs if they said anything publicly about it." The group included some well-known French scientists—atomic energy people and one of General de Gaulle's top scientific advisers. Vallée felt that the USAF's po-

24. *Ibid.*, p. 20.

25. The source will not be named here. McDonald basically distrusted him and especially resented the source's low opinion of author John G. Fuller, whom McDonald and NICAP considered most competent and reliable.

26. *The UFO Evidence*, Edited by Richard Hall, Washington, D.C., and published by National Investigations Committee on Aerial Phenomena (NICAP).

27. "Clouds" associated with UFO reports are common, especially in France, due to the work of French researcher Aime Michel, who wrote about "cloud cigars," his name for cloud-shrouded aggregations of UFOs. Also see "Santa Catalina 'Cloud Cigars,'" a paper presented by this author, Ann Druffel, at the 1976 Conference of the Center for UFO Studies, Lincolnwood, Ill., and printed in that conference's *Proceedings*, which presents evidence that recurrent "cloud cigars" are witnessed off the Southern California coast.

28. McDonald, *op. cit.*, p. 22.

sition—i. e., that UFOs, as unidentified flying craft, did not exist—was a major block to serious acceptance of the subject by French scientists and government.

McDonald and Vallée also discussed “ringlike” UFOs, like those associated with the Heflin and Ft. Belvoir photo cases (See Chapter 12). McDonald was impressed with Vallée’s knowledge and learned with interest that his French book about UFOs, *Insolites*, was coming out in an English translation. Hynek was planning to write the Foreword.²⁹ Hynek, at the time of this call, was planning to go to Canada for his annual month’s vacation. The idea of “an annual month’s vacation” was foreign to the indefatigable McDonald!

Regarding this June 1966 phone conversation, Vallée writes in *Forbidden Science*, “Jim tried to recruit me for his camp. ‘If it wasn’t for your influence, and all the research you brought over from France, Hynek would still be arguing that 99% of those reports are due to Venus or to marsh gas! It’s time for you to move on.’” From McDonald’s viewpoint, however, he was not trying to divide the scientific community into camps but, rather, trying every way he could to encourage clear-thinking scientists to push jointly toward a solution of the UFO question. On this occasion, they also spent 30 minutes hashing over Hynek’s past record.³⁰

When Vallée’s book, re-named *Challenge to Science*, was published in the U.S. McDonald read the foreword with special interest. In it, Hynek stated, “Unfortunately, as the authors point out, scientists, ‘draped with dignity,’ have often refused to study [UFO] reports. The fact of the matter is that many of my colleagues who have undraped their dignity long enough to take a hard look at the reports have joined the growing ranks of the puzzled scientists; they privately indicate serious interest in the phenomenon but publicly they choose, like the subject itself, to remain unidentified.”³¹ He also denied in the Foreword that he had ever “debunked” UFO reports, terming it “a most unwarranted charge” that he had ever “deliberately adopted a Procrustean approach, cutting down or stretching out evidence to make a forced fit, deliberately to ‘explain away’ UFO reports at all costs....”³²

On June 30, 1966, McDonald made a second trip to Project Blue Book (see Chapter 7 for details) and spent the day digging into files of current cases and other sightings in which he had special interest. In discussions with Maj. Quin-

29. This English edition appeared under the title, *Challenge to Science: The UFO Enigma*, New York, NY, Ace Books, Inc., 1966. It was co-authored by Jacques Vallée and Janine Vallée with a foreword by Hynek.

30. McDonald, *op. cit.*, reverse p. 22

31. Vallée, *op. cit.*, “Foreword” by J. Allen Hynek.

32. *Ibid.*

This further supports my approach to share the USAF and if necessary expose TS craft

tanilla, Dr. Cacioppo, Gen. Cruikshank, and Col. DeGoes, one of the new consultants whom Cruikshank had added to the staff, McDonald kept any lingering doubts about Hynek to himself. He said only that he felt Hynek seemed truly "off the fence," pointing out his talk at Stamford and his comment about U Thant's interest.³³

He urged them to invite Jacques Vallée down to Blue Book before he left for France, pointing out Vallée's wide knowledge, his valuable scientific contacts in France, and his acceptance of the UFO question as a valid scientific problem.³⁴ They expressed interest. McDonald informed Vallée of this, and Vallée was interested. However, Blue Book officials never contacted Vallée. McDonald typically tried to introduce other scientists to the contacts he'd made.

Toward the end of August McDonald received a phone call from Lee Katchen of the NASA Goddard Space Center, who privately investigated UFOs. Katchen had had two phone calls from Hynek in recent days. "He seemed pretty excited, and ready to blow the lid off," he told McDonald.³⁵ According to Katchen, Hynek was forming his own scientific committee here and abroad to study the UFO problem, hoped to speak to U Thant personally about it, had an article about UFOs accepted by *Discovery*, and another article by the *New Yorker*. He'd even succeeded in getting a "Letter to the Editor" accepted by the prestigious refereed journal, *Science*.

Hynek had also told Katchen that he'd needed the consulting money, mentioning the "two kids in college." He was afraid he'd be fired, and that was the reason he had not spoken out in the past, although his failure to do so had been weighing on his mind. Katchen also told McDonald that Hynek was now comparing himself to Martin Luther "posting his 99 theses on the church door!"³⁶

Toward the end of September, McDonald phoned Hynek again. His two main purposes: to ask if Hynek had known all along of the content of the infamous Robertson Panel Report and to clarify the "kids in college" aspect. The Robertson Panel was very much on McDonald's mind, for one of the panel's recommendations was that the government deliberately debunk all UFO reports, in order to minimize public interest in the subject.³⁷

Intell
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The country
might have resorted to "compromises" or in other words lying
most immoral scientists told them to debunk the material

33. McDonald, *op. cit.*, reverse p. 24.

34. *Ibid.*

35. *Ibid.*, p. 31.

36. *Ibid.*

37. *Report of Meetings of Scientific Advisory Panel on Unidentified Flying Objects Convened by Office of Scientific Intelligence, CIA, January 14-18, 1953*. A copy of this now-declassified report, with an Addendum by author Druffel, was published by The Center for UFO Studies in Chicago, Ill.

*Hynek was very vague as to just how much he'd seen [of the classified Robertson Report]. He thought he'd seen all of it. Someone showed him the final report, he thought. When I tried to pin him down on the debunking aspect he couldn't recall such terms, he thought.... He said he never thought that [debunking] had much effect, and felt that public ridicule wasn't the real factor in deterring pilot reports.*³⁸

McDonald pointed out to Hynek that there had been a dramatic drop in USAF reports after 1953, the year that the Robertson Panel had officially recommended "debunking." In that year, also, *an official Air Force Regulation, #200-2, had been put into effect, which prohibited all military personnel from publicly talking about a UFO sighting, under penalty of 10 years in prison and a \$10,000 fine.* McDonald bluntly told Hynek that it was a bit naïve to think that such a regulation had no effect on flow of information from USAF pilots and radar personnel. He also cited specific instances like the *Tinker-Carswell 1965 case, where radar information leaked out and then was quickly retracted after someone remembered AFR 200-2.*

McDonald was not satisfied with the answers he was getting from Hynek. "[It] sounded to me like he's looking for alternative explanations of what happened...seeking excuses," he wrote in his journal. He confronted Hynek with Charlie Moore's quote on the "two-kids-in-college" aspect. Hynek protested that he wasn't on the witness stand, that McDonald wasn't a lawyer, and what did he want out of him, anyway? He first denied making the "two kids in college" remark to Moore, then later said if he'd said it he'd meant it as a joke.

"You know Charlie Moore," countered McDonald. "Do you think he would pass on a jocular remark and portray it instead as a serious admission in a candid discussion? I don't think so, and I know Charlie pretty well." He also told Hynek that he'd heard the story independently from another person—not naming Lee Katchen.³⁹

The two men also differed on the percentage of true "unidentifieds" in Blue Book files. *Hynek insisted it was 1 in 25. McDonald countered that it was an order of magnitude higher.* Hynek disagreed strongly, and they broke off the debate, since it was evident that without specific case reports to refer to, this was futile discussion.⁴⁰

Hynek told McDonald that it was only in the past few years that he'd taken the UFO question seriously. "I was always waiting for a good photo or some ac-

38. McDonald, *op. cit.*, p. 32.

39. *Ibid.*

40. *Ibid.*, reverse p. 32.

tual hardware or a landing on the White House lawn," he said.⁴¹ He related that when he went up to investigate the Michigan sightings he honestly hoped the Dexter sighting would turn out to be a crucial case, but he was not impressed with the intellectual level of some of the witnesses. McDonald brought up the swamp gas controversy again, and Hynek finally agreed that he was "probably wrong" on that one.

James McDonald asked him if he'd ever familiarized himself with radar propagation theory, since this impacted directly on radar-visual UFO sightings, most particularly the classic 1952 Washington, D. C., sightings in which, on successive nights, numerous UFOs roamed freely in the prohibited air space over the White House. Hynek said he'd never done this. "I chided him on that," wrote McDonald later in his journal, "since a week's study could have done it." Hynek asked how could he have stood up to Air Force experts in radar? McDonald repeated that Hynek had been seriously remiss, never to have learned anything about radar in his 18 years' Blue Book duty.⁴²

Hynek also got in a few swipes. He told McDonald that, during the summer, he'd gone to Blue Book and that they regarded McDonald as "off his rocker." He also told him that he'd asked Fred Whipple [an eminent astronomer who was sometimes consulted on UFO cases] if he knew Jim McDonald. "Yes, he's a competent physicist," Whipple had answered. "Well, he's seriously interested in UFOs," Hynek told Whipple. "Oh, I thought he was a competent physicist," Whipple had replied.⁴³

In spite of such maddening discussions, McDonald remained positive, hoping that Hynek would eventually come around and admit his part in the "government UFO foul-up," as McDonald termed it. He continued to give Hynek the benefit of the doubt. In June 1968, when asked by prominent Congressmen in the House of Representatives to name potential panelists for a public hearing on UFOs, his preliminary list had Hynek first. Although the McDonald's list went through several revisions, Hynek's name was always first. Eventually the two men, together with four other prominent scientists, gave testimony on the reality of the UFO problem at the first and only completely public Congressional hearing on the subject to be held within the boundaries of the United States (see Chapter 10).

This Congressional UFO hearing, held on July 29th, 1968, went well, and the participants met that evening for cocktails and celebration in the Du Pont Plaza, joined by some NICAP staff. Later that evening, Hynek privately con-

41. *Ibid.*

42. *Ibid.*

43. *Ibid.*

ceded to McDonald that he had, indeed, seen the mysterious 1947 "Estimate of the Situation," a top secret Air Force document, the existence of which UFOlogists had tried to prove since 1953. Donald E. Keyhoe and NICAP had tried for many years to procure a copy of it, for its existence had been confirmed to Keyhoe by Major Dewey Fournet, a NICAP Board member, and it was described in *The UFO Evidence*.

The document was first described in an early UFO book written by Major Edward J. Ruppelt, a competent and objective man who had been head of Project Blue Book between 1953 and 1955, and its importance lay in the fact that it purportedly contained statements that the Air Force had come to a firm conclusion that the UFO phenomena were real and possibly extraterrestrial.⁴⁴ However, when the document was handed up the line and landed on Gen. Vandenberg's desk, the general reportedly considered it so sensitive in nature that he ordered it destroyed. Attempts by several researchers in recent years to pry loose a copy of the document (allegedly there was only one copy) by invoking the Freedom of Information Act since the mid-1970s have proved unsuccessful.

Intrigued by the fact that Hynek had actually seen this elusive document, McDonald asked why he'd never come out publicly and admitted that the "Estimate of the Situation" actually existed? Hynek squirmed, speculating that the USAF never made the document official after it found its way up the ladder to General Vandenberg. Therefore, it never existed as an accepted Air Force report. "However," repeated Hynek, "I've seen it somewhere along the line."

"How could you have kept quiet all these years!" challenged McDonald.

Hynek confided that he felt no one in the USAF ever looked at the whole picture and, instead, had only looked at one case at a time. "I tried to get the Air Force to change its policies," Hynek told McDonald, "but I felt awfully alone about it."⁴⁵

Over the next two years, Hynek and McDonald shared a few other close moments. When the American Association for the Advancement of Science (AAAS) decided to hold a symposium on UFOs for its December 1968 session, a few scientists rose up in arms, protesting the idea. However, Dr. Thornton Page, who had been one of the scientists on the Robertson Panel, insisted, along with Hynek, McDonald and others, that the session be held. Although

44. Ruppelt, Edward J., *The Report on Unidentified Flying Objects*, Garden City, NY, Doubleday & Company, Inc., 1956. The first edition of the book was objective, but a later "New, Enlarged Edition" edition, also dated 1956 added a strangely negative chapter at the end of the book. It is widely believed by UFO researchers that Ruppelt was forced by the Air Force (or some official source) to "revise" his book. He died about 1960.

45. McDonald, James E., fourth journal, p. 20.

another full year went by before the event actually occurred in 1969, Hynek and McDonald shared the podium, giving the impression of colleagues working for the same cause.

In mid-September 1968, on a pleasant flight from Denver to Ft. Ord, James McDonald and J. Allen Hynek discussed with great interest a May 1967 case concerning witness Stephen Michalak, a Winnipeg, Canada, man who has reportedly been burned during an encounter with a landed UFO. Michalak had sustained burns on his upper body in a gridlike pattern, and for many months traveled sporadically to the Mayo Clinic, at his own expense, for treatment of rashes on his chest in the same area as the burns. Hynek confided to McDonald that he was actively investigating the Michalak report and felt that it might, indeed, be a real case.

On that same flight, the two discussed the controversial "cover-up" hypothesis. McDonald was continuing to think that government inaction on UFOs was the result of a "grand foul-up" rather than a true cover-up and so expressed this to Hynek. He found that the astronomer shared his opinion.⁴⁶ In all of his writings, including his journals, McDonald never seemed to seriously think that there was any government "silence group" deliberately covering up information about UFOs, although he conceded that there seemed to be localized cover-ups on specific cases.⁴⁷ He debated the cover-up idea frequently with NICAP personnel and other researchers. Most were of the opinion that Blue Book, rather than being the only repository for government UFO reports, as the Air Force publicly proclaimed, was mainly a public relations scheme, and that its main function was to explain away all reports. Some researchers like Dick Hall felt that Blue Book, while under Ed Ruppelt's command, had tried to be a serious study, but that this did not hold true for other Air Force officers who had headed the Project.

UFOlogists who favored the cover-up hypothesis suspected that the best UFO data, the best UFO pictures, and the best physical evidence of UFOs were locked away at a level inaccessible to anyone without "need to know." McDonald, so far as is known, for his part never firmly believed that a conspiratorial cover-up existed.⁴⁸ After his death, however, documents concerning formerly classified UFO material—which were never in Blue Book

46. There is some evidence to think that McDonald, shortly before his death, was beginning to find evidence of an official cover-up. See, for example, Fowler, Raymond E., *Casebook of a UFO Investigator*, Englewood Cliffs, NJ, Prentice-Hall, 1981, hardcover, pp. 50-51. (Also see Chapters 17 and 18.)

47. McDonald, *op. cit.*, p. 24.

48. McDonald, "Cover-up vs. Grand Foul-up" file, in McDonald Personal Collection, archived at University of Arizona Library.

files—began to be pried loose from the CIA, the FBI, and many other intelligence and military branches of the government through the Freedom of Information Act (FOIA). This information, beginning in the seventies and continuing even today, settled the cover-up controversy once and for all. We now know that all branches of the U.S. military, all of its intelligence arms, the Defense Intelligence Agency (DIA) and the NSA intensely conducted classified investigations of UFO reports both nationally and internationally.

The “cover-up vs. foul-up” controversy which McDonald debated so vigorously might have been clarified by simple definition of terms. If by the term “cover-up” is meant that the U. S. government has adequate evidence that unidentified aeroforms are invading Earth’s atmosphere and even, at times, leaving landing traces on Earth terrain, there is no doubt that a “cover-up” existed (and still exists). This does not necessarily mean, however, that government officials, at top level, know exactly the nature of these unidentified objects or any specifics as to their purpose and motives.

On the September 1968 flight from Denver to Ft. Ord, after McDonald and Hynek discussed the cover-up vs. foul-up question, Hynek confided that he was having problems with Col. Raymond Sleeper, who at the time was Hynek’s superior in the FTD. He’d had several stormy sessions with Sleeper, who was demanding that he present his views on Blue Book methodology. McDonald recommended that Hynek should put all his criticisms of Blue Book on record, “in case Sleeper is planning to try to dump him.”⁴⁹ It seemed a strange twist, with McDonald advising Hynek how to keep his consulting job, but McDonald’s main purpose was to urge Hynek to emphasize that the Air Force was not utilizing its own in-house scientific competence.

Arriving at Ft. Ord, the two men continued talking at TWA’s Ambassador’s Club. “He seemed glad for a chance to talk and was clearly helpful regarding our past differences,” wrote McDonald. “I pointed out I felt he should have become better informed re. meteorological optics, radar, etc. and he agreed that he probably hadn’t taken the whole thing that seriously.”⁵⁰ corroborate my theory.

Hynek also was convinced that had he “pounded on the table” back in the early years of his Air Force consultancy, “they’d have gotten rid of him immediately.” He felt that he’d “gathered the data” which he couldn’t have done otherwise. Hynek meant that he had accumulated his own personal stockpile of UFO reports from Blue Book files, and regarded these as an important resource. McDonald, kindly perhaps, did not bring up the obvious point that such a stockpile was hardly significant if not openly shared with other scientists.⁵¹

49. McDonald, fourth journal, reverse p. 24 and p. 31.

50. *Ibid.*

The growing cordiality between the two was short-lived, however. By April 1969, the long-awaited "Condon Report" came out in a paperback edition, and the entire UFO research field was abuzz with its implications (see Chapter 11). McDonald, along with other objective researchers and investigators, was incensed by the hatchet job which Dr. Edward Condon had done on UFOs. Condon had stated in his "Conclusions" that UFOs were not deserving of further scientific study, that it was unethical for teachers to bring such "fringe subjects" to the attention of young students, and that the American public could safely forget the whole question.⁵² These conclusions were drawn by Condon after spending \$580,000 of taxpayers' money in a three-year study of UFO reports at the University of Colorado (See Chapter 11).

Hynek reviewed the Condon Report in the *Bulletin of Atomic Scientists*. A colleague called it to McDonald's attention, stating that it was a bad review because it was not unfavorable enough. McDonald concurred. He'd thought that Hynek's view was truly changing, yet his review of the Condon Report more or less whitewashed Condon's actions. Also, by this time McDonald had tracked down and interviewed numerous witnesses of the Hillsdale-Dexter, Michigan, sightings. After hearing their stories, and comparing them with Hynek's "swamp gas" write-off, he was dismayed anew. "JAH will be in Boulder the end of the week at a science project and I will see him then," wrote McDonald in his journal. "I plan to tell him, after interview[ing] 16-17 Swamp Gas witnesses I'm unhappy [sic] than ever."⁵³

At a scientific UFO Symposium on UFOs in August 1969, Hynek and McDonald were slated to be two of the primary speakers and were being interviewed at a press conference. In full hearing of the media, Hynek commented that he was "glad to see James McDonald is finally coming around to recognize some of the points I've been making, because scientists in general aren't paying attention to the UFO problem." McDonald was irritated by the remark. Afterwards he wrote tersely in his journal:

8/22/69 UFO Symposium "Science & UFO's" NAA Denver.

See file (Ken Steinmetz), 6 speakers.

Had good go around with Hynek at PM press conf when he volunteered, "Glad to see you're finally coming around to my view."

51. *Ibid.*

52. *Scientific Study of Unidentified Flying Objects*, Dr. Edward U. Condon, Scientific Director, Daniel S. Gillmor, Editor, with an introduction by Walter Sullivan, New York, Bantam Books 1968.

53. McDonald, *op. cit.*, p. 38.

Re my prior comment that the scientific community is basically responsible [for neglect of the UFO question.] I opened up on him, cited my swamp gas review. Got a fair amount out. Probably good I did."⁵⁴

For more than three years McDonald had been publicly speaking out about UFOs, urging his scientific colleagues, his contacts in the military and in government to pay attention to the UFO question. He'd put his reputation, his career and his personal life on the line. Yet here was Hynek stating that McDonald was coming around to his point of view! McDonald's desire for scientific honesty was deeply offended.

It was incidents like this, plus McDonald's encyclopedic memory and penchant for keeping detailed notes of conversations and events, that finally led him in July 1970 to write a lengthy letter to Hynek. On the pages of the third typed draft, he made many handwritten additions—so many that, if the letter had been sent, it would have constituted about 60 pages! He apparently never polished it enough to actually mail it, but the entire text of the last draft, re-typed for better legibility, is included as Appendix Item 4-A (see page 532).

In the letter, McDonald cited the encounters and differences he'd had with Hynek and recounted the numerous conversations in which he had tried to come to an understanding with him. His main concern at this point was that Hynek was not being honest with himself, or with other scientists, or with the public. Instead, McDonald charged, Hynek was trying to convince all who heard him that he had somehow kept the UFO question alive until scientists were ready to take an honest look at it. Hynek would never admit to McDonald that his 20-years' AF consultancy—in which he'd participated fully in explaining away excellent cases—contributed to the Air Force UFO "foul-up" and to the scientific establishment's neglect of the UFO question.

McDonald himself made mistakes, but he generally apologized on those rare occasions when he felt he'd been wrong. He simply couldn't understand why Hynek would not admit his participation in the government's neglect, especially since the question of UFOs was by this time, in McDonald's mind, "the greatest scientific problem of our time." In the July 1970 letter, he referred to Hynek's "strange misperceptions about the history of this whole problem.... I wished we could sit down and really thrash this whole thing out. We never have, and this letter is a poor attempt to do a bit of that."⁵⁵

What irritated McDonald even more than Hynek's refusal to admit that he had been part of the UFO problem was his deep concern that Hynek was planning to

54. *Ibid.*, reverse side p. 44.

55. McDonald's letter to Hynek, July 1970, p. 23 (see Appendix Item 4-A, page 532).

"re-write history." In a 1970 issue of *Flying Saucer Review (FSR)*, a respected UFO journal published in England, Hynek wrote, "Now that Blue Book has been terminated, I will be free to discuss some of their 'scientific' methods, and indeed a part of the book I am now writing will be devoted to that."⁵⁶

This passage increased McDonald's concern. "Do I understand that you really are going to try to write a book that makes out Quintanilla, his predecessors, and the 'establishment' as the malefactors in this drama?" McDonald asked Hynek in the July 1970 letter. "You can make a greater scientific contribution by...opening your own eyes [to] what you've done to the UFO problem, rather than trying to come out with a book that rewrites history...where you come out looking like some sort of a martyr to a great scientific cause.... [A] candid admission of the fact...might wake up some of the scientists who are still on the fence, might make them take that new and earnest look at the UFO problem that would help get it out in the open where some really capable scientists can begin to hammer away at it."⁵⁷

The next mention of Allen Hynek appears in McDonald's journal in August 1970. He had learned from NICAP's Dick Hall that the astronomer had been in Boston and was in close touch with UFO researcher Raymond Fowler.⁵⁸ "JAH is using some of [Fowler's] cases in a book due out this fall [and] is considering coming out with ETH [the extraterrestrial hypothesis],"⁵⁹ McDonald wrote. He was keeping track of Hynek's moves, while saying little.

On February 3, 1971, McDonald met Hynek at the Spanish Trail Motel in Tucson. By that time, McDonald had gone to Maxwell Air Force Base in Alabama where the Blue Book files had been archived, had spent two weeks studying them, and discovered (and copied) 100 radar-visual (R-V) files which no civilian researcher had ever seen before.⁶⁰ He always regarded radar-visual cases, where the objects were tracked on radar at the same time they were being viewed by reliable, official eyewitnesses, as possibly the closest thing to "physical evidence" that could be obtained. Consequently, he was even more enraged that Hynek had not alerted the scientific community to these cases.

56. Hynek, J. Allen, "Commentary on the AAAS Symposium," *FSR*, FSR Publications Ltd., P.O. Box 162, High Wycombe, Bucks. HP13 5DZ, England, March/April 1970 issue. *FSR* may be contacted at <http://www.fsreview.net> and fsreview@hotmail.com.

57. Appendix Item 4-A, see page 532.

58. Fowler, Raymond, *Casebook of a UFO Investigator*. Englewood Cliffs, NJ, Prentice-Hall, Inc., 1981. Fowler, a well-known NICAP investigator, was a friend and colleague of McDonald's.

59. McDonald, fourth journal, p. 49.

60. These 100 cases are archived in McDonald's "Personal Collection" at the Library of the University of Arizona at Tucson.

McDonald tore into Hynek, berating him for what he had learned from the radar-visual files and the sorry way in which Hynek had passed off even these astounding data with absurd "explanations." He then accused him of starting "the Menzelian pattern."⁶¹

"Menzelian" referred to the eminent astrophysicist, Dr. Donald Menzel of Harvard University, who was famous for his debunking and ridicule of the UFO subject. He had written widely on the subject, trying to convince scientists (and the public) that UFOs were nothing more than common misinterpretations of astronomical objects and atmospheric effects. McDonald engaged in public debate with Menzel repeatedly; at scientific conferences and symposia they continued the controversy face-to-face. Just as frequent were the written exchanges between them. This I would like to see.

After McDonald accused Hynek of starting the Menzelian pattern, the two men talked for two hours more. "He ended up hostile," wrote McDonald succinctly in his journal.⁶² Then, reverting instantly to a cooler manner, the journal continues, "Hynek's book is half done. He is having trouble with Crowell Publishers. They want him to make it sensational."⁶³

In spite of repeated attempts, McDonald was never able to come to an understanding with Hynek. Yet his journals are filled with instances where he urged numerous colleagues in science, military, government and UFOlogy to contact Hynek, in the hope of bringing influential sources together in a common goal. It also documents the many conversations, debates and arguments he had with the well-known astronomer. In July 1970, feeling that all his efforts to come to an understanding had failed, his frustration culminated in the July 1970 multi-page letter.

In February 1971, when he accused Hynek of "starting the Menzelian pattern," McDonald might have made a serious mistake. He had no way of knowing that Dr. Donald Menzel might have been much more involved in the government's "foul-up" than anyone suspected (see Chapter 14). Instead of starting the "Menzelian pattern" Hynek might have been a victim of it, as McDonald himself would soon become.

61. McDonald, fourth journal, reverse p. 49.

62. *Ibid.*

63. Hynek, J. Allen, *The UFO Experience: A Scientific Inquiry*, Chicago, Henry Regnery Company, 1972. Published by Regnery, it was not "sensational," as Crowell Publishers had requested but some UFO researchers feel, as did McDonald, that the book does tend to "rewrite history."

Common Sense vs. Academic Pussyfooters

*"Tell me, who is the giant with the gold curly hair,
He who rides at the head of your band?
Seven feet is his height, with some inches to spare,
And he looks like a king in command—"*
—from "The Boy from Killan"

*"Common sense is a docile thing. It sooner or later
learns the ways of science."*
—Henry Margenau

McDonald's two eye-opening trips to Blue Book had answered one question. He was now convinced that the UFO problem was being shockingly neglected by that part of the government that had been given the responsibility of investigating unidentified flying objects—the United States Air Force. He was also convinced that the public had a right to the truth, and that the full impact of science must be brought to the problem.

During the eight years from 1958 into early 1966, McDonald had networked quietly with lay researchers, particularly those connected with the National Investigations Committee on Aerial Phenomena (NICAP), headquartered in Washington, D.C. His first contacts were with NICAP's Director, Maj. Donald E. Keyhoe, (USMC, Ret.), who was about 25 years older than McDonald. The communication between them was friendly and fruitful. Keyhoe was delighted to know that a prominent atmospheric physicist was interested in scrutinizing the UFO phenomenon, and he gave him all the help and encouragement possible.

As early as 1949, after months of intense investigation, Don Keyhoe had written a major article which appeared in *True* magazine, in which he put forth his hypothesis that "flying saucers," as they were popularly called

at that time, were interplanetary machines.¹ By 1950, he had written a seminal book, *The Flying Saucers Are Real*, which still stands as the first objective book on the subject.² A small paperback, it sold widely and became a rallying point for numerous persons who were seriously interested in the subject.

Keyhoe was a graduate of the United States Naval Academy and of the Marine Corps Training Station. He'd served his country as a Marine pilot and had been an aide to Charles Lindbergh during that pioneer's worldwide publicity tour after his solo Atlantic crossing. Keyhoe's reputation was impeccable. He was an excellent writer whose easy style was logical and accurate. Before developing an interest in UFOs, he wrote books and articles on aviation, which were widely published. He had many contacts in the military, including the Air Force, and sources of information which no one else had.

In 1953, Keyhoe wrote a second book, *Flying Saucers From Outer Space*,³ which contained official information on many classic sightings that had been cleared for Keyhoe by the Air Force. His third book, *The Flying Saucer Conspiracy*,⁴ followed in 1955. In this book, he calmly tallied many objective reasons why he was convinced that the USAF had clamped a lid of secrecy over the UFO subject.

Keyhoe was a wiry, energetic man whose wife, Helen, and their twin daughters, Cathleen and Caroline, were the delights of his life. Helen was his romantic passion; UFOs became his scientific ardor. Because of Keyhoe's faultless reputation as a thorough researcher, he was asked by the Board of the newly formed civilian research organization, NICAP, to take on the job of Director in January 1957. NICAP had been founded in 1956 but did not become viable until Keyhoe lent it his reputation and his knack for drawing around himself objective people. NICAP published *The UFO Investigator*, a newsletter which was a source of unbiased UFO information. NICAP's Board of Directors were all influential men who added greatly to the research organizations's prestige and influence.

1. Up to about 1953, the term "flying saucers" was widely used by both objective researchers and contactees alike, the expression having been coined by the media after the June 24, 1947, sighting of Kenneth Arnold in Washington State—the first widely publicized report in our modern era. The current term, widely used in the United States—i. e., UFO, standing for "unidentified flying object"—came into wide use about 1954, following the publication of *The Report on Unidentified Flying Objects*, by Capt. Edward J. Ruppelt, who was an early, and open-minded, Head of Project Blue Book.
2. Keyhoe, Donald, (USMC, Ret.) *The Flying Saucers Are Real*, NY, Fawcett Publications, Inc., 1950.
3. Keyhoe, Donald, *Flying Saucers From Outer Space*, NY, Henry Holt and Company, Inc., 1953.
4. Keyhoe, Donald E., *The Flying Saucer Conspiracy*, NY, Henry Holt and Company, 1955.

I would like to see some of the original documents that Keyhoe used to write this statement.

McDonald had read Keyhoe's three books and decided he would like to meet him personally. He wondered about the cases which Keyhoe had described. Were they true? Were they well-investigated? Were they reported accurately? Jim Hughes, McDonald's contract monitor at the ONR, tells of McDonald's early interest in UFOs, even before he started investigating them.

“His interest in UFOs goes back farther than I realized, because I remember, we were passing each other in an airport, and he was in the lounge waiting for a plane. I noticed that he was reading a little book. I asked him what he was reading; he said he **was reading about UFOs**, and we got on to other topics. Nothing came of it at that time, but I vividly recall that was early on.”

James McDonald's first personal contact with NICAP came about accidentally, as a result of a 1958 letter which Dick Hall, then NICAP's Assistant Director, had written to *Weatherwise*, a publication of the AMS. Hall's letter commented on “ice falls,” a meteorological phenomenon which had also caught McDonald's ubiquitous attention. McDonald had written a short article in *Weatherwise* about “**the ice-fall problem**,” calling attention to an unexplained fall of a large chunk of ice, which had tumbled out of a clear, cloudless sky in the Midwest when no planes were reported in the vicinity.⁵ The most plausible explanation, of course, was that the areas's airplane reports were incomplete or faulty. Some of his colleagues at the Institute of Atmospheric Physics (IAP), considered McDonald's little article about ice-falls as inventing a problem where no one else could see a problem. However, Hall's letter commented on the fact that large chunks of ice had been reported falling from unclouded skies for over a hundred years, long before airliners dropped large clumps of ice from ice-laden wings or airborne toilets! These had been reported in the popular press and also in scientific journals of the time. Intrigued by Hall's reply, McDonald wrote to him, eager to know more about ice falls and Hall's reference sources, and a mutually beneficial association began.⁶

McDonald gradually confided to Hall that he was becoming interested in UFOs, was investigating local cases around Tucson, and was finding a small fraction of reports that were truly puzzling, for which no amount of research could provide answers. He kept in touch with NICAP through letters and phone calls for the next eight years, especially about meteorological phenomena which could explain some of the puzzling cases which NICAP was receiving, and also communicated directly with Keyhoe.

5. McDonald, James E., “The Ice-Fall Problem”, *Weatherwise*, Vol. 13, No. 3, June 1960, pp. 110-14, 132.

6. For examples of unexplained “ice-falls,” see Fort, Charles, *The Books Of Charles Fort: The Book Of The Damned*, NY, Henry Holt and Company, Sixth Printing 1957, pp. 183, 285, 301, 760.

Sound
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believer

Yep
McDonald
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From the beginning, Don Keyhoe and NICAP had worked for open Congressional hearings which would bring the question of UFOs before the public. NICAP members flooded their Congressmen and Senators with letters, asking them to take this action. By early 1962 Keyhoe seemed on the verge of persuading Congress to hold open hearings. Even though much of NICAP's evidence was based on confidential informers who perhaps would not be able, or willing, to testify, Keyhoe was counting on Vice-Admiral Roscoe H. Hillenkoetter's willingness to speak out openly against the Air Force's policy of secrecy.⁷

Hillenkoetter was an extremely influential member of NICAP's Board of Directors. He had been the first head of the CIA from 1947 to 1950, but after his retirement had given a bold statement to the press stressing the necessity of treating the UFO question openly and seriously. From the beginning, he allowed Keyhoe to use the following quote in NICAP correspondence: "The Air Force has constantly misled the American public about UFOs. I urge Congressional action to reduce the danger from secrecy." This statement lent much credence to NICAP. In 1962, however, as Congress was on the verge of open UFO hearings, Hillenkoetter abruptly resigned from the Board and publicly stated that the Air Force UFO investigation should not be criticized anymore; the proposed 1962 hearings came to a crashing halt. — Interesting

Hillenkoetter's unexplained action set back open Congressional hearings several years, and Keyhoe suspected that the Admiral was being pressured by the Air Force or perhaps even the CIA "to drop out of the picture and stop making troublesome statements."⁸ It was many years before clues surfaced which possibly explain Hillenkoetter's puzzling performance.

In 1964, an intense flow of public UFO reports commenced in the United States and continued unabated through 1966. This "flap"⁹ spurred interest in NICAP and UFOs in general and revived Keyhoe's hopes for open Congressional hearings. McDonald's interest had also intensified and his files of clippings, case reports and correspondence grew. McDonald, Keyhoe and Hall communicated more frequently, exchanging ideas and information on key UFO cases.

7. *Just Cause*, January 1979, Vol. 1, No. 7, published by Citizens Against UFO Secrecy (CAUS), p. 7.

8. *Ibid.*, p. 7.

9. The word "flap" is used in UFOlogy to indicate a sudden upsurge of reports from a localized area. A "mini-flap" can occur within a few square miles and last a few days to a month, but mostly "flaps" occur within a larger area and can last from several weeks to over a year. The term "wave" indicates a continued, widespread flap, sometimes encompassing an entire large country or several smaller countries. The 1964-66 "flap" is actually better defined, in hindsight, as a UFO wave.

McDonald by now was convinced that NICAP was a thoroughly trustworthy and effective research organization. He wondered about Hillenkoetter's 1962 resignation and inquired about it, but no one on NICAP's staff could explain it. The Board of Directors had replaced Hillenkoetter, and it was still composed of prominent individuals. Some were scientists who dared to come forth publicly, which added to NICAP's prestige. The well-known biophysicist, Dr. Leslie K. Kaeburn, was one who spoke out boldly in the press. He headed the Los Angeles NICAP Subcommittee, to which this author belonged. He had taught at the University of Southern California (USC) School of Medicine for many years. After attaining the title of Professor Emeritus, he established a private consultancy and was well known in the U.S. and parts of Europe.

As Professor Emeritus, Kaeburn felt free to engage openly in UFO research without fear of recrimination. He was frequently interviewed about the subject on radio, TV and in the press. He was always very objective and did not favor any particular hypothesis. He, like James McDonald, felt that UFOs were a scientific problem that needed to be studied. Also like McDonald, he disliked the contactees intensely. Contactees were persons who claimed encounters with benevolent "aliens," and they abounded in the Los Angeles area (See Chapter 6). "I completely disbelieve such claims..." Kaeburn bluntly stated in a Los Angeles newspaper interview.¹⁰ "Many of these claims are made for money, and to soak the public." A statement like this in the public press, expressed boldly by a prominent biophysicist who had pioneered the implanting into animals of EEG apparatus for space research,¹¹ must have gladdened McDonald's heart!

NICAP's membership also included scientists, engineers and other technical persons working in various fields; some held high positions in aerospace. Other NICAP researchers were non-scientists but were working in various professions, such as law enforcement, social case work, and other technical and clinical fields. Most were skilled in interviewing witnesses by reason of their academic training and work experience. Their general level of investigative competence impressed McDonald.

He became interested in re-investigating some NICAP cases himself, even though they were in widely separated areas of the United States. Most of these investigations were conducted by telephone, since he could not take time from his academic responsibilities to travel to many of the sighting locations. He found, through his own research, that the investigations done by NICAP people

10. "Did Spacemen See 'Saucers'?", *Valley Times*, (Los Angeles) May 15, 1962.

11. "USC Scientists Hook Up Radio to Dog's Heart", *Los Angeles Examiner*, November 17, 1959.

were objective and accurate. Keyhoe confided to a few NICAP members that a "top scientist" was working with them, but at McDonald's request kept his identity confidential until May of 1966, when McDonald came out publicly with his UFO interest.

In 1964, NICAP produced what was perhaps the most important work in the UFO field to that date, *The UFO Evidence*. This soft cover book included over 600 UFO cases which had been reported by expert observers, as well as a thorough rundown on the USAF's lack of interest and apparent cover-up on the subject.¹² Edited by Richard H. Hall, its 184 pages contained 14 fact-filled sections, objectively written and thoroughly researched. The sections included: "Air Force Observations," i.e., sightings by Air Force pilots, navigators and other personnel; "Pilot & Aviation Experts," observations by airline, military and private pilots; "Scientists & Engineers," sightings by expert observers such as astronomers and aeronautical engineers; "Special Evidence," reports where electromagnetic (EM) effects had occurred in close proximity to UFOs. It also described physical and physiological effects on witnesses and reported damage to vegetation and/or terrain, radar-visual (R-V) cases, and UFO photo cases.

McDonald was impressed with *The UFO Evidence*, and began distributing the book to some of his colleagues who displayed interest. There was, however, one area in which he disagreed with his NICAP colleagues. Keyhoe, and most NICAP members, were convinced by weight of evidence that at least one faction in the Air Force was engaged in an information "cover-up." NICAP knew that the vast majority of sightings could be easily explained by the fact that the witnesses had mistaken conventional phenomena for "UFOs," a conclusion that McDonald and other objective researchers had arrived at also. However, beginning in the early fifties, Keyhoe gradually came to the conclusion that some inexplicable UFO sightings, particularly close encounters experienced by military personnel, had been more thoroughly investigated than the Air Force admitted, and that the best evidence of the physical reality of UFOs was being officially covered-up.

Keyhoe's "cover-up" theory did not hypothesize a widespread "conspiracy," neither did it postulate that the U.S. government *en toto* was covering up UFO data. Keyhoe used the term "silence group," by which he meant that one faction within the Air Force was suppressing the free flow of information to the public. Keyhoe's cover-up theory in the sixties was much different from the way the same term is being used today; it was limited almost solely to the Air Force. Later, in the mid-1970s, the Freedom of Information Act

12. *The UFO Evidence*, Edited by Richard H. Hall, Washington, D.C., published by National Investigations Committee on Aerial Phenomena (NICAP), May 1964.

provided researchers with documented proof that all of the military services and the various intelligence agencies were covertly studying the UFO problem and covering up the results.

Donald Keyhoe had some personal knowledge of Project Blue Book operations through contacts he had with the military. He was the first civilian researcher to have this privilege. There was no doubt in his mind that a faction in the Air Force was withholding vital information about UFO phenomena from the public. McDonald, on the other hand, argued that the "cover-up theory" was unproven and that the Air Force had "fouled-up" its UFO investigations instead.

In spite of his refusal to accept the cover-up hypothesis, McDonald was received with open arms when he publicly joined the UFO field in the spring of 1966. His cordiality, his natural ability to make friends, his genius for cutting through to the heart of matters, his never-ending willingness to listen, his intense interest in all aspects of the subject, and his tireless energy impressed everyone.

Dick Hall and Jim McDonald met personally for the first time in Washington, D.C., in late May 1966. It was Memorial Day weekend and he planned to spend most of the week in D.C., attending to professional responsibilities. He also intended, in his spare time, to do an in-depth study of NICAP's files. He and Hall met on three successive days; it was the first of many extended meetings they were to have. There was a great deal to discuss—the research field was wide and convoluted. Hall had devoted eight years as Assistant Director at NICAP, working extremely long hours for modest pay. McDonald's intention was to spend the summer only, investigating UFOs with NICAP's help. He could not know that he would spend a great part of the next five years studying the topic, would travel halfway around the world, and become embroiled in a bitter controversy that would help end his life.

Hall and McDonald discussed puzzling cases such as the 1964 Socorro, N.M., case, where a law enforcement officer of impeccable reputation had reported the landing of a white, rounded UFO in a deserted gully. McDonald was equally interested in close-encounter cases where witnesses sustained physiological harm, such as the "burn" case reported by Stephen Michalak in Canada. He was also deeply interested in cases where electromagnetic (EM) effects had been reported on vehicles and instruments, such as had occurred during the numerous Levelland sightings in Texas (See Chapters 2 and 6).

Another aspect which intrigued him was what he termed the "amazing frequency" of humanoid sightings in France, as reported in the British UFO journal, *Flying Saucer Review*¹³ and other European publications. Of particular interest had been a spate of "occupant sightings" described by a French engineer and mathematician, Aimé Michel, in a book which had been published in

a English edition.¹⁴ McDonald preferred, like Don Keyhoe, to sidestep the “occupant” issue, at least in public discussions. Privately he was interested, but felt that they contained psychological aspects which he had not the expertise to judge. McDonald asked Hall’s opinion about the French reports, and Hall said they were reliable as far as press reports went, but he felt not much investigation had been done on them.

Hall surprised McDonald by telling him that NICAP also had a collection of similar reports from the United States. NICAP hadn’t concentrated on these, however, and some members of certain NICAP investigative subcommittees suspected that their reports which included UFO “occupants” were deposited in the “round file.”¹⁵ They were not, of course. The truth was that Keyhoe felt that concentrating on humanoid reports would tend to lessen NICAP’s credibility with scientists and Congressmen. Primarily, they were working for open Congressional hearings, where the best of scientific evidence concerning the reality of UFOs—as unidentified, physical aeroforms traversing Earth’s atmosphere—could be presented. In the light of Keyhoe’s priority, UFO occupant-sighting reports were low on the list but this position was, in Dick Hall’s words, primarily tactical rather than doctrinaire. McDonald concurred.

They also discussed an occupant sighting which researcher Isabel Davis had investigated in Hopkinsville, Ky. Davis was a member of a small research group based in New York City, the Civilian Saucer Intelligence (CSI), which had been active since the early fifties. It was headed by a dynamic trio: Davis, an editor-writer, Ted Bloecher, a Broadway actor and singer, and Lex Mebane, an organic chemist. Together they had, for many years, produced the well-written *CSI Newsletter*, of which McDonald eventually obtained a set of back copies. Even before meeting Isabel Davis, McDonald admired her work on the UFO subject so much that he included a statement she’d written in an essay on UFOs in his list of favorite quotes (see Appendix Item 5-A, page 534). Davis’s quote read in part:

Already they have created a climate of opinion in which anyone can publicly attack the extraterrestrial theory in perfect safety—regardless of what gross ignorance or bias he displays in the process—but he

13. For information about the research journal, *Flying Saucer Review* (FSR), still in publication, write to Mr. Gordon Creighton, Editor, FSR Publications Ltd. P. O. Box 162, High Wycombe, Bucks. HP13 5DZ, England.

14. Michel, Aime, *Flying Saucers and the Straight-Line Mystery*, NY, Criterion Books (English translation edition), 1958. Isabel Davis, Ted Bloecher, and Alexander Mebane of Civilian Saucer Intelligence (CSI) edited and checked the data for the American edition.

15. This popular term for a “wastebasket” is also referred to as “File 13” by people in aviation and other technical professions.

cannot defend it without risking his business, his reputation, or his professional career. '—Isabel Davis C.R.I.F.O. 3/56.

Dick Hall told McDonald about a 480-page manuscript which Davis had written about the Hopkinsville sighting. Several members of the large Sutton family, who were considered reliable citizens by local law enforcement officials, reportedly had warded off, with rifle fire, several strange creatures who had apparently emerged from a "silvery object... with an exhaust all the colors of the rainbow."¹⁶ Hall told McDonald that he personally felt that, because of Davis's superior research skills and certain corroborating documentation she'd gathered, one had to give the report a lot of credence (See Chapter 3). McDonald decided to go to New York and meet with Isabel Davis personally.

McDonald also asked about George Earley of Bloomfield, Conn., who headed one of the four NICAP affiliates around the country. The affiliates, as opposed to the subcommittees, which were responsible for investigative work, were larger public information organizations. Their main purpose was to disseminate NICAP data, provide knowledgeable speakers, and generally keep the public informed on the subject. Hall assured McDonald that Earley was a fine researcher and that the statewide Connecticut affiliate, NICAP*CONN, was a "good batch of engineers and scientists because of Earley's leadership."¹⁷ McDonald also met with Dr. Eugene Epstein, a radio astronomer with the Aerospace Corporation in Santa Monica, Calif., who happened to be in D.C. that week. Dr. Epstein was vitally interested in the UFO question, and the two scientists exchanged views on many aspects of the problem.

McDonald also talked at length with Gordon Lore, a talented researcher and writer who had joined the NICAP staff the previous October. Lore was working on a book about pre-1947 sightings. The first two chapters dealt with the "airship" sightings of 1896-97, which were curious reports of dirigible-shaped "unidentified flying objects" which were widely reported at the time all over the U.S. The "airship mystery" had been given extensive media coverage in newspapers and magazines at the end of the nineteenth century.

Early UFO reports were of special interest to McDonald. It was almost impossible, of course, to investigate most of these "on site" since most of the witnesses were deceased and those still living had been small children at the time. Taken together with other early reports of "UFOs" in the books of Charles Fort and other sources, however, McDonald had begun to suspect that the UFOs were not simply a recent problem, but one which had sporadically surfaced during hu-

16. Davis, Isabel & Bloecher, Ted, *Close Encounters at Kelly and Others of 1955*, Chicago, IL, Center for UFO Studies, March 1978, p. 23.

17. McDonald's second journal, p. 17.

man history. In this, he was not alone. NICAP, too, was interested in early anomalous observations, but this matter had not been fully addressed in *The UFO Evidence*. Gordon Lore finished *Mysteries of the Skies: UFOs in Perspective* in 1966, with McDonald contributing the scientific critique for the book. Prentice-Hall published it in 1968.¹⁸

On June 1st McDonald was still in Washington, becoming acquainted with other NICAP members who either lived nearby or who had made the trip to D.C. to meet him. Most of the members he met on that trip were in their thirties, but what they lacked in age they made up with research skills. McDonald took advantage of every hour, first attending to his professional business, then spending the rest of his time inquiring about every aspect of promising UFO cases NICAP people were investigating in other states.

Paul Cerny from San Francisco was in D.C. that week. Cerny was an engineer employed at Western Microwave in Santa Clara, Calif., and head of SFO-NICAP, an investigative group. He had contributed prolifically to the field. Cerny had brought in a taped interview with the primary witness in the Cisco Grove case, a UFO incident which had involved a group of hunters in Northern California. One of the young hunters had become separated from his friends and was alone in the woods when he reportedly saw a lighted craft descend from the sky and land nearby. Afterwards, a group of strange creatures came toward him.

Frightened, he climbed into a tall tree and for the rest of the night the creatures grouped around the base of the tree. One was a robotic type, which periodically opened its mouth and sent clouds of noxious fumes upward toward the witness. Whenever the fumes reached him, he lost consciousness for a while, but he'd had presence of mind enough to use his belt to fasten himself to the tree trunk and the large limb on which he was sitting. This went on repeatedly throughout the night. Finally at sunrise he awoke to find the creatures gone. He weakly made his way down the tree and found his friends, who had been searching for him. They had viewed the airborne craft from a distance and were puzzled by the sighting.¹⁹

18. Lore, Gordon & Deneault, Harold H., *Mysteries of the Skies: UFOs in Perspective*, esp. Chps. 1 & 2, Englewood Cliffs, NJ, Prentice-Hall, Inc. 1968. Lore afterward pursued the "airship question" with the intent of demonstrating whether or not they might have been early man-made dirigibles, viewed by the public while in experimental flights.

19. Classic cases from the archives of the Center for UFO Studies in Chicago, IL, have recently begun to be published in full. See "The Cisco Grove Bow and Arrow Case of 1964," by Ted Bloecher and Paul Cerny, *International UFO Reporter*, Vol. 20, No. 5, Winter 1995, published by J. Allen Hynek, CUFOS, 2457 W. Peterson Ave., Chicago, IL 60659.

In spite of the high strangeness of the report, Cerny was impressed by the apparent honesty of this witness and the corroborating testimony of his fellow hunters. McDonald listened carefully to the taped interview. He was non-committal; although intrigued by the implications of the case, he preferred not to become too involved. He realized that if he were to succeed in influencing the scientific establishment, the data he would use must apply strictly to UFO reports which described unidentified machine-like craft seen close to the witness, and these reports should be backed up by multiple witnesses, radar tracings, good photos and the like.

The NICAP personnel left late that first evening, but McDonald was not yet ready to sleep. He walked around Washington until 2:00 A.M. He needed the exercise, but his primary reason was that he wanted to stay awake until he could phone his eldest son, Kirk, back in Tucson. Kirk had just arrived home from a celebration, having graduated from the University of Arizona with a B.S. in Physics. McDonald congratulated his son on his accomplishment and learned that Kirk had graduated with the fourth highest GPA in his graduating class.²⁰

The next day, at 8:30 A.M., McDonald kept an appointment at the Environmental Space Science Administration (ESSA) in the Gramax Building in Silver Spring, Md., regarding a weather modification panel on which he'd been asked to serve.²¹ Jim Hughes picked him up at his hotel, and they looped back to get Cerny's Cisco Grove witness tape from Dick Hall so McDonald could take it to Isabel Davis in New York. During supper, McDonald discussed with Hughes his growing conviction that the UFO question was the "No. 1 scientific problem" facing the country.²² They talked until midnight, discussing various possibilities of attacking the problem and bringing it to the attention of scientists, including NASA. Hughes agreed that Gerard Kuiper of the University of Arizona's Lunar and Planetary Lab could make a big difference, if he were so inclined.

During that week in D.C., McDonald also met Lee Katchen, another NICAP member, who worked at Goddard Space Flight Center. After a lively dinner with Katchen and several other NICAP members, hosted by Dick Hall, McDonald sat up late again, reading galleys of a book by John F. Fuller, a prominent author who had also entered the UFO controversy. Fuller's book, *Incident at Exeter*, was a full account of startling close encounters at Exeter, N.H.²³ While reading the book galleys, he phoned Dick Hall to see if he'd set up an appointment for McDonald to meet Isabel Davis in New York City. Hall had.²⁴

20. McDonald, James E., second journal, p. 8.

21. *Ibid.*

22. *Ibid.*

23. Fuller, John G., *Incident at Exeter*, NY, G. P. Putnam's Sons, 1966.

Satisfied that the plans to meet Isabel Davis, Ted Bloecher and Lex Mebane were set up, McDonald finished reading Fuller's galleys and then slept for a few hours. Up early the next morning, after taking care of more professional responsibilities with ESSA, he managed a one-hour phone interview with Chief Richard D. Irwin of the Exeter Police Department in New Hampshire. The Chief confirmed that the Exeter police officers who reported an encounter with an immense, maneuvering UFO "definitely did see a flying object that hovered."²⁵ The sighting was being passed off by officialdom as an advertising plane, and McDonald wanted to re-check that part of Fuller's book. Chief Irwin assured McDonald that the Exeter UFO definitely was not a conventional object.

"Do you think the officers' story about that UFO is credible?" McDonald asked.

"I believe them," Chief Irwin replied.²⁶

McDonald next went to the ONR, and gave Jim Hughes some material about governmental regulations concerning disclosure of UFO information. Besides AFR 200-2, pertaining to Air Force personnel, JANAP-146 was a Joint Army/Navy/Air Force publication which applied to military personnel and airline pilots. Hughes had expressed interest early when McDonald had mentioned these. Copies of both regulations had been obtained by NICAP and distributed widely in the UFO community. Both specified heavy fines and/or long prison sentences for individuals who revealed details on any unexplained UFO sighting in which they had been involved in the course of their employment. McDonald's journal gives no clue to Hughes's specific reaction to these regulations when McDonald handed him copies, but Hughes himself was not convinced that UFOs were a serious scientific problem.

"My position was that if we knew more about the atmospheric physics of the sightings that they could probably be explained in terms of the atmospheric physics," states Jim Hughes in an interview for this book. "Even so, I recognized that there would still be a residue of unexplained cases. I know Mac was not entirely pleased with my attitude."²⁷

Nevertheless, Jim Hughes was always willing to listen to McDonald's investigations, and gave input or advice when he requested it. He noted the care McDonald used in his UFO research. But Hughes worried about his friend at times.

24. McDonald, *op. cit.*, reverse side p. 7.

25. *Ibid.*

26. *Ibid.*

27. Letter from J. Hughes to author, 14 March 1995.

"Somebody got him to comment on extraterrestrial life," relates Hughes. "I advised him not to make any concessions one way or the other.... I said, 'Stick strictly to the physical phenomena. If you make any concessions on that, you'll be damned if you do and you'll be damned if you don't, once you start speculating on life on other planets and that sort of other thing.' And I said, 'Don't let them trap you into speculating on it. Just say you don't know.... Stick to the existence or non-existence of UFOs and forget about the life that goes with it.'"²⁸

It was very good advice, which McDonald took to heart. In his frequent talks on the UFO subject, he continually emphasized the physical phenomenon of unidentified metallic aeroforms that were traversing Earth's atmosphere, as described by reliable, professional observers.

When he arrived at NICAP for his first opportunity to go through the files, he was met by Marty Triche, a dedicated employee who'd been with the organization since the autumn of 1965. Dick Hall was still not in, having stayed up very late to watch the Gemini launch in the early hours of that morning. McDonald introduced himself and spent some time chatting amicably with Triche, then delved into the files "like a tiger," to use Dr. Kassander's descriptive phrase. He sat down at a table and read sighting cases which she brought to him, including a new photo case which had just come in the morning's mail.

"He'd just sit there and read the reports," Marty recalls. "I liked him an awful lot. He was one of the most open-minded people I ever met. He didn't 'believe' in [UFOs] at all, but he was curious and open-minded." She remembers the intensity with which McDonald studied the NICAP files during that first summer of 1966.

"We had a black cat, Midnight," she relates. "Jim supposedly hated cats, so Midnight decided that his was the best lap to lie on.... And Jim was always wanting to be around people, talk to people, get their views and ideas. He was very friendly, and he did have unbounded energy, that's for sure."²⁹

NICAP was growing fast, having benefited from the intense public interest which had arisen as the result of the 1964-66 UFO flap, particularly the Michigan "swamp gas" fiasco. The organization had received 2,000 new memberships since January 1966 and the total membership was now about 10,000. This was an astounding accomplishment in the UFO field; the office was swamped with correspondence.

28. Interview with J. Hughes, 21 December 1994.

29. Author's interview with Marty Lore, 11 September 1993.

McDonald read through reports which had been sent to NICAP headquarters from subcommittees all over the country. The subcommittees were NICAP's investigative arms; the idea had been a brainchild of Dick Hall's. Each was headed by a person well qualified in the scientific or engineering fields or by some other professional person with superior research abilities. LANS, the Los Angeles NICAP Subcommittee, for example, had funneled reports of Southern California UFO sightings to headquarters since 1958. All of NICAP's subcommittees around the country were monitored closely, and Donald Keyhoe was never reluctant to rescind anyone's membership who was not displaying proper objectivity or who was causing harm to NICAP's reputation.

McDonald was particularly interested in the Dexter/Hillsdale, Michigan, files. J. Allen Hynek's "swamp gas" explanation had irritated McDonald, and not only on a scientific basis. In a restricted Congressional hearing on April 5, 1966, a partial transcript to which McDonald had access, Hynek contended that the swamp-gas hypothesis was a "logical explanation."³⁰ To the Congressional investigators, Hynek gave not the slightest hint that he thought it unsatisfactory. In the privacy of that restricted Congressional hearing, he described the swamp-gas exegesis as a good illustration of the method the Air Force had used with "great success in finding logical explanations for the great majority of the reports."³¹ McDonald found Hynek's statements both untenable and scientifically shocking.

At NICAP, McDonald made a remarkable impression upon all who met him. When asked what impressed him the most about McDonald, Dick Hall says, "He was so very friendly and cordial to everyone. He was always on an even keel—never got mad."³²

What Hall describes is the trait which all of McDonald's UFO colleagues appreciated. He treated everybody alike—scientist and non-scientist. He was always interested in listening to any rational views being expressed about UFOs. Although he thrived on congenial companionship and free exchange of information, he generally did not respond in a way which led to deep friendship. Some researchers noticed this lack of emotional response and put it down to his intense scientific attitude, his busy schedule, and lack of time. His unique sense of humor and cordiality made up for it. Of all the NICAP members and

30. Transcript, restricted Congressional Hearing, Rivers Committee, April 5-7, 1966, p. 6071. The page number has been questioned by an esteemed colleague of the author's, but the same page number was cited twice in McDonald's July 1970 letter to Hynek, and therefore seems to be correct. The restricted Rivers Hearing transcript was never made available generally to the UFO research field.

31. *Ibid.*

32. Author's interview with Dick Hall, 7 May 1994.

other researchers with whom McDonald interacted, Betsy McDonald states that Dick Hall was his closest friend.

"We had a lot in common," relates Dick Hall. "The UFOs were a deep, serious question to him, and we talked constantly about that. I had an objective attitude toward them, and I guess that kind of matched his own attitude. We spent a lot of time together, working on UFO cases and other things."

Gordon Lore also liked McDonald instantly from the moment he met him. He was impressed by his friendliness, enthusiasm and professionalism.

"I think he was paramount in the scientific arena. I don't think anybody else came close," says Lore. "I think Jim was the shining star of the scientific firmament as far as UFOs were concerned."³³

Lore also noticed something else about McDonald, he had an oversized shirt pocket. "He'd have maybe twelve pens lined up in it," Lore describes.

"And sometimes in his coat, or in his shirt pocket, he'd have all kinds of little papers just jammed in there, and he'd take out something and write on it." Lore chuckles softly as he recalls McDonald's note-taking habits.

Most scientists, engineers, writers, and others engaged in occupations where accurate data is important, scribble notes frequently. Lore's observational ability, however, was to prove very useful in seeking a solution to a major mystery concerning McDonald's UFO research which surfaced during the writing of this book. He apparently had several, disparate methods of taking notes.

Dick Hall, too, noticed that McDonald was always taking notes. "I watched him many times whip out a pen and do some calculations or make notes," he recalls. "He was a big note taker."

His note-taking habits became clear when, in 1992, Betsy McDonald found two of his journals tucked away in his files, and two others were discovered later by the author while archiving McDonald's UFO files.³⁴ Unknown to anyone, he had written hundreds of pages of precise descriptions of conversations with scientists, military personnel, government officials, civilian sighting witnesses, telephone calls and meetings with NICAP staff and investigators. There were details of cases confided to him by military pilots and others, as well as some private musings on the UFO question. Before

33. Author's interview with Gordon Lore, 13 September 1993.

34. Druffel, Ann, "James E. McDonald's UFO Files," *MUFON UFO Journal*, January 1997, No. 345, pp. 3-9. McDonald's UFO files were archived by this author with the help of a grant from the Fund for UFO research and are in the Private Collections section of the U. of Arizona, Tucson, AZ.

1992, no one knew of the existence of McDonald's journals. No one remembers ever seeing him write in any of them.

McDonald's "second" journal, a collection of 33 pages of 8.5" x 11" inch binder paper filled back and front with his small handwriting, begins on April 5th, 1966, and ends on July 12th, 1967. It was found tucked between the pages of his fourth journal, which was written in an ordinary 8.5" x 11" spiral notebook; it begins on April 28, 1968, and ends on March 17th, 1971—St. Patrick's Day. (The first pages of each of these journals are included as Appendix Items 5-B, page 535 and 5-C, page 536.)

McDonald compiled his journals from the multiple notes he took during conversations and on-site investigations—notes which McDonald, as Gordon Lore describes, "jammed into his pocket." He did not write in his journals day-to-day but would wait until he had a rare period of free time, such as waiting in an airport or during a flight. He would then refer to the notes which he had collected in his pockets, aided by his remarkable memory. We know this from the first sentence in his fourth journal: "Notes from 4/28 to 6/28 made *post hoc*, in D.C. A[irport], on 6/19/68." (See Appendix Item 5-B, page 535)."

During the months of transcription of McDonald's journals for this book, a curious fact emerged. Quite frequently and unexpectedly, between sentences, McDonald jotted the transient phrase, "See small notebook," enclosed in parentheses. The phrase stimulates curiosity, for the "small notebook(s)" are not in his UFO files. The first time the phrase occurs is in McDonald's notes of June 4th, 1966, during the week in Washington described above. Jim Hughes from ONR had taken him home for dinner, where they discussed NASA's reaction to McDonald's proposal that NASA should be responsible for a scientific UFO study program. The enigmatic entry, which can be seen in Appendix Item 5-D, page 537, reads:

Discussed how to word next year's ONR contract to cover ball lightning, etc. (See small notebook for more). Jim will check re Op Nav 94 —Merint item.

Probably, by the end of this first week, McDonald already realized that one summer devoted to UFO study wasn't going to do the job, and that it was imperative to determine the best way to present the UFO question to the scientific community as a legitimate subject for research. McDonald more than once broached the idea that Jim Hughes ask the ONR to provide him with funds for further UFO study, through a new contract. McDonald had, with Hughes's knowledge, been able to accomplish his initial week's research by working in his spare time, on the side, after performing all his professional atmospheric physics work which had brought him to Washington.

Jim Hughes had agreed that the intense research McDonald had done in NICAP files, and his meetings with NICAP staff during that same week, were linked with unidentified atmospheric phenomena, and he had no objection to McDonald's researching this in his spare time. The same applied as McDonald continued his UFO research into 1967—he was free to investigate UFOs on the side, wherever his ONR work took him into other states and cities. The notes McDonald wrote describing the June 4th meeting with Hughes are in his journal, but where is the "small notebook" in which he indicated more information exists, concerning a proposed ONR contract on "ball lightning"?

The phrase "See small notebook" occurs frequently in McDonald's last three journals, which he methodically kept between April 1966 and March 1971. Sometimes he used the alternate phrases, "See smaller notebook" and "See pocket notebook." Gordon Lore gives us a possible clue as to what these small notebooks looked like.

"Every once in a while he'd take out a little notebook and write something in it," relates Lore. "He seemed to take them out only at points where he really wanted to stress something he thought was ultra-important. He'd put notes describing a normal sighting—or something else—on a regular piece of paper." It is clear that both the separate note papers and the "small notebooks" were entirely different from the journals found and transcribed by this author. But the "small notebooks" have not yet been found despite an intense search during the writing of this book.

"A lot of the notebooks or pads were black," relates Lore. "He had black, pocket-sized leather covers over his little books, which you could fold and open."

During the ongoing search for the missing notebooks, Gordon Lore was interviewed specifically on this point. "I've seen him sit down in the course of an evening and go through three of those things [pads which fit in the little notebook]. He'd stick them in his pocket, pull out another. If he did that in the course of one evening, I mean, how many evenings were there?"

Lore further described the small pad holders. "They had metal binders. These little metal binder notebooks had pages that were lined. He'd sit there and take copious notes. Or, perhaps, he'd not take notes at all. Then, when he went up to his room, he'd write for hours. The next day, he might say he'd written notes until two o'clock in the morning," Lore states.

The notes that many UFO colleagues saw McDonald make on various pieces of paper were probably transferred to his journals and then discarded. The transfer of information was always done privately, however. No one—not Betsy, his colleagues, or anyone in the UFO community—ever saw him write in his

8.5" x 11" journals. That he reserved specific data for the "smaller notebooks" is certain. Betsy McDonald and the author have searched the Tucson home, among McDonald's files, storage and other belongings, but the small notebooks which undoubtedly contain fascinating, and possibly sensitive, material gleaned during McDonald's five years of UFO research have yet to be found.

At the end of his week's stay in June 1966, Jim Hughes drove him to the airport for his flight to New York. He arrived at Isabel Davis's New York apartment early in the evening. Isabel had to work overtime, but Ted Bloecher was there to meet him. Lex Mebane, because of illness, was not able to be present. McDonald immediately began going through the files of CSI, the investigative group which Davis, Bloecher and Mebane had directed since the early 1950s.

McDonald was impressed by the CSI files. They were in black loose-leaf notebooks about 2.5" thick, each containing fifty plastic slips filled on both sides. In all, there were about 25 notebooks, lined up neatly on shelves. Eventually, Isabel Davis arrived home. She worked for the American Council for Emigres in the Professions, and they'd had a graduation party for a half dozen trainees. Davis and McDonald found they had much in common; she had the same empathy for human beings that McDonald and Betsy shared.

Friendship developed quickly between Davis, Bloecher and McDonald. It was to be the first of many meetings they would have with him. They listened to the Cisco Grove tape recording and discussed several cases on which NICAP was currently working. McDonald shared news he'd gotten from Hall, Keyhoe, Berliner, Triche, and others he'd met during the week. Bloecher, when interviewed for this book, showed the regard he and Davis held for McDonald. "We were really excited about the fact that he seemed so dedicated to establishing a few facts about the subject," he relates. "There were few, if any, people with a scientific background like Jim's who were that dedicated to looking for the truth."

That evening, Bloecher stayed until midnight, and left Isabel and McDonald talking on into the night. Then she retired, leaving McDonald in her spare room; he was eager to read her 480-page Hopkinsville "occupant" case. He was impressed by the thorough investigation she'd done and was equally impressed by her precise writing style. His journal mentions that he read until 4:00 A.M., "catnapping on and off."³⁵

McDonald was up at 9:30 A.M. and continued talking UFOs with Davis. They discussed the proclamation the Air Force had made on the April 7 after

35. McDonald, *op. cit.*, p. 10.

the restricted Congressional hearing on UFOs. The Air Force had announced that a more thorough look would be given to the UFO problem through a "university team" approach. This was the very announcement that had squashed McDonald's hopes for NAS funding for a quiet one-man UFO study—the NAS had explained to him that it could not be involved in supporting any individual study when such a high-level decision to instigate new investigations had just been released (See Chapter 3). Though the proposed new Air Force study carried along with it a funding package of half a million dollars, and several universities had already been approached, all had rejected it, for academia in general was reluctant to touch what was considered by most scientists a "fringe subject." (The University of Arizona had not been approached.)

McDonald and Davis discussed how the university team approach would be implemented. Isabel felt that the investigative teams must promptly and courteously respond to UFO reports from the public, and that it was vital that UFO observers be protected from unwanted publicity. McDonald had already come to the conclusion that the University of Arizona would not be invited to participate. He also suspected, from remarks he had picked up here and there, that any scientists the government would invite would be ones who were "neutral" on the subject, and that neither he nor J. Allen Hynek would fit that definition! In other words, the government did not want the UFO subject to be studied by people who knew anything about it. McDonald accepted the illogic with his usual good humor.

The fact that astronomers as a group were supposedly negative about UFOs was also discussed, and Davis pointed out that the way astronomers search the skies for novae (exploding stars) was comparable to watching for UFOs, in that they never knew when or where the event would occur. McDonald interjected that the same problem applied also to tornadoes, ball lightning, meteorites, and volcanic eruptions.

Isabel advised McDonald that she sometimes felt that UFO phenomena represent almost "desperate" efforts to make themselves known to human beings. They had briefly discussed this in connection with the Cisco Grove case. McDonald was noncommittal. He was in the process of forming hypotheses which could be logically put forward, but being a physicist, he preferred to concentrate on the physical nature of UFOs. He felt that the sightings to be focused on first should be those which involved craftlike machines that had been detected by radar, or had left physical traces on earth terrain, or on the bodies of witnesses close to the site. After adequate proof was obtained, and the full attention of well-funded, independent scientists was brought to the subject, the peripheral aspects, such as the nature of the objects, or possible motives of occupants could then logically be studied.

Davis emphasized that there was physical evidence, such as UFO “landing sites” where vegetation and soil were burned. This had happened at Socorro, N.M., in 1965. Police Officer Lonnie Zamora had promptly radioed for assistance after he witnessed an unusual white craft taking off from an isolated gully, emitting flames from its underside. Another Socorro policeman had arrived in time to see burning brush, charred rocks and soil, and the deep imprints made by apparent “landing gear.” Davis pointed out that the site should have been cordoned off and preserved for physical scientists to study at will. Instead, investigators from the Air Force Project Blue Book had taken over the site, gleaned every piece of burned brush and rocks and, reportedly, fused sand. They had cleaned out the gully, taking the physical evidence away to sites unknown. No independent scientists or researchers had been able to learn the results of any analyses the Air Force might have done.

Hughes apparently went to see Zamora. Why wasn't the physical evidence mentioned in his book?

The 1964-66 UFO wave was still going on. New cases were flooding into NICAP, APRO and other research groups. To Isabel Davis's mind, the activity was unprecedented, except possibly for the 1952 “flap” when UFOs had overflowed the air space above the nation's capitol several nights in a row.

After leaving Davis, McDonald met with Thomas Malone, his friend, mentor, and former Professor at MIT. The subject again was the multiple aspects of UFOs. Malone listened patiently to McDonald; he seemed interested up to a point but not to the degree that Jim Hughes showed. McDonald discussed the problems of “occupant cases,” including the Hopkinsville incident. He sketched the appearance of the humanoids in Isabel Davis's report and told Malone about other occupant reports, which McDonald whimsically termed “LMs”—meaning “little men.”

He also discussed oceanic entry and emergence cases—a sub-grouping of UFO reports which were sometimes referred to as USOs (unidentified submarine objects.) McDonald had come across many of these and had a special interest in them, possibly because of his Navy background. He told Malone that U Thant, Secretary General of the United Nations, was being approached by a UFO researcher named Gordon Evans. McDonald felt this was a good move; perhaps the United Nations would be the logical organization to launch a worldwide study of UFOs.

Tom Malone warned his younger friend to be careful with his bold new interest, pointing out that he must not lose credibility in the scientific community. Nothing in McDonald's journal indicates how he reacted to this warning. He was too independent a thinker and too confident of his professional reputation to let Malone's warning bother him.

Thus ended McDonald's first week as a public figure in the UFO research field. He was aware that NICAP had drawn the interest of scientists, engineers,

and other professional persons, but had, no doubt, also attracted the attention of the CIA. Through its 1953 sponsorship of the Robertson Panel, the CIA had been instrumental in slamming down a lid of ridicule and debunking over the entire subject in 1953. Another of the Panel's recommendations had been that UFO organizations be watched lest they engage in "subversive" activities (See Chapter 3). This did not particularly bother the NICAP staff, which conducted its entire operation in an open manner. It did not bother McDonald either.

"We had nothing to hide," relates Richard Hall. "We wanted people in the government to pay attention, to take it seriously. We were always very straightforward about that kind of thing. [Once] this CIA guy came to the office," relates Hall. "He made an appointment! He called up and said he'd like to come to the office to interview me. So I said, 'Sure, come in.'"

The NICAP staff also had rather good evidence that someone, possibly a government agency such as the CIA, was tapping the NICAP phones. There is now little doubt that they were being tapped; but just who was "listening" has not yet been discovered (see Chapter 17). Dick Hall, who was Assistant Director from 1958 to 1967, relates with a little laugh. "We always suspected that sort of thing was going on. We had anticipated that likelihood. We were tapped, yes, in fact, I'm sure my home phone was. There were some funny things that went on there. I didn't ever get paranoid about it. I just assumed that...we were known to be an important source of information on the subject, and somebody was keeping tabs on us. We used to make jokes, asides, on the lines. We'd be talking about something and we'd say, 'In case you guys are listening—.'"

The phone taps were more a source of amusement than of concern. In order to get some kind of evidence as to whether or not the NICAP phones were really being tapped, author Frank Edwards, who was a friend of almost everybody in the UFO field and an avid researcher, got together with Don Keyhoe and laid a trap. They made up a UFO case, which included occupants, electromagnetic effects and other astounding details, and they talked about it on the phone.

"They just made it up," relates Dick Hall, "and it came back by way of feedback from somebody, so they obviously were being tapped at that time. I do remember one incident of talking on the phone when a voice in the background said something like, 'This is Air Force—' and they reeled off some number. It was some sort of Air Force operation, suddenly, on our phone. I experienced that one personally."

It was into NICAP's open operation that McDonald strode, full of energy, in the spring of 1966. He showed no concern to anyone in the UFO community that his unprecedented actions might impact negatively on his reputation. Yet he had privately agonized over the decision to go public, a fact which seems to contradict his confident public persona. Early in 1966, McDonald had ap-

proached his friend and colleague, Dr. Cornelius "Corny" Steelink at the University of Arizona and asked him what he thought about going public.

"He asked me, and other people, too," states Steelink. "I'm sure he knew that what he was doing was right—that it was a legitimate investigation. He only agonized about the type of flak he would get, which might distract people from the real object of the work and put him in a class of flakes and nuts. I don't remember giving him absolute advice. I said, 'Whatever you do, I will back you up.' But his colleagues could never be as enthusiastic about that project as he was.

"He was very conscious of the fact that he might immediately be labeled..." continues Steelink. "When he decided to go ahead and give the first seminar on UFOs here at the University the room was packed. I was there. You could feel the tension. It was an act of courage, much more than going picketing for civil rights or something, because that was OK. That wasn't scientific, so you were allowed to do that. But as a scientist, the peer pressure was something he had to contend with."

Dr. Paul Martin also describes how McDonald's decision to study UFOs publicly held hazards.

"Jim was never conventional," Martin says. "He was always capable of going beyond the safe and secure paths that most of us prefer most of the time. But he was taking a risk going into the UFO field of paranormal science.... To see him take an objective stance with regard to reports of a phenomenon that flaunted conventional physics—that's a far-out position to get into."

With his new friends and colleagues in the UFO research field, however, McDonald never showed any concern about exploring what conventional scientists considered a "fringe area." He hid his feelings well. He did not share any anxiety about how openly studying UFOs might affect his reputation. "Just speaking for myself," says Gordon Lore, "I had more concern over his reputation than he seemed to have. Jim could be a bit naïve at times in feeling that any reasonably intelligent person was bound to be swayed by the body of UFO evidence that existed. But even then, we had been in the business long enough to know that wasn't the case. Others were more concerned over his reputation that he was. This was certainly true of us."

As McDonald traveled around, in the course of his atmospheric physics work, he met more and more NICAP people. His cordiality and intelligence impressed new-found colleagues wherever he went. His respect for scientifically oriented research was universal—he looked for objective research, whether done by a physical scientist, an aerospace engineer, a Broadway actor, a social caseworker, or a homemaker with a talent for public relations. This one

quality made him admired and respected by researchers throughout the United States and in other foreign lands. These new colleagues found him congenial, humorous and fond of prolonged discussions on many topics.

Although McDonald's wife and his university colleagues called him "Mac," the UFO community called him "Jim." He had the appearance of an ordinary Celt, but everyone in the UFO field who worked closely with him knew he was "at the head of the band." They took him into their hearts, such as they had never done anyone else before. He united them and encouraged them. Without any formal announcement, they considered him their leader.

The reasons were twofold: McDonald was rightfully confident of his place in the scientific community, and he was positive that, if a scientist of his standing came out publicly with convincing evidence of UFO reality, other scientists would listen and follow. He had many well-placed contacts in government and the military, especially the Navy, and he fully expected that these contacts would ask higher-ups to listen. To McDonald, the procedure was comparatively simple. It could be accomplished if he put all of his energy into it, just as other scientific problems he'd tackled had bent to his will.

Mazes and Monstrosities

*We knew the woods and the resting places,
And the small birds sang when winter days were over....
Then I've laughed and sung through the whole night long,
Seen the summer sunrise in the morning.*

— from “Freeborn Man”

*Anyone who looks for a source of power in the transformation
of atoms is talking moonshine.*

—Lord Rutherford, 1933

Once McDonald took on the UFO question, his life became even more rushed. The complexities of his life snowballed as time went on. What were perhaps the happiest days of McDonald's life—the time when he was snapped unawares in a rare moment of ease by a clever photographer in his rooftop office of the Institute—were on the verge of disappearing forever (see Figure 4).

He had been received warmly by most researchers in the UFO field, and during the next five years, by numerous others. He carefully judged the qualifications of each, and, once he satisfied himself that they were methodical and objective, he worked earnestly with them. His generosity in sharing information and in giving recognition to capable research performed by non-scientists made him unique. The UFO field had never met anyone like him before, and a grand new era began. Yet it is difficult to delineate the many facets of belief and disbelief which McDonald met in his home town.

He was more available now than ever, publicly, to receive local UFO reports, which resulted in a phenomenon he had not counted on. In Tucson, a plethora of strange people swirled around him. They irritated him, as they had frustrated lay researchers in other states for many years. These were known as “contactees,” and they had been the bane of UFO

researchers since the late forties. Recognizing McDonald as a new “spokesman,” the contactees were eager to share their “experiences” with him.



FIGURE 4. Dr. James E. McDonald in his rooftop office at the Institute.

The contactees had done great harm to the UFO field, for they were not interested in whatever scientific knowledge could be derived from the data. Not that much science could be derived, for the closest things to physical evidence that even the best cases offered were possibly authentic UFO photos, verified radar-visual sightings, and “landing traces.” All of these three aspects were eagerly sought after, but real evidence was elusive. No one sought them more eagerly than McDonald.

The “contactees,” on the other hand, told bizarre stories, which they presented as fact but with absolutely no verification. There were so many contactees, each telling a different tale; no one definition can encompass them all. However, a general definition can be offered: **Contactees claimed that they had taken rides in “flying saucers” and had interacted with benevolent occupants.** The “occupants” were almost invariably described as tall, beautiful or handsome humanoids who engaged their human guests in prolonged philosophical, “scientific” and/or socioeconomic discussions. The usual motive given for UFO visitations, according to the contactees, was that they were “Space Brothers,” **here to save the human race from nuclear destruction** or other catastrophes. *Um, I've never heard anything like this before. Tall, beautiful sure, but philosophical debate?*

phes. In some cases, the contactees received their other-worldly "communications" by telepathic "channeling."¹

The contactees in major U.S. cities held annual conferences. Among the attendees were people who wore silver suits and antennae, with confident assurance that other attendees would consider them authentic space travelers. These types were a source of amusement for NICAP members, who occasionally attended these so-called "space conferences" in order to keep tabs on what this strange breed was doing.

Most people in the general public merely laughed at the contactees' stories and privately thought, "Yeah!" As unbelievable as the stories were, however, the media gave them good press, and bountiful exposure on TV and radio. "Space travel" stories were far more sensational—and more fun to write about—than the complex issues involved in scientifically oriented UFO research. As a result, contactees became, in the public's mind, an integral parcel of the "UFO question," an unwanted parcel, clinging to the UFO topic as mistletoe clings to an oak.

The media considered contactee stories good topics to print on slow news days. Consequently, the public was pounded by descriptions of "space flights" and "extraterrestrial visits" by contactees such as Daniel Fry, George Van Tassel, Gabriel Green,² George Adamski,³ Truman Bethurum,⁴ Frank Stranges—an almost endless list. The publicity given them was not limited to tabloids; even conservative newspapers printed tongue-in-cheek articles about them. Meanwhile, competent UFO investigators had to work hard for the rare interviews they were granted and were thoroughly frustrated, until McDonald arrived on the scene.

McDonald had met contactee types before 1966 in and around Tucson. A particularly vivid example was connected with unexplained "ring-clouds" which appeared occasionally over Arizona, and which McDonald investigated assiduously. On the 28th of February, 1963, for example, an unusual ring-shaped cloud appeared high in the sky and was seen over most of the state. It remained illuminated well after sunset, showing green, blue and pinkish coloration. Its tremen-

1. For instance, "The Dick Miller Story," by Mark Smith, *Thy Kingdom Come*, (later changed to *AFSCA World Report*) Editor, Gabriel Green, Los Angeles, published by Amalgamated Flying Saucer Clubs of America, Inc., May-June 1959, Issue No. 9.
2. Editorial by Gabriel Green, *Flying Saucers International*, Los Angeles, Issue No. 24, July 1966. Also Green, Gabriel with Smith, Warren, *Let's Face the Facts About Flying Saucers*, New York, Popular Library, 1967. See esp. last chapter pp. 122-127.
3. Adamski, George, *Inside the Flying Saucers*, New York, Paperback Library, Inc., 1967 (Copyright 1955).
4. Bethurum, Truman, *Aboard a Flying Saucer*, Los Angeles, DeVoss & Co., Publishers 1954.

dous height and size, and its peculiar grainy structure puzzled him to the extent that he appealed to press and radio for confirmatory reports.



FIGURE 5. A 60-km long Arizona ring cloud.

He received approximately 150 reports and about a dozen photographs from widely spaced cities and towns in Arizona (see Figure 5) and was able to compute an approximate height of 35 kilometers and a length of 60 kilometers for this extraordinary and beautiful ring cloud. He questioned scientific and military facilities far and wide, seeking an answer to the unprecedented phenomenon. He ruled out every possible conventional explanation and eventually hypothesized that it was very possibly caused by a rocket-firing at Vandenberg AFB in California, some hours before the cloud was seen over Arizona. The Air Force would neither deny or confirm that their missile firing caused the ring cloud, and kept their records of the firing classified. McDonald eventually published an article about the cloud in the prestigious journal *Science* (see Appendix Item 6-A, page 538). His investigation of the ring cloud was supported by the Office of Naval Research.⁵

In the midst of this investigation, McDonald heard about a local minister, who was insisting that he had seen seven angels rise from the Earth and fly up to the ring cloud, where the "Lord God" was sitting on a throne. The minister,

whose fervor and lack of documentation matched the contactees, was convinced that the ring cloud was a sign of the "coming of the End."

"It had nothing to do with UFOs. It was just a cloud," relates Betsy McDonald, describing these events. "But people were making a cult out of it."

We do not know when McDonald personally encountered his first "contactee," but in his files are copies of his "Letters to the Editor" of Tucson papers rebutting the minister's claim about the 1963 ring cloud. Also there is a *Los Angeles Times* news clipping dated August 10, 1960, which describes how Gabriel Green, a 35-year-old from Whittier, California, had thrown his hat in the ring, running for President on "the flying saucer ticket." At a press conference, Green stated that his "advisers" were from the Alpha Centuri system and that they "looked like people."

"The space people want to teach us peace and economic security under universal law," Green had contended. Answering a question from one of the reporters, he commented that the women in space were beautiful. "One of my friends made a contact with one of them not long ago," Green stated. "He said she was really out of this world." (See Appendix Item 6-B, page 539).

James McDonald was dismayed over the contactee aspect of the UFO question, just as all objective researchers were. He realized that most witnesses described their UFO sightings honestly and undramatically. Even when they had mistaken conventional objects for UFOs, their reports incorporated the actual aspects of the event, and they accepted McDonald's explanations with good humor. The contactees were another matter—they sought publicity and financial profit. During McDonald's years of UFO research, a virtual parade of contactees attempted to "instruct" this prominent scientist exactly what UFOs were and why they were here! They found McDonald an impatient listener, for he quickly learned that trying to document contactee stories was nearly impossible and a waste of time. It was the same conclusion his new UFO colleagues had come to years before.

At the same time, a few experienced, objective UFO researchers felt that perhaps one or two contactee stories might contain grains of truth. Paul Duich,

Agreed.

5. Eventually, McDonald learned that the cloud was the result of a secret, experimental missile firing from Pt. Mugu, Vandenberg AFB. He had contacted the AF in the midst of his investigation and had been told that under no circumstances was the AF responsible for the cloud. This was not the first or last time that the AF would give McDonald wrong information. The government propensity for "secretiveness" in this case demonstrates strongly how much easier it would be if there were honest exchange of information between government agencies and researchers! Now, of course, missile firings from Point Mugu are common knowledge and have been for many years.

an engineer employed by a Southern California aerospace firm, who was a valuable and respected member of the Los Angeles NICAP Subcommittee, wondered privately if perhaps the initial phases of Daniel Fry's account might be true.⁶ Daniel Fry was a contactee who allegedly came across a landed UFO in the California desert. He reached out to touch the craft and was informed by a "voice," presumably emanating from within the ship, "Don't touch the hull, pal. It's hot!" Fry's accounts of later "space rides" followed his original account. Duich did not accept Fry's account of the hot hull or the subsequent "space rides," but he wondered if perhaps Fry did see a landed saucer and had just embellished the event.

Another of McDonald's scientific colleagues, a prominent physicist with another Southern California aerospace firm,⁷ privately expressed his opinion that some of George Adamski's photos of "mother ships" and "scout craft" might be genuine. This scientist thought some of Adamski's pictures were being overlooked because Adamski was also insisting that he had encountered "Space Brothers" in the desert and had been on rides to the Moon and other planets.⁸ Some of these researchers confided these thoughts privately to McDonald, but he could not understand how objective researchers could accept any portion of such wild tales. To McDonald's mind, and to the minds of a majority of objective researchers, if one part of a report fell apart, it damaged the entire case, making it useless to any valid scientific study.

This is also the argument for doing slow good science.

Other correspondents wrote long letters to him on the same subject, in which the writers expressed their general feelings about the physicality of UFOs, their dissatisfaction with government neglect, and the possibility that contactees' stories like Adamski's and Fry's might have some truth to them. McDonald stopped answering these letters. There was simply not time in his complex life to investigate cases where portions of the stories had been proven fraudulent. Too many other cases which held out the hope of establishing UFOs as a legitimate subject for scientific study were calling out for attention.

McDonald did occasionally confront prominent contactees in "Letters to the Editor" and media interviews on his own home grounds, like the time Frank Stranges visited Tucson. In a well-attended public talk, Stranges claimed that he had met an alien from another planet in Washington, D.C. Stranges was selling a book about his "experience" titled *Stranger at the Pentagon*. He was also selling a dubious mechanical device which he claimed would bring health and vibrant energy to all who bought and used it. In a local "Letter to the Editor,"

6. Personal communication, Duich to author.

7. Personal communication to author.

8. Adamski, *op. cit.*

McDonald informed Tucson citizens that Stranges was not to be taken seriously and gave multiple reasons gleaned from his deep knowledge of the UFO mystery. He advised his fellow Tucsonans that, if they were experiencing health problems, that they should go to their family physician instead of using Stranges' contraption!

Besides the profiteering "contactees," there were other people in the UFO field whom objective researchers colloquially referred to as "kooks" or "crackpots." They were different from the average contactees, for they appeared mentally disturbed, whereas most "contactees" acted rationally.

McDonald ran into his full share of these disturbed individuals. His "Kooks" file is as thick as any other researcher's. He may have been a bit more irritable with them than other researchers, most of whom had a little more time and were used to telling unwelcome callers, "We cannot help you."

A letter McDonald wrote to Dick Hall around this time demonstrates the frustration he felt with these kinds of interruptions:

Dick: Today I encountered a new Grand Cover-up Hypothesis.... I came back from a campus errand to find a woman waiting at my door.... After a half hour of "background," which proved quite irrelevant, she came to what seemed to be her main point. She feels some "group" has cooked up the entire UFO business to prepare the world for the next big step in history, world government. They're creating an "external enemy" out of whole cloth to bring us all together....

I blew up and told her what I thought of the half-hour prelude that wasted precious time.... After she retreated out the door, I learned she had the further gall to go next door and start talking to Dr. [Raymond M.] Turner about what an "irrational man" I was.... After about ten minutes he gave up and gave her the door, too. That's two near-nuts in a week. Another one bent my telephone ear for 30 minutes last Sunday.... I pretty much blew up at her too.... She kept admonishing me that if one only looks up he may miss diamonds at his feet.⁹

McDonald quickly realized that scientific investigation of UFOs was not going to be as easy as he'd first thought. His reputation and ability to speak un-

9. These troubled people still abound in the UFO research field. They are demonstrably psychotic or near-psychotic, unlike some rational, productive and obviously honest individuals who claim "abduction" by so-called "alien beings." The latter comprise a separate group, which is presently reaching the attention of clinicians and other researchers with backgrounds in psychology and other behavioral sciences. The "experiences" of these so-called "abductees" appear to occur in altered states; researchers to date have been unable to present scientific documentation that they are physical events.

derstandably on the subject, however, began to bear fruit. Gradually, he began influencing other scientists to lose their fears and publicly express an interest in the UFO question. He spent a good part of his time—aside from his usual professional and academic responsibilities—speaking before governmental, military, and scientific groups, and he began making a difference.

The media stopped paying so much attention to the Tucson contactees and began to listen to him instead.

He methodically searched all hypotheses he could think of that could possibly explain UFOs. He would discuss seven scientifically logical hypotheses in his public talks, and then he would point out Hypothesis #8, which he had gleaned from contactee writings, namely: "Spaceships bringing messengers of terrestrial salvation and occult truth." Then he would tell the audience about the extensive contactee writings, which he termed, "A bizarre literature of pseudo-scientific discussion of communication between benign extraterrestrials bent on saving the better elements of humanity from some dire fate implicit in nuclear-weapons testing or other forms of environmental contamination. That 'literature' has been one of the prime factors in discouraging serious scientists from looking into the UFO matter."¹⁰

At the same time that he was influencing his contacts in government and science, interviewing UFO witnesses on promising cases, being interviewed himself by the media and trying to keep kooks and contactees away from his door, he was continuing his IAP cloud-physics projects, working on the U.S. Navy's and NAS climate modification panels, teaching at the university three days a week, and guiding post-graduate students through their masters' and doctoral studies. He and his wife Betsy were also seriously interested in civil rights, the Vietnam War, and various other causes concerned with peace and freedom for all members of the human race. He was also intrigued by the growing problems of atmospheric pollution and was one of the first outspoken environmentalists.

McDonald used humor to help maintain his equilibrium. Although he never talked about his Irish heritage and, unlike most Irish-Americans, expressed no love for Ireland, his sense of fun was, in many ways, typically Irish. It was a sly, impish type of humor, subtly skipping in and out at unexpected times. Besides his many other talents, he drew cartoons, and one of his favorite subjects for merriment was the way "Bets" prepared meals for their large family. Betsy, with her scientific knowledge of food chemistry and dietetics, regularly cooked balanced meals and allotted each family member one portion of all the foods she prepared.

10. Hearings Before the Committee on Science and Astronautics: U.S. House of Representatives, 90th Congress, Second Session July 29, 1968, Washington, D.C., U. S. Government Printing Office, 1968, p. 35.

This method permitted the whole family to stay slim and healthy. When guests came over for dinner, McDonald often teased Betsy's "one person, one portion" policy. He drew and tacked up cartoons in prominent places which pointed the way to a nearby cafe, in case the guests needed "seconds."

Humor aside, James McDonald often expressed his deep distress about social conditions to close colleagues. His good friend, Richard Kassander, relates:

He often spoke about...the whole social condition in the country, the fact that our treatment of the blacks wasn't what it ought to be. And most of us would argue, "Well, of course it isn't, but we're trying very hard, and look at this and this and this progress." He was never satisfied with that at all.... "Relatives" were not important. It was "the absolutes" that were.

We had a couple of pretty good arguments, and so what? That's one of the nice things about a democracy. We can say what we feel like and then go out to lunch together. We had the little Mexican cafeteria in the Student Union Annex, which is about as good a Mexican restaurant as there was in town. And we'd go there about every day for lunch.... Frequently the discussions would go down that [political] vein. Frequently, it would be just as much football.¹¹

As the years went by, and the six McDonald children grew into young men and women, Betsy was freed somewhat from incessant household tasks. Her concern for human beings matched McDonald's, but unlike her husband, who could not take the time to express his concern to the fullest extent, Betsy became actively involved in many social causes. At McDonald's urging, she entered the graduate program in the university's Philosophy Department, eventually completing all academic credits required for a doctorate. As a student, she could legally plan and participate in activist movements on the U. of A. campus. Soon she was picketing on campus for civil rights, integrated housing, and against the draft and the Vietnam War. McDonald did not often take active roles in these activities, but he was always supportive of her. When Betsy and other Tucson activists established a print shop and book store for the Peace and Freedom Party on the edge of university property, he took time to build shelves for the books. Among his many talents, he was also a skillful woodworker.

These were the days of the "hippie" movement, and one of their sons, while attending the university, wore long hair and a beard, and some of their daughters wore "flower children" clothing. Of these tumultuous times, his

11. Author's interview with Dr. Richard Kassander, Nov. 1-2, 1993.

friend Dr. Bill Sellers laughs gently as he recalls McDonald's short haircut and neat appearance, compared with the long-haired activists.

"There were a few times when he seemed to be a little bit embarrassed by it all, but he didn't say anything. He just sort of kept in the background. There was one case where [activists] were trying to get the president of the university to resign, and Mac sort of kept to the background on that one. Although he was obviously part of them, he didn't really say anything."

On other occasions, McDonald took a more active role. On occasion, he voiced his opinions publicly at "speak-outs" against the Vietnam War. He abhorred the use of napalm and other types of chemical warfare and researched these subjects thoroughly. Although his writings on these are not among the atmospheric projects reverently displayed in IAP's memorial room, they are preserved in the Institute's library and in the Library of the University of Arizona with many of his other projects.

Dr. Dick Kassander related the following about McDonald's confrontations with the president of the university, Dr. Richard Harvill:

Mac was not kind to Dr. Harvill on several occasions, including in the Faculty Senate. I was surprised, because certainly in "the smoke-filled rooms" Harvill had to be the best friend he had. And I don't know if Mac ever appreciated that.... There were people higher in the state who were after Mac's head for things that were being broadcast internationally that they thought reflected poorly on Tucson, both as a good place to locate a new large business and as a place to emigrate to in one's retirement, thereby bringing more value to the state. The Board of Regents worried...about the Titan missiles because all the realtors in town were upset, the business men were upset. "All of those construction jobs," and "thousands of people are coming here," and all of that.... I caught a bit of heat about that.¹²

Dr. Harvill called Kassander into his office one day and said to him, "I'm going to ask you this question just once, and you can answer it as candidly as you want. We'll never discuss it again. Do you believe that what Dr. McDonald is doing is good science?"

"I have absolutely no question about it," replied Kassander. "The man just isn't capable of doing bad science or twisting it or anything else. He believes in what he's doing and it is good science."

"OK," Harvill replied, "I'll never ask you again."

12. *Ibid.*

“And he never did,” says Kassander. “The question had to do with the Titan missiles, not UFOs. UFOs? Well, most people simply refused to take that seriously.”

McDonald went ahead and did what he thought was right in everything—whether in science, in private political thinking, and in other situations. He was a man of high principles, who didn’t care whether or not anyone else—including his best friends—shared those principles with him. Some of his colleagues did, of course, including Drs. Paul E. Damon, Paul Martin and Cornelius “Corny” Steelink. But whether he was essentially alone or not, whenever McDonald felt the good of the public was involved, he forged ahead.



FIGURE 6. The happy McDonald family.

McDonald was immensely proud of his wife “Bets,” not only as a homemaker but especially because she stood staunchly by her principles. She was arrested by Tucson police for picketing the draft board during the Vietnam War with a group of demonstrators, and later stood trial with the prospect of being jailed if convicted. A jury found her not guilty of violating the public order, and McDonald later told some of his UFO colleagues about the event, expressing his pride in the way “Bets” stood up for her beliefs.

As they were growing up, the McDonald children looked forward to attending the University of Arizona to study various branches of science or to enter the teaching profession. One of the perks given faculty members was that their children could attend the university at reduced rates. The McDonald children made full use of the privilege. They were proud of their eminent father

and their activist mother. To everyone who knew them, the McDonalds seemed an ideal, happy family (see Figure 6).



FIGURE 7. Lois McDonald Riley, sister and only sibling of Dr. James E. McDonald.

McDonald's widowed mother, Charlotte Linn McDonald, also lived with the family after her husband's death in 1958. She was called "Grandma McDonald" by the children, while their parents called her Hilve. Her political views were diametrically opposed to her son's and his wife, but being an intelligent and graceful woman, she never interfered with their life in any way. She did confide to Dr. Dick Kassandra once that she thought her son "got a lot of his political ideas from Betsy," but she never expressed this opinion to Betsy herself. It is very possible Hilve was wrong, for James McDonald's ideas were always his own.

McDonald also maintained a good relationship with his one sister, Lois McDonald Riley (see Figure 7). Betsy McDonald got along well with her mother-in-law Charlotte McDonald. She especially admired the way she walked and dressed—always slim, fashionable, straight-backed and active (see Figure 8). Hilve occupied the attached guest apartment with its separate kitchen, which opened out onto the flagstone terrace. The back of the house was not complete when McDonald bought it, but he immediately finished it himself, and added on the apartment for his mother after his father died. Hilve McDonald, a devout Presbyterian, attended a local church a few blocks north of the family home. The McDonalds attended a Unitarian Universalist church for a while but soon became dissatisfied with it. They joined a group which split off from the larger church and helped found the Tucson Humanist Association.

McDonald's father, James Patrick, was never discussed in the Arizona household (see Figure 9). Even Betsy did not know the full story, but McDonald privately shared with her some of his feelings about what was, for him, a difficult childhood. The children realized early they were not to ask about "grandfather." It was only much later that the reasons became clear.

Outside his academic and family life, with its many varied personalities, McDonald was welcomed in the UFO field, by the numerous lay researchers and also by fellow scientists who had been quietly researching the question. It was a different matter at IAP. Although McDonald's impeccable reputation continued unchanged, many of his university colleagues wondered about his open interest in UFOs. Dr. Dick Kassander had been James McDonald's friend since the early days at Ames, Iowa, where they were graduate students together. He admired McDonald's cloud-physics contributions but felt he was wasting his time studying UFOs. He gives the example of McDonald's creativity, citing his work on the shape of raindrops. Kassander thought McDonald actually "shook up the society a little bit" when he proved that large raindrops resemble more the shape of a "tiny hamburger bun" than the "pearl drop" that everyone else thought (See Chapter 1).



FIGURE 8. Charlotte Linn McDonald, at far right, mother of Dr. James E. McDonald.

"Even just the thing he did with the shape of the raindrop was so inventive and so important that we all felt that he was capable of some really great things in the advances and in the knowledge of cloud physics and other areas of meteorology," states Kassander. "That was one of the reasons why many of us felt that the UFOs...were an unfortunate diversion. There were very, very important problems in our science that needed the kind of attention that only he could give, that could have had extremely significant effects, especially as they related to nucleation and, ultimately, cloud-seeding.



FIGURE 9. James Patrick McDonald, on right, father of Dr. James E. McDonald

“[His UFO study] had to be at the expense of some of those problems and programs,” says Kassander. “But...nobody could better evaluate where he should be spending his time as he could. We were confident that what he did was done properly, without any ‘little green men nonsense.’ There were no fiery arguments in the hall, or over lunch, or anywhere else. He decided what he wanted to work on, and he did some great work in atmospheric physics. An awful lot of what he chose to do was on the edges, but that was his decision, and I supported it. And that was academic freedom, too.”

McDonald was well aware how Kassander, who, as IAP Director, was technically his superior, felt about his UFO study. Fortunately, Kassander’s

idea of being "Director" was not that of a martinet. He thought of himself as a Chairman, rather than as a "Director"—a word which implied guidance. He respected McDonald as a colleague, as a scientist and as a friend and never forgot that McDonald had stepped down from his Co-Director's post into a Senior Physicist position, at the same time recommending to President Richard Harvill that Kassander take on full Directorship. McDonald reasoned, as did Kassander, that the two of them merely had an honest difference of opinion. To McDonald's mind, UFOs were an important scientific question; Kassander's position was that McDonald knew his science and his own abilities better than Kassander himself did.

"He'd have exactly the same kind of conversations with Lou Battan, whose scientific abilities he respected tremendously, more than mine, for good reason." Kassander says. Kassander's own expertise was in administration, rather than pure research, but he was also a creative expert in instrumentation, related to many smaller facilities connected with the IAP in and around Tucson.

Dr. Bill Sellers, a meteorology professor at IAP, wondered what was going on in McDonald's mind. Since so many other scientists felt there were logical, conventional explanations for the UFOs, why was McDonald spending so much time on them, instead of on atmospheric problems he was trained for, and on which he had already contributed so much and on which he could have contributed so much more? To Sellers, it seemed like McDonald was essentially wasting his time studying UFOs.

"He obviously didn't get any support from anyone else on the faculty that I know of," states Sellers. "We respected him, but it seemed so strange to us that he was spending so much time on these things that were not related to his own field of training."

However, Lou Battan and Dick Kassander, as well as other university colleagues, would listen with interest to his descriptions of UFO cases he was working on. His descriptions were vivid and his choice of words meticulous. He was a stickler for details and, with his remarkable memory, he left out very few from any description he gave. He was never boring, for the incidents he was describing were of such extraordinary content.

"He would tell us about some of these very interesting sightings with so many factors that coincided," Kassander relates. "All of these sightings within a several hundred mile radius, all converging on the same point. Hard to imagine it was an accident, especially when it was reinforced with pilot radar reports, and the Air Force would systematically deny they were on radar. Makes you wonder about the Air Force radars!"

McDonald spoke about his UFO studies to any colleague who would stop and listen. He had an uncanny ability to detect whether or not he was boring a person, and could immediately change the subject to a mutually agreeable one or terminate the conversation altogether.

Other university faculty members were not so kind. A few ridiculed his UFO interest, privately and publicly. One of these was Gerard Kuiper, the planetary astronomer who was Director of the university's Lunar and Planetary Observatory. Kuiper openly derided UFOs, terming them "the worst kind of pseudo-science." McDonald countered Kuiper, explaining that he had reviewed every possible explanation that he could think of, and he was driven to the conclusion that no inner-space phenomena could explain them; therefore UFOs had to be something to do with "outer space." Kuiper replied caustically that fortunately McDonald did include the fact that he had reviewed all of the answers that he could think of but that didn't necessarily mean all of them. Kuiper, however, never offered any hypotheses of his own.

The irony in this is that McDonald was instrumental in securing Gerard Kuiper to head the IAP's new Lunar and Planetary Observatory. Kuiper apparently was not the easiest man to get along with. He had fierce battles with many colleagues, including the eminent Harold Urey, whose pre-1969 theory was that the moon's surface was covered with a very deep layer of dust, while Kuiper insisted (rightly) that it was hard. Kuiper had been Director of Yerkes Observatory, but had been essentially "unelected" by his own faculty at the University of Chicago. President Harvill approached Kassander and asked if it would be possible to find a place for Gerard Kuiper in the IAP. Barely a week before Harvill made his request, McDonald had recommended in a faculty meeting that part of IAP's activities should be directed toward planetary atmospheres and Earth's upper atmosphere. McDonald and the other IAP faculty were delighted when Kuiper agreed to head their new Lunar and Planetary Observatory.

In suggesting the new observatory, McDonald had proposed, "It would be very interesting to have a program that looks at the atmospheres of other planets, as well as the Earth's upper atmosphere, [about] which we are doing nothing, but it is becoming more and more interesting." Since Earth's atmosphere included the ozone layer, McDonald was once again edging into a field where he would be ahead of his time. He could not know that his later intense study of the ozone layer would contribute, in a most unexpected way, to his own demise.

There is nothing in his journals indicating that his colleagues' attitudes irritated or bothered him in any way. He was not a man given to emotional outbursts; his rare displays of what a casual observer would consider "temper" did not spring from an emotional base. The incident with the "kook" who wasted a half hour of his time, for example, was prompted by a logical assessment of

the situation. His irritability with the loquacious woman was more planned than explosive. He handled most annoying situations in the same manner. Typically with friends, he often saw their side of a debate as well as he saw his own, and they would cordially agree to disagree.

Fortunately, however, McDonald had a few close friends at the university who did more than listen when he talked about the puzzling sightings he was investigating. Even though their own interest in UFOs was minimal, they gave him moral support. McDonald himself did not seem to recognize (at least consciously) that he needed moral support. His own confidence in his abilities and reputation seemed to be enough. It is entirely possible, however, that the enthusiastic support and camaraderie he gained from his new-found lay colleagues and the scientists who were already in the UFO field helped him through the next demanding years.

Dr. Benjamin Herman, whom McDonald had guided through doctoral studies, remained at IAP as a member of the faculty and was one of his closest colleagues.¹³

"When Mac said something, he wasn't off on a fringe trip," Herman states. "He knew what he was talking about. I think he had the respect of everybody on this campus, even though they may not have agreed on what he described as UFOs."

He knew that McDonald was ridiculed in some quarters. "Anybody that ridiculed Mac was ignorant, because Mac was stronger than anybody that ridiculed him, I'll guarantee you that," he says.¹⁴

Herman also comprehended McDonald's basic UFO hypothesis—i.e., that the extraterrestrial hypothesis (ETH) was the least unsatisfactory hypothesis. Even to this day, McDonald's hypothesis is not well understood, even by researchers well versed in UFO history and who knew him personally. Herman remembers McDonald stating, "From what we know now, I can think of no other scientifically sound explanation, and that's what I'm looking at."

"Basically he was saying, 'I really can't believe this, and it must be something else, but what is it?'" Herman says. "But I don't think Mac was understood, and a lot of people would just say he 'believes' in the ETH."

It is an axiom that a true scientist does not "believe," because "belief" is considered an act of faith, rightfully belonging in creative and religious realms. Sci-

13. In 1995, Dr. Benjamin Herman became Director of the Institute of Atmospheric Physics, a position he resigned in July, 2001, to resume full professorship.

14. Author's interview with Dr. Ben Herman, 2 November 1993.

ence studies and questions, and only when evidence is verified, does science “know” or “is convinced.” Herman points out, however, that there were many scientists who did understand what McDonald was doing. These thoughtful scientists realized that there was a problem in the flood of UFO reports from credible people. Herman himself realized a problem existed. “There’s a lot of things that have not yet been scientifically explained,” he states. “But I don’t believe these things were from outer space.” *He thinks they’re terrestrial?*

Two of James McDonald’s IAP colleagues actively participated in a few of McDonald’s investigations. One was the so-called Brown Mountain trip, which indirectly impacted on the UFO question. The colleagues who accompanied him on the trip were Ben Herman and George Dawson, whose doctorate was in chemistry. The “Brown Mountain Lights” of North Carolina intrigued the UFO community, mainly because they were essentially “unidentified” and had been reported for at least a century by apparently credible observers. Some UFO investigators had studied them on-site and had determined that some of the reports could be explained as the headlights of distant cars, wending their way down a unlighted road which ran through the sparsely settled mountain. The fact that the strangely maneuvering lights had been reported before automobiles had been invented, however, meant that all the “lights” had not been explained!

McDonald regarded the Brown Mountain lights as unexplained atmospheric phenomena, which lay squarely in the arena of conventional science. A high school teacher in North Carolina heard of McDonald’s interest in UFOs and came to Tucson to talk with him and Ben Herman about the Brown Mountain Lights. McDonald then discussed the situation with NICAP’s Dick Hall. Around 1960, Hall and Walter Webb, a NICAP astronomy consultant, had investigated “the lights” on site and had found some witnesses who reported seemingly anomalous incidents. A ranger had seen lights moving horizontally, and the proprietor of a lodge at Jonas Ridge claimed to see them frequently. The proprietor’s wife had encountered a large object, the angular size of the moon, which moved horizontally and was so bright that it illuminated the road and nearby trees. Hall and Webb found few reports of large lights, however. They felt that most reports were caused by car lights on the mountain, or lights from towns in the distance.

“The story, as related by the high-school teacher, was that there were these lights starting at the bottom of the valley, and almost any night you go there, you could watch them rise up beyond the mountain,” relates Herman. “So we made an appointment to meet him on a certain date at Brown Mountain. George [Dawson] and I and Mac had radios, for intercommunication amongst us. We wanted to try, among other things, triangulation...so we could get an-

gles and distances, if in fact we saw anything.... We brought some theodolites with us, too, to make measurements."

With Jim Hughes' permission, McDonald paid for part of the trip expenses with ONR funds, and the trio of scientists arrived at Brown Mountain at the prearranged time. The high school teacher was there, and met them excitedly.

"You should have been here 20 minutes ago," he told them, "because there were all kinds of lights. But they stopped."

McDonald and the others were not to be dissuaded, and the four men hiked up to the top of the mountain, which is not very high; Herman remembers it as about 2000 feet. They did not see any anomalous lights that night. The next evening they made another trip. This time, they arranged to be at triangle locations. They stayed for several hours and saw nothing.

About the third day, Dawson had to leave to go back to Tucson. McDonald and Herman stayed and did a lot of research in the files of local newspapers. They also met a couple of people who were very active in "pushing" the Brown Mountain Lights. One was a rhododendron specialist who ran a nursery partly up the mountain. He had arranged several expeditions for people in the past, and Herman was of the opinion that he was possibly charging money to take the groups up the mountain.

"We arranged for him to take us up and show us the lights," he relates. "We got partly up the mountain and then stopped. There's another mountain a mile or two away and there's a road on this mountain. All of a sudden [the guide] looks up and he says, 'Look over there, guys. There's a genuine Brown Mountain Light!' I started to say, 'That's a car.' And Mac kicked me and told me to stop, so I shut up. And what he pointed out to us for several occasions were cars on the other mountain, which you couldn't hear. It was very dark, and it was a very rural area...no houses."

McDonald, in warning his younger colleague, was silently teaching him that, when a witness is misidentifying a conventional object for a UFO, you don't immediately tell him he's wrong. He was letting the nurseryman reveal just how untrained an observer he was! He possibly used the same technique on everyone he took up on the mountain. However, McDonald and Herman had binoculars; they could plainly see that the lights were cars.

Whenever a car went down the rural road, it was so far away that the two headlights appeared as one light to the naked eye and so were not recognizable as headlights. Also, both mountains were heavily forested. The lights would vanish from sight temporarily as they went behind trees and then would reappear again. With the equipment available to them, McDonald and Herman definitely identified the "lights" as cars.

The next night McDonald and Herman took one more trip up the mountain to study another type of "Brown Mountain light" that behaved differently from the lights which were identifiable as cars. From the top of the mountain, they could see the lights of two towns, which were 10 to 15 miles away. Every once in a while they would see lights that would appear suddenly and then, just as suddenly, disappear. They were able to identify these lights as distant cars, which at first would be headed toward them, then would abruptly turn a corner.

There were several other aspects involved. Car lights, from a distance, can appear yellow-reddish instead of a yellow incandescent color. The fact that many of the Brown Mountain lights had been described as reddish had made the car-lights explanation seem unreasonable to many witnesses. But McDonald and Herman reasoned that, because of atmospheric scattering, blue light becomes filtered out, leaving the reddish tones predominant.

They also discovered there were a lot of young couples that were going up the mountain road. "It was a good place to bring your girlfriend," Herman says. "It was dark, and there was nobody around to bother you, and so the excuse was, 'Let's go up to watch the Brown Mountain Lights.'" Herman was of the opinion that the youngsters who lived on the mountain probably knew the "lights" were normal occurrences. He pointed out that some of them surely had looked at them through binoculars at one time or another.

"I don't think it was fooling anybody," Herman states. "There was also a lot of folklore involved. There were people who were telling us, 'Oh, yeah, there's a headless woman you can see sometimes, carrying a lantern, looking for her head and her murderer!'" He felt that some of the townspeople might be superstitious, adding their fears to the general lore. The bottom line, in both McDonald's and Herman's opinions, was that there was nothing to the "Brown Mountain Lights." They were a combination of mistaken conventional objects and folklore. To the best of Herman's knowledge, McDonald wrote up the trip's results and sent the report to ONR. However, this paper is not mentioned in McDonald's bibliography, and no copy has been located to date in his files.

After they arrived home, Dr. Herman did additional research on his own. Talking over the situation with one of his psychologist friends, he learned about "autokinesis." If one looks intensely at an object which is motionless and which has no fixed reference points around it, like a star in the sky which does not have other bright stars around it, the eye can play tricks, and the object, or light, will appear to move. This is a common effect which UFO researchers come across. In the UFO field, it is colloquially known as "eye jiggle"!

When Herman's colleague told him about autokinesis, he conducted an experiment in his classroom. He turned out the lights and pulled down the shades. When the room was pitch black, Herman struck a match, lit a cigarette, and asked

the class to tell him which way he was moving the glowing tip. Various students responded, stating every possible direction. Yet Herman had not moved it at all. In this way, he proved to himself and to his students that autokinesis was a very real effect.

The fact that bright stars surrounded by black sky, with no immediate stars nearby, will appear to move if stared at intently could have contributed to the Brown Mountain lore. A local inhabitant like the nurseryman, for example, could point out a bright star or planet near the horizon and tell his "group" that it was moving and that it was a "genuine Brown Mountain light." He himself might have been experiencing "eye jiggle" and really believed he was seeing an anomalous object. Or locals might be perfectly aware of autokinesis, and use it to convince others that they were seeing a mysterious light. McDonald and Herman concluded that the reports of unexplained lights just above Brown Mountain were quite possibly stars and planets.

A few other colleagues besides Ben Herman were accepting of McDonald's UFO studies because they themselves had seen anomalous objects in the sky or had "second-hand experience" which convinced them that there might be something to the UFO question. Dr. Paul Damon was one of these.

"Now, I did have a vicarious experience," Damon relates. "I was in Frank Senftle's office at the United States Geological Survey (USGS) in Washington when they were on the same grounds as the National Bureau of Standards. He received a telephone call while I was there."

The person who called Senftle was a geologist who had arrived late in Houston, Tex. He had been driving south on his way to Houston when, late in the evening, a bright, brilliant object came low across the highway.

"As I remember [this occurred] in the Amarillo district," relates Damon. "His car wouldn't function. There was something wrong with the electrical system, and he noticed other cars had been having similar problems. He went out and looked under the hood and took the cap off the battery, and the water-sulphuric acid boiled out."

Damon had heard only one side of the telephone call, but Senftle filled him in. The man who'd called so excitedly was a credible, hard-headed professional with whom Senftle had worked closely.

"Then when I went back to my hotel," continues Damon, "there was a group of paper boys who were yelling, 'Extra! Extra!' about this event and about a number of cars having difficulty. They were selling newspapers with headlines about it."

He could not remember the date of the occurrence, but it sounds very much like the classic car-stopping cases which occurred in and around Levelland, Tex., on the late evening of the 2nd and early morning of the 3rd of November 1957. The identity of the geologist who called Senftle to report his encounter is not known, and so the details of his experience are not complete. Damon does not remember if he ever told McDonald what he learned at the USGS office. He and McDonald had many things in common, but Damon had no active interest in UFOs at the time.

"I have seen things that people might call UFOs, but I would stare at them until I figured out what they were," he states. "For instance, radiosonde balloons high in the sky—beautiful."

Probably Damon never mentioned the event in the Washington USGS office, but, had McDonald been aware of this car-stopping case, he very likely would have tracked it down, just as he did most promising reports which came to his attention. He would have determined whether or not the geologist's encounter was an unreported Levelland sighting or an entirely separate car-stopping case. Either way, it is likely that he would have pursued it like a tiger, especially since it was experienced by a fellow scientist. It is entirely possible, however, that Damon had stumbled upon a Levelland sighting, on the very night that headlines were blazing about multiple car-stoppings caused by a UFO.

McDonald was thoroughly familiar with the Levelland cases, having read, in NICAP publications, descriptions of 10 cases occurring in that vicinity in November 1957.¹⁵ He re-checked the cases himself, particularly the weather conditions over that part of Texas at the time of the sightings, and concluded that they were not conducive to thundershowers and lightning. Blue Book had acted quickly to squelch the public interest in the sightings. Captain G. T. Gregory, who headed Blue Book at the time, called consultant J. Allen Hynek by phone. Captain Gregory had, off-the-cuff, evaluated all of the Levelland sightings as "ball lightning" and so informed Dr. Hynek. It so happened that Dr. Hynek, that same night, was officially responsible for tracking the new Russian "Sputnik" satellite which was orbiting above the Earth. Completely absorbed in that task, he had concurred with Gregory's evaluation of the Levelland sightings without investigating any of the facts himself. In a 1972 book, published after McDonald's death, Hynek stated that he'd been under the impression that an electrical storm had been in progress in the Levelland area at the time, a condition particularly conducive to the formation of ball lightning.¹⁶

15. *The UFO Evidence*, Editor, Richard H. Hall, Washington, D. C., Published by National Investigations Committee on Aerial Phenomena (NICAP), May 1964, pp. 163-64.

McDonald's own research on weather conditions in the Levelland area indicated that the sky was almost cloudless during the times of the sightings. The subject of ball lightning was still on the fringes of science, and it irritated McDonald that multiple car-stopping cases, apparently caused by close encounters with a large UFO, should have been summarily written off. Early in June 1966, just before his first trip to Blue Book, he had discussed Levelland and other UFO cases in a private meeting with Gerard Kuiper and a few other scientists at the university.

At this meeting, mention of the "ball lightning" explanation elicited surprising reaction from the other scientists; some of them had their own "ball lightning" experiences to tell! At his second trip to Blue Book, McDonald checked the Levelland sightings in the files and found three reports of low clouds and drizzle or mist. This was a different picture from the weather conditions McDonald himself had researched, as well as what Captain Gregory had described to Hynek, i. e., a lightning storm in progress over the Levelland area. Because of these inconsistencies, McDonald maintained deep interest in the Levelland sightings. He often chose them as examples of good UFO cases when talking before scientific groups and stressed that they were events that should have been scientifically studied but which had been grossly ignored.

A few other colleagues also assisted McDonald in UFO investigations. His friend Professor Charles B. (Charlie) Moore, a professor at the New Mexico Institute of Mining and Technology in Socorro, N.M., was one of the first to confide his own sighting to McDonald. In April 1949 Moore was in charge of a General Mills (GM) research project out of Minneapolis. He had just been given responsibility for the project and was pressing hard, searching for a suitable site to launch a large GM balloon. At about 10:00 A.M. on a Sunday morning, Moore was with a four-man Navy crew at White Sands, N.M., just south of a town later called Truth or Consequences. They launched a pilot balloon to determine the winds aloft at different levels.¹⁷

One of the four enlisted men on Moore's crew had never seen a theodolite before, so Moore let him look through the instrument's eyepiece to track the balloon. A Chief Petty Officer and Moore noticed an elliptical white object in the southwest which looked like the balloon, but the theodolite was not pointing in its direction. Moore told the young Navy man to get the instrument back

16. Hynek, J. Allen, *The UFO Experience: A Scientific Inquiry*, Chicago, Henry Regnery Company, 1972, p. 127.

17. Author's interview with Prof. Charles B. Moore, 27 September 1994.

on the balloon, and he replied that he was looking at it. Moore took the theodolite away from him, and saw the balloon, right in the crosshairs.

"I abandoned the balloon and picked up this object which was in the southwest," relates Moore. "We followed it for something like 65 seconds."

The theodolite magnified objects 25 times. The unidentified object was elliptical, white, with hard edges, but because it was moving so rapidly—about 5° a second—Moore was unable to fine-tune the instrument enough to see much detail. He could see no features or protuberances, just a large, white ellipsoid. "One part of it was as though it was in shadow—it was more yellow," describes Moore. "It had a line across, as if some of it were in shadow from the sun."

The object went from about a 45° elevation angle in the southwest, and then across the sun, which was southeast of the group. Moore picked it up again, as it moved away from the sun. The object made an about-face and then traveled into the northeast.

"The interesting thing is, that as it got further away from us, the elevation angle dropped," relates Moore, "and when it got down...to about 25° above the horizon to the northeast, it suddenly increased in elevation and got very small very rapidly...as though it were going up and out."

McDonald was fascinated by the description of Moore's sighting. With his help, he tracked down some of the other witnesses. Their descriptions matched Moore's in every detail. Moore wrote up his sighting for McDonald's personal files—a rather brief written statement giving the essential details. The statement emphasized that Moore had nothing more to add. He did not know what the object was; he only knew that it was not a balloon or an aircraft.

"There was no way that it could have been one of the General Mills balloons, because I was in charge of them, and it was nothing being flown out of White Sands that day," states Moore. "In fact, when we called in to the blockhouse, we were told, 'Are you guys drunk? This is Sunday. Nobody else is working, except you nuts.' And we inquired as to where the X-1 was, the experimental aircraft of the time, and it was in the hangar out at Muroc Dry Lake."

The report was passed on to the Air Force. "The Air Force Intelligence people told me that I 'misidentified' it when I reported it as an 'unidentified object,'" relates Moore with a little laugh. "That was the Air Force assessment of it. They said I misidentified an unidentified object! It was amusing, but this was an object that clearly had different performance from anything I'd ever seen."

Eventually the report was passed on to Dr. Donald Menzel for his "expert" opinion. Menzel's opinion was that Moore and the others had seen a mirage!

"I remember we calculated the elevation angle of the sun at that time, and it was something like 70°," relates Moore. "And at that time of day, in April, any thermal inversions would have washed out by the solar heating by 10:00 in the morning.... It was just the best time, the best time of all not to have a mirage."

"I think [Menzel] had a mind like a steel trap," Moore states. "Closed a long time ago."¹⁸

In spite of his own rather extraordinary multi-witness UFO sighting, Professor Moore remains basically a skeptic. "I think my position on this ever since has been that even though we were visited from outside...and they left no evidence, they wouldn't change humanity at all," he philosophizes. "If you observe it, all you can do is tell people, 'Watch. It might happen again,' and if it does, it might be significant. That's always been my view on this."

In spite of this, Charlie Moore was one of McDonald's closest colleagues and supporters. He helped him personally over the years on the investigation of a few UFO cases, unearthing data for his friend whenever he could.

McDonald found many good UFO reports among scientific colleagues and associates in the military. He was surprised at the incredible experiences which credible observers of impeccable reputation were recounting. He was even more surprised that, unlike Charlie Moore, they kept silent about them for so long.

18. *Ibid.*

A Guy Made Out of Steel

*I saw the danger and I passed along the enchanted way,
And I said, "Let grief be a fallen leaf, at the dawning of the day."
—from "Raglan Road"*

*Knowledge is a sacred cow, and our problem is to figure out how
to milk her while keeping clear of her horns.
—Szent-Gjorgyi*

McDonald's colleagues expressed their reactions over his public entrance into the UFO field in varied ways, but Betsy's reaction was unique. It was not the UFO subject itself that worried her. During his eight quiet years in UFO research, she had sometimes helped him find terrestrial explanations for reports which Tucson witnesses had made to him. She also accepted the fact that there were many unexplained observations in other areas. She agreed with McDonald that UFOs should be considered a scientific question, but she did not consider it a pressing problem. She instinctively knew that one summer's study would be not enough, as he'd first thought. Most of all, she was familiar with his work habits, and knew that he would pursue the problem until he found a satisfactory answer. It had been that way with all other projects he'd taken on.

She had experienced first-hand how he'd thrown all of his energy into the Titan missile controversy, and she had worked at his side in that fight, because she felt it was a crucial situation affecting their family. She'd seen how that fight had taken away time from his professional work, and feared that UFOs would do the same. McDonald never neglected his basic responsibilities to the IAP and the university, and she knew he never would. But how many times could he go off on tangents which were not within the normal realm of atmospheric physics? And would the UFO study eventually result in a depressive state such as he'd experienced during the Titan fight, at the point when he'd felt the controversy couldn't be resolved? In-

wardly, she worried that an all-out UFO study would leave him discouraged and exhausted, just as the Titan fight had done at one point. She was the only person who knew that the Titan controversy had affected him that way.

Another thing concerned her. "As a side to the Titan project, he worked on civil defense and in the process of proving that the Titans should be downwind, he did an analysis of what would happen to Tucson under a nuclear attack," she relates. "He studied a lot about civil defense. People used to write to him from all over the U.S. asking him where they could go in the event of a nuclear attack. He wrote a couple of articles about Tucson effects, which were published in *Science* and other refereed journals.^{1,2} After that, someone else got a \$50,000 grant to study civil defense. He had done the pioneer work for no pay, and someone else had followed up!"

The innate unfairness of this had provoked her, but she'd come to terms with it. When she saw McDonald taking on the UFO question in the same tiger-fashion with which he had attacked the Titans, she feared that he would end up doing the pioneering work and that some other scientist would receive the credit and possible funding. She expressed these opinions frankly to him.

Her objections fell on deaf ears. Once McDonald made up his mind that a scientific question existed which he might help solve, he plunged in wholeheartedly. His IAP friend and colleague, Dr. Benjamin Herman, has perhaps the most picturesque description: "Mac did not get bothered easily," he states. "He had more inner strength than anyone I've ever known. He might have been deep-down bothered, but...the guy was made out of steel. If what he thought was right, he would do it, no matter what."

McDonald's six children, with the exception of his oldest daughter, Ronilyn,³ were also cool to his new quest, regarding UFOs as unworthy of their dad's time and effort. In June 1966, his elder son Kirk had graduated from the university with a physics major, and planned to obtain a doctorate at Caltech. Ronilyn, 20, was a junior, studying psychology at the U. of A. Lee, the younger son, was a freshman, planning to major in astronomy. The other three children, Nancy, Gail and Jan, were still in high school and junior high. Although they wondered

1. McDonald, James E., "Backlash," *Science*, Vol. 133, #3460 April 21, 1961, p. 1271.

2. McDonald, James E., "Analysis of Civil Defense Hazards Being Created by Emplacement of Inter-Continental Ballistic Missiles Near Tucson," *Journal of the Arizona Academy Of Sciences*, Vol. 2, #1 August 1966, pp. 3-19. Also, *Civil Defense - 1961: Hearings Before a Subcommittee on Government Operations* (August 1-9, 1961).

3. Ronilyn wrote a 96-page honors thesis titled "Psychological Aspects of Unidentified Flying Objects" as part of her work toward a B. A. in Psychology at the University of Arizona. It is dated May 15, 1967.

why the UFO question had become so important to him, they were accustomed to his temperament and his penchant for pursuing unusual scientific questions.

One of his IAP colleagues once asked McDonald about his large family—why he and Betsy felt that people who could afford to raise and educate several children were obliged to do so. McDonald answered that they were contributing in the best possible way to the good of society. It was Betsy, however, who had decided that six children was a perfect number, and he'd gone along with her wishes. To Betsy's mind, six children would provide an ideal setting for familial interrelationships (she had been one of six children also.) She took on all the homemaking tasks, while McDonald concentrated on the financial responsibilities.

His family's lack of approval toward his UFO studies probably affected him inwardly, but typically, he hid his disappointment. He was able to show real emotion only to Betsy. McDonald loved his children deeply, but he was not emotionally warm. Although he was a proud, caring parent, he did not show feelings. Even when he became irritable and blunt from illogical circumstances encountered in the course of his work, he displayed these qualities from an intellectual base, rather than from true emotional vexation.

There was another reason why his colleagues' lack of encouragement didn't divert him from his course. He considered himself first and foremost a professional, whose expertise was climate and weather modification—problems facing the world at large. He felt responsible for helping to resolve them. Consequently his roles as husband and father tended to take a back seat a lot of the time. He realized himself that he had a "less-than-warm" personality and learned to make up for this with cordiality and a finely honed sense of humor. These personality traits might seem paradoxical, but in his case they were not. He forged ahead with his own convictions and seemingly boundless energy. The government's neglect of the UFO subject had forced him to seek a solution, and the full support of the UFO research community and its "hidden" scientists encouraged him.

This is a big question on my mind. If the remaining 5% are military I'd rather know so I don't compromise security. I know that makes the US look head up on Washington. It's OK, so let's get it done & learning.

McDonald was properly cautious, however. He recognized there was a possibility that he might be treading in dangerous waters. He realized that there was, conceivably, a security link with UFO research somewhere in the web of government bureaucracy, and he set about finding out if this did, indeed, exist. In mid-June he phoned his colleague Gordon MacDonald, a prominent scientist who served with him on a weather-modification panel for the Environmental Science Service Administration. Gordon MacDonald, who spelled his name in the Scottish way, was also with the Mitre Corporation, working in electronics under government contracts, and was also connected with a heavy-duty government security agency. He was a logical

person to ask about possible government security links surrounding the UFO question. He carefully listened to Jim McDonald's description of his involvement in UFO studies.

Gordon MacDonald had read Edward Ruppelt's book and knew about NICAP's *UFO Evidence*. However, when McDonald voiced his opinion that the enigmatic unidentified objects were possibly "from elsewhere," Gordon MacDonald seemed shocked and didn't agree. Nevertheless, to help his friend Jim, he talked to the Department of Defense (DoD), with officials in the office of Secretary of the Air Force's **Harold Brown**, and with various security-agency people. He received the distinct impression that there was no security tie-in whatsoever in the subject of UFOs.⁴

"Mostly, people looked at me as if I were nuts," Gordon said lightly to McDonald. "At Brown's office I heard something about Hynek's May 24th letter, but it hadn't caused any real stir." (See Chapter 5.)

Gordon MacDonald, in scouting out the security question, had the impression that the CIA, or perhaps the National Security Agency (NSA), was the only intelligence agency even perfunctorily following the UFO problem. **No one hinted to him in any way whatsoever that McDonald should back off from researching the subject publicly.**

After being reassured that he was not treading in forbidden waters, James McDonald made his second trip to Project Blue Book at the end of June 1966 to glean more data from Blue Book files. When he arrived at Wright-Patterson AFB in Dayton he was given VIP quarters—a four-room suite. In his journal, McDonald jocularly noted that the suite was stocked with "18 bottles plus beer," and a coffee-maker stood ready. "I'm equal to a Colonel," he wrote impishly in his journal.⁵ Had Blue Book decided to treat him royally, hoping that he wouldn't cause any more trouble?

The next day he met with a group of three military officers—**Maj. Boyce M. Smith**, a **meteorologist with the Army Weather Service**, **Maj. Bruce A. Dolan**, an **electronics engineer with Air Technical Intelligence Command**, whose main interest was "information theory" and the head of this three-man team, **Col. Louis DeGoes**. The latter was **presumably a physicist**, although McDonald did not note DeGoes's specific expertise in his journal.⁶ FTD's Chief Scientist, Dr. Anthony

4. McDonald, James E., second journal, p. 16.

5. *Ibid.*, reverse p. 24. Elton Boyer, an aviation expert and ex-military pilot who acted as a consultant during the writing of this book, cites the policy of stocking the quarters of important visitors with small bottles of various types of liquor, each bottle holding enough for one or two drinks. The higher the visitor's military rank, the more bottles provided.

6. *Ibid.*

Cacioppo, had made good on his promise to appoint three qualified people to conduct an FTD review of Blue Book's operations. Gen. Cruikshank had given them the assignment of coming up with a report and recommendations for future action within 60 to 90 days. McDonald's description of "DeGoes and Co.," as he called them, gives the impression that they were new members of the Blue Book staff, but an internal NICAP memo, written by Dick Hall after McDonald informed him of this development, specifies that "DeGoes and Co." was a monitoring group instead of a Blue Book upgrading.⁷

Over coffee on the patio, McDonald pressed the issue with the trio about the importance of the UFO question and the "foul-up" in which the Air Force was engaged. He mentioned how the Blue Book staff had searched unsuccessfully for the B-36 case which he knew had been reported to them (see Chapter 3). After two hours of chatting with DeGoes and Co., he went inside and again looked for Pestalozzi's 1953 case and failed again to find it. He asked Maj. Hector Quintanilla for the Xerox copy of the Robertson Report which had been promised to him and was told it still had not been prepared.

McDonald was inwardly irritated, for he realized the importance of this Report, since it documented the CIA's role in recommending that the government officially debunk UFO reports, beginning in January 1953. He said nothing to Quintanilla, however, and instead went to lunch with DeGoes, Smith and Dolan. Returning, he diligently typed information which he found on several Blue Book cases which NICAP had investigated, including the Levelland sightings in Texas.⁸

At McDonald's urging, Major Dolan began searching for Rudy Pestalozzi's B-36 case. He dug out a February 1953 case at Ft. Worth, which involved radar frequencies from a B-36. McDonald found this information extremely interesting and put the data in his notes for future reference. The case did not match Pestalozzi's precise description of the startling objects which had reportedly paced the B-36 over Davis-Monthan AFB, and Major Dolan went back to his search.

In mid-afternoon, McDonald went over to Gen. Cruikshank's office and offered a number of suggestions which he thought would aid Blue Book's investigations. DeGoes and Dolan accompanied him. McDonald submitted a list of books that Blue Book should get and also advised that certain cases, including Levelland, be re-checked. He also expressed his concern, for the first time, that the November 9, 1965, widespread blackout on the East Coast needed to be closely studied for possible correlation with UFO activity.

7. Hall, Richard H., "Memo: July 5, 1966 USAF Shake-up," Internal NICAP memo.

8. McDonald., *op. cit.*, reverse p. 24.

NICAP had uncovered several good sightings of unidentified objects which had been seen hovering low over power stations along the Canadian border just about the time the "great blackout" began. NICAP's investigations had been thorough, and the witnesses had checked out as reliable. McDonald was not convinced that UFOs had caused that immense blackout, but he felt strongly that interruption of electric power and the simultaneous presence of typical UFO-type objects should not be simply attributed to coincidence. Throughout the years, many other incidents of lesser blackouts had been reported simultaneously with the close presence of UFOs. Cruikshank, DeGoes and Dolan were apparently noncommittal to McDonald's suggestion that the 1965 Northeast blackout should be re-investigated.⁹

McDonald also discussed his growing interest in pre-1940 UFO cases and urged that Blue Book expand its operations into this aspect of the problem. He cited the classic tome, *The Books of Charles Fort*, as a good place to start a literary search.¹⁰ He also described Hynek's recent Stamford, Conn., talk, in which he had urged: 1. Immediate study, in depth, of the whole UFO problem; 2. Pattern analysis using computers; 3. Establishment of a UFO Center at a major university.¹¹ ①

"I feel that Dr. Hynek is coming off the fence," remarked McDonald. He also told Cruikshank and DeGoes that Dr. Hynek was aware that UN Secretary General U Thant was deeply interested in the UFO problem. At the time, U Thant's interest was not publicly known, but certain persons involved in UFO research were aware of it.

After about an hour in Cruikshank's office, Colonel DeGoes suggested that McDonald come back to Blue Book and help them on a consulting basis. Major Dolan added that "their study" might be turned over to outside contractors but told McDonald that this was just something he'd casually heard; he was vague on the details.¹² DeGoes took McDonald to Dr. Anthony Cacioppo's office to discuss the details of McDonald's consultancy. (In his journal, he now referred to Dr. Anthony Cacioppo as "Tony," another example of how easily McDonald made friends.) He told "Tony" that he would soon be making a trip to Washington, D.C., to brief NASA on the UFO problem and could stop by Blue Book then. "Tony" told McDonald that they could work out contractual arrangements then. He stressed that McDonald would

9. *Ibid.*

10. Fort, Charles, *The Books Of Charles Fort: "The Book Of The Damned,"* NY, Henry Holt and Company, Sixth Printing 1957, pp. 183, 285, 301, 760.

11. McDonald, *op. cit.*, p. 19.

12. *Ibid.*, p. 25.

be entirely free, no strings attached.¹³ At this point, DeGoes pointed out to Cacioppo “that they’d better hold back the Robertson Xerox, because it involved the CIA and they must check if it was okay to give McDonald a copy.” It was agreed that McDonald could get the copy the following week.¹⁴

McDonald was relieved to hear from Cacioppo that he would be free to use any information he might learn from acting as an official consultant to Blue Book; this was the only basis on which he could consider working with them. He also felt that he was making headway changing Blue Book’s assessment of the UFO question and decided that it would be worth his time to continue his association with Cacioppo and DeGoes & Co.

While waiting for his plane that evening, James McDonald called his friend Tom Malone, and filled him in on his second Blue Book visit. Malone had picked up information that new plans regarding the UFO question might be in the works at the Department of Defense (DoD). Malone asked if Dr. William Price was involved, because Price was the Executive Director of the Air Force Office of Scientific Research (AFOSR), which was under the Office of Aerospace Research. McDonald didn’t know. He asked Malone to call Brian O’Brien, tell him about the session at Blue Book that day, and find out what was planned. Malone was negative to this suggestion.

“Let him call you,” Malone advised.

McDonald yielded to Malone’s advice. Malone then asked if it was OK for him to call John Coleman at the NAS and describe the new look at Blue Book. McDonald concurred so strongly that Malone responded—as McDonald later described—with “pained insistence.”

“We have to proceed delicately, because DoD is all stirred up about this,” Malone argued. “We’ve already gotten a lot of things going. To be effective I need to remain invisible.”¹⁵

It was not in McDonald’s nature to remain invisible, and he was curious why Malone felt that way. Malone explained that he’d been reading Aimé Michel’s UFO writings. Michel was a respected French mathematician, who had been able to retain scientific credibility while intensely researching French UFO cases. In one of Michel’s UFO books, many of the unidentified objects were described as only about three feet in diameter. This fascinated Malone. He’d recently made some inquiries about UFOs in the aerospace industry, but had come up against a stone wall.

13. *Ibid.*, reverse side p. 24.

14. *Ibid.*

15. *Ibid.*

Is it me, the author, or Malone, that's leading me to believe there's something fishy going on in a key outside McDonald's understanding.

"All I got from anyone was strong advice to lay off, don't touch it!" said Malone.

"That's understandable," responded McDonald. "Nobody takes it seriously." Malone seemed disturbed by McDonald's comment.¹⁶

McDonald spent the flight time to Tucson writing in his journal, outlining the Blue Book visit, and expressing newborn hopes that the Air Force could pull itself out of the mess it had been in since 1953. Arriving home, he called Dick Hall at NICAP and informed him fully about his second Blue Book visit. In meticulous fashion, he noted in his journal that this call cost \$29.00 for 56 minutes, for, unlike travel expenses, this personal phone call was not chargeable to his ONR funds. He told Hall that Blue Book "had three good men on the job now and it looks promising."¹⁷

McDonald told Hall that he'd urged the new Blue Book staff to contact NICAP directly, but they'd given excuses why they couldn't do this. Hall understood, and agreed to send DeGoes back issues of NICAP's monthly newsletter, *The UFO Investigator*, as well as a gratis copy of *The UFO Evidence*. He also said he could forward any NICAP file material the USAF might want, to be copied as Blue Book wished. McDonald requested William Weitzel's report on the Ravenna-Portage County UFO and offered to take it to Blue Book for copying. Weitzel was also sending a copy to Major Quintanilla personally, in hopes the Major would see the illogic of explaining the case as "a satellite and Venus." (See Chapter 3.) Both NICAP and McDonald were willing to go to any lengths to get suitable UFO case documentation to "DeGoes and Co.," who seemed so open-minded and interested.

By early July, McDonald was ready to travel to Blue Book again and proposed a three-day visit. DeGoes okayed the plan and told him that he'd received the script of the "CBS Presents" UFO program that McDonald had sent to him. McDonald had also sent scientific articles on the ball-lightning phenomenon, in order that DeGoes & Co. could see how illogical Blue Book's official explanation for the Levelland sightings had been.

An airline strike wiped out McDonald's carefully laid plans. By the time he was able to re-form plans for a third visit to Blue Book, and to assume the consultancy which had been offered, he learned that DeGoes, Dolan and Smith were leaving for meetings at the RAND Corporation, a California think-tank based in Santa Monica. They would not be at Blue Book when McDonald came. McDonald asked DeGoes if he'd connected with Jacques Vallée yet, to

16. *Ibid.*, p. 25.

17. *Ibid.*, p. 26.

discuss the solid French UFO cases which Vallée knew about first-hand. This visit would give them an idea of the international scope of the UFO problem, rather than continuing to regard it as a localized phenomenon which only affected the U.S. Air Force. DeGoes replied that he hadn't yet taken any steps to get Vallée down to Blue Book.

"Our work's not down to that level, yet," he told McDonald, "But the problem's getting fascinating as hell."¹⁸

McDonald persisted, stressing that Vallée was leaving for France at the end of July, and would be there a full year.¹⁹ This should not be put off, he emphasized, for Vallée was a prominent French researcher with many contacts who worked closely with Allen Hynek in UFO research.

DeGoes apparently changed the subject. He told McDonald he'd consulted with "Bill Price" a few days earlier. This was the same Dr. Price, the Executive Director of AFOSR, about whom Tom Malone had questioned McDonald so closely. DeGoes told McDonald that Dr. Price was in favor of engaging McDonald as a consultant on UFOs. They planned to meet with Price in Washington, D.C., after McDonald had briefed NASA officials, as NASA had requested.²⁰

On the 3rd of June, McDonald had had the opportunity to discuss the UFO question with Al Eggers, a friend and colleague who worked with NASA in Washington, D.C. Eggers had asked how one could attack the problem scientifically. McDonald explained general techniques which could be used, as well as specific information about how to set up a tracking system, ideas which seemed to impress the NASA official. Eggers had then asked him to give a briefing to NASA officials in July. Although Eggers had seemed interested, McDonald wrote later in his journal that he "wasn't sure that Al got the real point" or that "Eggers senses [the] potential NASA importance."²¹

McDonald was glad for the chance to brief NASA officials, however. If he could convince NASA—the official U.S. organization in charge of outer-space exploration—that UFOs presented a serious scientific question, he might be able to influence the powers-that-be to take the problem out of the hands of the Air Force and put it in NASA, where he felt it belonged.

18. *Ibid.*, reverse p. 27.

19. *Ibid.*, reverse p. 22. Later, Hynek apparently met with Vallée in France, where Vallée was working with a small group of scientists who were interested in UFOs. This group was called "The Invisible College."

20. *Ibid.*, reverse p. 28.

21. *Ibid.*

NICAP and Don Keyhoe openly advanced the “extraterrestrial hypothesis” (ETH) to explain these unidentified aeroforms which played “footsy” with our fastest jets and performed maneuvers which seemed to defy the known laws of physics. McDonald, in considering the ETH, was more cautious. When asked about what UFOs might be, his standard reply was, “The extraterrestrial hypothesis is, at present to my mind, the least unlikely.” *well said*

On July 19th, at NASA, during a casual conversation with a colleague, McDonald obtained confirmation that “DeGoes and Co.” had, indeed, gone to The RAND Corporation to discuss the subject of UFOs. McDonald had talked recently with Paul Cerny of SFO-NICAP who’d remarked, “At RAND perhaps they’ll have people who’re willing to think about the unthinkable!” McDonald considered this a good quote and wrote it down in his journal.²²

Just before McDonald’s NASA briefing, Eggers had advised him to “Make it as scientific as hell!”²³ At the briefing, Brig. Gen. B. G. Holzman (USAF Ret.) was in charge. Also present were George C. Dentsch of the Research Division, Office of Advanced Research Technology, Mason T. Charak, Conrad C. Moody of the Space Vehicle Research and Technology, and Jim Danberg.²⁴ General Holzman went out briefly and brought back a sixth listener, Wes Fletcher, and Al Eggers popped in once or twice but had to leave for other commitments. McDonald ran over USAF history, the Robertson Report, Dr. J. Allen Hynek, and Dr. Donald Menzel. He pointed out emphatically that study of the UFO question had been wasted at Blue Book.

He emphasized that, in his considered opinion, NASA was the agency who should be studying it, for the phenomenon seemed to be other than purely terrestrial in nature and NASA’s province was beyond terrestrial concerns. The Air Force could act as an additional data-collection agency and refer its cases to NASA for serious scientific study. He recommended that the officials present get a small group working on it, and fast. He spoke for an hour and fifteen minutes and then fielded questions. At the end of the briefing, McDonald felt “the seed had been planted.”²⁵

He spent the next three days at Blue Book. “DeGoes & Co.” were still at The RAND Corporation, but surprisingly, Quintanilla now reported to DeGoes! General Cruikshank had been transferred elsewhere—just where, McDonald couldn’t find out. At lunch, McDonald discussed Allen Hynek’s claims that he’d had to bow to USAF pressure during his 18 years as Blue Book consultant in as-

22. *Ibid.*, reverse p. 27.

23. *Ibid.*, p. 29.

24. *Ibid.*

25. *Ibid.*

*It hardly
possible that
could they
have been
working on
tech to
these dimensions?*

tronomy. Quintanilla objected and replied that he didn't have the authority to put pressure on Hynek. He was only a Major, and Hynek was a professional astronomer and an Air Force consultant. In recounting this conversation in his journal, at this point McDonald again wrote the enigmatic phrase, "See small notebook."²⁶ Until McDonald's smaller notebooks are found, the history of his exploration into the UFO question remains incomplete. Crucial information lies hidden in those notes.

McDonald asked, the third time, for the copy of the Robertson Report that had been promised to him more than six weeks before. Quintanilla informed him that the report was now re-classified. At Col. DeGoes's orders, he'd written the CIA 10 days earlier to clarify the "declassification" that had permitted him to give the uncensored version to McDonald in the first place. The CIA had balked. Quintanilla told him that some part of it would be cleared so that McDonald could at least be given a partial version. This didn't satisfy McDonald.

"Who de-classified it in the first place?" he asked. "You gave me a de-classified version to read when I first got here on June 6th!"

"I have no idea who de-classified it," Quintanilla replied.

"You can tell by the date and the initial of the person who declassified it!" reminded McDonald.

"There's no date or initial on my copy!" answered Quintanilla. "The CIA couldn't even find its copy! I had to identify what I was talking about by showing them the Xerox we'd made for you."

At this point, McDonald again wrote in his journal, "See smaller notebook" and stated his opinion that he didn't believe either General Cruikshank or Dr. Tony Cacioppo had ever read the Robertson Report! "No one else, no reporter or anybody else, has ever asked for it before you did," commented Quintanilla.²⁷ McDonald couldn't believe what was going on. It was apparent, however, that by reading the uncensored version, he'd stepped on a raw nerve somewhere! He realized that further discussion about the Robertson Report was fruitless, at least right then, and changed the subject.

"Now, about the Portage County case?" McDonald asked. "I gave Col. DeGoes information that proves that the huge UFO which Deputies Spaur and Neff chased from Ohio to Pennsylvania couldn't possibly be an Echo satellite and Venus! What do you plan to do about that?"

"I'll change it to 'unidentified,'" Quintanilla muttered.

26. *Ibid.*

27. *Ibid.*

Record this detail as a case

That was about all McDonald could ever hope for from Blue Book! He and Quintanilla continued their discussion, their lunches not sitting very well. McDonald brought up his concern about the November 1965 Northeast blackout. Quintanilla was aware that *The New Yorker* had published a rather astonishing article about the blackout, written by J. Allen Hynek, which described UFOs seen by six members of the famed magazine's staff, from their own darkened New York building.

"So now Blue Book has to check into that blackout," McDonald insisted. Hynek, Blue Book's own astronomical consultant, had brought up the possibility that UFOs were associated, at least in some way, with it. "Consequently," McDonald contended, "Blue Book doesn't have the right to ignore it any longer." Quintanilla reluctantly conceded.²⁸

McDonald knew what he was talking about. Less than a month before, he'd gone personally to the Federal Power Commission (FPC) in Washington, and had discussed with an FPC official, William E. Dean, the possibility that UFOs might have been associated with the unexplained power surge that caused the blackout which had darkened the entire Northeast section of the country for many hours on 9-10 November, 1965. Dean advised McDonald that a "vague outage pattern" was involved, with the tripping of a relay known as Q-29. The fundamental cause of the massive blackout, however, was not yet known. The best that the FPC investigators had come up with to date was that a "random fluctuation" had occurred. McDonald asked Dean, "What was the average rms departure from the mean load?"²⁹

The FPC official hesitated. "I don't really know," he said.

McDonald sensed that Dean didn't even understand what he was asking and clarified the question.

"We don't have any data on that in our files," replied Dean. "I'd have to get that from Ontario Hydro."

McDonald was amazed at the FPC's lack of available information, but pursued the issue.

"Was the rise time of the surge that triggered the Q-29 relay unusual?" asked McDonald.

"I don't know that, either," said Dean.

28. *Ibid.*

29. rms is root-mean-square, a tighter statistical measure of variation than the mean.

"I'd like to see any compilation of statistics FPC has on outage frequencies, preferably categorized as to apparent cause," McDonald requested.

"We don't have any," replied Dean. "We can only get that by going to individual power companies, and they might give them to us, or they might not."³⁰

McDonald persisted, trying tactfully to educate this uninformed FPC official. He told Dean about NICAP's research into several UFO reports which were possibly involved with the original power surge, including an unusual, very low-level "fireball" seen in Syracuse, NY, just before the blackout occurred in that area. He urged Dean to try to get the rise time of the surge and the exact time the Q-29 relay had tripped and to let him know when he obtained that information. Dean seemed interested in the NICAP investigations and asked McDonald for copies of clippings from NICAP files which McDonald had with him. McDonald doubtless wondered why the FPC didn't have their own clipping file on the mysterious blackout but tactfully said nothing. He shared his clippings with Dean.

Toward the end of the session, Stewart Crum, another FPC official, joined the discussion. He said that FPC had received many UFO reports from New York City, which the witnesses thought might be involved with the blackout. McDonald later took this information to NICAP, and found out that these particular reports were probably caused by misidentifications of the planet Venus. McDonald resolved to check again to make sure.

Now, three weeks later in July, discussing the Northeast blackout with Major Quintanilla at Blue Book, McDonald tried to reach FPC's William Dean on the Blue Book phone. Dean was not available. At McDonald's suggestion, Quintanilla phoned Bill Powers, Hynek's aide, in Evanston. Powers said he and Hynek had done some investigation on that blackout and had found out that Odan Bech had lost its load to the north, so the original power-surge had not directly affected New York City. Subsequent tripping of relays along the Northeast power grid had been responsible for that.

The basic question, however, still remained: Why had relay Q-29 fired in the first place? The unanswered question bothered McDonald. It was not that he "believed" or "disbelieved" that the Great Blackout had been caused by UFOs, but he was simply researching the matter in ways no one else had done. It was not until two years later that McDonald learned from a colleague that someone had gone to the Odan Bech plant personally and asked about the official explanation of "relay-failure." The official taking him through the plant had said, "We had to tell the papers something."³¹

30. *Ibid.*, reverse p. 23.

Getting nowhere discussing the Great Blackout with Major Quintanilla, James McDonald changed the subject. He asked about AFR 200-2, the troublesome regulation which prevented Air Force personnel from speaking out publicly about UFOs they had personally witnessed. The regulation was being revised, and Quintanilla handed him the revised draft. Reading through it, McDonald discovered what he termed "bothersome language" about the necessity to reduce the percentage of "Unidentifieds," and penciled-in some less offensive wording. He suggested further revision, aiming at completeness and accuracy.³²

McDonald pointed out that a lot of questions were going to arise in adopting AFR 200-2 to the new university teams, which the Air Force was still seeking to establish. For example, how could they get accurate information from air base witnesses if these individuals were prevented from discussing any sighting which the Air Force had not officially explained? He urged Quintanilla to point out this paradox to his superiors and advise that perhaps the 200-2 revision should be held up for the time being. Quintanilla saw the logic and agreed.³³

Shortly after McDonald left Blue Book the third time, he telephoned Jacques Vallée at Northwestern, telling him that he'd urged FTD officials to send someone up to Northwestern to see Vallée, since Blue Book hadn't acted on his suggestion to invite Vallée down to Blue Book. Vallée hadn't heard anything from them. Privately, Vallée had problems with McDonald's entire excursion into the UFO research field. He couldn't forget how McDonald had pounded on Hynek's desk during their first meeting, barely one month before.

"He'd told Allen, 'Look at this case!' and 'Look at that case!'" describes Vallée in an interview for this book. "And Hynek would say, 'Yes, I knew about those cases.' And Jim would say, 'How could you sit on this if you knew that witnesses were actually seeing those things?'"³⁴

Vallée knew why Hynek had not spoken out publicly; he understood why his good friend and mentor had remained silent for 18 years: "At that time, Hynek said to me, 'It was very simple. If I had said so, I would have lost my job, and I would have lost my credibility with the scientific community because these things are not proof! They are anecdotes. They are interesting anecdotes.'³⁵ And Hynek kept asking McDonald, 'Where is the evidence, Jim? Where is the evidence? Where is the stuff that you're going to take to the NAS to convince those guys?' And of course Jim felt—you could ascribe it to his scientific integrity and

31. McDonald, fourth journal, reverse p. 21.

32. McDonald, second journal, reverse p. 29.

33. *Ibid.*

34. Author's interview with Jacques Vallée, 6 June 1994.

his intellectual integrity—that, given the strength of the data, it should be presented no matter what. ‘You should go public with it. It should be presented.’

“Or you could say he was a bull in a china shop, going off with preliminary data, with not enough evidence,” continues Vallée. “Allen Hynek had his problems with Jim, which had to do with the fact that they were such different men, [with] different temperaments and philosophies. But I had my own problems with Jim.... He didn’t really understand how Hynek’s position had changed, and why it had changed. And why, in fact, Hynek had been in a kind of impossible position with his job....”

Vallée pauses, remembering. “And I don’t know who was right, you know? I was unhappy with both. What I would have liked to see was a real scientific panel. If Jim and Allen had gotten together, they could have created a team of scientists who could have gone public and really pushed the problem before their colleagues.”

“Would it have taken both of them, though?” Vallée was asked.

“I think so,” Vallée replied.³⁶ *I agree. You need both sides of an argument (someone who at least pretends to fairly data)*

Returning to July 1966, when McDonald called Vallée to tell him that he was still urging DeGoes to send someone up from Blue Book personally to see him at Northwestern, Vallée was non-committal. He had seen the Blue Book offices in 1964, when he went to Dayton with Hynek. Vallée, also, had been amazed at the “explanations” that were being given for the sightings which were pouring in from reliable sources. He had likewise been underwhelmed by the **three-person staff which ran Blue Book in 1964.**

smaller than I realized! Hynek, Guinan, & who else?
“This was a long time before I was even aware that there was somebody like Jim McDonald,” states Vallée. “No one but Tucsonans, the NICAP official staff in Washington, D.C., and a few of McDonald’s close colleagues knew of his early interest in the field.”

The conversation between McDonald and Vallée turned to the Air Force search for appropriate university teams for the newly funded government UFO study. The Air Force was experiencing difficulty finding even one university that wanted to be associated with UFOs, particularly since **the Air Force wanted too much control in case selection** and review of published material. Vallée wondered why they hadn’t asked Dr. Hynek, who was willing and ready to

35. Most UFO data at the time was anecdotal, but the sheer volume of sighting reports from trained observers was “evidence.” Researchers seek additional data which amounts to a type of physical evidence, i.e., documented radar-visual cases and photos. Hynek was asking “where is the irrefutable evidence?”

36. Interview with Vallée, 6 June 1994.

serve if asked.³⁷ McDonald commented that probably they would not select any scientist who knew anything at all about the subject, because the Air Force was ostensibly seeking a neutral study.

McDonald, through a high-placed contact, USAF Col. Bob Hippler, had learned that the Air Force considered the UFO subject "a can of worms" and that they felt they had "a tiger by the tail but couldn't let go."³⁸ Hippler had told McDonald that the Air Force had tried twice in the past to give the job to NASA and had been turned down flat! The Air Force had also tried, unsuccessfully, to get the NAS to take on the job. Hippler had told McDonald that neither he [McDonald], Hynek, nor Donald Menzel would be chosen to participate.³⁹ McDonald had encouraged this attitude, probably figuring that whoever was selected could be brought up to speed when NICAP and other objective researchers, including himself, shared their own data freely.

It isn't clear how much of the above McDonald shared with Vallée. He did tell him how Quintanilla had responded when he'd told him that Hynek had overruled him in certain instances. Vallée agreed that there had been no pressure placed upon Hynek in regards to the Dexter, Mich., sighting, but that when Hynek disagreed with Quintanilla about "a satellite and Venus" being the cause of the Portage County chase, Quintanilla told him, "If we believed every story we heard we'd have 100% unknowns."⁴⁰

Now July 1966 was almost over, and McDonald had heard nothing further from DeGoes or any other Blue Book official about the consultancy which had been offered him. He waited another month, using the time to study radar propagation theory and reading widely on rumor, hallucination, and other psychological matters. He was educating himself, refining his list of hypotheses which various sources used to "explain" UFO sightings. Then late in August, tired of waiting to hear about the consultancy, he called Wright-Patterson AFB to talk with DeGoes. DeGoes was unavailable; he was in the middle of a meeting with Dr. Thomas Ratchford, a solid-state physicist who was visiting from Washington, D.C.

37. McDonald, second journal, reverse p. 29.

38. *Ibid.*, reverse p. 23.

39. Although Col. Hippler had told McDonald this, another confidential source, AF Chief Scientist Winston Markey, had "revealed" to Hynek that Northwestern University might be chosen for the \$500,000 study and that three men would supervise everything about the scientific program there. These three men would be Hynek, Menzel and McDonald! To Hynek and Vallée's credit, they listened to Markey's words with extreme skepticism. See Vallée, Jacques, *Forbidden Science: Journals 1957-1969*, Berkeley, CA, North Atlantic Books, 1992, p. 192.

40. *Ibid.*, reverse p. 29.

DeGoes is very important in this puzzle!

No one wants the hot potato.

Ratchford was connected with the AFOSR—the USAF counterpart of ONR. McDonald had met with Ratchford and Dr. Bill Price at AFOSR the day before he flew to Blue Book for his third visit. He'd been told by Tom Malone that Ratchford had been asked to "look into the UFO problem by a high government official." Malone guessed, but wasn't sure, that Ratchford had been given the assignment by Secretary of the Air Force Harold Brown.⁴¹ Malone told McDonald at the time that Ratchford was in the process of forming a scientific panel for the new Air Force study. During their meeting, Ratchford had informed McDonald that he was not forming a panel, but rather was searching for an individual scientist to head the study. It was not like Tom Malone to make mistakes. McDonald wondered about this and noted in his journal, "Tom Malone's evidently not gotten it straight."⁴²

In his mid-July meeting with Ratchford and Dr. Bill Price, McDonald had been rather astonished at an opinion expressed by Ratchford that criticism of the Air Force came from kooks and cultists "who'd never shut up." Hiding his astonishment, McDonald tried to interpret what was really going on:

*I quietly insisted that their trouble does not come from kooks, but from reasonable people and pointed out NICAP's study [was] superior to the USAF's.*⁴³

Ratchford and Price had listened carefully to McDonald; his appointment with them had begun at 8:00 A.M. and had continued through lunch until 2:00! Ratchford seemed to be earnestly seeking a way to properly study the UFO question. He had met at Woods Hole Oceanographic Institute at Cape Cod, in a private meeting with Brian O'Brien, John Coleman of NAS, and Aden Meinel, a prominent astronomer who was one of McDonald's colleagues at the University of Arizona.^{44,45}

Now, in late August, when McDonald called Blue Book to inquire about the consultancy which had been offered him, he had to settle for talking with Quintanilla. He asked the Major, for the fourth time, if his copy of the Robertson Report was ready for him yet. Quintanilla informed him that there was no news on that.

41. *Ibid.*, p. 29.

42. *Ibid.*, reverse p. 28.

43. *Ibid.*

44. *Ibid.*, p. 28.

45. Ratchford was meeting secretly with three of McDonald's close colleagues. What was said at that meeting?

"The CIA may sanitize the report and release that to you," he told James McDonald. "But I'm still trying to get it fully declassified. I've got Colonel DeGoes's OK to do that."

"What about the change on the Air Force explanation for the Portage County case?"

"There's no change on that," replied Quintanilla.

"Why not?" asked McDonald, pointing out that even Allen Hynek thought Quintanilla's satellite-Venus explanation was ludicrous.

"I'm not going to change anything until my superiors tell me to," said Quintanilla.

"Well, then, what about your investigation on the November '65 blackout. How's that going? Haven't you interviewed those six members of the *New Yorker* staff who saw that object near their building during the blackout?" pursued McDonald.

"I've talked to Dr. Hynek on that," replied Quintanilla. "He won't tell me any of the names of the six people. How can I go ahead and investigate if I don't have names of witnesses?"

"Tell Lou DeGoes to send my ball-lightning stuff back," said McDonald.⁴⁶ It seemed apparent by now that not much was going to change at Blue Book, in spite of the encouraging signs he'd seen a few weeks ago from "DeGoes & Co.," and it was also apparent that the promised "consultancy" wasn't going to materialize. Besides Quintanilla's flip-flop on the Portage County case, it was also apparent that the information he'd sent to DeGoes about ball lightning wasn't going to affect the Levelland sightings "explanation" one bit.

"In general, he [Quintanilla was] was very cool," wrote McDonald, describing the above contact.⁴⁷

Five days later, Tom Malone called McDonald to inform him that Dr. Ratchford was fairly sure that **Dr. Edward U. Condon**, of the University of Colorado, would take on the job as lead investigator for the new half-million dollar Air Force Study. Shortly afterward, this was announced in the press. Condon was 66 years old and a prominent, respected physicist. He had a long list of accomplishments, including participation on committees that established the Jet Propulsion Laboratory (JPL) and the atomic-bomb development program. He

46. McDonald, second journal, p. 31.

47. *Ibid.*

had headed Westinghouse radar research and had also been involved in theoretical radiation physics.

Condon was also used to personal attacks, having been called before the House Committee on Un-American Activities as a possible pro-Communist but had been exonerated; he didn't worry about what people thought. McDonald was well acquainted with Condon's work. Privately, he wished him well and hoped that a scientific staff, under Condon's leadership, would work vigorously and open-mindedly to unravel the UFO problem. He planned to help, unofficially, any way he could, by referring cases he thought worthy of study.

Malone told McDonald that Will Kellogg, of the National Center for Atmospheric Research (NCAR) in Boulder, who was a friend of McDonald's, might possibly be invited to serve on Condon's staff. Malone had talked to him, and Kellogg pointed out that he hoped to get McDonald in on it, too. Malone, however, advised his younger friend not to push the issue. He said he'd spent quite a bit of time telling Dr. Bill Price of AFOSR about McDonald's past two years' activities in UFO research. McDonald, of course, had filled Price in on the same thing.⁴⁸

After Condon accepted the Air Force offer to head their new study, further forays into Project Blue Book files took a back seat in James McDonald's schedule. He was still curious, however, about the Robertson Report and the incredible revelations he'd seen in the uncensored version. He never received any copy from Blue Book, sanitized or not and gave up asking for it. He had his notes, however and distributed the information widely; NICAP wrote an article about his discovery in *The UFO Investigator*. NICAP's revelation sent a shock through the entire UFO research community. For most people in the field, it was their first introduction to McDonald. Five glorious years—1966-1971, “the McDonald years”—had begun.

From July 1966 on, McDonald set out to re-check classic cases which NICAP had investigated and, in general, to explore all aspects of the UFO question that were anywhere close to his own expertise. The Robertson Report was especially intriguing, since it had recommended a public-education program of “training” and “debunking.” By “training” was meant that the public should be educated to believe that all UFOs were misidentified conventional objects. In spite of his impression that the Air Force had engaged in a “grand foul-up,” instead of a true cover-up, McDonald wondered if an official debunking policy had affected Blue Book's operation since 1953. In late September he called J. Allen Hynek to ask what he knew.

48. *Ibid.*, reverse p. 30.

"Did you know, all along, the uncensored content of the Robertson Report?" McDonald inquired.

"Well, I think I've seen all of it," replied Hynek vaguely.

"You think you've seen all of it? Then someone showed you the final report, uncensored, the one Quintanilla accidentally showed me?" pursued McDonald.

"I think someone showed me the final report," replied Hynek again.

"Well, what did you think about the Robertson Panel's recommendation, 'that the American people need to be educated about UFOs, and that the educational program should have two major aims: training and 'debunking'?"

"I do recall the decision to try to educate the public," replied Hynek.

"What about the 'debunking' aspect?" pursued McDonald. "Do you really think that debunking is the proper way to go about educating the public?"

"I can't recall any such term being used," denied Hynek.

"You don't recall the term 'debunking' in the report? It's on page 20."

"I never thought that 'educational' recommendation had much effect," replied Hynek. "I never felt that public ridicule was the real factor in deterring pilot reports and other promising sightings."

"There's a definite step-function drop in USAF reports after 1953," stated McDonald bluntly. "You don't think Air Force Regulation 200-2 had a profound effect in preventing pilots and other Air Force personnel from reporting sightings to Blue Book, much less reporting them publicly?"

"I'd like to think it didn't," replied Hynek. "I feel Don Menzel's influence was much greater. How is an ordinary pilot going to speak out in seeming contradiction of a Harvard astronomer?"

"Allen," said McDonald. "It's a bit naïve to think 200-2 had no effect on flow of information from USAF pilot and radar sightings. What about the Tinker-Carswell 1965 case, where radar data got out and was then retracted after someone remembered 200-2?"

Hynek didn't seem too familiar with that particular case. McDonald tried another tack.

"If the Robertson Report was as inconsequential as you claim, why was it withheld from the public for four years and even then the key portions not disclosed?" inquired McDonald.

Hynek didn't have any answer.

"I think you've been quite remiss in never straightening Quintanilla out on various optical and other matters," McDonald told him. "I specifically asked the Major if you'd ever discussed with him the absurdity of the Blue Book categorizations, and he said you hadn't."

"How can you change the military mind?" asked Hynek, attempting levity.⁴⁹

McDonald made many other attempts to talk out with Hynek what he regarded as the astronomer's penchant for "re-writing history." His sense of humor was totally absent during many of these discussions with Hynek; this fact was not lost on Hynek's closest colleague.

"I felt that, with Allen Hynek, he didn't have much of a sense of humor," says Jacques Vallée. "He didn't have a perspective of being able to laugh at himself and laugh at things. We tried. We were a pretty funny group. Bill Powers was a great prankster. And we were always joking and laughing whenever we got together. But Jim seemed to be taking himself very, very seriously. He was very rigid."

McDonald was rigid in his thought processes, in some ways, but the situation was more complicated than that. McDonald was delightfully sociable and fun-loving with people he got along well with, but was deeply troubled by Hynek's failure to admit that he had contributed to Blue Book's "grand foul-up." Sociability, honest communication and humor were, to McDonald's mind, inextricably linked. Hynek, from about 1966 onward, was very slowly changing, however. It is generally conceded by most veteran UFO researchers that he sincerely wished to forget the past, for he had become convinced that UFOs were a subject worthy of scientific study. By 1967 he was giving conservative talks about the scientific problem posed by UFOs.

In direct opposition to his difficulties with Hynek, James McDonald's communication with Donald E. Keyhoe was easy and mutually beneficial. In certain ways, the two men were much alike. Keyhoe had no scientific credentials but was blessed with excellent common sense; his investigations of the problem had convinced him that UFOs were a problem of highest importance. He also knew that Blue Book files held the kind of "pay dirt" that Menzel and other skeptical scientists were pontificating about. When he managed, through his own government and military contacts, to get hold of factual material in Blue Book, Keyhoe continued to write objective, fact-filled UFO books.⁵⁰ McDonald quietly re-

49. *Ibid.*, p. 32. Actually, Hynek had made a very wise observation. According to Elton Boyer, the author's consultant in aviation and military affairs, "the military mind" considers itself "different" from the rest of the population, looking at things from a divergent angle which most civilians simply don't comprehend.

50. For example, Keyhoe, Donald E., *Flying Saucers: Top Secret*, NY, G. P. Putnam, 1960.

checked many of the cases in Keyhoe's books, curious to see how accurate they were. After a couple of years, he privately told Idabel Epperson, who took over the Chairmanship of the Los Angeles NICAP Subcommittee after the death of Dr. Leslie K. Kaeburn, "Keyhoe's books are accurately written. He has his facts straight."⁵¹

Even though McDonald was the ultimate academic and scientist, he also tirelessly ferreted out data, as Keyhoe did. He also drew comparisons between Hynek and Don Keyhoe, contemplating the different roles they'd played. He remained convinced that, when the facts were all set forth, and UFO history was written, Don Keyhoe would appear, in the deeper sense of the term, a better scientist than Hynek, when the respective accomplishments of both men in the UFO field were finally totaled up.⁵²

In spite of his growing involvement in UFO research, McDonald continued full steam ahead with his professional work. He taught a full schedule of classes at both the undergraduate and graduate level in the meteorology department of the university, and continued with his numerous atmospheric projects. In March 1966 he appeared before the Senate Committee on Interior and Insular Affairs, stressing the importance of maintaining a broad, integrated conception of national goals in weather and climate modification. Typically, in such public appearances, he was a teacher as well as a speaker, and his 20-page statement on this occasion expertly summarizes the history of cloud modification.⁵³ He urged caution on artificial rainmaking, because McDonald always took the long-range view. In experimenting with nature, the needs of the public must be considered first.

McDonald circulated among the meteorological community a five-page letter relating corrections and suggestions for the Weather Modification Act of 1966, to accompany a bill that was then before the Congress.⁵⁴ The ease with which McDonald moved in Congressional circles was to serve him well when, two years later, he helped push through the first open Congressional Hearings on the UFO question.

51. Personal conversation, McDonald to Epperson, 1968, and Epperson to author, 1969.

52. McDonald's letter to J. Allen Hynek, July 1970 (see Appendix Item 5-A, p. 7, page 532).

53. "Statement by James E. McDonald Before the Committee on Interior and Insular Affairs, U.S. Senate Hearings on S. 2875," March 22, 1966.

54. Described in Valerie Vaughan's bibliography of McDonald's voluminous scientific works as, "Self-published paper presented to the Washington, D.C., chapter of the American Meteorological Society (Oct. 19, 1966) and to the Department of Physics, University of Arizona (Oct. 5, 1966), 4 pages."

But he also began to talk publicly on the subject of UFOs. On October 5, 1966, he conducted a scientific seminar for an overflow crowd at the university's Department of Physics. Encouraged by this reception in home waters, two weeks later he spoke on "The Problem of UFOs" to the Washington, D.C., chapter of the AMS. In these seminal talks, he discussed in depth the discrepancies in Project Blue Book and the "pat" answers being passed off to the public.

In this AMS talk, McDonald established the custom of distributing printed summaries of his talks. He also sent these to his numerous correspondents. He was going full speed ahead, and the scientific community was learning from a consummate professional about UFOs—a subject which had previously been regarded as "a fringe subject" and unworthy of attention.

Forays Into Other Lands

*All my life I wanted to roam, to go to the ends of the earth.
But the earth really ends where you started to roam,
And you and I know what a circle is worth....*

—“We’ve Come a Long Way”

*Sit down before fact as a little child, be prepared to give up
every preconceived notion, following humbly wherever and
to whatever abysses nature leads, or you shall learn nothing.*

—Thurley

In his first public talk on the subject, McDonald spoke on “The Problem of UFOs” before the AMS in Washington, D.C. He explained to his scientific colleagues the true meaning of the term “unidentified flying object.” To him, **UFOs meant veritable “unknowns” described by credible and trained observers as machine-like “craft,” which remained unidentified in spite of careful investigation.** Only about 1% of the reports he had studied personally met this criterion. He presented eight broad categories which various groups—ranging all the way from arch-skeptics to “kooks”—were using to explain the reports:

1. Hoaxes, fabrications, and frauds;
2. Hallucinations, mass hysteria, and rumors;
3. Misinterpretations of well-known physical phenomena (meteorological, astronomical, optical, etc.);
4. Advanced Earth technologies (test vehicles, satellites, re-entry effects);
5. Poorly understood, rare atmospheric and electrical phenomena;
6. **Psychic phenomena**—psychic projections, archetypal images, (parapsychological phenomena);
7. Extraterrestrial probes;
8. “Messengers of salvation and occult truth”¹

The definition
between
McDonald's
definition &
Hime's is
that McDonald
added

“machine-like
craft.”
Which I
partially agree
with. I prefer
“intelligently
guided.”

He pointed out that there was general agreement among objective UFO researchers that the first four categories did, indeed, account for the majority of reported "UFOs." "However, when such cases are eliminated, there remains a still-sizable residuum of unexplained reports from credible observers," he stated. "Categories 5 and 6, to the extent that they constitute explanations in terms of the still-unknown, were intrinsically difficult to handle in logical fashion.... I would emphasize that I now regard Category 6 as the only important alternative to Category 7."²

This was a most unexpected statement, considering the fact that he was speaking before a large audience of "hard" scientists. He was saying that, if true "unknowns" (UFOs) are not from an extraterrestrial source, the parapsychological/psychic hypothesis was the next logical choice! Leaving that statement to fend for itself, he proceeded further down his list of hypotheses:

"My own study of this problem has led me to the conclusion that Category 7 [ETH] now constitutes the least unsatisfactory hypothesis for accounting for the intriguing array of credibly reported UFO phenomena that are on record and that do not appear to fit acceptably into the first six cited categories." The double negative he used demonstrates how carefully he had formed his hypothesis. He could have just as easily stated that the ETH was "the most likely" or "the most satisfactory," but he deliberately chose the more tentative phrase, giving his colleagues no chance to accuse him of sloppy thinking.

In Category 6, however, he had referred to a startling concept, one which only a few NICAP associates even considered tenable. Most veteran UFO researchers living today don't even remember that he ever even referred to the psychic/parapsychological hypothesis. To his mind, that category probably encompassed many possibilities which might fit into his term, "other-worldly." As early as 1959, the famous psychologist, Dr. Carl G. Jung, had suggested that UFOs were "archetypal" or psychic in nature, i.e., that they were "projections" formed by mental processes.³ McDonald had Jung's book on the UFO subject in his own library, well-annotated.⁴ The fact that Jung had formed the "archetypal image hypothesis" made it "respectable," although most objective

1. McDonald, James E., "The Problem of the Unidentified Flying Objects," Summary of a talk given October 19, 1966, to the District of Columbia Chapter of the American Meteorological Society, Wash., D.C., pp. 1-2. (See Appendix Item 8-F, page 545.)

2. *Ibid.*, p. 2.

3. Jung, Dr. Carl G., *Flying Saucers: A Modern Myth of Things Seen in the Skies*, Translated from the German by R. F. C. Hull, from the collected works of C. G. Jung, Volumes 10 and 18, Bollingen Series XX, NJ, Princeton University Press 1959.

4. Jung, Dr. Carl G., *Flying Saucers: A Modern Myth of Things Seen in the Skies*, NY, A Signet Book, New American Library, paperback, 1969.

UFO researchers didn't ascribe to it. Toward the end of his life, even Jung himself stated that UFOs were most probably more physically real than he'd first hypothesized.⁵

One of the very few colleagues in the UFO research field who remember that McDonald initially listed the psychic/parapsychological hypothesis is Dr. Berthold Eric Schwarz, a psychiatrist and veteran parapsychologist.⁶ He feels that McDonald might have been criticized early on by certain colleagues for his open statement of Category 6.

"To come out openly, especially in those days, for such a hypothesis would have been considered very unscientific," says Schwarz. "But Jim's mind was like that, completely open and scientific. He would read everything and consider everything."⁷

Most of McDonald's scientific colleagues in sciences such as physics and chemistry regarded parapsychology with scorn. To their minds it was equated with "ghosts," "telepathy" and other "fringe subjects."⁸ A clue exists in his journal which might possibly throw light on this puzzle. Just before the AMS talk, two friends warned him about safeguards he must take to preserve his credibility:

10/5 & 6/66 Tom Malone called twice re. my talk, concerned lest I go too far. Also talked to Lou [Battan] about same.⁹

Although most of his professional colleagues scorned parapsychology, there was one exception at the University of Arizona. Dr. Paul S. Martin, the paleo-ecologist who was his friend and colleague from the mid-1950s onward, relates: "There's a little bit of theory that says that's why prehistoric people succeeded in hunting animals so well, that the human mind is able to reach out," relates Dr. Martin. "It's not totally impossible that some people can communicate without direct contact. The case is always open; there's no exclusion of that possibility."¹⁰

5. In the Foreword of the 1969 edition of Jung's book cited above, researcher Martin Ebon points out that Dr. Carl Jung continued to refine his hypothesis regarding UFOs and by 1969 had stated, "If these things are real—and by all human standards it hardly seems possible to doubt this any longer—then we are left with only two hypotheses: that of their weightlessness on the one hand and of their psychic nature on the other."
6. Schwarz, Berthold E., *UFO Dynamics: Psychiatric & Psychic Aspects of the UFO Syndrome, Volumes I & II*, Moore Haven, FL, Rainbow Books, 1983. This is the earliest comprehensive study of psychic and psychiatric components in UFO incidents and in the witnesses reporting them.
7. Author's interview with Dr. Bert Schwarz, 24 January 1993.
8. In the three decades since McDonald's death, the existence of psychic phenomena was slowly being accepted by some respected members of the scientific community.
9. McDonald, James E., second journal, p. 33.

The fact that telepathy was being studied in university labs such as Duke University by pioneers like Dr. J. B. Rhine made no difference to most scientists. It has never been clear precisely what McDonald was suggesting in his own "Category 6." No known recording of the AMS talk exists. We have only his hand-out summary to guide us. By "psychic projections" he probably meant Jung's "archetypal images," but it is not known what he meant by the broader term, "parapsychological phenomena."

McDonald dropped Category 6 from his list immediately after the AMS talk and never referred openly to it again. He remained aware, as did many researchers, that some credible witnesses reported paranormal phenomena in their homes shortly before or after close encounters with UFOs. Some witnesses "knew" that UFOs would appear and rushed out to see them, as if possibly alerted by some type of ESP. Other equally credible witnesses state that their automobiles had been levitated in the presence of UFOs, occurrences which might fall loosely into the phenomenon of "psychokinesis" (PK). He seemed fascinated by these "mass displacement" reports, as he termed them, and devoted a separate file to them.¹¹

McDonald was fearless in his search for knowledge, and was privately interested in various aspects of parapsychology which had been studied by reasonable people. These included PK, mental telepathy or ESP, materialization and dematerialization. He read widely on the subject, just as he read voraciously on numerous phenomena which are more deeply rooted in the physical world. He never discussed parapsychology with his colleagues in atmospheric physics. However, a few objective researchers in the UFO field, including some scientists, shared this interest and, with them, he discussed the subject freely. Isabel Davis, for example, had a large collection of books on psychic research and parapsychology. She and McDonald had many long talks about the subject, as well as with Dick and Marty Hall and Gordon Lore.

"Jim meant 'space craft' when he said 'extraterrestrial'," relates Dick Hall. "But also he considered, I think, other dimensions and that sort of thing when he mentioned 'not of this world.' He was very private about that...but I think actually that's what he meant. We discussed parapsychology. He liked to talk about lots of things."

Hall stresses, however, that their discussions about parapsychology were never directly related to UFOs, but were treated as a separate subject. Al-

10. Interview with Dr. Paul S. Martin, 16 July 1994.

11. "Mass Displacement" case file in McDonald's Personal Collection, University of Arizona at Tucson Library.

ways, McDonald's study of anything sprang from a need to study that subject scientifically.

Probably McDonald dropped Category 6 from his list because he realized the difficulty in presenting this particular hypothesis scientifically. In subsequent talks, he sometimes added the phrase, "If UFOs are not extraterrestrial, they might be something even more bizarre." He also substituted the "psychological" hypothesis for Category 6 in subsequent talks, indicating that UFO sightings might be some form of rare or as-yet-unknown psychological phenomenon.

"I think probably Hynek and I had some impact on his listing [Category 6 initially] as a possible hypothesis," states Jacques Vallée, for he and Allen Hynek had discussed alternatives to the ETH before they first met McDonald in June 1966.

"I said to Jim, 'Well, what if it's not extraterrestrial? Wouldn't that be even more interesting?'" relates Vallée. "I don't want to put words in his mouth, but he said something like, 'Yes, but for now the extraterrestrial hypothesis is the least unsatisfactory hypothesis.' But he left the door open for other things.

"We didn't communicate [well]," relates Vallée. "And it's as much my fault as his. When I say that...it can be real and not extraterrestrial, I don't necessarily mean that it's psychic. There could be other physical things, that could manifest in our physical environment."¹² In other words, UFO phenomena might be more than temporarily physical, when viewed by witnesses. "They would be physical all the time," Vallée replies, "But we wouldn't have access to them with our science of today, except when they were in our environment."

Vallée is not referring to the term "interdimensional" as it is commonly used today. "One way to think about it would be 'interdimensional,' but the metaphor that I try to use is watching television," Vallée replies. "You'd have a very hard time explaining it to a 17th Century scientist, that this image on a television screen is actually going through all of us. The television picture is a physical signal, an EM wave. It's not an interdimensional or psychic thing. Now, to physicists in the 17th Century, or even in the 19th Century, that would make no sense whatsoever. They would say, 'You're just talking about diabolical things, about the occult, about psychic stuff.' UFOs could be, among other things, another level of that concept. It could be a phenomenon...that knows how to manipulate space and time. But that doesn't mean it's not physical. I could never get into that discussion with Jim McDonald.

"These things could be more than EM phenomena," Vallée continues. "They could be more fundamental than that. And I don't want to pin it

12. Author's interview with Dr. Jacques Vallée, 6 June 1994.

This idea represents not necessarily atmospheric or physical, but it could be like Vallée is trying to say that's more to the physical universe than we know. Capturing this is "that knows" means we think he's considering the idea that witness may fundamentally grasp a different level of intelligence.

down...because there are many hypotheses that could be proposed here. There are many similar examples in parapsychology, and it doesn't mean that it's necessarily 'psychic stuff.' Although that kind of physical entity would probably be able to control a lot of effects in parapsychology, as well."¹³

McDonald must have realized that it was going to be difficult enough to get over to the scientific community that the UFO question itself was a serious problem. The ET hypothesis was a viable one, widely held by researchers in the field. Unidentified physical "craft" were being photographed by reliable witnesses and were being viewed by credible observers both visually and on radar. McDonald decided to concentrate on physical data, hoping to obtain hard, physical evidence of UFO reality.

Intrigued by the entrance of a top scientist into the UFO field, the powerful **American Society of Newspaper Editors (ASNE)** invited him to speak at their spring 1967 annual meeting in Washington, D.C. There, he would be addressing numerous individuals who could give the UFO subject serious media coverage, an opportunity long sought by objective researchers.

At the ASNE meeting in **April 1967**, he shared the podium with arch-skeptic Dr. Donald Menzel, a prominent astrophysicist who had written widely on the subject of UFOs.¹⁴ Menzel was more than a scientific critic; he took up the cudgel against McDonald in a slashing manner, using neither tact nor any semblance of collegial courtesy (see Appendix Item 8-A, page 540). A verbal battle between the two scientists ensued, as McDonald tore Menzel's arguments apart with cold logic.¹⁵ Without malice, McDonald stated, "He seemed to calmly cast aside well-known scientific principles almost with abandon, in an all-out effort to be sure that no UFO report survives his attack." He gave detailed explanations why he considered Menzel's claims erroneous.¹⁶ His meticulous data contrasted sharply with Menzel's rationalizations (see Appendix Item 8-B, page 541.)

Not even Menzel's bitter criticism could dissuade him, McDonald continued, urging the 500 editors of leading newspapers to do a better job of seriously

13. See also Vallée, Jacques, *Dimensions: A Casebook of Alien Contact*, NY, Contemporary Books, 1988. This recent book gives a comprehensive view of Vallée's present hypothesis on the UFO question.

14. Menzel, Donald H., *Flying Saucers*, Cambridge, MA, Harvard University Press, 1953, hardcover.

15. The first public debate between McDonald and Menzel was widely reported in newspapers throughout the U.S. For example, "Scientists Clash On UFO Theory," *Los Angeles Times*.

16. McDonald, James E., "UFOs: Greatest Scientific Problem of Our Times?" (This paper was prepared as a "hand-out" for the 1967 annual meeting of the American Society of Newspaper Editors, Washington, D.C., April 22, 1967, 28 pp. (See Appendix Item 8-G, page 546.)

investigating local cases, to get more of the good cases on the wire services and to demand reasonable explanations for these cases from the USAF.

"Part of the problem is the 'half-life' of newspaper interest," he explained. "The Air Force has repeatedly exploited this. They wait two to three days, then come out with a nonsensical explanation, and nine out of ten times, the press passes on to other news."¹⁷ In this one paragraph, McDonald latched onto the core of a serious media problem.

He also discussed the 1953 Robertson Report, particularly its recommendation that public interest in UFOs be reduced by an official policy of debunking. He felt that the four-day panel study—under CIA sponsorship—was the turning point for the current Air Force handling of UFOs. Dr. Howard Robertson, who had been the panel's chairman, had died several years prior, but McDonald had talked at length with Robertson's son, who was a medical doctor living in Arizona. In doing so, McDonald began to realize that the Air Force had not merely selected a scientist at random to head the panel, for the younger Dr. Robertson emphasized all the DoD committees and panels his father had been on, before and after the 1953 UFO panel. Much of his work with the government had been classified and involved Air Force and DoD operations!¹⁸

Speaking eloquently, McDonald brought many facets of UFO research to the attention of the ASNE. He told the editors that UFO reports were not in capable hands with the Air Force, despite the assurances the media and the public had been given for so many years. He concentrated on yet another point—his deep concern for individual witnesses who had been caught up in the official "debunking" policy:

*[R]esponsible citizens have, in all good faith, reported significant encounters with unidentified objects at close range...only to have the Pentagon press desk release official explanations in terms of "twinkling star"...and the like. I truly doubt that Air Force personnel can have any notion of the bitterness they have created among persons who have been made the butt of ridicule.*¹⁹

Following the two scientists' clash before the ASNE, Donald Menzel continued to attack McDonald throughout the next four years. In a paper titled "UFOs—the Modern Myth," he wrote, "McDonald's interviews [with hundreds of] people who have reported UFOs have no scientific validity whatever."

17. Handwritten "ASNE Notes," from which McDonald gave his ASNE talk. In McDonald Personal Collection, University of Arizona Library.

18. McDonald, James E., Notes in "Robertson Panel" file.

19. McDonald, James E., "UFOs: Greatest Scientific Problem of Our Times?" p. 3. (See Appendix Item 8-G, page 546.)

er—except to confirm McDonald's well-known bias for the ETH and against the Air Force and myself..."²⁰ Menzel's paper continued with similar unscientific remarks.

Menzel continued flooding the media with examples of UFO reports which he claimed to have solved. On television, he performed simplistic "scientific experiments," which he presented as "proof" that UFOs were nothing but refraction and/or reflection of light sources. UFOs, according to Menzel, were all mirages and other optical phenomena. McDonald was well versed on conventional phenomena in the atmosphere, including mirages. He knew that Menzel's negative attitude had influenced Blue Book, for Menzel's theories and writings were well known to Blue Book personnel. McDonald felt that Menzel had contributed to, and perhaps had even created, the "grand foul-up." He coined the word "Menzelian" to describe Menzel's inept explanations for excellent, documented cases, and set about collecting his own accounts of airborne mirages to counter the arguments.

Menzel never had the grace to admit that McDonald solved most of the "UFO" reports which came to his attention. The bitterness with which he treated McDonald passed all understanding. McDonald doubtless added to the fray by expressing open amazement at what he considered Menzel's ignorance of optical properties of the atmosphere. It was not until the 1980s that facts about Menzel's "secret life" began to emerge, facts which might possibly explain the astronomer's acrid attitude (See Chapter 14).

McDonald continued to investigate new, promising reports, re-investigated classic cases, and presented scores of talks before prestigious scientific groups. Large crowds attended, for his scientific analysis of the problem impressed many who had privately wondered about UFOs but who had been hesitant to express their interest. But scientists and newspaper editors weren't the only ones who were listening.

Philip J. Klass, an electrical engineer and senior editor of the prominent technical publication, *Aviation Week and Space Technology*, also became an outspoken critic of McDonald. At first it seemed that he was taking an objective interest in the subject; in the mid-sixties Klass visited NICAP's Washington, D.C., Headquarters to read and study reports, just as McDonald himself began to do in June 1966. Klass's and McDonald's correspondence at first was on a cordial tone.

20. Menzel, Donald H., "UFO's—The Modern Myth", pp. 8-15. See Appendix Item 8-A, page 540.)

Apparently he felt that he and Klass might be able to work effectively together. In September 1966, he wrote to him at *Aviation Week*, enclosing a "Letter to the Editor" which was in response to an article by Klass in the August issue titled "Plasma Theory May Explain Many UFOs." In it, Klass referred to the "plasma hypothesis" that he was in the process of developing. "Plasmas" are essentially balls of ionized gases, ranging in size from a few inches to a foot or so diameter. This is the phenomenon which, in its natural state, is known as "ball lightning" lasting from a few seconds to a few minutes. When produced in the laboratory, they are very short-lived, and are termed "plasmas" or "plasmoids."

"Your opening up a discussion of the UFO problem in *Aviation Week* is an excellent step," wrote McDonald to Klass. "As you'll see from my letter [to the editor, attached], my own fairly extensive study of the matter, and my familiarity with the meteorological and physical matters involved leads me to disagree with the hypothesis you develop. It might account for a few cases, but...most good UFO reports involve phenomena that cannot reasonably be equated to any ball lightning or plasmoid processes."

The letter continued in a friendly fashion, with McDonald expressing the hope that he and Klass might meet soon to discuss the matter further.²¹

Klass was not convinced. In the October issue of *Aviation Week*, he presented another article on the same subject, the title of which was not at all tentative. It was titled, "Many UFOs Are Identified as Plasmas." In a side bar, Klass attempted to explain a NICAP case in which a huge UFO was detected on Air Force radar and estimated by experienced military radar personnel to be "at least as big as any of our larger transport planes." He "identified" this huge object as a plasma. McDonald disagreed, mainly because the huge blip had remained in place for over 30 minutes.

McDonald filed Klass's article, after having made handwritten notes on the back, discussing scientific references which contradicted Klass's theory and listing technical questions raised by Klass's explanation of the NICAP case, such as, "Where could one get the energy to sustain [such a huge plasma]?" See McDonald's notes, Appendix Item 8-C, page page 542.²²

Jim Hughes, McDonald's ONR contract monitor, also agreed that Philip Klass's mistakes were quite apparent.

"He made a lot of errors on his physics," relates Hughes. "He was an electrical engineer, but he was never quite able to figure out the distinction between

21. Letter from McDonald to Klass, 28 September, 1966. Attached to this letter was a "Letter to the Editor," bearing same date.

22. These notes are in McDonald's Personal Collection, U. of A. Library.

I'll have
to find
out the
biggest
plasmoid
recorded.

the difference of electrical tensile and strength of atmospheric field. He was always getting those kinds of things confused. And McDonald pointed out some of these errors to him."²³

In spite of public critics like Menzel and Klass, McDonald continued his whirlwind research. Within a few weeks after his first trip to Blue Book, he'd taken on an arduous schedule of talks, given a briefing at NASA, met with Nick Golovin, the President's scientific advisor, and recommended that the Presidential office take a serious look at the UFO question. He had also contacted the Director of the Office of Defense Research and Engineering, Dr. Finn J. Larsen, and urged him to review the matter. No part of the scientific community, the military or the government seemed closed to him. He had contacts everywhere—most of whom seemed willing to help.

However, McDonald was not naïve. He quickly realized that his recommendations to Cruikshank, Cacioppo, and "DeGoes and Co." had not led to any actual changes in Blue Book operation. He wrote to Philip Klass, before the two men began to engage in open controversy:

"One salutary effect of my first visit to WPAFB [where Blue Book was headquartered] was that Brig. Gen. Cruikshank put a colonel and two majors onto the problem to find out whether my complaints had any substance," James McDonald wrote. "But they've clammed up and I don't know what conclusions they've reached. For reasons I could discuss if we can get together for a phone call, I'm pessimistic about their changing their position."²⁴

Project Blue Book had not only "clammed up"; McDonald was never given the consultancy he'd been promised. His briefing at NASA unlocked no great interest, and no significant funding. He approached Dr. Gerard Kuiper, a NASA scientist at the U. of A., hoping to share in NASA's annual \$100,000 grant to the University. Kuiper agreed to consider McDonald's proposal, provided that he removed all reference to "non-terrestrial," and merely state he was studying "unusual atmospheric phenomena." McDonald agreed, and was granted \$1,300 of NASA monies. This amount was minimal, but it permitted him to conduct telephone interviews with witnesses in localities where he could not travel.

Setbacks didn't seem to trouble him. After each reversal, he simply reached out elsewhere. His talks were well received. Scientists, engineers and military personnel approached him, divulging accounts of personal UFO sightings they'd never reported. He respected their confidentiality, knowing that government and

23. Author's interview with James Hughes, 21 December 1994.

24. Letter from McDonald to Klass, 28 September 1966. See Ref. 21.

military personnel were liable to imprisonment and/or fines if they publicly revealed involvement in UFO sightings. By this time, it had become apparent to McDonald that a summer's study hadn't solved the UFO question. He continued on, concentrating on UFOs whenever his schedule permitted. A short entry in his journal reveals his two-edged life:

9/5/66: Nothing further in this direction (UFOs) for several weeks. Spent latter on mainly non-UFO topics such as friction, plastic flow, kinetic theory, and 'stalloff' on doing new ONR proposal and other tasks.... In meantime fall term underway...several days on gas solubility in water and ice. [About] Sept. 25 resumed review of UFO problem.²⁵

McDonald's correspondence and other contacts with researchers nationwide grew to immense proportions and soon extended into other countries. Australia, for example, had several active UFO research organizations. One of the largest was the Victorian UFO Research Society of Melbourne (VUFORS). Its public relations officer was an engineer, Paul Norman. Peter Norris was the president, Geoffrey Rumpf vice president, and Judith Magee was secretary. Many of their excellent reports had been reprinted in U.S. and European research journals.

Paul Norman corresponded with McDonald shortly after his public entrance into the field, and the two exchanged UFO reports and other materials. McDonald became aware of the mine of information awaiting re-investigation in Australia, and the prospect intrigued him. He wondered if Australian sightings were basically the same as those reported from America or if they differed in some significant way.

In early May 1967 Paul Norman came to the U.S. to see relatives and also to visit McDonald in Tucson. Norman first visited J. Allen Hynek and Jacques Vallée in Chicago, principally to discuss a couple of UFO photos which had been taken by reliable witnesses in Australia. He then went on to Boulder, Colorado, where he met with some of the staff of the Condon Committee, for Condon's staff also had interest in cases worldwide.

Norman brought key Australian cases with him, discussed them in an eight-hour meeting, and let Condon's staff photocopy them. The next day, a Saturday, he discussed the cases for another ten hours with Dr. Dave Saunders, a psychologist on Condon's staff, then went on to Tucson where he spent the rest of that weekend with McDonald. The scientist was his usual cordial self, inviting Norman for one of Betsy's special dinners. He listened closely to Norman's description of his two days at Boulder and recorded the information.

25. McDonald, James E., second journal, p. 31.

Like everyone else in the UFO community, McDonald was vitally interested in how the Condon Committee was progressing. Like Paul Norman, all were sharing their best data, at Condon's specific request. McDonald himself had sent a list of "100 best" cases to Condon, recommending that at least some of them be re-investigated (See Chapter 12).

"If I come to Australia," McDonald asked Norman, "will you line up some of these people for me, the good cases?"²⁶ Norman gladly agreed. When he arrived back in Australia he immediately began setting up arrangements for McDonald's planned visit.

McDonald had also arranged, through correspondence with U Thant, the UN Secretary General, to speak before an influential UN group in New York. On June 5, 1967, a Middle East war broke out, necessitating U Thant's absence from McDonald's talk. It didn't dissuade McDonald, however, and on June 7th he addressed the UN's Outer Space Affairs Committee. In a follow-up letter to U Thant, McDonald stated his concern that the number of credibly reported, low-level sightings of machine-like objects might possibly constitute some type of extraterrestrial probe.²⁷ U Thant himself had confided to friends that he considered UFOs the most important problem facing the United Nations, next to the war then raging in Vietnam.²⁸

McDonald's work for the Office of Naval Research (ONR) sometimes took him to other countries for meetings, consultancies and participation in joint research projects. He had commitments in Australia in June 1967 and checked first with Jim Hughes to be sure he would be free to investigate UFOs in his spare time in Australia and New Zealand. Although Hughes had been unable to get "UFO research" written into any of McDonald's ONR contracts, an understanding had emerged which was known to Hughes's superiors. There was always the possibility that information could be gained on atmospheric optics, radar propagation, and atmospheric electricity from a careful study of selected UFO sightings. James Hughes clarifies the official ONR position:

"I did not support any UFO research," Hughes states. "I supported McDonald on a contract to do cloud physics, and he was doing cloud physics, and he was working on nucleation of cloud vapor. But McDonald had many interests, and UFOs was one of them. He used to tell me about them, and I was glad to listen. But I didn't support any of that research. The research we supported was strictly on cloud physics."

26. Author's interview with Paul Norman, 22 May 1994.

27. Letter from McDonald to U Thant, dated 5 June 1967.

28. Pearson, Drew, "Skyborne Mystery Objects Are High on U.N. Agenda," *Los Angeles Times*, June 27, 1967.

McDonald felt he was walking a tightrope, but Jim Hughes' tolerance made the situation endurable. The openness with which he arranged his UFO studies in conjunction with his ONR trips and projects is illustrated by a letter which he wrote to Russell L. Lathrop, of the Pasadena, Calif., ONR branch office. In it, he asked approval for a planned trip to Washington, openly stating his intent to discuss the UFO problem to Navy groups.

The primary purpose of the trip is to present to the ONR staff a summary of the findings of my recent investigations of the UFO problem, with special emphasis on Navy-related aspects. I am speaking to ONR on the 18th. Jim Hughes has also set up a talk on the 19th at NRL [Navy Research Lab], and is making inquiries about possible interest in this topic at a couple of other Navy facilities. I'm also hoping to talk to USAF people while there....

This letter also asked Lathrop if the Pasadena Office would be interested in having him come to give a briefing as well. He was slated to go out to Southern California to brief personnel at RAND Corporation about UFOs, and McDonald wished to do both on the same trip. He suggested that Lathrop inquire if Naval personnel in the area would be interested in joining an ONR briefing. Certainly, he could not have been more open with the Navy.

He confirmed his Australia and New Zealand travel plans with Paul Norman; research groups in those two countries worked together eagerly to make his visit worthwhile. About a hundred of the best cases were selected, and the witnesses made plans to be interviewed either in person or by phone, at several meetings set up in various cities "down under."

McDonald's visit began on June 24, 1967. His first stop was in Auckland where, on his own time, he interviewed New Zealand and Tasmanian witnesses and met with top researchers in that area, including Henk and Brenda Hinfelaar, Directors of the New Zealand Scientific Space Research (NZSSR). He also met with Tony Brunt, a top journalist, and with Harold Fulton, founder and Director of CSI (NZ).²⁹

"We met Jim McDonald at Auckland Airport, knowing that we had about seven hours in which to cover a lot of territory," Brenda Hinfelaar relates. "In the space of a few hours, he impressed us all with his total honesty, absolute sincerity, and sheer dogged dedication to the task he had set himself."³⁰

He shared with them the shock he'd felt at the bungling incompetence at Blue Book. "This was a major shock to us at the time, as from our distance

29. McDonald, James E., third journal, "N. Z." Section.

30. Letter from Brenda Hinfelaar to author, dated 20 September 1994.

from the scene, we tended to believe that 'Project Bluebook' must at least be serious," Hinfelaar states. "We spent the day at Tony Brunt's home, as Jim talked by phone with some major New Zealand witnesses.... We managed to skip lunch and survived on endless coffee! But I still remember a lovely meal, eventually, shared with a man who was in all ways a gentleman, with a brilliant mind and a heart bursting with the need to find the truth, and present it in service to mankind. My personal view, at that time, and now, is that his humility, and graciousness, allied with a mind of true scientific brilliance, was the measure of a very rare man."³¹

When they saw him off at the airport on his way to Sydney, however, Brenda Hinfelaar had an instinctive feeling that all would not be well with him. "My most lasting memory is standing on the tarmac at the airport, as we farewelled him onto the plane, with the tears streaming down my face, and a great pain inside, as I knew full well that...this too-honest man [would not live] to achieve his goal."

Upon his arrival at Mascot Airport in Sydney, TV, radio and newspaper reporters were waiting for him. McDonald ignored them, for he had notified all his Australian contacts that he didn't want to do any mass media interviews until after he had investigated most of the cases which had been lined up for him. However, certain members of the Sydney branch of **Unidentified Flying Object Investigations Centre (UFOIC)** had failed to abide by his wishes. A scientific colleague of McDonald's was also at the airport to meet him. They greeted each other heartily and began to talk earnestly with each other. **Dr. M. Lindtner**, UFOIC's President, grasped McDonald by the arm.

"Professor McDonald, we have the press here for interviews," Lindtner informed him.

"I don't want an interview at this time," McDonald said.

"But we have them here!" persisted Lindtner.

"There's only one thing you can do about that," replied McDonald. "Cancel it."³²

Lindtner tried to make the best of a difficult situation. "We have been corresponding with Dr. McDonald," Lindtner explained to the media. "He told us he wanted to meet people who have seen unidentified flying objects." He briefly outlined the plans the Centre had made to facilitate interviews of primary witnesses.

31. *Ibid.*

32. Letter from Paul Norman to author, 18 October 1994.

A reporter from the *Sun-Herald* persisted, trying to interview McDonald.

"I have nothing to say," he bluntly told the reporter. "I have certain objectives and it is not my habit to talk about them until they are accomplished."

"Do you consider Australia a fertile country for flying saucer sightings?" pressed the reporter.

"Do you think the press will treat this matter seriously?" McDonald countered.³³

The reporter wrote an article in the *Sun-Herald* of June 25th, using the scant information available. It stated that Dr. M. Lindtner, was "surprised and embarrassed by Professor McDonald's secrecy." The article went on to state, in a bold sub-title: "A top American scientist flew into Sydney last night on a 'secret mission' to investigate unidentified flying objects in Australia." The article mentioned "secrecy" and "secret mission" twice, a distinctly erroneous slant.³⁴ It was not a secret mission; neither did he plan to work in secrecy. The *Sun-Herald* article also contained a peculiar large-font subtitle reading "Govt. grant," but the article contained no explanation of this, and there was no mention of the ONR projects which permitted him to travel to Australia in the first place (see Appendix Item 8-D, page 543). This enigmatic subtitle foreshadowed a dreadful blow that was waiting in the wings.

The requests for media interviews continued unabated during his visit. He refused all requests, preferring to use his precious spare time gathering information first hand, judging the reliability of the witnesses and collecting data which might possibly be correlated scientifically. He promised to answer the media's questions at the airport on the day of his departure. He met all of his ONR responsibilities, with his usual expertise; he attended meteorological meetings and participated in other professional projects. Then, on his own time he interviewed, by telephone and in person, 80 individual witnesses. He concentrated more on *Victoria* and *Queensland*, since the incident at the Mascot Airport had soured relations somewhat with the Sydney group. In each city, local research groups facilitated his access to witnesses and fielded incessant queries from the media.

He consulted with numerous veteran researchers, including *Peter Norris*, *Ian McLaren*, *Roy Russell* and *Stan Seers* among others. Brisk exchanges of views lasted far into the night. The Australian research groups were like NICAP—hard-working and serious. They found him serious and intense when

33. *The Sun-Herald*, June 25, 1967.

34. *Ibid.*

interviewing witnesses, but cordial and good-humored when he stopped to socialize a bit. When meal times approached, McDonald would say, "That's enough about UFOs for now. Let's talk about our families."

"I remember when he was talking to us socially, he'd laugh," relates Paul Norman of VUFORS. McDonald's sense of humor got the better of him at least twice. When describing the staff personnel of Project Blue Book, McDonald lightheartedly remarked, "At Blue Book there was a sergeant, a secretary, and a trash bin!" On another occasion, McDonald merrily described the process by which "explanations" were conceived at Blue Book. "When the Sergeant couldn't decide which 'explanation' to choose and which cabinet to file them in," he quipped, "he'd turn his back, throw the files up in the air, and on whatever cabinet each one landed, that was the 'explanation' assigned to it, and he'd file them in that cabinet."³⁵

These descriptions of Blue Book procedure was outlandish, of course, but McDonald was using his impish humor to illustrate the unforgivable neglect by the USAF of a serious scientific question. But someone on the other side of the Pacific was listening.

In Melbourne, Paul Norman drove him to some of his meteorological meetings. Then, when each day's professional work was done, McDonald spent most of his remaining waking hours re-investigating the UFO cases which the VUFORS had selected.

"He was making a difference," relates Paul Norman. "He was getting to science, he was getting to the public.... He had more energy and a keener mind than a lot of them put together. He was up early every morning, recording people. He not only was recording; he was taking notes at the same time, witnesses as far away as Perth... [W]e had him lined up on these good cases so he could discuss the details of each case with them on the phone."

While in Australia, McDonald began his third journal, a green loose-leaf 10" x 11.5" notebook with 165 handwritten pages. It includes maps of Australia and New Zealand and shows the precise location of the cities he visited in each country. In it, he listed the research organizations, names and addresses of scientists, researchers and witnesses, as well as a list of things he had to accomplish when he returned home to Tucson! After the "Melbourne" tab in this journal is a list of "Cases Selected"—16 classic Australian cases. He also cited the tape numbers on which the interviews had been recorded. The rest of this third journal is just as precise—handwritten notes on dozens of cases in other

35. Author's interview with Betsy McDonald, 11 January 1993.

cities, conversations with researchers, addresses and phone numbers, all arranged impeccably.

McDonald showed other sides of his nature to a few of his Australian colleagues. He confided to Paul Norman that not all scientists in the United States were listening, including many at the University of Arizona—his own home base. He was not complaining about his colleagues' lack of support but merely discussing facts. "He realized he was influencing many in the scientific community through his efforts and he had hopes that the UFO question would soon be taken seriously," says Norman. "He had faith that the Condon Committee would come to the conclusion that the problem had been neglected by science."

McDonald was always on the lookout for cases where some type of possible physical evidence had been obtained. In Australia and New Zealand, three UFO photo cases had surfaced. McDonald valued these, for they had been thoroughly investigated by Australian researchers and judged most probably genuine.

One series of pictures had been taken on March 5th, 1967, by a 15-year old boy, John Coyle. He and his sister Miriam, 13, were walking on a clear, cloudless day toward a wooded area 3/4 mile from their home. The time was about 5:30 P.M. John was carrying his first camera—a 95¢ Anny. The winding knob was jamming, so John decided to use up the film shooting pictures of trains on nearby tracks. He then planned to take the roll of film to be developed and get the camera fixed at the same time. As they approached the wooded area, a glint of light in the southeast caught Miriam's eye. She glanced over and saw a silvery object moving very fast. She thought at first it was a plane but quickly realized that its appearance was very different and called her brother's attention to it. John hadn't seen the original glint, but he viewed the object as it quickly came closer—the teenagers could not estimate the distance. It was weaving up and down "in a peculiar way" as it circled them repeatedly at about 45° elevation. The bottom of the UFO was dark, and the top was an "aluminum" color. It slowed while circling; they estimated it took about ten seconds per revolution and circled them about seven times. Then it went off toward the west, sped up and in 4-7 seconds was gone. John took six photos of the object as it approached and also as it circled. His last picture was taken when the object was almost out of sight.

Judith Magee and Paul Norman took McDonald to the sighting location, where he interviewed John and Miriam. He staked off the position from where John Coyle had photographed the object and later measured the shadows of a fence post and nearby trees. He confirmed that John was standing where he'd said he was when he photographed the object.



FIGURE 10. John Coyle's photograph of a dark rim around a UFO.

When the photos were enlarged, a dark rim could be seen around the object during its nearest approach (see Figure 10). John, however, had not been aware of seeing this dark rim. McDonald doubtless found the dark rim very interesting. He'd been working for over a year with the Los Angeles NICAP Subcommittee, participating in the study of a set of UFO photos from Santa Ana, Calif., which also involved a blackish ring (see Chapter 12). McDonald was given copies of Coyle's photos to bring back to the States.

"McDonald analyzed the Coyle photos," states Paul Norman. "They remain unknown."³⁶

Another Australian photo case was the **Drury movie film**, which had been investigated by a **Queensland team**. One of the main things which intrigued him about this film was the fact that most of the frames had reportedly been confiscated by the **Royal Australian Air Force (RAAF)**. Film confiscation cases were of special interest to him because NICAP researchers whom McDonald respected thought they confirmed the "cover-up" hypothesis.

The Drury film was taken in **Port Moresby, New Guinea**, on **August 23, 1957**, by **Thomas C. Drury**, Deputy Director of the **Australian Department of**

36. Letter from Paul Norman to author, dated August 30, 1994.

Civil Aviation. His wife Marjorie, and son Paul were also witnesses. Drury, who was interested in meteorology, had noticed a cloud which was forming rapidly in an otherwise cloudless sky. Fascinated, he filmed it intermittently for several minutes with color film in his French 8-mm movie camera. Suddenly, a bullet-shaped metallic object emerged from the cloud, traveling at very high speed, trailing a thick vapor behind as it disappeared into the distance. In spite of the comparative nearness of the object, no sound was heard. Marjorie Drury and her son Paul saw the bullet-shaped object but do not recall seeing the cloud from which it emerged.³⁷

The Drury film was examined first by the Australian Air Force and then sent to Project Blue Book. Blue Book sent it back after a period of time, without comment. The part of the film which showed the developing cloud, the emerging object, and the clearest frames of the object were missing. In spite of repeated attempts by Drury and Australian researchers to recover the missing portions, they were never recovered.

In his re-investigation of this intriguing case, McDonald tried several times to reach Drury at his work. Even though his path had been paved by Melbourne researchers, Drury did not return his calls. Finally, McDonald reached Marjorie Drury on July 9. She told McDonald she didn't wish to discuss the sighting, because she had seen only the "very beginning." She referred him back to her husband. McDonald persisted, but was still unable to reach him; apparently Drury traveled widely in his job and remained unavailable. Finally, through the persistence of Stan Seers, President of the Queensland Flying Saucer Research Bureau, McDonald succeeded in getting a longer phone interview with Mrs. Drury. His journal relates.

*When failed to get Drury Monday A.M. 7/10/67, called her again (from Sydney - no tape.) Pressed her for details. She was emphatic re the point that she never saw a "cloud." When she first saw it come she perceived a "silver bullet," streaking upwards, at very high speed, leaving a vapor-trail behind it.*³⁸

"I can still see it," emphasized Marjorie Drury, warming up a bit to James McDonald. "I saw it from the start as a bullet, not in a cloud. In fact, I didn't see any clouds in the sky at all.

37. Other incidents of unidentified objects emerging from unusual small clouds have been reported by reliable witnesses. Mrs. Idabel Epperson, who was chairman of LANS from 1968 to 1973, reported seeing a silvery object emerge from a small cloud and dash west across the daytime sky. The small cloud instantly vanished. Possibly something of this nature occurred in the Drury case, explaining why Mrs. Drury and son Paul did not see the cloud their father photographed.

38. McDonald's third journal, "NZ" section.

"What about the vapor trail associated with the object?"

"It wasn't a cloud," she replied. "The 'bullet' at all times was ahead of the trail. And it was going fast! It was going hell bent for leather, climbing upwards. There were no wings or other appendages," she stressed. "It was just like a bullet."

McDonald tentatively asked her if the object could have been an unfamiliar type of aircraft. Mrs. Drury was emphatic. "I've been around aircraft all my life, and I know it was no aircraft!"

She asserted that [she]...was 'busy with other things after that.' (I did not press her on that.) She evidently wished to leave all the rest of the account to him. She had stated to me (as yesterday to Stan Seers) that Mr. Drury "does not live here anymore," and it was awkward to press on details involving him.³⁹

McDonald was a tenacious, expert interviewer, but he realized that Mrs. Drury's privacy was being violated. He phoned Drury's office again, pointing out to his assistant, a Mr. Smith, that researcher Stan Seers of the Physics Department of the University at Brisbane had arranged with Drury to talk with him by phone between 9:00 and 9:30—in other words, now! Smith said Drury wasn't there but he would see what he could do when he returned.

A meeting was finally set up. When the two men finally met face-to-face, Drury was deeply upset, because all attempts to force the RAAF to return the pilfered frames had failed. Paul Norman described the meeting, as he heard about it from another Australian researcher.

"Drury was blowing his top when he was telling McDonald how the film came back to Australia with several of the frames missing," relates Paul Norman.⁴⁰

Norman kindly sent information about the Drury film for purposes of this book, as did Roy Russell, who interviewed Drury's son, Paul. Paul Drury was only eight years old at the time of the sighting and does not remember the cloud from which the object emerged, only a trail near and behind it. The object's apparent length was about 1/4" at arm's length, and the thickness at arm's length was that of "a dressmaker's pin near the point." Although the object was small, it was clearly seen; it glinted in the sun ahead of its vaporous trail. As the family drove away in their car a half hour after the incident, Paul could still see the trail in the cloudless sky.

39. *Ibid.*

40. Computer image analyses of one Drury movie film frame obtained with Paul Norman's help concluded that it was too indistinct to yield any reliable or interesting information.

The Drury movie film, as it exists today, is only 11" long—about four seconds' viewing time. Yet Marjorie Drury, who was also re-interviewed by Roy Russell, estimates that her husband filmed the object on and off for about 10 minutes. Paul Drury concurs that his father filmed the event "for quite some time." When the Drury film was sent to the RAAF, and later to Blue Book, it was part of a roll 50 feet in length, with one join in the center at the 25-foot mark.⁴¹ When the film was tracked down in the Drury family home in 1994, it had been connected onto other family film and was in a collection of family movies that hadn't been disturbed for years. Russell describes how the "New Guinea" reel starts with a join, where it's joined onto other family film. Shot (1) of the reel is of Tom Drury on a beach with children. Other segments follow, but the day of the sighting starts with Shot (2) of a young Papuan spearing fish. Shot (3) is of a similar nature.

*Shot (4) is of the (about) 4-second segment of the UFO. Shot (5) is a close-up of some foliage. After this...the next join in the film occurs. The point is, no joins occur anywhere near the UFO segment, suggesting that Drury filmed the UFO for only the four seconds, since there are no joins to suggest that anything was ever cut out. But Paul and his mother say that he filmed it for quite some time....*⁴²

Russell, an experienced and canny researcher, suggests a possible answer to the puzzle, pointing to the fact that, on the day of sighting, at least two other subjects, including a Papuan man spearing fish, were also on the 50-foot roll which included the UFO incident:

*[I]t seems to me that...Drury sent the whole roll of film to the authorities (50 feet), that they cut out all the good shots, joined the film together again and then made a copy of the entire patched-up roll, and sent it back to Drury as his "original" film. Therefore, not a join in sight. This way, Drury could never seriously claim that his film had been cut, since there are no join marks to be seen. This theory seems the only way to explain the shooting time observed by the witnesses, and the short "no joins" UFO segment on the film.*⁴³

The four-second segment which Blue Book returned to Drury shows only a streak of light moving across the sky, no unusual cloud, no bullet-shaped UFO emerging, no close-up frames of the UFO. Russell's report continues:

41. Letter and "Drury Report" from Roy Russell to author, 20 October 1994.

42. *Ibid.*

43. *Ibid.*

Paul says his father, when the film was returned, was very angry. Then, when a Port Moresby newspaper printed something about Tom Drury seeing something through the bottom of an upturned rum bottle, his father clammed up for good.⁴⁴



FIGURE 11. Jim Kibel's photograph of UFO flipped onto its lower edge.

Shutting up witnesses through ridicule was apparently used in Australia, too! And it was not the first time that Project Blue Book (or someone) had snipped the best frames from UFO footage. It had happened in the **Newhouse** case, now a UFO classic. That film attracted the attention of the highest military officials, including **General Samford**, ATIC and the Navy.

44. Letter from Russell to author, *op. cit.*

"The [Newhouse] film raised 'ned' at the Pentagon," Donald E. Keyhoe wrote in his book, *Flying Saucers From Outer Space*. "General Samford had it run for him three times."⁴⁵

It was closely analyzed at a Navy photo lab where the speed of the whirling objects was calculated at 1,000 miles an hour. In 1952, no nation on Earth had any type of aircraft in production which could fly at that speed, much less make tight turns around other objects while flying in close formation.

Judging from incidents like these, it had become clear to most UFO researchers that some group in government, or in the Air Force itself, was hiding the best UFO data as it surfaced. But even Drury's experience failed to convince McDonald of a cover-up, for he was seeking incontrovertible and scientifically verifiable proof. Forging ahead on his incredible schedule down under, he interviewed selected UFO witnesses every available hour, slept only three or four hours a night, and pushed himself to complete his research before his date for departure arrived. He kept careful track of each phone call he made on UFO matters and paid the costs from his own pocket.

He also interviewed the witness in the classic *Balwyn UFO photo case*, which had been written up widely in UFO literature. On April 2, 1966, James J. Kibel was supervising alterations at his parents' home in Australia. He decided to use up the film in his Polaroid 800 camera in the beautiful garden.

The film was so old, the witness told McDonald, that it "was of altered speed." Kibel tried one shot, which turned out badly. He adjusted the speed setting.

Suddenly he noticed a bright flash on the ground. Although it was full daylight, half of the garden lit up. Startled, he looked up and saw a peculiar shiny object descending downward. The top was shaped like a bell, and a "stalk" projected from the bottom. The object bounced up and down in "yo-yo" fashion. Kibel had similar difficulty describing how far the object descended. "Two hundred to three hundred feet," he estimated. "It's terribly hard to say."⁴⁶

It was a warm, sunny day with a strong northerly wind gusting to 30 m.p.h., yet the wind seemingly had no effect on the object's bouncing motion. At one of its descents, the object suddenly stopped and flipped up onto its lower edge. It hovered a half-second and Kibel hastily shot a photo (see Figure 11). In his haste and excitement, the camera hit his nose so hard that it hurt afterwards! He lowered his camera; he was unable to shoot again immediately because the color Polaroid film demanded a 60-second wait between pictures. McDonald's journal continues:

45. Keyhoe, Maj. Donald E., New York, Henry Holt and Company, 1953, pp. 152-53, 220.

46. McDonald, James E., *op. cit.*, "Melbourne" section, "Balwyn Photo" entry.

*Rolling to the north, it then seemed to lose a bit of altitude, maybe 15-20 feet. At bottom of drop, it jerked violently upwards 30-40 feet at angle 30° to horizontal. Then curved over and accelerated at very great rate. Disappeared behind trees.*⁴⁷

Kibel ran around the house trying to find other witnesses, meanwhile pulling the film in the Polaroid to start the developing process. A workman, Mr. D. English, was bending down in the yard; he had seen nothing. Kibel pulled the picture out, startled by the clarity of the photo. He looked for other witnesses, but could find none. It was an exclusive neighborhood where not many people spent time outside, he explained. He told McDonald that the object, in his opinion, was definitely "manufactured" and that its motions were "mechanical." He estimated its size between 15-25 feet diameter.

Jim Kibel had seen two other UFOs from that same garden, when he was still living at home. In late afternoon in August 1954, at the age of 15, his mother had called him suddenly into the garden to view a disc which was flipping in the sky, showing alternately a shiny side and a dull, dark bottom. Its angular size was equal to an Australian ten-cent piece at arm's length, very much larger than the moon. Mrs. Kibel reported the object to the staff of a Melbourne paper, who ridiculed her, suggesting she'd been drinking too much! After a sighting in 1958 which was also witnessed by his fiancée, Jim Kibel reported it to Peter Norris of VUFORS, whom he knew personally. Remembering the ridicule his mother had sustained, he didn't report it to anyone else. McDonald wrote in his journal "All Jim Kibel knows is that the objects were definitely there."⁴⁸

The Melbourne-based VUFORS gave McDonald a reception, which was attended by numerous researchers, scientists and engineers. Around this time, he had an opportunity to interview Fr. William B. Gill, an Anglican priest whose 1959 sighting at Boainai, in Papua, New Guinea, was also a classic case. The Gill case was intriguing to McDonald, not only because it involved an Anglican priest of impeccable reputation and dozens of other witnesses, but also because the sighting lasted more than three hours. The VUFORS had sent him a comprehensive report of the case which they had prepared.

The Fr. Gill-Papua case has been written about in many books and journals, and Gill's sketches of the object appeared in NICAP's *UFO Evidence*.⁴⁹ The fact that NICAP had chosen to include Fr. Gill's sketch in spite of that research organization's extreme care not to concentrate on "humanoid" reports,

47. *Ibid.*

48. *Ibid.*

49. For instance, Hynek, J. Allen, *The UFO Experience: A Scientific Inquiry*, Chicago, Henry Regnery Company, 1972, pp. 146-50.

confirms the high regard in which Fr. Gill was held. The sighting occurred during an intense but relatively short period of UFO activity over eastern New Guinea, during which UFOs were viewed by Europeans, by educated Papuans, and also by unschooled natives who were totally unaware of the Western concept of “flying saucers.”

Fr. William B. Gill was one of the 80 witnesses whom Australian researchers had lined up for McDonald to interview. Within a short time after meeting him, McDonald was calling him “Bill.” He gave McDonald a carbon copy of his detailed report of the sighting including sketches of the objects and a map of the site. This carbon copy had original signatures of 13 of the 25 witnesses, all 13 educated to differing degrees (see Appendix Item E, page 544.) McDonald was impressed by Fr. Gill’s objectivity, precise description, and detailed affidavit. He avoided any witnesses who put any kind of religious or “salvation” meaning into their UFO sightings, but Fr. Gill had no such interpretation.

Just hours before the sighting of June 26, 1959, occurred, Fr. Gill had sent a letter to a friend at a neighboring mission about the UFOs that were being seen in eastern New Guinea. He wrote, in part, “my simple mind still requires scientific evidence before I can accept the from-outer-space theory. I am inclined to believe that probably many UFOs are more likely some form of electric phenomena or perhaps something brought about by the atom bomb explosions, etc.” The day after the June 26th sighting, Fr. Gill wrote to this same friend. “Last night we at Boainai experienced about 4 hours of UFO activity, and there is no doubt whatsoever that they are handled by beings of some kind. At times it was absolutely breathtaking....”⁵⁰

At the time he met McDonald, Fr. Gill had resigned from the Papuan mission and was teaching history and English at Camberwell Grammar School near Melbourne. McDonald’s journal contains numerous handwritten notes of their interview and the original recording and typed transcript are in his files. Fr. Gill described how he had seen a large lighted object hovering over the ocean, fairly close to the mission playing field. It was dull yellow or pale orange in color with what he described as a “sparkling halo.” When it moved occasionally, it glowed very bright. Its apparent size was that of a hand-span at arm’s length; its features were clearly visible. There were four other lighted objects of similar shape which hovered in the sky at greater distances. Fr. Gill asked two of his mission helpers, including Stephen Moi, a college graduate and mission teacher, to confirm the object, then called other witnesses. The group watched the objects from the beach.

50. Hynek, *op. cit.*

Because Fr. Gill and a group of his parishioners had seen a similar object the night before, though not so close, he decided to keep a journal of events. At 7:00 P.M., two humanoid figures, seen from the waist up, appeared on the flat top of the UFO. Shortly afterwards, a shaft of blue light emanated from the top of the object at about a 45° angle, and two other “men” appeared on the “deck.” At one stage, one witness waved a flashlight, and one of the humanoids waved back. Then several of the witnesses waved, and the humanoids responded with more waves; at one time all four of the figures on top of the UFO were waving. McDonald’s journal continues, revealing his penchant for exact details:

Seemed to be a space between the object & the [sparkling] glow or halo that traced its periphery. Same with the figures. [The space was] clear or dark. Sparkles were perhaps a foot long & dark space about same.⁵¹

McDonald needed a precise description of the “glow” or “sparkling halo” Gill had seen around the object, because Dr. Donald Menzel had thought up an explanation—that Fr. Gill and the other witnesses had been watching the planet Venus! Menzel insisted that since Venus was bright in the west on the date of sighting and was not mentioned by the witnesses that naturally they’d seen Venus! Menzel had also assumed that Fr. Gill was both myopic and astigmatic, was not wearing his glasses while watching the objects, and so had seen Venus as a large, elongated blur. Menzel had also assumed the Papuan witnesses imagined the “men on top.”⁵²

From Gill’s precise descriptions, McDonald satisfied himself that Fr. Gill and the others were not watching “Venus.” It was also proven that Fr. Gill’s eyesight was corrected by glasses and that he was wearing them at the time. Gill told McDonald that he had the firm impression that the central “figure” on the top of the object was bending over and that one of the “fellows” just seemed to be looking down at the people on the beach. Fr. Gill couldn’t see a rail around the flat, top “deck” of the UFO, but it was as if this being was leaning over a rail. The central figure was bent over as if working on something. Most of the time, however, the “figures” didn’t seem to pay much attention to the witnesses on the beach.

At 9:30 P.M. when the object finally moved away at high speed, its color changed from white to deep red, then to blue-green. As it disappeared through a cloud layer, it caused a bright glow on the clouds; the other four more distant UFOs disappeared at different times. None of the other four objects had any trace of “beings,” not even the second largest, which Fr. Gill referred to as “B”

51. McDonald, *op. cit.* “Rev. Wm. B. Gill,” Melbourne section.

52. Menzel, Donald H., “Analysis of the Papua-Father Gill Case,” December 20, 1967, Appendix 2 in Hynek, *op. cit.*, cited above, p. 241.

in his affidavit. "B" was close enough to the observers that five panels of bright "windows" could be discerned on its edge.⁵³ Fr. Gill related the events from memory to McDonald, admitting that he had not even looked at the report for many years. He confided that he'd gotten "fed up" with the attention and controversy which had resulted from his report.

McDonald inquired how far away the largest hovering object was from the witnesses. Fr. Gill had had one of his people walk out across the playing field until he looked the same height as the "figures" on the UFO. This man was 5' 3" tall, and looked the same size as the "men" at 350'. He'd also determined the approximate height of the base of the cloud layer by comparing it with a nearby mountain top. The cloud layer was at about 2,000' and the object hovered below it during the entire sighting.⁵⁴

The next day, everyone in the local village of Keiboda was discussing the sightings, and more reports began to surface. Canon Norman E. G. Cruttwell, Fr. Gill's associate, interviewed 60 New Guinea witnesses, none of which mentioned any "beings." Cruttwell was just about the only white man in the area who never saw any.⁵⁵

The same night as the Gill sighting, a government employee in neighboring Barmara saw a glow in the sky toward Boainai. Gill tried to interview this witness but could not get him to talk; Gill was left with the impression that the man's government job precluded his discussing it—a strong correlation with the situation in the United States. The RAAF was contacted by the New Guinea witnesses, but were told that the other, smaller, luminous phenomena "could have been planets." The RAAF ventured no explanation of the main object.⁵⁶

The Gill case made a deep impression upon McDonald, but he did not discuss it very much during his numerous talks, mainly because it involved the question of occupants. Only three or four days before he died, McDonald confided to one of his close colleagues that he could not believe that Fr. Gill, an Anglican minister, was not being truthful.⁵⁷

53. McDonald, *op. cit.* "Rev. William B. Gill."

54. The brief description, including sketch, of the Gill-Papua sightings in *UFO Evidence (op. cit.)* estimates the distance of the object from the observer at 450', probably because most "occupant" reports of that period described entities a foot or more shorter than human beings. In contrast, Fr. Gill compared the beings' size with a 5'3" mission worker, and came up with an estimate of 350'.

55. McDonald, *op. cit.*, Addendum 7/1/67, as told to McDonald by Peter Norris.

56. McDonald, *op. cit.*, p. 2

57. Author's interview with Dr. Paul Damon, 27 February 1994.

While McDonald was still in Australia, he learned of a July 8th sighting of multiple UFOs being pursued by several light planes, similar to the Andrew Greenwood case, an older Australian case which had been thoroughly researched. In this case the object and planes had been viewed by a school yard filled with children and also had been witnessed by several teachers. In this case, beyond a shadow of a doubt, the RAAF was aware of the incident but showed little overt interest in it.



FIGURE 12. James E. McDonald (right) with John Pearse, at the radio station 2GB in Sydney, on June 26, 1967.

This case occurred on the morning of April 6, 1966, at Westhall High School in Melbourne. One of the primary witnesses was Andrew Greenwood, a teacher at Westhall, who was later interviewed by McDonald. A child had run into his classroom to tell him that "flying saucers were outside!" Greenwood did not wish to break up his class, and he instructed the child to go back to her physical education class in the yard. Ten minutes later the morning recess bell rang, and Greenwood went outside. Half of the school, about 300 children between 11-15 years of age, were on the playground staring at an unidentified gray object in the blue sky. The object was cigar-shaped but at times "bulged" in the middle. Greenwood could not determine the cause of this shape change but had the im-

pression that the object might be changing position in the sky, thereby presenting different aspects to the viewers.

The distance of the object varied from about 1000 yards to about 500 yards at its nearest approaches. It alternated between hovering motionless and accelerating almost out of sight, then returning to position. As Greenwood and the children watched, a Cessna came up and tried to get near the UFO. The object was about two-thirds the size of the Cessna. The object began to play "cat and mouse," and more Cessnas came, until there were five. Moorabin Airport, about four miles away, was checked, but personnel there stated there were no planes from that airport in the air. "It was silly of them to deny it because there are almost always planes up," Greenwood told McDonald.

Greenwood and the children watched the object and the planes for 15 minutes, until the object abruptly accelerated out of sight, leaving the planes still in the air. Greenwood questioned the other teachers. The physical education teacher, Jeanette Muir, confirmed she'd seen it but then "clammed up." Claude Miller, senior English master, saw the object near the end of the sighting. The Air Force came to the school, ostensibly to check out the report. They spoke with Headmaster Frank Sambleble. McDonald's journal describes what happened:

*Somehow Sambleble got on edge. At the assembly that noon he spoke on it and said it was a lot of rubbish. Was his first year as Head[mas-ter], went by book, wanted to keep things on regulation. When Air Force came he refused to call Andrew Greenwood out of class to talk to them. A. G. thinks he sent them packing, and came out muttering 'what rot.'*⁵⁸

Although several teachers and 300 students had seen a strange object pursued by Cessna aircraft for almost a half hour, the RAAF made no further follow-up, to anyone's knowledge. "What puzzles and amuses Greenwood most is [that] Moorabin Airport claims that no planes were up," wrote McDonald.⁵⁹

In his Australian journal, McDonald kept a list of a dozen physicists and astronomers, to whom he had been referred by Australian and American researchers. The list included Dr. F. A. Berson, a scientist with the Division of Meteorological Physics, CSIRO, Aspendale, with whom McDonald met personally. Dr. Berson had seen an anomalous red glowing object in the night sky in September 1963. It was large, about half lunar diameter, and later split into two sections and disappeared. A similar object, appearing across town at the same time and viewed by independent witnesses, was reported in the press.

58. McDonald, *op. cit.*, "Melbourne" Section, "Andrew Greenwood" entry.

59. *Ibid.*

Berson tracked down the witnesses and was able to make azimuth readings which demonstrated that the object was too large to be either a balloon or a hoax.

Dr. Berson had done his own investigation of the Westhall High School sighting. He'd called Moorabin Airport also, but had been told that he would have to call four separate companies in order to try to track down the source of the five Cessnas! He'd learned that students at Clayton School had also seen the object at the same time. He went to the Department of Air, but was given no information. There he was told by an aviation instructor, "We have a sub-chasing aircraft with very bright lights that can be misinterpreted."⁶⁰ The Australian officials were reaching as far afield for "explanations" as Project Blue Book did.

resume 4/6/66 case



FIGURE 13. A "Tully" nest," a type of UFO "landing trace." Dead reeds, swirled clockwise, are seen floating on top of a shallow lagoon.

Dr. Berson, together with another scientist, Professor of Theoretical Physics Stuart T. Butler of Sydney, quietly began their own study of Australian sightings, possibly encouraged by McDonald's example.

"I would emphatically disassociate myself from the people who claim to have contacted flying saucers [contactees]. Their stories are so wildly improbable that it seems to me to involve the suspicion of mental unbalance of some

① I wonder about this, if we accept that these objects are crafts that are intelligently guided, why do we have such a hard time accepting abductions & contactees? I guess its again - a burden of proof problem.

60. Ibid., "Dr. F. A. Berson" entry.

sort," Dr. Butler was quoted. "At the same time, in view of the probable existence of some other intelligent race in the universe, I think we have to keep an open mind on the possibility of some UFOs being intelligently directed."⁶¹

During the last few days of his Australian visit, McDonald began to speak out publicly. He appeared at **radio station 2GB**, where a picture of a smiling, happy McDonald was taken with **John Pearse** (See Figure 12). He also appeared on "**Talk Back With Barry Jones.**" At a packed meeting of the Sydney UFO Investigation Centre at **Strathfield**, he reviewed his research to that date and emphasized that the USAF had "fouled up" a complex subject by neglecting to treat it seriously. He bluntly criticized Project Blue Book and the ridicule curtain which the CIA had helped slam down.

Max Suich, who was a **reporter for the Sydney Sun-Herald**, attended McDonald's Centre talk and wrote a long article with blazing headlines, "**Flying Saucers Are Real, Says Scientist.**" The tone of the article was generally objective, but bold subtitles accompanied it which spoiled the general effect. One subtitle screamed, "They come from another world out in space, he said."⁶² McDonald was being badly misquoted. He had carefully stated his working hypothesis at the Centre meeting, just as he always did to anyone else who asked. He was also quoted as stating that he considered about 90% of Australian cases to be reliable. This was a gross misquote, for McDonald regarded only about 0.5% of UFO reports as true "unknowns."

¹⁹⁶⁷ Besides the enigmatic subtitle "Govt. grant" in the *Sun-Herald* article of **June 25th**, cited above, another article appeared in the *Melbourne Sun* on **July 6th** which bluntly stated, "McDonald's visit is being sponsored by the U.S. Government." It is possible that this article was simply a re-hash of the June 25th article, multiplying the serious error therein. The *Melbourne Sun* article also contained another reference to McDonald's funding. Under a large subtitle, "Learning the Cost," it stated, "His trip to Australia is being paid from U.S. Navy funds allocated to him for physics research."⁶³ This was a surprising statement for two reasons: (1) The U.S. Navy was not giving funds to McDonald directly for UFO research and the article concerned his UFO studies; (2) In 1967, very few people in the UFO field knew of McDonald's ONR contracts, and it is doubtful that McDonald discussed them with Australian reporters. This article, and other Australian newspapers, also quoted McDonald's severe criticism of the USAF and the CIA's debunking program. It must have puzzled Australian

61. **Hallows, John**, "What Do You Do If You See A UFO?", *The Australian*, May 14, 1968.

62. **Suich, Max**, *The Sun-Herald*, July 9, 1967. "Flying Saucers are real."

63. *Ibid.*

readers that this American scientist was “being funded by the U.S. government,” yet was bluntly criticizing U.S. agencies in a foreign land.

The *Sun-Herald* article did, however, include a photo of the so-called “Tully nests,” a type of UFO landing-trace (See Figure 13). One Tully nest had been connected with a sighting of a UFO. The witness, Albert Pennesi, was working on his land in early January 1966. Suddenly the engine of his tractor failed as he saw a large, steel-gray object rising from a nearby lagoon. His tractor had been headed straight toward the lagoon. The object was shaped like two saucers with their rims placed together, and the bottom part appeared “hazy.” It climbed into the sky at terrific speed, and disappeared into the distance.

It had no portholes, appendages or exhaust trail. In a circular area in the lagoon, exactly where he had seen the object rise, the witness saw a large, round circle of swirled grasses (tall reeds) on and under the water. “I decided to carry on with my work,” Pennesi told McDonald. “I figured people would think I was a bit cracked.” That afternoon, however, he confided in some townspeople who advised him to report the incident to the police. The police, including a sergeant, suggested he’d seen a helicopter. Pennesi thought they were joking, until the police also suggested that he’d seen birds, or a whirlwind, or “crocodiles with lashing tails.” Pennesi countered: he’d worked that land for 20 years and had never seen anything like it. He returned to the spot that same afternoon, and found the dead reeds, swirled clockwise, floating on top of the water

Local researchers investigated the case. Smaller swirled circles, similar to the one from which Pennesi had seen the object rise, were found near the same area, but no objects had been seen associated. In these smaller circles, the grasses were swirled counter-clockwise. He swam under water to investigate the large circle and found “the roots all in a mat.” Later, new grass began to grow under the water to replace the dead “nests.”

The Tully “nests” bear some resemblance to present-day “crop circles,” widely reported from the United Kingdom, Canada, the United States and other countries. However, in the corn-circle phenomenon, no large objects which can be reasonably assumed to be the cause of “crop circles” have been reported in close proximity.⁶⁴

64. A possible exception occurred June 20, 1994, when several witnesses in Arad, Romania, claimed that a huge “light,” hovering over a cornfield, left typical “crop circles” in a cornfield. One witness stated that he viewed two humanoids aboard the craft. To my knowledge, adequate investigation was not made of this report. From *Flying Saucer Review*, Vol. 39, No. 3, Autumn 1994.

Toward the end of his visit, on July 4th, McDonald appeared on ABC-TV in Melbourne, Channel 2. The program was called "This Day Tonight." The host was Bill Pritchard and the "interlocutor," as McDonald referred to him, was Brian King. Paul Norman describes the event:

Both Judy [Magee] and I were present. I recall he did not like the background panel and had the crew remove it. He also objected to some of the statements made on other occasions by the media. Those were the usual misquotations which the media always make. The average newsman writes and talks about everything, expert on nothing except misquotations and out-of-context reporting, as everybody who has experienced interviews knows.⁶⁵

McDonald spent his last day down under in Queensland at the home of Roy and Pearl Russell. He kept an appointment at the University of Queensland, where the book on meteorology to which he had contributed a classic chapter on cloud physics was still being used, and then spent the rest of the day interviewing Queensland witnesses.⁶⁶

"In the evening, we drove him to the airport where he did a TV interview," relates Russell. He also gave an interview to the press, as he'd promised, and numerous articles in several papers were subsequently printed. The articles differed in their objectivity and were written from differing points of view, depending on which newspaper ran the story and the individual outlooks of each reporter. On July 10th, the *Brisbane Courier-Mail*, for example, ran an article with a large heading titled "Flying Saucer Idea On Blackouts." Its main thrust was McDonald's concern that power outages and UFO close approaches might be connected, for McDonald had found that there were good UFO/power outage cases in Australia, as well as in the U.S., South America and Europe.

"When one considers the great New York blackout, power failures in South America and the high instance of [UFO] sightings occurring simultaneously—then one concludes there is something to this UFO business," McDonald was quoted.⁶⁷ He refused to say what value his Australian interviews had in support of the extraterrestrial hypothesis. He was waiting until he could study his notes and interviews and correlate the data. At the same time, he praised the Australian witnesses for their reliability and levelheadedness.

As much as McDonald had accomplished during those two weeks, he felt he'd merely touched the surface "down under." He had not been able to accept

65. Letter from Paul Norman to author, 18 October 1994.

66. Letter from Roy Russell to author, 20 October 1994.

67. *Brisbane Courier-Mail*, July 10, 1967.

Albert Pennesi's invitation to visit Tully and investigate the "nests" first hand. He was not able to follow through with the invitations of other veteran UFO researchers in Australia and adjacent countries, nor could he know the chaos that was awaiting him at home.

On July 9, 1967, the day before McDonald was due to return to the States, Thomas Clark, the U.S. Ambassador to Australia, called repeatedly, but he couldn't reach McDonald, who had left Melbourne for an ONR appointment. Geoffrey Rumpf tracked him down and found him at the Meteorology Department in Townville. By this time it was almost midnight on Saturday.⁶⁸ The same day Clark tried to reach him, there had been a sighting of multiple discs being chased by several light planes in Victoria, but McDonald, being in Queensland, could not participate in the on-site investigation.

When McDonald finally learned of U.S. Ambassador Clark's urgent calls, he checked with Peter Norris, a Melbourne lawyer who was head of VUFORS. Norris had been told only that McDonald should get in touch with Clark immediately. Early the next morning, McDonald called the Sydney American consulate but was told by a Mr. Wagoner that there was "nothing on the logs."⁶⁹ McDonald probably should have called the embassy in Canberra, where the ambassador was based, instead of in the consulate in Sydney. The fact remains, however, that the consulate should have told him how to reach Ambassador Clark!

Paul Norman and the other Australian researchers never learned personally from Ambassador Clark why he was so anxious to talk with McDonald. After McDonald returned to Tucson, however, the puzzle began to fall into place. Repercussions from his Australian-New Zealand visit affected his remaining years of UFO research—and the rest of his life.

68. McDonald, *op. cit.*, "Melbourne" section, "Geoff Rumpf" and "U.S. Embassy" entries.

69. McDonald, *op. cit.*, "U. S. Embassy" entry.

The First Attack

*Inch by inch, row by row, someone bless these seeds I sow,
Someone warm them from below, 'til the rain comes tumbling down.*
—from “The Garden Song”

*“I throw a spear into the dark, that is intuition. Then I have
to send an expedition into the jungle to find the way of the spear.
That is logic.” —Ingmar Bergman.*

*Those who refuse to go beyond fact rarely get as far as fact...
Almost every great step in the history of science has been made by
the anticipation of nature, that is, by the invention of hypotheses
which, though ultimately verifiable, often had very little
foundation to start with.*

—T. H. Huxley

When McDonald returned home from his Australian trip, he was hardly prepared for the brouhaha which greeted him. He quickly learned why Ambassador Thomas Clark had tried so persistently to reach him. The U.S. Air Attaché at the Australian Embassy had heard his television remarks, criticizing the Air Force and the CIA, and had “reacted strongly to them.” The complaint reached Jim Hughes, his ONR contract monitor, before McDonald arrived back on American soil.¹

“Jim got on TV and radio down there and spoke about UFOs,” relates Hughes in an interview for this book. “And when [they] heard about that speech in Washington, I guess you could hear the howls back to Australia, because the newspapers, when they attribute something to somebody, they’re not very careful.... They apparently do what they like with the text, just to make sensational news. And that came back to me. Some captain came marching into my office with, ‘Are you supporting this?’ Because [the newspapers] gave the impression we were. He was on an ONR contract.”²

1. Coded letter from Jim Hughes to ONR official, addressed as “Code 400”, dated 16 September 1968.

McDonald answered the charges candidly. He told Hughes he was not acting on behalf of the Navy when he criticized the Air Force's sloppy operation at Blue Book. His criticisms of the Air Force's handling were based on scientific grounds, and he was speaking out as an individual scientist.

McDonald didn't write in his journals again until he began his fourth journal on April 28th, 1968.³ However, correspondence and other documents from his files fill in the gaps.

"We never supported anything that said 'UFO' on it," Hughes states. "If it was UFOs, it wasn't charged. Please make that straight, because people were trying to give me static on that all the time."

McDonald survived the initial Air Force criticism, and the Navy did not retaliate against him. From events which followed, however, it is clear that opposition was amassing elsewhere. By February 1968, he realized that the ONR contract which permitted him to research UFOs in his spare time while traveling on ONR business was under attack.

Up to the time of his trip, McDonald assumed that any resistance he would encounter would be by colleagues in the scientific community who simply did not share his concern that a scientific problem was being neglected. He'd heard a couple of critical remarks from colleagues and experienced unexpected coolness from a few but accepted this in good grace. He soon found out that his adversaries and antagonists were not all scientists. His criticism of Blue Book and the CIA down under had struck deep in many places.

He had never been recriminated against when he spoke out against the Air Force/CIA debunking policy within the confines of the U.S. Once he stepped foot on foreign soil and spoke the truth about Blue Book incompetence, however, certain elements of the government wouldn't tolerate this. The erroneous statements in Australian newspapers that his UFO studies in Australia were "sponsored and funded by the United States Government" were curious. Were they mere inaccuracies, or were the newspapers deliberately deceived by persons unknown? Other UFO researchers were plagued by similar inaccuracies. For example, Jacques Vallée was repeatedly quoted as a "NASA scientist" by Latin American papers, although he always made it clear he had never been on the NASA payroll.⁴

2. Author's interview with James Hughes, 21 December 1994.

3. McDonald's fourth journal is a spiral-bound notebook with about 50 pages of closely written text, covering events in McDonald's UFO study from April 28, 1968, through March 17, 1971.

4. Communication to author from Jacques Vallée.

The inaccuracies in the newspapers were serious enough, but his two Australian television appearances seem to have bruised the feelings of certain U.S. officials even more. It was his TV appearances which directly caused the cut-off of his funding. A brief entry in his fourth journal, describing a conversation with J. Allen Hynek, reads: "I pointed out how my ONR funds cut off re USAF protest [on] Aussie TV."⁵

McDonald had even discussed with Navy officials whether it would be unwise to criticize the USAF in Australia, as revealed in one of his letters to Paul Norman during the planning of the Australian trip:

*I'll have a chance to talk with some of the Navy people informally and sound them out on whether blunt comments from me on Australian TV concerning USAF incompetence, made while traveling with USN support, would be awkward from their viewpoint.... Aside from that, I have no objections to appearing on serious TV programs. I prefer to delay that until the last few days of my Melbourne visit...."*⁶

McDonald had sounded out Navy people on the question and drew no negative reaction.⁷ In informing Norman of this, he emphasized again that his principal reason for visiting Australia, aside from his specific ONR duties there, was the direct interviewing of key witnesses in important Australian cases, not media appearances. An Australian research journal, *Australian Flying Saucer Review*, gives the details correctly:

Dr. McDonald visited Australia under the auspices of the U.S. Navy to further his research work in the field of atmospheric physics. While in Australia, he was able to devote much of his time to his private investigations into the UFO problem, interviewing some 80 witnesses throughout the Commonwealth, and addressing various groups of scientists as well as the general meetings of members of the Melbourne and Sydney Societies.

*The Professor was also able to find time for appearances on several ABC television and radio shows as well as the highly rated 2GB session "Talk back to Barry Jones."*⁸

The criticism which resulted from his Australian trip, however, made McDonald fully aware how ONR's unwritten "permission" to study UFOs

5. McDonald's fourth journal, reverse p. 24.

6. Letter from McDonald to Paul Norman, 31 March 1967.

7. Letter from McDonald to Norman, 5 June 1967.

8. "U. S. Scientist Addresses U. F. O. Societies," *Australian Flying Saucer Review*, Moorabbin, Victoria, Published by Victorian Flying Saucer Research Society, September 1967.

on the side was affecting him. He set out to settle the matter once and for all, sending a plea to Jim Hughes late in September 1967 which fully outlined his quandary. His journal barely hints at his mood as he described the basic problem of his life as a UFO researcher:

P3
209 ...letter of mine dated Sept 27, 1967, where I made plea to make honest man out of me by getting UFOs OK'd openly in my contract.⁹

Jim Hughes did not respond in writing to this letter, and the press of professional responsibilities and his ever-increasing UFO research schedule prevented McDonald from following it up. It was his usual habit to chase down anything that was important to him when he didn't quickly get an answer. The two men probably discussed the matter by phone, with Hughes offering to see what he could do. They had discussed the subject numerous times in the past, but Hughes hadn't been able to convince his superiors that "UFOs" should be written into any of McDonald's contracts.

Two months later, Philip J. Klass openly assailed "McDonald's use of ONR funding for UFO research." In December 1967, he sent a lengthy letter to Dr. Robert A. Froesch, the Navy's Assistant Secretary for Research and Development, asking, "When does J. E. McDonald find time, in view of his extensive commitment to the UFO problem, to work on contract research for ONR?"¹⁰ After my second (and last) UFO article was published by *Aviation Week and Space Technology* (AW&ST) on Aug. 3, 1966, I was personally funding all of my UFO research...out of my own pocket. Therefore, I was shocked to hear that JEM's UFO efforts—including a costly trip to Australia—were being financed by the U.S. Navy....¹¹

Jim Hughes immediately went to work on McDonald's behalf, gathering materials in case Klass's objections continued. He collected lists of all of McDonald's publications and reports produced under ONR funding, over 100 items in all, and sent these to ONR officials. Hughes' cover letter mentioned two other reports McDonald was submitting under his 1967 contract: one on ball lightning and another on the meteorological aspects of UFO reports, which was to be printed in the *Bulletin of the American Meteorological Society*. His letter requested that McDonald be given a specific contract for study of UFOs, citing the value to the Navy of the many atmospheric physics

9. McDonald's fourth journal, reverse p. 25. McDonald did not keep a detailed journal on his UFO studies for several months during this period on the beginning of the ONR controversy. It was not until September 25, 1968, that McDonald mentioned writing this letter in his fourth journal.

10. Coded letter dated 21 February 1968 from Hughes to ONR "Code 400."

11. Correspondence from Philip J. Klass to author, dated July 20, 1995.

projects in which McDonald was already actively engaged. Hughes' letter said in part:

*There now exists a wealth of good case material by competent observers on the latter subject, and the work should be continued but probably under another name and contract. I would suggest the Atmospheric Physics of Unusual Aerial Phenomena. Because of his wide involvement in weather modification and cloud physics projects such as his current activities for the National Academy of Sciences, the National Science Foundation's panel on cloud physics, the ESSA-Navy Stormfury panel, and his extensive publications, McDonald has been a valuable consultant to the Navy....*¹²

University of Arizona administrators also came to McDonald's defense. They assured ONR officials that McDonald worked the equivalent of a full 40-hour week, or more, on atmospheric physics and did his UFO work the rest of the time. Dr. Dick Kassander also handled questions from the university's Board of Regents, through whom state funds for the university's operation passed. Arizona state funds paid about two-thirds of McDonald's salary.

"One question came up," states Kassander, "which I was asked by a member of the university's Board of Regents. 'How can he have so much free time to be doing this sort of thing?' ...And I said, 'It all depends on how many hours you call a week's work. Nobody who had any reputation at all, particularly one like his, thinks a 40-hour week is a normal week. If a man chooses to work sixty hours, how are you going to tell which forty you should be getting? ...I'm his supervisor, and I'm satisfied that the State is getting what it should out of a normal week's work by anybody's definition.' And that settled the argument."¹³

Philip Klass persisted. He contacted Russell S. Greenbaum, head of the public affairs branch of ONR, asking specifically what ONR business McDonald had pursued in Australia. Greenbaum replied:

Professor McDonald, while in Australia, had a rather crowded schedule which included visits and discussion at the Commonwealth Scientific and Industrial Research Organization and the universities. His topics of discussion included cloud physics, some problems in atmospheric physics and composition, and anomalous refraction phenomena which could possibly explain an unidentified aerial [sic] observation.... However, the concern of this office is the question of

12. Letter from Hughes to ONR, dated 21 February 1968.

13. Author's interview with Dr. Richard Kassander, 19 November 1993.

anomalous refraction which the UFO problem raises and not the UFO problem itself...."¹⁴

In spite of the fact that officials from the University of Arizona and ONR were defending him, McDonald was irked at having his honesty questioned, but in general he kept his troubles to himself. Although blessed with social graces, his basic nature was rather on the shy side. One person who worked closely with him day-by-day was his secretary, Margaret Sanderson-Rae, who states: "As a person, there was nothing flamboyant about him. He was shy and sort of reclusive and wanting to get his work done. He had no swagger to him."

McDonald continued his UFO studies and his ever-increasing rounds of talks. Sanderson-Rae prepared his papers for publication, transcribed his interview tapes, and duplicated the multi-page summaries which he gave out at his UFO talks and sent to correspondents around the world. These "handouts," as they were called, contained the meticulous UFO data which was the essence of each talk and are some of the main writings on the UFO subject which he left behind. A careful perusal of each reveals not one typo or mistake in any of them. The handouts stand as a tribute not only to McDonald's thorough research and writing ability but also to Sanderson-Rae's skills! She, like McDonald, willingly worked overtime many hours each week to prepare them, without additional remuneration.

In the spring of 1968, Klass wrote his "JEM white papers," choosing this method as a convenient way to challenge McDonald on various issues. He prepared five of these two-page essays between May and June 1968, and several others followed. Each was filled with specific charges against McDonald's UFO concepts, and each was headed by a piquant quote, such as "A man who is always ready to believe what is told him will never do well. —Petronius;" and "Half the truth is often a great lie. —Benjamin Franklin." (Apparently both men collected quotes which took their fancy.) Klass disseminated these "White Papers" to a few dozen researchers in the UFO field and to selected Navy officials.

"I did send the first JEM white paper to McDonald, but he returned them marked "Return to Sender," states Klass.¹⁵ However, UFO researchers rapidly supplied McDonald with copies. Klass's close scrutiny of McDonald's writings and talks was apparent. They referred to McDonald's dismantling of the "ball lightning" hypothesis, which Klass insisted explained some classic UFO cases. They also endeavored to bring McDonald to task, when he initially accepted certain UFO cases and later changed his mind about them. The answer

① How I wonder which cases?

14. Letter from R. S. Greenbaum, ONR to Philip Klass, 15 March 1968.

15. Letter from Philip J. Klass to author, *op. cit.*

to some of these particular charges lay in the fact that McDonald's UFO research was incredibly thorough. He uncovered data by delving deeper than most other researchers were able to do, which permitted him to explain some cases which had, up to that time, been accepted as "unknowns."

James McDonald was irritated by the "JEM white papers," which impugned his honesty and questioned his scientific competence. His first inclination was to answer them all point-by-point. He asked advice from several of his close colleagues.

"Should I reply to Klass by answering his charges one by one?" James McDonald asked colleague George Dawson. "I doubt that it would be wise to lower yourself to reply," Dawson advised. "It may be futile, as well."

"But I feel that I should at least provide answers to the scientific arguments he's bringing up, like his continued claims about ball lightning," reasoned McDonald. "There may be some point in your doing that," agreed Dawson. "I suggest you **deplore his introducing personal elements into a scientific exchange.**"

Others gave differing suggestions. McDonald posed the question to one of his students, **Peter Du Toit**, who answered, "They shouldn't be dignified with a reply." Isabel Davis and Ted Bloecher also offered their consensus: "We fear that non-rebuttal will be exploited by Klass."

Paul Cerny of the NICAP affiliate in San Francisco wrote: "Each of these reports he sends me makes me madder, and also makes me realize how really...misinformed he is about the whole UFO picture in general.... I frankly cannot see...motive for the work and time spent in his determination to 'put you down.' I'm sure the Govt. would like nothing better than to see you discredited."¹⁶

McDonald, swamped by the demands of his teaching, his atmospheric projects and his continuing incursions into UFO cases, finally **decided that a formal reply to Klass's white-papers would not justify the time and energy** he'd have to spend. He **chose instead to rebut Klass's "ball lightning" hypothesis** every chance he got, with all the resources available to him. He managed to get the topic on the agenda of a two-day conference on lightning which was held at the University of Arizona in April. He chaired that session, which gave him an opportunity to answer Klass's ball-lightning claims in depth. Klass was advancing his ball-lightning theory energetically, and McDonald, loving any scientific challenge, fired back.

^② This is the correct solution because it in effect defangs Klass by showing how little he knew about the area he was commenting on. Better to make him irrelevant than stoop to his level.

16. Letter from Paul Cerny to McDonald, dated August 26, 1968.

At a conference in Montreal, McDonald again addressed Klass's "ball lightning" theory before a group of scientists. In his *AW&ST* article, Klass had claimed that a plasmoid (ball lightning) could follow an aircraft which has acquired a charge opposite to that of the plasmoid, by acquiring dust, snow or rain particles—the so-called "Coulomb attraction."¹⁷ McDonald analyzed this statement using precise formulae and proved that the airplane would not draw the plasmoid behind it "even at the pace of a very slow walk."¹⁸ He addressed other aspects of the "ball lightning" hypothesis, including Klass's attempt to explain why auto ignition systems often failed during encounters with UFOs. Klass had incorrectly used the term "mirror image" in discussing the possibility that a plasmoid could penetrate the hood of a car, thereby causing electromagnetic disturbances in the engine. McDonald pointed out this "puzzling erroneous misconception...held by an electrical engineer." He also cited other errors, pointing out that Klass confused "voltage" and "voltage gradient"; that his description of how a gyroscope reacts to external force was incorrect; and that his chapter on radar and UFOs did not show a clear understanding of radar principles.¹⁹

He also humorously described the erroneous concept of the "charged pedestrian." Klass had written that a person can acquire a "very light charge," and that a plasmoid would be drawn slowly toward him or back off as the person approaches, depending on whether the person and the plasmoid carried the same or opposite charges. McDonald played fair, however, when he told the Montreal scientists that the *AW&ST*'s Senior Editor did not claim that all UFOs were plasmoids, but that

*[Klass felt he had] identified most if not all of the previously unexplained UFOs as atmospheric electrical phenomena, using NICAP's most convincing cases. By the latter, he referred to the more than 700 cases in Hall's The UFO Evidence. Such a claim is fatuous; there are in... The UFO Evidence hundreds of cases that could not even remotely be reconciled with Klass's plasma-UFO hypothesis on any reasonable, scientific grounds.*²⁰

17. Klass had refined his "ball-lightning" theory, as it was popularly termed by the UFOlogical community and wrote *UFOs Identified*, in which he addressed classic UFO cases, re-interpreting them in the light of plasma technology. Published by Random House, New York, 1967. (In 1974 Klass published a second book, *UFOs Explained*, after he had investigated many more cases, and put forth alternative explanations.)

18. McDonald, James E., "UFOs—An International Scientific Problem," 38-page summary of a talk presented March 12, 1968, at the Canadian Aeronautics and Space Institute Astronautics Symposium, Montreal, Canada.

19. *Ibid.*

20. *Ibid.*

In the meantime, the ONR funding which allowed him to wholeheartedly research UFOs was in jeopardy. James McDonald found this both irritating and illogical. What made it more illogical was that he had briefed the staff of the ONR on the UFO question shortly before his trip to Australia. McDonald had written to Paul Norman regarding this briefing:

It's regarded as a rather loaded problem due to the Air Force being under some public criticism for its handling of the problem.

For the Navy, which has no legal jurisdiction over the problem, to hear someone who is on record as a strong critic of USAF, and to invite him to their own offices, is a bit uncomfortable, I learned. However, the tack...was something like this: One of these days we may be asked a few embarrassing questions about all our own Navy sightings..., so maybe it would be prudent to invite McDonald to review his findings for us.²¹

CYA theory anyone?

I also was reminded of Dr. Mindick and his letter to LIFE criticizing the Navy's navy sightings

How valid was Paul Cerny's assessment of the attack against McDonald's funding, as cited above, regarding the "government's interest" in seeing him discredited? Most NICAP members ascribed to the idea of a deliberate government "cover-up" and hoped that this would not affect McDonald adversely. Evidence already cited shows that some government agencies including the DoD, of which the Navy was an integral part, were worried about his UFO research. Were the forces who were attacking McDonald's ONR funding honestly concerned that his criticism of the Air Force and the CIA would cause harm to those agencies? Or were they more worried that too many good hidden reports were being wrenched loose by this respected gadfly?²² An excerpt from an August 1967 letter which McDonald wrote to George E. Kocher of The RAND Corporation demonstrates how he was wholeheartedly received by numerous government-funded facilities.

I just got back from...a day at the Sandia base, where I spoke to the scientific staff. There is keen interest in the UFO problem at Sandia, and I picked up half a dozen quite good sightings from members of their technical staff....²³

Air Force Regulation 200-2 (later upgraded as AFR 187) specifically forbade Air Force personnel to discuss "unexplained" UFO sightings, and another governmental regulation, JANAP-146, effectively silenced civilian employees of certain military and governmental agencies in regard to UFO matters. Apparently some people who "should not have been talking" were confiding their own

21. Communication from McDonald to Norman in JEM files.

22. "Gadfly" is used here in its most honorable meaning. Webster's defines the term as "a person who stirs up from lethargy."

23. McDonald to Kocher letter, dated August 14, 1967.

UFO experiences to McDonald, unaware that they were breaking government regulations. McDonald had also discussed with Sandia personnel the possibility of using the base's facilities to analyze samples of presumably related UFO materials which the Condon Committee's staff were collecting from certain witnesses, and one of McDonald's Sandia contacts had readily agreed to this plan!

Yet McDonald knew that any information of a confidential nature with which he might be privately entrusted was, in essence, of little worth to him in his public research on UFOs. Sightings related by his colleagues, of course, strengthened his own conviction that UFOs were a serious scientific question. However, as he wrote to Paul Norman on the eve of his visit to Australia in regard to some intriguing sightings involving staff at scientific facilities in Woomera and Adelaide:

*Might I accomplish something with the Woomera people? ...If the trip up there only led to discussions of a classified nature that neither I nor anyone else could openly recount, it probably isn't worth the effort.*²⁴

The fact that personnel at Sandia, near Roswell, N.M., were talking privately to McDonald may have been very worrisome to some government sources, for it was one of the most sensitive bases in the country.²⁵ His expenses for the August 1967 colloquium that he presented there were reimbursed by the Sandia Corporation. A letter that McDonald wrote to John A. Anderson of the Sandia Corporation reads in part: "I think we got quite a bit accomplished with respect to information exchange flowing in *both* directions...and if any other reports from Sandia personnel come your way, I shall certainly appreciate any leads you may be able to send me." [Italics by author]

His sense of humor, and love for his children, surfaced even here. In the same letter, he wrote:

*...the [\$150] honorarium which Sandia kindly gave me has already been spent on a new sewing machine for the use of three of my daughters who are still at home and competing for tightly programmed time on the existing Singer. The girls are delighted with the new 'Sandia' sewing machine.*²⁶

24. McDonald to Norman, letter dated June 13, 1967.

25. A knowledgeable source describes 1990s security measures at Sandia: three electrified fences, each fence encompassing a larger circumference, with guard dogs roaming between the fences!

26. Letter from McDonald to John A. Anderson, dated August 9, 1967.

It is significant that a handwritten note in his journal, regarding his trip to Sandia, mentions only that he "visited" there on August 2, 1967, followed by the recurring enigmatic phrase, "See small notebook."

By the beginning of the ONR fiscal year in 1968, McDonald was advised that the contract which he had been using partially for UFO research would not be renewed, and he began seeking other sources. In a self-typed memo to Frank Rand on February 12, 1968, he wrote: "If you know of any loose money, let me know. As a result of some criticisms of USAF made while in Australia, no ONR-renewal! Please don't mention this in casual conversation much, as it nettles me—it's not a point to air just now. Maybe I'll have to if all leads on UFO funds fall through."²⁷

In mid-February 1968 he requested a six-month extension of the small NASA grant which had been given to him in 1966 through the help of Dr. Gerard Kuiper. In a letter to Dr. Albert B. Weaver, chairman of the Space Sciences Committee at the U. of A., he stated his situation clearly:

*The work done under my earlier grant (\$1300) from your Committee has, in my opinion, indicated that the subject area (observations of anomalous aerial phenomena) warrants continuing careful study.... Certain areas of my problems that overlap atmospheric physics problems coming within the purview of my ONR-supported research were approved for study under funds from ONR. Those funds are now limited and I seek an additional sum to carry me through until mid-summer and when new prospects for support seem more promising.*²⁸

The amount of funding which McDonald was asking from this NASA source was a mere routine extension of his 1966 \$1300 grant. It was minimal, compared to the \$200,000 NASA gave yearly to the university for distribution to "appropriate" projects. However, it had helped pay for some long-distance telephone interviews on promising UFO cases. While he was waiting for an answer from Dr. Weaver, he spoke before the American Institute of Aeronautics and Astronautics (AIAA) in Los Angeles. The title of his talk was "Are UFOs Extraterrestrial Surveillance Craft?" As usual, the auditorium was crowded with scientists and engineers. The summary handout of this talk begins:

If it were insisted that I limit my entire talk to a one-word answer to the question posed in that title, I should find it hard to choose between the safer answer, "possibly," and the riskier answer that actually comes

27. The identity of Frank Rand is unknown to this author. However, he is mentioned in a letter from McDonald to Dr. Edward C. Welsh of NASA in Washington, D.C. He was apparently a close friend and colleague of McDonald.

28. McDonald's letter to Weaver, February 16, 1968.

closer to my present opinion, "probably." The ever-increasing weight of the evidence I have been examining would drive me to the latter answer, if I had to compress an hour's remarks into a single word.²⁹

Jacques Vallée feels that McDonald made a mistake, as a scientist, in titling this particular talk and also in stating his position so strongly.

"Jim...could only antagonize a majority of his colleagues—by calling this talk the way he did," states Vallée during interviews for this book. "The title...implies that McDonald was already willing to jump to conclusions about the nature of these objects. While most NICAP members agreed with him that this was the most likely hypothesis (and I did, too, at the time) most scientists definitely were not ready to make the jump on the basis of the available data."

Indeed, some NASA scientists might have been antagonized, as Vallée suggests. On his arrival home, McDonald received a formal reply to his request for renewal of his small NASA grant. Dr. Weaver's April 3, 1968, letter informed him that the Committee would not support an extension of his work on "unexplained objects." The wording of the letter is strange, to say the least, in its referral to "politics" and the "lay community":

This decision was based on the Committee's opinion that the NASA Institutional Grant was not intended for use in gaining support for an investigation or for stirring up the scientific and lay community in favor of some particular study.... We realize, of course, that there are overtones of selling some point of view or another in every scientific investigation...but as the emphasis of an investigation shifts to politics (however necessary that shift may seem to be), we feel the use of NASA grant funds becomes questionable.³⁰

Reading NASA's refusal letter (see Appendix Item 9-A, page 547) one is struck by the fact that NASA deemed it inappropriate to involve lay researchers or the public in a scientific problem. Even more ludicrous is Weaver's fear that UFOs should not enter the arena of "politics," for McDonald's research was purely scientific. The NASA refusal is even more satirical because McDonald had sent Weaver a complete list of the talks and papers he had delivered to scientific, technical, and academic groups on the subject of UFOs. From October 5, 1966, through March 26, 1968, he had given 60 presentations on the subject of UFOs (see Appendix Item 9-B, page 548). Of these, 57 were before scientific, technical, and academic organizations and two were to journalist groups. Only one was a public lecture. NASA's objec-

29. McDonald, J. E, "Abstract of March 26th, 1968 talk before AIAA, Los Angeles," p. 1.

30. Letter from Weaver to McDonald, dated April 3, 1968.

tion to McDonald's "lay community" and "political" approaches was erroneous as well as illogical. He was spending his time and energy striving to alert scientists, military and governmental personnel—with the finest data he could possibly collect—to the problem of unidentified, craftlike aeroforms flying in Earth's atmosphere, yet was being accused by a NASA official of stirring up the lay community and shifting his investigation to politics! *or rather maybe there was this thing*

This refusal of a NASA sub-group based at McDonald's own university is made even more curious by the fact that NASA Headquarters in Washington, D.C. never responded to his proposals for more substantial funding. This, in spite of his Washington, D.C. NASA briefing and his continual contact with NASA colleagues, to whom he sent multi-page summaries of his talks before prestigious scientific organizations. The extraordinary efforts he made to obtain substantial NASA funding are hinted at in a letter which he wrote to Dr. Edward C. Welsh of the National Aeronautics and Space Council in Washington, D.C. He had seen Dr. Welsh at a meeting of the AIAA in August 1967, where he spoke to an enthusiastic crowd of scientists and engineers. His letter read, in part: *where the problem lies*

I believe that the UFO problem is one to which the National Aeronautics and Space Council should give careful attention. If you have had a chance to talk with Frank Rand about my visit with him last spring, you will have some impressions that may go beyond the remarks I made in the AIAA [Seattle] talk. I believe that this problem has been very seriously misunderstood and warrants greatly expanded attention by all persons concerned with the space sciences.³¹

In spite of McDonald's success with individual groups of scientists, his bold efforts were being strangled. The funding on which he depended was cut off at the source. The particular ONR contract in question had been first granted to him on July 15, 1958, for atmospheric physics research projects. It had been renewed annually nine times and bore the ONR designation "Nonr-2173." It was not until June 1966 that McDonald began to publicly research UFOs in his spare time, as well as fulfilling all of the ONR obligations connected with Nonr-2173.

This particular contract was separate from other ONR contracts granted him (all of which continued to be renewed annually) such as Contract 082-164, which was specifically for study of cloud dynamics. The Nonr-2173 contract, however, was completely cut off on June 30, 1968. One third of McDonald's salary had been reimbursed from it, but this temporary loss of salary was made up in another ONR contract which pertained strictly to atmospheric physics. He wrote his "Final Report" on Nonr-2173 to ONR on December 13, 1968.³²

31. Letter from McDonald to Dr. Edward C. Welsh, September 15, 1967.

32. This document is in JEM Private Collection, U. of A. library.

Accompanying it was a letter by Dick Kassander, which shows the solid support IAP's director continued to give him.

Even after #2173 was terminated, Phil Klass continued asking ONR and the Navy about McDonald's use of "public funds" to study UFOs. Kassander and Jim Hughes, together, prepared other materials to confirm the scientific use McDonald had made of his ONR funds through the years. These included a list of atmospheric physics publications produced under the ONR Contract 2173. A few of McDonald's scientific colleagues around the country also began to openly criticize him for his interest in UFOs. One IAP colleague was queried by scientist **Chris Junge** during a trip to a cloud physics conference in Toronto in early 1968.

"Why has McDonald gone off the deep end regarding UFOs and dropped his previously good cloud-physics work?" Junge asked. The story got back to McDonald. He learned also that a woman colleague at the **NCAR** in Boulder, Colo., had openly made very negative comments toward his position on the UFO question. McDonald had met resistance before, but fault finding was growing more vocal.³³

The controversy about his ONR funding became public when a **Jack Anderson** "Merry-Go-Round" column, "**Dispute Marks Flying Saucers Study**," appeared in the *Washington Post*. Anderson had called to interview him, pretending interest in his UFO studies. McDonald had trusted the journalist to quote him accurately, but this particular column was a classic of dishonesty and character assassination. It stated that certain unnamed "accusers" of McDonald were charging:

*...that he was using Navy funds, intended for atmospheric research, to investigate flying saucers. Pentagon regulations give the Air Force sole responsibility for UFO investigations. Yet McDonald spent the Navy's money, they charge, to visit Australia...where he interviewed 80 flying saucer witnesses. Dr. McDonald told this column that his flying saucer research and his expenditures had been approved by the Navy.*³⁴

During the phone interview, Anderson had hinted about possible misuse of government funds. McDonald made every effort to explain his judicious use of ONR funding in selected instances, but Anderson made no attempt to quote him accurately. The flat statement about "Navy approval" in the "Merry-go-round" column is oddly reminiscent of the false statements in

33. McDonald, fourth journal, reverse p. 21.

34. "Dispute Marks Flying Saucers Study," by Jack Anderson, "Washington Merry-Go-Round" (column), *Washington Post*, **September 14, 1968**.

Australian papers that the "US government sponsored McDonald's research." The statement about the sole responsibility of the Air Force to investigate UFOs was likewise distorted. All the branches of the military, the FBI, the CIA, and other intelligence agencies were investigating UFO sightings in the 1950s and 1960s. This was not public knowledge at the time, but FOIA disclosures of previously classified documents since 1975 have demonstrated this beyond any doubt. Moreover, McDonald already had proof that the CIA was directly involved and openly informed Anderson about this. At the very least, Anderson's column amounted to inaccurate and irresponsible journalism.

A few days after the column appeared, Jim Hughes phoned McDonald about it, agitated over the problems it was causing. Hughes told him that Philip Klass had sent a copy of it, with an accompanying letter, to Robert Frosch, Assistant Secretary of the Navy for Research & Development. In the letter, Klass accused Hughes of condoning the "shocking misuse of Navy research funds." (See Appendix Item 9-C, page 549.) Hughes suggested that McDonald send a night letter to the Chief of Naval Research with a carbon copy to Dr. Frosch. McDonald immediately complied.³⁵ In his telegram, McDonald stated what he'd carefully explained to Anderson—that "overlap between topics in atmospheric physics and UFO explanations had made it possible to examine some overlap areas using Navy funds." Hughes had also asked McDonald to follow the telegram with a letter, so McDonald wrote an eight-page letter directly to Robert Frosch, explaining the entire situation in detail. The last paragraph read:

Mr. Klass's previous efforts to use innuendo in place of pointed scientific rebuttal have amused me more than they have annoyed me. My disposition is still to be just a bit amused that he has managed to carry his odd brand of vindictive attack to Secretarial levels within the Navy. But, if this goes any further, I ask that you take steps to afford me an opportunity to confront Klass directly rather than to have to defend my position without full knowledge of just what he is charging.³⁶
(See Appendix Item 9-D, page 550.)

McDonald sent Klass a copy of this letter he wrote to Frosch. Jim Hughes comments: "He made a tactical error in discussing the controversy and refuting what Philip Klass said, and sending him a copy. Klass could see all his arguments first.... In a dog-eat-dog world, it's a bit naïve." McDonald's fourth journal continues the saga:

35. Western Union "Night Letter" to Frosch from McDonald, September 18, 1968.

36. Letter from McDonald to Frosch, dated September 25, 1968.

9/19/68 Phoned J. Hughes 1700

Jim had called Dick Kassander midday, asked for theses I've supervised, to bolster his position. Pressure partly from general change of attitude around ONR to "production figures" viewpoint. Are wondering why no published reports & papers, I gathered.³⁷

Kassander also sent the list of IAP publications produced under McDonald's Nonr-2173 in which partial or total support by the ONR was formally acknowledged. It was an impressive roster of 40 publications in refereed scientific journals, 21 of which McDonald had produced personally. The remainder had been written by graduate students under his supervision. The Navy seemed satisfied that nothing was amiss.

McDonald's mention of "no published reports and papers" in his journal entry, cited above, referred to the fact that Klass was formally requesting Navy officials to send him papers or articles McDonald had written on the subject of UFOs with ONR support. There were none, for two reasons: Refereed scientific journals were unwilling to accept McDonald's papers on UFOs because of their fear of sanctioning "a fringe subject." (The same situation had been met by Hynek and other scientists who were bold enough to enter the UFO research field publicly.) However, McDonald's privately published writings on the UFO subject were plentiful by this time, and they were widely distributed among McDonald's colleagues and throughout the UFO research field.

The second reason why there were no McDonald UFO papers published "with the support of ONR" was due to the fact that ONR had never directly supported his UFO studies. Besides, McDonald considered his UFO study incomplete, and he felt that a formal report was premature. There was still much to be learned on the subject. In fact, **he had begun to suspect that perhaps a dramatically new technique was needed** to adequately study the problem.

By this time, McDonald was thoroughly irritated at Klass's attempts to impugn his honesty and to stir up the Navy. He wrote in his fourth journal that it might be **"a good point to call attention to the contradiction that Klass feels sure UFOs are atmospheric electricity, yet thinks I'm mispending funds intended for 'atmospheric research.'**" Jim Hughes agrees that it will be relevant to cite recent subsonic studies [by which McDonald had been able to solve a puzzling UFO report] and to ask, 'You draw the line, Mr. Secretary, between atmospheric physics and UFO research', and is it 'shocking'?"³⁸

37. McDonald's fourth journal, reverse side p. 25.

38. *Ibid.* This paragraph has been edited slightly to make the meaning clearer in relation to the text preceding it. JEM's journals often used abbreviations and shortcuts in grammar and clarification seemed necessary in this instance.

Shortly after, Hughes called James McDonald again. Klass had now gone beyond Robert Frosch at Navy R & D and was complaining to the Navy Chief of Staff about what he regarded as misuse of Navy funds. As a result, Hughes had been called before his superior, Dr. D. King. King at first seemed "amazed with the whole business and didn't take it seriously." By the next day, however, Dr. King was getting irritated over the situation, and, in Hughes' words, had "chewed him out" for not replying to McDonald's letter of September 27, 1967 where he had made a plea to make an 'honest man' out of him by getting UFOs OK'd openly in his contract. King told Jim Hughes that his failure to reply in strong negative tones to McDonald's request made it look as if ONR was "condoning" McDonald's UFO research. The fact that Jim Hughes's immediate superiors knew about how the ONR funds were being used made no difference to King. McDonald wrote in his journal that King's remark to Hughes was an "astounding commentary" regarding the UFO problem.³⁹

McDonald looked in his files for his September 27, 1967, letter to Hughes but couldn't find it. "Oddly," he wrote, "I can't find the copy in my files, but recall it."⁴⁰ He habitually referenced and re-referenced items so as to be able to lay his hands quickly on anything he might need. It was not the last time papers and other materials vital to his UFO research would inexplicably disappear.

Contract 2173 had been ended, but in November 1968, Klass was still suggesting in letters to high Navy brass that McDonald had used the funds improperly. The Navy decided to end the accusations once and for all and sent an auditor to the IAP to examine all the expenditures on that particular contract. U. of A. President Richard Harvill was informed that Mr. George E. Girard, Director of the Review & Analysis Division of the Naval Audit Service would personally conduct the audit. McDonald was embarrassed by the situation, but he tucked his feelings deep inside. He wrote:

*I gave Dick copies of JEM white papers, of Federal Register on USAF responsibilities re UFOs, also mimeo copy of Klass letter of Sept 30, file on contract expenses & of my phone calls.*⁴¹

Only a few of his colleagues knew about the audit. Dr. Lou Battan, Associate Director of the IAP and head of the Meteorology Department, tried to cheer him up with a horror story, recalling the time officials from the Department of the Interior came on campus to audit the expenditures on a desalinization contract.

39. *Ibid.*, p. 26.

40. *Ibid.*

41. *Ibid.*, p. 28.

"They stayed two full weeks," Battan told him. "And they were even asking about the cost of the paper cups which each of the guys on the project used!"⁴² A reception had been held for the dedication of the desalting plant, and a very large number of paper cups were used to permit all of the attendees to test the water. Dr. Kassander suggested that **Senator Fannin**, who was present, would be able to assure **Secretary Udall** of the success of the water-tasting activity, should the auditor wish to disallow the cost of the cups. That auditor dropped the matter!

McDonald appreciated Lou Battan's attempts to cheer him up with the "paper cup" story. He decided that he wasn't going to let the situation get him down and went about his work as usual. He spoke before the AIAA conference in Oklahoma City, with expenses paid by the AIAA, and titled this talk "UFOs—The Key Question and a New Hypothesis." The hall, as usual, was crowded, and the talk was well received. A **Maj. Thompson** and his aide, a **Lt. Fielding** from **Tinker AFB**, who were the UFO officers on base⁴³ attended and spoke at some length to McDonald afterwards. Later he wrote in his journal: "Thompson conceded afterwards there's a lot to my position."⁴⁴

That Saturday morning, Kassander laid a handwritten memo on James McDonald's desk. McDonald was not at his office that day, for he was still at the AIAA conference in Oklahoma City.

"URGENT Sat. A.M.

*Mac: Attached is some of the material I have prepared for [the auditor] according to specific request. I believe his conclusion is that we have done nothing without the concurrence of the contract monitor...that [ONR] superiors had a pretty clear idea of what was going on and should have told Klass that the Navy can look into UFOs if they want to...."*⁴⁵

Meanwhile, McDonald was seizing every opportunity to talk with AIAA colleagues about the serious nature of the UFO problem. **He perceived that some sort of network should be set up between the branches of the military, the scientific community, other government agencies and the public, in order to gather hard documentation** which would prove the reality of UFOs. In such a network, the active participation of SAC bases would be crucial, for these bases had **sophisticated radars** capable of detecting unidentified aero-

Hydrol, if you leave out any group it makes it hard to know if something is known, will know or simply

I wonder if these radar stations are hooked up to external networks. If they're remotely accessed as they could be used in this project legitimately or illegitimately (like satellites in orbit)

42. Ibid.

43. McDonald used the term "UFO officer" to denote the AF personnel on each Air Force Base who were charged with the responsibility of receiving UFO reports and channeling them to Project Blue Book in Dayton.

44. McDonald's fourth journal, reverse p. 28.

45. Memo from Kassander to McDonald, in JEM UFO files.

forms operating in Earth's atmosphere. McDonald was determined to draw SAC into the investigation, if possible. His journal cites his efforts:

11/16/68 OMAHA AIAA

Lunch Friday with T. Penn Leary & Bill Strauss.... Knows all the SAC brass & will try to get the word to them, knows Walt Roberts from session at Aspen Inst.... May try to set up session with me & SAC general....

First Lt. Kebler came for Gen. Stewart (Intelligence). Fielding does as one duty, reporting to Gen. Stewart re UFOs at any & all SAC bases. No previous knowledge of UFOs. Sounded naïve.

Capt. Ernie Pope is in Trajectory Dir. programming warheads to target. Is Aero Engineer & getting out in couple months. V. Admiral Noel Guyler J. S. T. P. S. [title, group] Offut AFB came. Aviator.

None?

Sharp. Sat at speakers' table & we got fair discussion. I'll send him reprints.⁴⁶

When he arrived back at Tucson, after the non-stop weekend of interaction with military and scientific types about UFOs, auditor Girard was still on campus. Girard spent two hours with him, going over all the details of how the monies from Contract 2173 had been spent.

There is only one entry in McDonald's journal which speaks directly about the cutoff of his funds. While in Oklahoma City, he phoned Jim Hughes to tell him that his ONR Final Report on #2173 was on its way. Hughes told him that Girard had also gone to the Pasadena ONR office, as part of his investigation. Girard was quoting McDonald's "honest man query" and had also asked the same question: "Why didn't Jim Hughes reply to McDonald's September 24, 1967, 'honest man' letter?" pg. 194

Hughes told McDonald that he had explained the whole thing to Girard including the fact that ONR had invited McDonald to speak to the highest ONR officials about his UFO studies, inviting all ONR staff. "What more could I do to let ONR know of your interest in UFOs?" Hughes asked. "I added that ONR only had 30% of your time anyway."⁴⁷ McDonald's journal continues:

Jim gathers that Girard's final report will stress that UFO research was going on, but there was no misapplication of ONR funds. Jim urged Girard be careful re. wording because of what Klass will do with it. Girard said it'll be looked at by USN consuls in last stages.⁴⁸

46. McDonald's fourth journal, reverse side p. 28.

47. *Ibid.*, p. 30.

The Navy auditor found all of McDonald's expenditures on Contract 2173 open and aboveboard. Nevertheless, that particular contract which had permitted McDonald to investigate UFOs on the side had been allowed to expire without renewal. McDonald's reputation for ethical behavior remained intact, and Navy Department officials, particularly those at ONR, continued to respect him for his continual contributions to atmospheric physics, cloud dynamics and weather modification. In spite of the contract cutoff, he continued on in UFO research as though nothing had happened. His controversy with Philip Klass and Jack Anderson made merely a ripple in UFOlogical waters, and he never spoke openly of the loss of his funding. Only those who were very close to him knew any of the details.

An unexpected poignancy, surrounding the tragedy of the bitter controversy between McDonald and Klass was that Philip Klass, like McDonald, has qualities of easy cordiality and a mischievous sense of humor which he uses to very good advantage whenever he chooses. It is regrettable that the two men were not able to direct their energies toward a common goal—that of alerting the scientific community to investigate the UFO phenomenon as a scientific question, just as McDonald had done with Donald Keyhoe, Dick Hall, and other researchers, engineers, and scientists.

Permission to use ONR funding in any way for McDonald's UFO research was never re-established. The actual reason why the Navy cut off McDonald's Contract 2173 remains unknown. He was exonerated completely of Klass's charge that he had misused public funds; the cutoff of his contract indicates that some high-level political concerns were involved. Two possibilities have been suggested:

1. that high Navy officials (and perhaps other governmental sources?) felt that Klass should be appeased, since he was a Senior Editor of a leading aerospace magazine; or
2. that the DoD made the final decision, in the light of Air Force complaints that a Navy-funded scientist was severely criticizing Project Blue Book. In other words, was the funds cutoff done simply to ameliorate friction between the branches of the military?

There are sub-possibilities. It's one thing to want to investigate the another to allow the person investigating to stipulate "position" publicly.

"The Navy feared that I might do a story in *AW&ST*," relates Klass. "When Russ Greenbaum assured me that...[they] would not continue to fund JEM's UFO activities, I agreed not to write an exposé article."⁴⁹

So Klass was trying to kill McDonald's research. If this really worried maybe I should focus on trying to promote more media attention on any the work for a respectable paper.

48. *Ibid.*

49. Letter from Klass to author, *op. cit.*

A hint that the DoD might have authorized the cutoff is found in a letter which McDonald wrote to Jim Hughes in October 1968, in which he mentioned that Jack Deyo was now the Head of the ONR in Tucson. He added, "As you probably know, Deyo is now in residence here for ONR (and, I guess, DoD in general)."⁵⁰ The implication here is that there was such close cooperation between the ONR and the DoD that the same person could represent both in a particular city. This letter is included as Appendix Item 9-E (see page 551) because it also dramatically demonstrates the complex involvement of McDonald in the UFO field and the meticulous nature of his research.

Although McDonald was left virtually without resources to fund his UFO research for several months, all of his atmospheric physics projects at IAP continued with ample funding. He used his modest honoraria from his talks to help pay for the telephone interviews he continued to conduct on promising UFO reports around the country. This source of funding did not cover all the expenses, however, and soon there was a \$1,000 phone bill at the McDonald home, which greatly worried Betsy. McDonald's overall income remained virtually the same, however, for the contract that had terminated was replaced with another ONR grant for atmospheric physics projects.

"The overall funding was not cut," explains Betsy McDonald. "But for us, it specifically affected Mac in his work. I knew it. The important thing was not the amount of money, but that they did it, that they attacked it that way and tried to get at him that way."

In the midst of all the controversy, McDonald continued working on the Navy's Stormfury Panel, the NAS's panel on weather modification, as well as chasing down every aspect of UFO research which he considered worthy of attention. One case in which he and other UFO researchers took great interest was the Socorro, N.M., landing which occurred on April 24, 1964. The primary witness, Deputy Marshal Lonnie Zamora, a law-enforcement officer of impeccable reputation and undoubted courage, had seen a white, egg-shaped craft in an isolated gully outside the town of Socorro. Zamora saw two small individuals standing near it. He thought it was an upturned car that had crashed into the gully. As he drove within 150-200 yards from the craft, he saw that the "little people," as he termed them, were only about four feet tall, and that the white object was not an automobile but an egg-shaped craft. He headed toward the gully on a dirt road to render assistance. The "little people" seemed startled as he drove toward the strange machine. Then a slight rise in the unpaved road hid it temporarily from his view, and as he came over the rise the "little people" were no longer in sight.

50. Letter from A. Richard Kassander to J. C. Deyo, December 14, 1968.

As Zamora got out of his cruiser, the object rose into the air with a roar; a bluish flame emitted from the bottom. Startled, he backed up and bumped into his police cruiser; his glasses fell off and broke. The object traveled horizontally toward the south, and mesquite and other green desert plants were left burning on the site. Indentations were left in the earth where the object had sat on rodlike legs, and smoke and ashes filled the air. Zamora called for assistance on his police radio and then went to examine the site. He noticed a melted, lava-like rock where the object had rested on the ground. Within two minutes, **Sgt. Sam Chavez** arrived on the scene in response to Zamora's call, and he confirmed the ashes, smoke and burning mesquite. A third officer, Deputy **Sheriff James Luckie**, arrived about two minutes after Chavez and also testified to the indentations, the smoking ground, and the burning vegetation.

"Those bushes are hard to set afire," Chavez stated later to the Air Force officer who investigated the incident. "Maybe a blowtorch would do it. They're always green and hard to burn."

Strangest of all, perhaps, within 45 minutes, an unidentified military-type vehicle, equipped with a **binlike apparatus**, entered the area. Stone-faced men in uniforms without insignia scoured the landing site, taking away the melted rock, soil, and some charred vegetation. The only people who were aware of Zamora's sighting for about an hour after the craft took off were law enforcement officers in Socorro; their police radios had a range of only a few miles. Where did this cleanup truck and its workers come from? Even more significant, how did they learn of the incident; they could not have learned about it by monitoring police radios.

Researcher **William L. Moore**, a well-known UFO investigator, while interviewing Lonnie Zamora several years later, was the first to notice this peculiar timing. Moore theorized that the unmarked truck was from **Stallion Site**, a large up-range USAF radar site about 20 miles away on **White Sands Missile Range**. Technicians there might have been following the craft on radar and sent out equipment immediately to gather physical evidence of the landing. A time span of 45 minutes would suit this scenario nicely.⁵¹

When J. Allen Hynek, as Blue Book consultant, investigated the case a few days later, he expressed surprise that the object had not been caught on **Socorro Airport's** radar, since the landing site was on the very edge of this civilian

51. Author's interview with researcher William L. Moore, 5 August 1994. Although it was a well-known fact that military personnel cleaned up the landing site the evening of the landing, **Moore was the first UFO researcher to learn from Zamora the immediacy of military reaction** and the specifics of the equipment used. He was also the first to speculate which NM radar site had detected the craft—Stallion Site, part of the huge White Sands research grounds. The UFO landing site was near the edge of this government facility.

airport. Jim and Coral Lorenzen, directors of APRO, learned the answer quickly. The incident had occurred on Friday afternoon, and all airport radar had shut down at 4:00 P.M. No one apparently thought to inquire at radar sites as far away as twenty miles!

This was one of the few cases where reported occupants of a landed UFO could not be ignored or swept under the rug. Zamora was ridiculed by many townspeople, but he stuck to his statement that he'd seen two "little people" near the craft, and his two corollary witnesses corroborated the after-effects of the landing.

The military wasted no time sending Capt. Richard T. Holder to investigate the case the same day.⁵² Strangely, Capt. Holder's investigation was requested by the FBI instead of the Air Force, the government agency supposedly in charge of investigating UFO reports. Holder was accompanied to the site by FBI agent, D. Arthur Byrnes. Holder specifically noted in his report that the FBI had requested that no mention be made of FBI interest in the case (see Appendix Item 9-F, page 552). Holder's extensive report included Zamora's description of the object and the statements of the corollary witnesses. He did not make any Brownie points with Zamora and Chavez when he suggested to them that they might have been the victims of a "hoax." Zamora, who felt all along that the unidentified craft was some type of experimental Earth technology—an hypothesis shared by Chavez—did not appreciate Holder's statement. "We're not kids," they told him.⁵³

The landing at Socorro was widely publicized in the media. J. Allen Hynek and Maj. Quintanilla of Blue Book tried to identify the object as an experimental craft, perhaps a lunar exploratory module (LEM) being developed at the LEM Test Facility at nearby White Sands Missile Range (WSMR). All their efforts to identify it failed, and Blue Book listed the case as "Unidentified." Later, McDonald researched the same aspect and also came to the conclusion that the LEM hypothesis could reasonably be rejected. In April 1965, a full year after Zamora's report, the LEM's ascent engine underwent a five-second test firing at WSMR. In the early months of 1969, five full years after Zamora's sighting, LEM test devices were being flown

52. "UFO Report," by Capt. Richard T. Holder (see Appendix Item 9-F, page 552), a copy of an original U. S. Army document found in McDonald's files. This document identified an FBI agent who had prior knowledge of the sighting and who referred it to military personnel for investigation. It also cautions that no mention of FBI involvement in the Socorro case be made public!

53. From McDonald's hand-typed notes in file, "Socorro Landing Report 4/24/64," p. 1.

in Texas, but were still experiencing malfunctions in some components.⁵⁴ Logically, the object was not the LEM.

McDonald did not realize that the FBI had also covertly investigated Zamora's landing report; however, Byrnes made a full report, dated May 8, 1964. This formerly classified FBI report was obtained years later by researcher William L. Moore through the FOIA. Byrnes wrote a straight-forward account of the incident. He apparently had been at the site before Captain Holder was even notified, and he had noted the ground traces, including the four "landing mark" depressions, which were rectangular in shape and approximately 16" x 16". Byrnes described Zamora as a "well-regarded, industrious, and conscientious officer and not given to fantasy." An intriguing addendum to Bryne's report is an "Urgent" teletype sent to the FBI from the SAC base at Albuquerque, describing Zamora's sightings, so apparently SAC had notified the FBI even before Capt. Holder was asked to investigate on behalf of the Air Force.⁵⁵ McDonald, of course, was not aware of SAC's and the FBI's participation in the case, but his idea about attempting to involve SAC in a networking study of UFO reports was at least perceptive!

The Socorro case is the only landing trace/occupant case listed as "Unidentified" in Project Blue Book files. The case also forced NICAP to relax its ban on publication of occupant sightings. Because of Zamora's credibility, NICAP began tentatively to publish, in the *UFO Investigator*, a few occupant cases which had been carefully investigated by experienced NICAP personnel.

The Socorro sighting continued to intrigue McDonald. He carefully rechecked the work which the Air Force, NICAP, APRO, and other researchers had done on the case. His colleague Professor Charles B. (Charlie) Moore of the New Mexico Institute of Mining and Technology (NMIMT) in Socorro helped McDonald immeasurably by investigating on-site for him. Moore was in a position to learn things about Zamora's character and credibility which other researchers could not access.⁵⁶

Moore also knew Zamora's cousin, Moise Zamora, who stated that Lonnie was fed up with all the notoriety from the sighting. Moore met with Lonnie Zamora in late May 1966, gaining his confidence by telling him that he'd had a sighting of his own in 1949 (see Chapter 6). Moore later reported back to McDonald that he had been quite impressed by Lonnie Zamora because "he was not promoting anything." Lonnie had worked for NMIMT about seven years as an aircraft mechanic and had helped build that facility's Lang-

54. Letter from McDonald to Charles B. Moore, April 19, 1969.

55. "Unidentified Flying Object—Socorro, New Mexico 24 August 1964," FBI report.

56. McDonald, James E., fourth journal, reverse p. 19.

muir Lab, but later entered law enforcement. The publicity from the sighting, continual harassment by the media and repeated requests for interviews by UFO investigators led him to accept a tempting offer as manager of a Chevron station in town. The better pay and anonymity it offered was more than he could turn down.

Talking with highly placed Socorro officials, Moore learned that Zamora had not been asked to leave the police force (as rumors stated) but had quit because of the better job offer. There were no complaints of any sort against him from any quarters. Moore assured McDonald that Zamora's reputation and character was "stolid and solid."⁵⁷ From 1966 through 1970, Moore worked intermittently on the Socorro landing case whenever McDonald asked him, cheerfully following up on his friend's intermittent requests for information.

"McDonald was a good person," relates Professor Moore. "We had disagreements on how thunderclouds got electrified," he states with a chuckle, "but...this was a scientific disagreement, none other."⁵⁸

Moore, at McDonald's request, also followed up on rumors that there had been corollary witnesses to Zamora's sighting. "There was a Whiting Bros. station on the north side of Socorro, and it was operated by a man named Opal Grinder," he relates. "Grinder made the report later that day.... A Colorado motorist had driven into the station and, I think the right word is "complained," that he was nearly struck by a flaming aircraft that came from the East as he drove up Highway 85 into Socorro from the south side. And this was about the level of Socorro Airport. Grinder reported that this person had been quite vocal about it, and then had driven off, but he did not get the license number or the name of the motorist. And he vanished into oblivion." Some attempts were made by researchers to trace this motorist—who could have given invaluable testimony regarding the strange craft—but their efforts were unsuccessful.

Lonnie Zamora took Moore out to the landing site. He told Moore that the flame from the craft had melted some of the rock beneath it, and that in the area of the "landing holes" there were some metal streaks, where metal had been dragged across the rhyolite (lava rocks) on the ground. He stated that the Air Force investigator, Capt. Holder, had come from Stallion Site, and that Holder took the melted rock and the rocks with the metal streaks back there. Moore wrote Capt. Holder, wishing to interview him personally on McDonald's behalf, but by that time Holder had been transferred to Alaska. He wrote to him in Alaska but received no answer. Moore recalls how he attempted, three years

57. *Ibid.*, reverse p. 22.

58. Author's interview with Prof. Charles B. Moore, January 10, 1995.

after the fact, to find physical evidence at the site that the area had, indeed, been subjected to high heat.

"Following what Lonnie said, I talked with the State Police people, and they essentially confirmed the reports," relates Moore. "I then went back to the site and took a coarse metal screen, and I sieved the whole area...that the exhaust had hit, looking for molten rock or previously melted rock. I found nothing." He also noticed that fragments of rhyolite—a very acid volcanic rock which is the lava form of granite—covered the area where the craft had reportedly landed. As an experiment, Moore gathered samples of rhyolite and lava from an area near the NMIMT and heated them with a blow torch.

"When I put a torch onto the rhyolite...it would expand and come off in little flakes. They were very characteristic. And when I heated the lava—which was black, vesicular, or bubbly—it melted into a glassy surface."

Moore went back to the area where Zamora had seen the odd craft land and looked again for signs of rhyolite and lava rocks that had been heated. "I never found anything at all—nothing physical or tangible that would confirm the story. There was just no evidence at all that any heat had been applied there other than some mesquite bushes there had charred roots.

"There was a fire when [Sgt. Chavez and Dep. Sheriff Luckie] came out," confirmed Moore. "It was established that there was some sort of fire in some mesquite or creosote bushes there. A number of people here in NMIMT said they went out the next day, and that there were well-marked indentations in the ground." Moore had not investigated the site himself until he was first requested to do so by McDonald in mid-1966, fully two years after the event. The indentations had eroded away with the summer thunderstorms, but he photographed the gully site and also a ring of rocks which still surrounded the area where one of the "leg-holes" had been.

"My own feeling is that probably Zamora saw something, possibly something from the proving ground, the northern extension of which is just on the other side of the river," states Moore. "In fact, one of the people who still works with me was there the next day and believes pretty strongly in the existence of something landing there." Moore states that he favors the possibility that Zamora had seen an early version of the LEM, in spite of the fact that McDonald had written to him the results of his investigation on that point. The Air Force, Hynek and McDonald had all researched this hypothesis and had come to independent conclusions that the LEM was not operational in 1964.

McDonald pointed out another reason why the strange machine most probably was not an experimental LEM. Zamora had described how a bluish-orange flame emitted from the craft as it rose from the ground, but that the

flame ceased as the object traveled away on a horizontal trajectory. McDonald reasoned that Earth technology like the LEM would require sustained propulsive power, represented by the flame, to travel on a horizontal path.

In early January 1967, McDonald wrote an account, as described by Professor Moore, of a visit by Philip Klass to the Socorro site. Klass had invited him to go out to the landing site with him. Unknown to Moore, Klass had also invited Zamora and Chavez and sat in his car talking to the two officers. When Moore attempted to join the conversation Klass, according to Moore's account, turned "aggressive."⁵⁹

"He argued with me about various points of plasma physics," Moore told McDonald. "He tried to say that the [leg] holes were gopher holes. Then he proposed that maybe Zamora saw a 'plasma'." Moore realized that plasmas could not take on the white, machine-like features of the craft which Zamora had described and sketched for numerous investigators. If one accepted Lonnie Zamora's credibility, which Moore did, it was illogical to accept it as a "plasma." He argued with Klass.

"Maybe Lonnie here saw a dust devil, then," said Klass.

To Moore, the explanation of "dust devil," a cohesive, whirling wind which carries dust and debris along its path, looking very much like a tiny tornado, was as unacceptable as "ball lightning." Charlie Moore's arguments didn't discourage Klass, who persisted in trying to explain the Socorro object.

"He tended to twist all my statements around, and answered my questions before I was half through with my replies," Moore related.⁶⁰

In his frequent communications with McDonald regarding the Socorro case, Moore expressed his surprise that the object landed scarcely a half-mile from the nearest dwelling on the edge of town, and about a half-mile from the north end of the Socorro airport's approach path. "No experimental FAA or USAF craft would ever dare land one-half mile from residences, unless it was an emergency," he told McDonald. Moore also relayed to McDonald another incident which seemed significant to him: While he and Zamora were viewing the site, some tourists came up, asked, "Is this the place where the cop saw the flying saucer?" Zamora merely answered, "Yup."⁶¹ Moore was impressed by the witness's desire to avoid publicity!

59. McDonald's hand-typed notes in file, "Socorro Landing Report 4/24/64," reverse side of p. 2.

60. *Ibid.*

61. McDonald, second journal, reverse p. 23.

There were persistent rumors for years after Zamora's 1964 sighting, to the effect that the town of Socorro had made a tourist attraction out of the "landing site" in the gully, and that a road had been paved from the main highway leading to it. In March 1970, Charlie Moore visited Tucson to give a colloquium at the IAP. Afterward, he and McDonald discussed the Zamora case until after midnight. Moore told him that no road was ever paved into the site. Four years later, the "road" into the gully was the original dirt track that Zamora and Chavez had used to get to the landing site. No signs were ever put up, and there was no evidence around Socorro that the site had ever been treated as a tourist attraction. Moore doubted that any promotion was ever considered.

There was also a rumor that "fused sand" had also been found around the landing area, and McDonald set about trying to track this down. Charlie Moore searched the area but could find no traces of fused sand, even under the surface. If a government-type vehicle/crew had scoured the landing site within 45 minutes, as reported, all traces of fused sand, if it existed, might have been removed. The importance of the fused sand, of course, was that tremendously high temperatures, far beyond the capacity of an ordinary hoaxer, would be needed to produce it.

The "fused sand" rumors were never investigated until McDonald took the opportunity in September 1968 to ask Hynek if he'd ever heard of the rumor. Hynek said he had not, even though he'd investigated on-site for a full four to five days, immediately after the incident occurred. One month earlier, however, McDonald had gotten a lead on the "fused sand" from Stanton Friedman, a nuclear scientist who was openly involved in UFO research. Friedman had spoken before the Las Vegas section of the American Nuclear Society (ANS), and a member of the audience, Mary G. Mayes, came up to talk with him afterward. She told him that, while working on her masters degree in radiation biology, she had been asked by the University of New Mexico to analyze plant material from the Socorro site. Afterwards, she was told to turn in all records and samples, and then heard no more about it.

McDonald, at Friedman's suggestion, called Mayes and spoke at length with her over the phone. Two other technicians had worked on samples from the landing site also, but she could not recall who they were. They were graduate students like Mayes; one a woman working in microbiology and the other a man working on rabies research in biochemistry. Mayes did not know how they were notified and knew no details about what work they might have done. They were told to "keep quiet" about the work, just as Mayes had been.⁶²

62. McDonald file, "Socorro Landing Report 4/24/64."

Mayes had gone to the site the morning after the landing, to collect samples of plants. While there, she met some "USAF people" who had heard about a rock that was heat affected. She also told McDonald that she saw an area where the heat had turned the sand "glassy." There were many people there, but the site was roped off, so that "the others couldn't get down close."⁶³ She collected plants, parts of plants, and "plant substance" and took the materials back to the lab to analyze. She found that the plants were scorched—"not charcoaled, but completely dried out." Plant sap phloem and xylem of creosote bush and low mesquite had "burst out through the surface of the bark in many places." She found no evidence of radiation in the materials, but did find "two organic substances" which were not identified. The rest were ordinary plant fluids.

Mayes's analysis was done under Dr. Howard Dittmer at UNM, but an Air Force officer whose name Mayes did not remember took the results away. Some time later she wrote to Wright-Patterson to try to get the results since she felt she had "need to know," but she never obtained any information. She did no work on the fused sand, since her specialty was radiation biology.

A few weeks later, McDonald was in Las Vegas and interviewed Mary Mayes in person. She described the sand as "like glass and had holes in the edge. It "looked like something splashed and dropped" and she felt it was a "hot jet that hit it."⁶⁴ He showed her sketches of the landing area, and she pointed out to him where she had seen the fused sand—on the southeast side of the gully. There was a 25"-30" patch which ran down the side of the gully as if in a stream 8"-10" wide, tapering down to about 1". The patch was about 0.25" thick. The portion toward the side of the wash was like "a Campfire Girl cookie" but the near edge was smooth.⁶⁵ McDonald pointed out to her that no other researcher had located any other person who actually had seen the fused sand. She said she just assumed others had seen it and supposed it was a well-known feature of the event.

Mary Mayes visited Socorro toward the end of August 1968 and unsuccessfully tried to locate the name of the two other graduate students. She promised McDonald that she would search through her papers for clues to their identities, since she had been acquainted with them both at UNM. However, no other mention of this has been found in his files to date.

McDonald continued in this fashion, following up leads on classic cases like the Socorro incident, researching recently surfaced UFO cases, and cooperating with NICAP investigations. All this went on in the midst of his funding

63. *Ibid.*

64. *Ibid.*

65. *Ibid.*

cutoff controversy. At the same time, his academic colleagues were sending conflicting messages to him about how they felt about his involvement with the “unknowns.” But he was also making a major breakthrough. Largely through his efforts, a Congressional committee was on the verge of an open hearing. The subject: UFOs.

Battering the Gateway...

*Enniscarth is in flames, and all Wexford is won,
And the Barrow tomorrow we will cross.
On the hill o'er the town we have planted a gun
That will batter the gateway to Ross.*

—from “Kelly, the Boy From Killan”

*New truth is always a go-between, a smoother-over of transitions.
It marries old opinion to new fact so as ever to show a minimum
of jolt, a maximum of continuity....*

*By far the most usual way of handling phenomena so novel that
they make for a serious rearrangement of our preconceptions is
to ignore them altogether, or to abuse those who bear witness
for them.*

—William James in *Pragmatism*

McDonald's entrance into the UFO field helped bring about a major event for which NICAP had worked hard and long. Ma. Don Keyhoe had always felt strongly that Congressional action could penetrate the government “cover-up,” for the legislative and executive branches of the government controlled the military. If enough members of Congress could be convinced that UFOs were a serious scientific problem, and especially if they presented some type of threat to the nation, Congress might demand that the Air Force release all classified UFO data. He felt, as did McDonald, that the people had the right to know.

Starting in mid-1957, NICAP members began urging their Congressmen to hold open hearings on the UFO subject. A few secret Congressional hearings were held, but their proceedings were never made public. One of these secret hearings was held April 6-7, 1966, before the Armed Services Committee, chaired by Rep. L. Mendel Rivers, where J.

Allen Hynek and Hector Quintanilla had testified. McDonald obtained access to a partial summary of the UFO hearings, which was published by the U.S. Government Printing Office and made available to the public.¹ In this summary it was revealed that veteran UFO researcher Raymond Fowler's report on the Exeter, N.H., sightings, introduced by Fowler's Congressman William Bates, had sparked a debate and the Air Force was made to retract its evaluation of those remarkable sightings from "identified" to "unidentified." Aside from this one significant retraction, however, McDonald concluded that no scientific evidence had been given which pointed to the reality of UFOs and that "the Air Force line" prevailed throughout. He must have been intrigued that, after the public part of this hearing had been concluded, the Committee went into "Executive Session," the transcript of which was never released.

One statement by Hynek at the public part of the hearing was especially evasive and irritated McDonald. He later expressed his displeasure to Hynek in no uncertain terms.² Hynek had testified:

During the International Geophysical Year, I was in charge of the optical satellite tracking program, and you would think that with the surveillance the astronomers placed on the sky that, if these objects existed as tangible objects, surely these astronomers would have seen more than they did. It is a dilemma.³

Other statements Hynek made in this hearing also irritated McDonald, especially his testimony about the Hillsdale, Mich., sighting: "No individual that I talked to, and no group of persons, could agree that they had seen anything either enter or leave the swamp," Hynek had testified.⁴ Yet NICAP had obtained detailed reports from Michigan police officers which specified that disc-shaped, solid objects had been seen emerging from a Hillsdale college landing

1. "House Armed Services Committee Document No. 55 'Unidentified Flying Objects,' Ref. L. Mendel Rivers," Washington, D. C., Government Printing Office, p. 6009. The Rivers Committee UFO hearings were published as a portion of other hearings before the House Armed Services Committee, hence the page number cited, which does not reflect the true size of the much smaller UFO Hearings document.
2. Letter (never mailed) from McDonald to Hynek, July 1970, third draft. (See Appendix Item 4-A, page 532.)
3. Barely three months later, Hynek was changing his tune. In an interview in a major newspaper in October, he listed several reasons why the UFO problem should be taken seriously: His seventh reason was: "Radar, meteor cameras, and satellite tracking stations have picked up 'oddities' on their 'scopes or films which have remained unidentified.'" *Chicago Tribune*, byline Ronald Kotulak, October 22, 1966.
4. "House Armed Services Committee Document No. 55 'Unidentified Flying Objects,' op. cit., p. 6071.

location,⁵ which McDonald later verified was not a swamp, but a large, well-cared-for lawn. The fact that false testimony had been given to Congress was intolerable to McDonald, and he threw the weight of his Washington contacts and reputation behind NICAP's push for open Congressional hearings. Keyhoe and he agreed that only reputable and authoritative scientists who had studied the subject should testify. Congressional hearings were not new to McDonald; he had testified before a Congressional committee during the Titan controversy and on several other matters concerning atmospheric physics (see Chapter 1).

Keyhoe shared with McDonald all the facts of his early attempts to bring about open UFO hearings "on the hill." During 1960-61, he had almost succeeded. Keyhoe was acquainted with many Congressmen and other government officials and had convinced a number of them that the UFO question was a serious one. The incessant flow of letters and telegrams from NICAP members to their own Congressmen also helped. In August, an extra impetus arrived: Keyhoe received from NICAP Board Member Vice-Admiral Roscoe Hillenkoetter (USN-Ret.) a signed statement in which Hillenkoetter urged immediate Congressional action to **reduce the dangers of UFO secrecy**, specifically: the **risk of accidental war** resulting from UFO formations being mistaken for a Soviet surprise attack; and the danger that the **Soviets might claim that UFOs were secret Russian weapons** against which our defenses were helpless.

Hillenkoetter's warning was part of a "NICAP Report on Secrecy Dangers," which contained verified evidence of radar-visual and photographic cases and was endorsed by more than 200 pilots, rocket, aviation, and radar experts, astronomers and military veterans.⁶ This report was distributed confidentially to several Members of Congress, including then-Senator Lyndon Johnson. Parts of it were put into the Congressional Record by Rep. Leonard G. Wolf from Iowa (see Appendix Item 10-A, page 553).

This powerful document helped convince Congressmen that UFO hearings should be held. Sen. Lyndon Johnson ordered the **Senate Preparedness Investigating Subcommittee** to keep close watch on UFO developments and on Air Force investigation of recent, significant sightings.⁷ But **it was the House, not the Senate, who eventually acted**. In May of 1961 the House Space Committee formed a subcommittee to study the UFO problem, and the members decided that open hearings should be held. They were on the verge of doing so

5. McDonald, James E., second journal, p. 3.

6. *Congressional Record: Proceedings And Debates Of The 86th Congress, Second Session*, Statement by House Representative Leonard G. Wolf.

7. From "NICAP UFO Report," (see Appendix Item 10-A, page 553).

when suddenly, and inexplicably, Vice-Admiral Roscoe Hillenkoetter abruptly resigned from NICAP's Board of Governors, stating: "In my opinion, NICAP's investigation has gone as far as possible. I know UFOs are not U.S. or Soviet devices.... The Air Force cannot do any more under the circumstances...and I believe we should not continue to criticize their investigations." The flat statement negated a great part of NICAP's work in the eyes of the Congressmen, and hearing plans collapsed. Keyhoe, and all NICAP members, were astounded at the setback (see Chapter 4).

McDonald's entrance into the UFO research field revived hopes for open Congressional hearings. He was personally acquainted with powerful Congressmen and other government officials, including both of the Udalls from Arizona—Morris "Mo" Udall, a Representative, and "Mo's" brother, Stewart L. Udall, the Secretary of the Interior. Still, he was fully aware of the difficulties. He questioned Keyhoe and Hall about Admiral Hillenkoetter's inexplicable about-face which had helped destroy the 1962 UFO hearing plans, but no one could explain why Hillenkoetter had acted as he did. Finally, McDonald wrote in his journal: "Hillenkoetter never retracted his serious concern."⁸

McDonald's lobbying is a masterful example of how to work the halls of Congress. His journal gives complete details of the convoluted process he undertook. Eighteen months before the actual hearings took place, he became acquainted with Rep. J. Edward Roush of Indiana, who was well known to Keyhoe and convinced that a Congressional inquiry was in order. McDonald gave Roush copies of his UFO talks and other materials.⁹ He also became acquainted with Roush's staff assistant, Phyllis O'Callaghan, Ph.D., who had earned her doctorate in History.¹⁰

By April 1968 plans for an open hearing were in motion, and Roush had made a public statement that such a hearing was essential. McDonald wrote regularly in his journal during the next few months. Two things especially concerned him: He wanted to be certain that nothing about UFOs was classified or involved with national security; and he wanted all UFO testimony by the participating scientists before Congress to be strictly objective and irreproachable.

Betsy McDonald, meanwhile, felt growing anxiety about her husband's incessant research into a subject which she felt was not worthy of his time. She worried that he would become exhausted and, perhaps, depressed as had happened briefly during the Titan controversy, but McDonald gave little

8. *Ibid.*, reverse p. 19.

9. These newsclips included articles from the *Tucson Citizen*, Oct. 5th, 1966, and *New York Times*, October 18th, 1966.

10. McDonald, second journal, reverse p. 33.

heed to her warnings. He was spurred on by continuing criticism of high-profile skeptics like Menzel and Klass. In all his talks before scientific audiences, he continued to rebut their statements. He looked forward eagerly to open discussion of UFOs in the halls of Congress. If the hearings could convince the government that UFOs must be seriously studied, the objections of skeptics would fade naturally into the background.

The Condon Committee at the time was studying the UFO phenomenon with their half-million government grant, but by now NICAP, McDonald, and other researchers were receiving evidence from members of Condon's own staff that the study lacked proper objectivity. The Committee's Report was due out soon and researchers expected it to be essentially negative (see Chapter 11). In McDonald's opinion, Congressional hearings, therefore, were of prime importance and should be held at the earliest possible date.

Early in May 1968, after Roush's public statement, McDonald met with Isabel Davis and Gordon Lore in Washington to discuss the proposed hearings. Dick Hall had had to resign his NICAP post due to growing family responsibilities, and Lore had been appointed Assistant Director. Davis had moved from New York and was working at NICAP full-time. She'd rented a spacious, three-room apartment in an old walk-up building, where she lived with several cats.

Early the next day, McDonald went to Congressman Roush's office. At the Congressman's instructions, Phyllis O'Callaghan had already done a lot of ground work. She'd discussed the proposed hearing with Congressman **Mendel Rivers** and Air Force Secretary Brown. She'd also talked to Dr. **Thomas Ratchford** at the Office of Scientific Research.

Ratchford confided to O'Callaghan several bits of information about how the work of the Condon Committee was proceeding, and she shared them all with McDonald. As she talked, McDonald realized with some consternation that Ratchford's "facts" were all erroneous!¹¹ That same day, he spoke with **Dick Olsen**, aide to "Mo" Udall, discussed power outages with **Rep. Ryan**, and talked to one of **Rep. Daddario's** aides. All of these Congressmen agreed to lend support to Roush for the hearing.

The wheels of government ground slowly, but by June 20 O'Callaghan was handed the job of tentatively planning the scientific panel. She requested McDonald's advice. He urged her to tell Roush that, during the actual hearing, he should expressly ask about military-related and "obfuscation" cases, of the types that NICAP and similar groups had brought to light and which were so plentiful in Blue Book files. He suggested that Roush officially ask him to put

11. McDonald, fourth journal, p. 1.

some of his criticisms of Air Force UFO investigations in writing. In that way, McDonald reasoned, he could put his objections into terms that the testifying scientists would have to confront. O'Callaghan concurred.¹² Still, no date had been set for the hearings, and Roush was not even sure they would be held.

The same day, the indefatigable McDonald, at Roush's suggestion, spent an hour with Rep. George Miller. Miller, being an elder statesman, had great influence over which subjects would be discussed in certain Congressional committees. He was known to be interested in UFOs, and McDonald was determined to cover all bases. Miller had a "grandfatherly chat" with him, with Miller doing most of the talking.¹³ He cited the pros and cons of UFO reality, using popular logic. There were billions of planets, Miller told McDonald; consequently, on some of them, there logically could be civilizations more advanced than ours. On the other hand, Miller advised, "It pays to be skeptical. Remember Shakespeare, and the advice to Laertes, 'There are more things in heaven and earth than are dreamt of in your philosophy'."

McDonald had heard all this before, but he tactfully let Miller talk. Miller told him about a woman in Silver Spring, Md., who claimed to have movies of UFOs and who called him up from time to time, complaining that local aircraft landing patterns interfered with UFO landings at her home! McDonald was aware of this contactee, Madeleine Rodeffer¹⁴, and commiserated with Miller. He told Miller that the "crackpot fringe" had discolored the UFO problem badly, and Miller seemed to agree.¹⁵

Miller also brought up the possibility of a jurisdictional problem: Would open hearings interfere with the Air Force's official responsibility for UFO investigation? McDonald explained his discussions with various officials, which had indicated there didn't seem to be a jurisdictional problem. He'd also heard that the USAF was planning to rid themselves of the problem by the fall, anyway, so the question was moot. The two continued to discuss the problem pro and con, with McDonald citing promising cases which kept surfacing.

"Things like this keep coming along," he told Miller. "I'm convinced that we've missed the boat on the UFO problem."¹⁶

12. *Ibid.*, reverse p. 4. Roush later requested that McDonald write this statement, which he called a "bill of particulars" (See Chapter 11.)

13. *Ibid.*, reverse p. 4.

14. Her name is also spelled Rodifer in some sources.

15. *Ibid.*, p. 5.

16. *Ibid.*

so the technique is to convince a senior statesman and then you get hearings?

Suddenly, Miller casually told McDonald, "Well, I've told Mr. Roush he should go ahead and have some hearings. I've warned Roush to be careful not to overstep jurisdictional barriers, however. I told him to use care not to prejudge the USAF shortcomings."¹⁷

McDonald was a bit puzzled at the offhand way Miller indicated his "okay." His reaction reminded Miller that the Air Force's shortcomings were all too apparent, and he tried to reassure him. "If the Air Force has mishandled it, Congress has ways to handle that," Miller said. "For example, I sit on the **Armed Services Committee**." - So work on the arrival chair of the Armed Services Committee

Because of Miller's low-key manner, McDonald really wasn't sure that the elderly Congressman had said they'd definitely have hearings! After their meeting, McDonald went straight to Roush's office to meet with Phyllis O'Callaghan and Roush's other aide, **Bill Stanton**. He gave them the news about George Miller's go-ahead, and Stanton confirmed that they knew Miller had said this to Roush.

"But Miller is so elderly, Ed Roush was afraid he'd forget he'd said it," explained Stanton. "So Roush felt unsure it was definite!"¹⁸

The three decided to go ahead with plans for the hearing, assuming that Miller's okay was definite. Phyllis O'Callaghan called Rep. **J. E. Karth's** office, since Karth was instrumental in the **Committee on Science and Astronautics (CSA)** before which the hearings would be held. Karth was at roll call, but his administrative aide **Robert Hess** came to the phone. He was personally disinterested in the idea of UFO hearings. McDonald briefly outlined the Herman UFO sighting, which had occurred near Hess' home town.

"I don't know anything about that case," replied Hess in a rather derogatory manner.

McDonald tried again, telling Hess about the Long Prairie case, which was also a well-documented sighting.

"Well, I know about that case. **Joyce Kilmer** comes from Long Prairie," remarked Hess irrelevantly. "But nothing ever happens in Herman!"¹⁹ McDonald cut the call short, fed up with the aide's attitude. He then went to "Mo" Udall's office and summarized the day's results to Udall's aide, Dick Olsen. While they were talking, Udall came in. He said he'd just seen George Miller in the hall,

17. *Ibid.*

18. *Ibid.*

19. *Ibid.*

who'd told him he planned to have some UFO hearings. McDonald was relieved to have the information confirmed!

McDonald discussed the casual Air Force handling of current promising cases which were being investigated by NICAP. Olsen suggested that now was the time for McDonald to write up a scholarly summary as a basis for the planned Hearings. "This will be a document that Roush and the others can use as a core of the hearing," Olsen said. "It'll give the Congressmen's staff people something they can get their teeth into." McDonald was well aware that *Congressmen normally leave most preliminary work to their staff aides* but cited the need to get a request for such a document from Roush first.²⁰

In helping to plan the hearings, McDonald was probably impelled by information he'd recently learned: UFOs were being discussed in Pentagon briefings. He had learned this during a discussion with his ONR contract monitor, Jim Hughes, and wrote about it in his journal:

*5/24/68 J. Hughes phoned. UFO matters came up in Pentagon budget briefing he attended. See yellows....*²¹

"Yellows" referred to pages from legal pads which McDonald filled with notes about important meetings, phone conversations, and the like. Hundreds of pages of handwritten "yellows" were found in his files, covering many different topics. It was of great interest to him that UFOs were being discussed secretly in Pentagon briefings. The "yellows" on the Pentagon briefings have not yet been found in McDonald's files, but when Hughes was asked if this journal entry could be quoted, Hughes replies: "If it fits into a chapter. I can't remember anything on that specific briefing, but UFOs were such a common subject in the newspapers, and the military was involved. There's no secret about that. So naturally they could have come up in any DoD briefing, but I can't remember a specific instance.

"But you know, there was a time around Washington, when UFOs were making sensation," continues Hughes. "They were scrambling Air Force jets to send them out here or there, to look at this or that phenomenon. The military was involved because if there was anything to UFOs, they'd have to know about it."²² Hughes might have been referring to the 1952 Washington, D.C., overflights or possibly a flap that had occurred around Washington, D.C., in the 1960s.

20. *Ibid.*, reverse p. 5.

21. *Ibid.*, reverse p. 2.

22. Author's phone interview with James Hughes, 21 December 1994.

During the period of advising Roush's office on the proposed hearings, McDonald sought input from his good friend Tom Malone. Malone was still worried about McDonald's need to study UFOs so openly, and he advised caution. As early as June 1966, McDonald had cited two concerns: power outages apparently associated with UFOs, and the fact that UFOs were being reported from various arenas of the Vietnam war. Malone listened carefully and ended up warning him again that he'd have to be careful not to lose credibility.²³ McDonald apparently listened to this advice, for his concerns about the Vietnam sightings, as well as power outages, were always cautiously phrased in his talks. If he made any mentions at all, they were backed up by the best documentation he could glean from his personal investigations.

With the support of NICAP colleagues, McDonald continued full speed ahead. He planned to make up for the inadequacies of the closed April 1966 UFO hearings by presenting the best of the evidence, including the 1952 sightings when, for several nights, UFOs had overflown the nation's capitol, including the forbidden air space over the White House. These startling events were written up by the media nationwide, for military jets had been scrambled in vain attempts to confront the unidentified objects. Each jet chase ended with the UFOs darting quickly away.

The July 1952 sightings had long intrigued Keyhoe, NICAP and others, but the sightings had been dismissed by Hynek and Quintanilla in the closed April hearings as "temperature inversions." NICAP investigators and James McDonald had proven from meteorological data that there were no temperature inversions on the nights of the sightings strong enough to cause the solid radar blips and visual sightings which had occurred, but Blue Book was not interested in facts. McDonald was hoping to settle the 1952 controversy once and for all by proving that the Air Force had handled those sightings in a grossly neglectful manner.

He also planned to discuss the weaknesses of the Condon Report, in order to forestall any anticipated objections that further government action was unnecessary because "Condon was already studying it." The situation at Condon's Colorado offices was steadily growing worse, and some of the competent scientific staff members had been fired for "insubordination." Dr. Condon was limiting his own "UFO investigations" to wild stories of contactees and was giving lectures about their shenanigans, which kept receptive colleagues highly amused. The Committee's funds were being misspent, and Roush's staff, encouraged by McDonald, was attempting to launch a Government Accounting Office inquiry. There were other signs that the final Condon

23. McDonald, James E., second journal, reverse p. 10.

Committee Report would be essentially negative, in spite of excellent cases which were being studied competently by some of Condon's more objective staff members (see Chapter 11).

In late June, McDonald met with Jim Hughes, to discuss the information McDonald wanted to include in the document he was planning to write for Congressman Roush. Since it was Rep. George Miller's expressed wish that Roush not prejudge the Air Force's neglect of the UFO problem, Hughes advised McDonald to merely state bald facts as he had personally gathered them. With no editorial comment at all, the needed points could be made.²⁴

Toward the end of June, O'Callaghan informed McDonald that Roush's staff had come up with the idea of a one-day "seminar." Six to eight working scientists would present papers on the UFO question. She assured him that Congressional committees often did this to get briefed on some problem prior to deliberation, or as a background for more extended hearings, and that such seminar papers were usually published by the Government Printing Office and made available to the public. She also informed him, in no uncertain terms, that it had been decided that testimony presented in the seminar **could not relate in any way to the Condon Committee**—there could be **absolutely no criticism**. Nor could the **Air Force be criticized**. Only the objective face of the UFO question and specific cases could be discussed.²⁵

McDonald's journal gives no hint of how he felt about these restrictions. He had probably suspected all along that one part of the government would not permit criticism of another. An NAS panel was due to review the Condon Committee's Final Report before it was released to the public, and McDonald hoped that the published *Proceedings* of the upcoming Congressional "seminar" would inform and guide the NAS panelists so that they could more objectively and knowledgeably judge the worth and accuracy of the Condon Report. He therefore agreed with Roush's plans with good grace, and wrote in his journal: "Idea sounds excellent & I pointed out salutary effect on NAS Panelists to have this seminar on record before they deliberate."²⁶

The main question as far as Roush's aides O'Callaghan and Stanton were concerned was: Were there six to eight working scientists who were actively involved in UFO research? McDonald assured them there were. He had already prepared a preliminary list of 21 scientists whom he felt could discuss the question thoroughly and objectively. This list included: J. Allen Hynek; **Frank Salisbury**; **Robert L. Hall**; **Roger Shepard**; **Seymour Hess**; Charles B. Moore; **Al**

'NOT Richard Hall!'

24. McDonald, fourth journal, reverse p. 6.

25. *Ibid.*, reverse p. 6, p. 7.

26. *Ibid.*, p. 7.

(A) Cameron; Robert M.L. Baker; Robert M. Wood; Eugene Epstein; Gordon MacDonald; Robert Wilson; and R. Leo Sprinkle, among others. Not included in this list was Jacques Vallée, who had left the United States in disgust when he realized that the Condon study would be a whitewash. He'd taken a job in France, and was working quietly on the UFO question behind the scenes.²⁷ McDonald also listed Walter Sullivan, Frank Drake, and Carl Sagan as possible participants, although they had done no direct UFO research. Also on the list, for balance, was Dr. Thornton Page who was basically a "skeptic."

We might wonder about McDonald's inclusion of Carl Sagan on the list, since the eminent astronomer, for decades, was a vocal arch-skeptic. This was not so in Sagan's earlier days; Jim McDonald and the younger Carl Sagan were cordial colleagues and, in addition to his objective interest in extra-terrestrial life, Sagan had professed interest in UFOs as a scientific question. McDonald had sent Sagan a copy of his American Society of Newspaper Editors (ASNE) paper and received a warm response:

I have carefully read your article "UFO's: Greatest Scientific Problem of Our Times?" and want to tell you immediately that, although I may object to an occasional point here and there, I think the article is altogether creditable, and I want to congratulate you on it.... I think it is very important that someone with your background has looked into many of the classic sightings and has reached opinions different from the official ones. If your article is widely disseminated in the scientific community I think it can only stir interest and unhardened opinions.... (See Appendix Item 10-B, page 554.)

A few days after Sagan sent this letter, he called from the Department of Astronomy at Cornell to ask McDonald's advice about the forthcoming symposium, to be held by the AAAS. It was planned for December 1968 with Sagan and Page as co-sponsors. Due largely to McDonald's growing influence in the field, the theme was to be "The UFO Phenomenon." Sagan asked McDonald what his choice of speakers would be for that AAAS gathering.

Realizing that AAAS members would want to hear both the pros and the cons, McDonald gave him a dozen names, a truly mixed bag, which included J. Allen Hynek; Bill Powers; Joachim Kuettner; Robert M. L. Baker; Philip Klass; (B) Carl Sagan; Donald Menzel; Robert M. Wood; Hector Quintanilla and William Hartmann. Hartmann, who was on the faculty of the University of Arizona, was also serving as a photogrammetric expert on the Condon Committee. Joach Kuettner, who was prominent in the AAAS, had already established a UFO study committee within that prestigious organization. McDonald also indicated his

27. Author's communication with Jacques Vallée.

Note: Compare list (A) to (B)

(B) This is a clever list, in the sense that he preloads it with those he wants to discredit or to contrast his own objective approach to those who appear to be both biased and ill-informed like Kuettner though?

** It's obvious McDonald greatly respected Hall.*
 own availability as a speaker and suggested that Richard Hall of NICAP, though not a scientist, might be a valuable addition as a "discussant."²⁸

Dr. Robert M. Wood, whom McDonald had met shortly before his trip to Australia, was a physicist and a highly placed executive at McDonnell-Douglas. He was very active in UFO research in the southern California area. McDonald was eager to have Wood on the Hearing panel and began to use the full force of his will to persuade him to participate. Due to Wood's sensitive position, he worked mostly behind the scenes; he was mainly interested in the mechanics of UFO propulsion. McDonald had met Don Goedeke, Wood's chief team scientist, before meeting Wood. As early as December 1966, McDonald had discussed ball lightning and other aspects of UFO with him, and Goedeke had told Wood about the scientist with impeccable credentials who had publicly entered the UFO research field. In fact, McDonald's boldness had encouraged Wood and Goedeke to go ahead with an idea they'd been toying with—a project aimed at obtaining clues to UFO propulsion.

Goedeke had a Navy contract to study ball lightning, and Wood had suggested to him that they could use that contract as a kind of cover story if they wanted to go out with a instrumented van, looking for ball lightning. "We could say, instead of looking for UFOs, we were looking for 'lightning'," states Wood. "So that was in our minds, for somewhere along the line."²⁹

In May 1967 McDonald had stopped off for a couple of days in Los Angeles to speak at RAND Corporation and meet with members of the Los Angeles NICAP Subcommittee. The McDonnell-Douglas Missiles and Space Systems, where Wood was Deputy Director of R & D, was nearby, and McDonald met with Wood and his colleague, Dr. Darrell B. Harmon. The three physicists spent two hours discussing UFO propulsion theory.

"Probably the best idea brought forward was a multi-mode system involving electrostatic & magnetostatic reactions against atmospheric E & H³⁰ fields," wrote McDonald in his journal.³¹ He followed this statement with mathematical formulae concerned with the propulsion theory Wood and Harmon proposed. "The 'Q-mode' is not really bothered by the corona-discharge burst, since the operating area lies to the left of the voltage limit," McDonald wrote. Then, in his meticulous manner, he added, "I realize I did not get it perfectly clear.... Bob spoke of charges of 100 coulombs. He also definitely

28. McDonald, 4th journal, p. 9.

29. Author's interview with Dr. Robert M. Wood, 21 August 1993.

30. electrostatic and magnetic

31. McDonald, James E., second journal, small two-page appendix, "Wood notes," p. 1. Also see note 32 below.

spoke of fields of the order 10^6 Gauss...500,000 Gauss to stop a car....³² Whereas Wood has recently been leaning to anti-gravity Harmon still feels can do with a combination of conventional modes, including some dependence on momentum-reaction, i.e., jet effects," McDonald's journal continues. "We discussed the soundlessness problem. Harmon felt that the multi-mode propulsion idea could go up to 200 f.p.s. over a broad area, yet be quiet."³³ (Because of its possible interest to technical readers, this page from McDonald's second journal is included as Appendix Item 10-C, page 555.)

In discussing this with Wood, McDonald mentioned the fact that many witnesses had reportedly viewed UFOs very closely, in situations where the objects were completely silent while hovering directly overhead. Wood conceded that in such cases the propulsion unit would have to be on another mode, which his and Harmon's theoretical ideas did not include. McDonald and Wood quickly became friends after their 1967 meeting, corresponding over the years and meeting together whenever opportunity presented itself. The "lightning van" became a reality, and for several months it monitored isolated regions in the Mohave Desert east of Los Angeles, looking for ball lightning—and UFOs. "There wasn't really that much that we learned," relates Wood. "Nothing was ever published, even internally, within the company."³⁴

When did Paul Hill start media propagation?
 Bob Wood was McDonald's first choice to discuss theories of UFO propulsion at the Congressional hearing. Wood was not alone in his experience of having to investigate UFOs under another more "acceptable" label. McDonald had already met this problem in spades. Not one scientific lab, not one prominent scientist that he knew of, was able to openly investigate UFOs with adequate funding.

In late June, Phyllis O'Callaghan called McDonald. The hearing had been set for July 29, a date squarely between the Democratic and Republican conventions. She explained that Roush felt that the hearing should be held at an opportune time for members of his party to be informed, should the UFO question emerge as a political issue during the campaign! She then asked McDonald outright if he would select the six panelists from his own list and Roush would follow up with formal invitations. McDonald approved, writing "Good" in his journal.³⁵ In addition, he was requested to choose five or six other scientists to

32. Wood, Robert M., "A Little Physics...A Little Friction: A Close Encounter with the Condon Committee," *International UFO Reporter*, July/August 1993, Chicago, IL, J. Allen Hynek for UFO Studies.

33. McDonald, second journal, Appendix, *op cit*. "Anti-gravity" propulsion has been a hypothetical idea since the 1950s. It seemed to fit many of the anomalies of UFO flight which cannot be explained by more conventional methods.

34. Author's interview with Bob Wood, 21 August 1993.

contribute papers for the printed *Proceedings*, but these scientists would not appear personally on the panel.

McDonald chose six panelists and sent the list to O'Callaghan. She pointed out that his list contained mostly scientists who were "pro-UFO study," but that she and Bill Stanton talked it over and decided that it was okay. McDonald was relieved to hear this. "There are plenty of anti-UFO scientists," he pointed out. "The point of the hearing is that here is a group of scientists who do feel the UFO problem needs much more scientific attention."

Typically, McDonald was working on more than one project at a time. During the period of time he was helping plan the hearing, NICAP was publishing a special edition of the old Project Grudge/Project Blue Book monthly reports, which had been extricated from Air Force files with the help of Rep. John Moss of California. Don Keyhoe had asked McDonald to write the preface.

Rep. Moss was head of a Subcommittee of the House Committee on Government Operations, which had effectively brought about the release of some classified UFO documents. McDonald was excited about the Grudge/Blue Book monthly reports, because they were from a period in 1951-53 when the Air Force seemed to be studying the UFO question in a truly scientific manner. They were originally classified *secret* or *confidential*. McDonald called the Grudge Project "an heroic period" of Air Force investigations, placed as it was between "the dark age" of Project Sign/Project Grudge before October 1951 and the "dark age" after 1953 when the CIA-sponsored Robertson Panel had slapped debunking and ridicule lids over the entire subject. In the midst of preparing for the Congressional hearing, McDonald found the time to write a four-page preface for this important NICAP publication, which became readily available to scientists and lay people alike.³⁶

On July 8, Phyllis O'Callaghan called again. "It's going to go," she informed McDonald, referring to the House hearing. "I want you to phone the people on your list and invite them to participate." McDonald hesitated, realizing he lacked funding to pay for the telephone costs involved.

"You can use our Congressional credit card," continued O'Callaghan. "If you call them, they'll be more likely to respond. When they accept, tell them they'll get personal invitation letters from Congressman Roush. Let me know who accepted or declined...use your own judgment about alternates."

35. McDonald, second journal, p. 10.

36. McDonald, James E., "Preface," in *United States Air Force Projects Grudge & Blue Book Reports 1-12 (1951-1953)*, Washington, D. C., NICAP, June 1966.

McDonald set about the task, after first jotting down the general content the seminar should encompass, so he could explain it efficiently.

General approach: How scientists interested in subject feel about UFO's.... Diversified views. Can make recommendations to Congress if care to.... [E]ach should confine time to 30-40 minutes, to allow questions from Congress. Need papers if possible. Can be presented later. Tell them stenotypist will get all remarks & that will help on final paper.³⁷

McDonald had barely picked up his phone to call the first invitee when O'Callaghan called him back. Congressman Roush had told her to go upstairs and check with General Counsel Ducander regarding the July 29 date, since all of the CSA staff hadn't heard of the hearing plans yet.

"Hold off phoning till I check with Ducander," requested O'Callaghan. "Give me 15 minutes." She phoned back almost an hour later.

"Jim, I called Ducander at his home," she said, a little anxiously. "He brought up the problem that some people are claiming that discussing UFOs in the Congress is a jurisdictional problem."

"It's not," asserted McDonald. "I've discussed this point several times with various people in the government and the military and been assured over and over that just because the Air Force was assigned the duty of checking on UFO reports, there's no hard-and-fast rule that other agencies can't study them. Just tell Ducander that we'll make clear to all the invitees that we want to cover the scientific aspects of the UFO question at the hearing, not to criticize the Air Force." O'Callaghan agreed that would solve that problem, but it wasn't the only one.

"Ducander was also wondering about whether or not lots of people would want to come and testify," said O'Callaghan. "He's afraid of the nuts."

"We'll tell the invitees to keep it quiet," advised McDonald. "That will keep the nuts from asking to come."³⁸

"It's a good thing Roush was in town," said O'Callaghan, "because Ducander could have stopped the whole hearing right there!" However, Ducander had okayed the use of a stenotypist at the hearing and had given a commitment that the Committee would cover the panelists' expenses.

McDonald immediately started calling the six panelists. The first one was Dr. Robert L. Hall, Head of the Department of Sociology, at the University of

37. McDonald, J. E., fourth journal, reverse p. 10.

38. McDonald, J. E., second journal, p. 11.

Illinois in Chicago, who had been actively researching the subject from a sociological point of view. Dr. Hall accepted the invitation enthusiastically. He was already familiar with some UFO literature, but McDonald encouraged him to read *When Prophecy Fails*. This book was an account of a small cult, the members of which had believed a channeler's prediction that they would be saved from a coming worldwide devastation; UFOs would pick them up and whisk them away. When the world failed to end, as predicted, most of the group continued to believe, merely setting a new date for the fulfillment of the prophecy.³⁹ The fact that McDonald, an atmospheric physicist, was recommending a sociological study to Dr. Hall demonstrated his own familiarity with all aspects of the UFO subject.

He called Dr. Bob Wood next, who was more than willing to participate but needed to ask his superiors if he could state his affiliation with McDonnell-Douglas. If not, he would speak as an independent scientist. Wood thought there was a 50% to 75% chance that the company would okay it. He also told McDonald about an intriguing report he'd heard from a source he considered very reliable. It concerned Gene May, a Douglas test pilot, who had been involved with the X-15 experimental aircraft for several years. According to the story Wood heard, May had taken the experimental craft for a flight five to eight years ago with 15 minutes' fuel in the X-15's tank. Yet May didn't land back at the airfield until three hours later. May allegedly reported he'd been taken aboard a UFO, X-15 and all! As a consequence, he was examined by psychologists at Edwards AFB. Wood's reliable source was a colleague who worked at Vandenberg AFB who knew Gene May well. McDonald tucked the story in his journal, to be checked out later.⁴⁰

Wood's prime interest in the UFO phenomenon was the possibility that it held clues to alternative energies which could improve our own space-flight capabilities. In turn, McDonald felt that the panel should include a scientist actively involved in alternative energy research and he regarded Wood as a reliable, high-profile scientist in this pioneering field. Wood told him that he could find out within a week as to whether or not his company would permit him to testify.

McDonald called Carl Sagan next, who expressed a willingness to participate, provided he would be free to say what he felt about UFOs and their possible relation to life in the universe. McDonald assured him on this point. Sagan kidded McDonald, saying, "Some people are going to say you picked all the participants for this hearing!"

39. Festinger, Leo, Riecken, Henry W., & Schachter, Stanley, *When Prophecy Fails*, Minneapolis, University of Minnesota, The Lund Press, Inc., 1956.

40. McDonald, fourth journal, reverse side p. 11.

"If Congress has a hearing on poor people's problems, you don't invite all Rockefellers!" McDonald replied.⁴¹ *True, but Rockefeller might have some odd ideas*

He also obtained a "yes" from Dr. Robert M.L. Baker, highly placed in space sciences at General Dynamics. Baker was well known in the UFO field for his analysis of the Newhouse photo case. He had concluded that the objects in the classic UFO film were numerous, round unidentified flying objects, with some of the objects appearing to circle around each other at times. The film was well focused; the edges of the objects were sharp and clear. Some of the objects held formations in groups for as long as 17 seconds (See Chapters 8 & 18).

Dr. Baker had been involved with ADC planning for the 1970s. He had advised officials that the UFO problem must be handled very sensitively and that military sources should react as if to an attack if a UFO were spotted. He was one of the rare high-profile scientists who seemed free to discuss UFOs openly. His boss approved his plans to testify and even offered to chip in, if the CSA didn't cover all his expenses!⁴²

With Baker confirmed, McDonald phoned J. Allen Hynek, with whom he had previously discussed the hearing plans. Hynek wanted to be sure that the Condon Committee and the Air Force wouldn't be criticized.⁴³ McDonald said he'd already given his word to Roush on both of these sensitive issues. Hynek seemed enthusiastic and accepted the invitation.

McDonald then called Phyllis O'Callaghan to let her know what progress he'd made. O'Callaghan had run into other problems: certain people on the CSA "hated" the idea of the UFO hearing, especially Dan Boone, the technical consultant for the Committee, and Ducander, who'd also been negative about the 1961 hearings which had been canceled.⁴⁴ They thought it was set up just to help Roush win in the coming election. The two counsels had warned Roush that "all the kooks would be writing in." McDonald reminded her that George Miller had received hundreds of letters from constituents in his district calling for the hearing and that this probably had prompted him to give his "okay."

"Well, it's going this time," said O'Callaghan. "And Congressman Roush will probably make a press release on it."

"Will there be any press there?" asked McDonald, logically leery after his Australian experience.

41. *Ibid.*, reverse p. 12.

42. *Ibid.*

43. *Ibid.*, p. 13.

44. *Ibid.*, reverse p. 13.

If looks more like Hynek is just CRA'ing

"The press will be there, but TV is barred," she replied. "The participants can hand out statements if they want."

"That will help," replied McDonald. "At least the press will have some copy, so they won't screw it up too badly."

That same day, O'Callaghan sent out the formal letters of invitation. James McDonald felt good; it would be the first time a Congressional body would publicly receive documented UFO data from scientists who were openly active in the field. Dr. Robert Wood, however, had trouble getting the permission of his superiors and called to discuss his quandary. He'd gone all the way up the ladder to Vice President **Dorrenbacher** and there met immediate negative reaction. "I was told, 'it never does any good for McDonnell-Douglas to get involved in any way with any Congressional Committees'," Wood said. "He didn't give me an absolute 'no,' but that Mr. McDonnell, the Chairman of the Board, will have to approve it."⁴⁵

"The testimony isn't under oath," McDonald indicated. "And we're not up against Congressmen with already entrenched positions, fighting for pork-barrel items. Ed Roush will chair the seminar, and he'll be friendly to all of us. The letter from the Committee could specify that your comments are non-official."

"I like that, but I'll still have to clear it with Mr. McDonnell,"⁴⁶ said Wood.

McDonald told O'Callaghan about Wood's problem. She assured him they'd be happy to write McDonnell personally, that Roush could be charming and would emphasize that Wood was there speaking for himself. McDonald was eager to have him on the panel. The other five speakers, including himself, would be talking on UFO theory and various hypotheses; by contrast, Wood would represent the "hardware" aspect. Wood already had planned a six-point outline, which included his personal research into clues to UFO propulsion and recommendations on data-collection. He'd also cite the present state of technology and astronautical science as it related to the UFO phenomenon.

But it didn't happen. "I went to my management and sought their opinion," says Wood. "They said, 'You can do what you want to do, but our experience is that nothing good ever comes from testifying before the House.' I read between the lines. I think they really didn't want me to do it. They gave me some good reasons...[but] it was made clear to me, though indirectly, that it wouldn't do any good for me or my career to throw my voice in."

45. *Ibid.*

46. *Ibid.*, p. 13.

It wasn't just exposure to Congressional questioning that was bothering McDonnell-Douglas personnel. The disrepute in which UFOs were widely held among scientists who hadn't studied the data might have been involved. That didn't bother McDonald, and it didn't bother Wood, but McDonald realized what he meant: persons in Wood's position would have to go beyond the question of proof and try to duplicate the apparent propulsive capacities of UFOs, using the cutting edge of Earth technologies.

"What I would have had to say would have been all speculation anyway," Wood says. "Now that I'm thirty years wiser, I think my perception of what we had yet to learn in science was that it was just a little step forward, that we were almost there. Since then, I've concluded that we were a long way from understanding the physics necessary to build the craft. I'm not sure whether the secret program of the government has or has not achieved this understanding."

Consequently, McDonald was left without an aerospace scientist to discuss the "hardware" aspect. He wasn't really sure this aspect was needed, but felt it could take the seminar out of the realm of hypothetical science and give the Congressmen a practical aspect to consider. After thinking the problem over, he contacted Dr. James A. Harder, an associate professor of civil engineering at the University of California in Berkeley. Harder worked mainly with Coral and Jim Lorenzen, directors of the Aerial Phenomena Research Organization (APRO) in Tucson, and had been active in the UFO field for some time.

He told McDonald that he was working on hypothetical UFO propulsion mechanisms. He'd studied the May 5, 1953, sighting of Wells Alan Webb, a scientist who had observed what seemed to be "concentric fields of force" coming from a UFO in flight. Harder had become convinced that the "interference rings" could be rationalized in terms of "spin-fields." His explanation wasn't clear to McDonald; he asked Harder many questions about it.⁴⁷

Webb's sighting occurred on a clear, spring morning in Yuma, Arizona. When he noticed the "concentric rings" he was wearing Polaroid glasses; the rings were not visible when he took his glasses off. Wells's sighting was included in a book he wrote in 1956.⁴⁸ In 1966 McDonald had had a long conversation with him and later made a terse note in his second journal:

*Sunday 6/5/66 Wells Alan Webb. See small notebook. Get his book UA library. Cf last chapter, re his being dissuaded by Menzel.*⁴⁹

47. *Ibid.*, p. 15 reverse.

48. Webb, Wells Alan, *Mars, The New Frontier: Lowell's Hypothesis*, San Francisco, Fearon Publishers, 1956, pp. 127-28.

Berkeley
has quite
the history
as far
as being
open to
UFO/
ET!!

That phrase, "See small notebook," again. It gives no idea what the two men discussed. Knowing McDonald, we can be sure he questioned Webb on every aspect of his sighting, to obtain the best understanding possible of what Webb meant by "concentric fields of force." Why did McDonald choose to put the details in a private notebook?

However, Webb's sighting directly impacted on Harder's hypothesis. He told McDonald he was trying to determine what kind of "spin field" was needed to get gravitational dipoles, since he felt rotational spin fields could explain some of the mysteries of UFO propulsion, as well as the "concentric rings" in the Webb sighting. McDonald wrote this all down in his journal and expressed guarded doubt.⁵⁰

Harder was also familiar with the 1961 case of Betty and Barney Hill, and the "missing time" the couple experienced after a nighttime encounter with a UFO, while traveling near the New Hampshire-Vermont border. As the object came nearer, they had viewed it through binoculars and saw it had a double row of windows. Eventually, the object hovered over trees less than 500 feet away. Barney Hill got out of the car; in spite of being very frightened, he walked within 50 feet of the strange craft and saw a group of "figures" inside. Terrorized, he ran back to the car. As Barney and Betty fled the scene, they heard a series of "beeps," experienced a hazy sensation, then heard another series of "beeps." Their car was then traveling along the highway, miles from where they had encountered the UFO. They arrived home about two hours later than they had expected.

The "missing time" element in 1961 was unique. Walter Webb, one of the investigators who first researched the case, didn't know what to think of it, but wrote a report on it and sent it to NICAP. Later, journalist John G. Fuller wrote a popular book on the subject, *The Interrupted Journey: Two Lost Hours Aboard A Flying Saucer*⁵¹; years later, this popular book was made into a TV movie. Harder spent some time discussing the Hill case with McDonald, for APRO had also investigated it in depth. He confided that there were "more cases like the Hill case," i.e., reports involving "missing time." This remark piqued McDonald's interest, for the Los Angeles NICAP Subcommittee (LANS) was investigating a case in the mountains near China Lake, Calif., which also involved "missing time." (See Chapter 15). McDonald tucked Harder's remarks in his mind, to be checked out later. In spite of his doubts about Harder's "spin field" hypothesis, McDonald invited him to speak on the

49. McDonald, second journal, reverse p. 10.

50. McDonald, fourth journal, reverse p. 15.

51. Fuller, John G., *op. cit.*, New York, The Dial Press, 1966.

Congressional panel. Harder agreed to talk about UFO cases of general interest that he and scientific associates had investigated and would include some of his own ideas concerning propulsion hypotheses.

The long-awaited hearing took place in the Symposium Room at the Rayburn Building on July 29, 1968, before the CSA. About a dozen Congressmen were in and out during the day, but only three stayed the entire time. McDonald had the names of the entire Committee and knew who attended and who didn't! A dozen newsmen, including Neal Stanford of the *Christian Science Monitor* (CSM), and an interested audience were also present, including most of the NICAP staff. Philip J. Klass was there, handing out copies of his "JEM White Papers." Jim Hughes attended in the afternoon to hear McDonald speak. Apparently no "nuts" showed up as feared; if they did, they kept quiet. The discussions were confined to the panelists and the Committee members. This was deliberately arranged to prevent contactees, cultists and debunkers from interrupting. In spite of the ban against criticizing the Air Force and Condon Committee one of the Committee members, Rep. William F. Ryan (D.) from New York, who had long been an advocate of scientific study of the UFO question, suggested that the CSA should investigate the Condon Committee! Some of the scientists implied their agreement with Ryan's suggestion.

The six-hour hearing cannot be even briefly summarized here, due to the sheer volume of material brought out by the participants. Two sources of the full testimony were printed and made widely available.⁵²

During his 15 pages of testimony, J. Allen Hynek stated that "reports of aerial phenomena which continue to defy explanation in conventional scientific terms [have] potential scientific value." He stressed the exceptional value of multiple-witness sightings and those from respected scientists. He gave veiled reference to a "detailed report he received from the Associate Director of one of the nation's most important scientific laboratories" but did not elaborate. He stated that the lack of meaningful, "hard-core data" prevented proper scientific study but nevertheless asked, "Can we afford to overlook a potential breakthrough of great significance? And even apart from that, the public... does not want another 20 years of UFO confusion." He suggested a serious, adequately funded study in a receptive scientific climate.⁵³ It was the first time he'd ever spoken out so positively in public.

52. *Symposium On Unidentified Flying Objects: Hearings Before the Committee on Science and Astronautics*, U. S. House of Representatives, 90th Congress, Second Session, July 29, 1968, Washington, D.C., U.S. Government Printing Office, 245 pp. A later version of the document is "Symposium on Unidentified Flying Objects: Committee on Science and Astronautics (U.S. House) 20 July 1968, PB 179 S41," Springfield, VA, Clearinghouse for Federal Scientific & Technical Information, Government Printing Office, 1968.

I envision the supporting arguments as tree nodes like slash code and an option to flatten the tree

McDonald's testimony was more assertive and detailed and comprised 68 pages. "I wish to emphasize that my own study of the UFO problem has convinced me that we must rapidly escalate serious scientific attention to this extraordinarily intriguing puzzle," he said in part. "I believe that the scientific community has been seriously misinformed for 20 years about the potential importance of UFOs."

He urged the Committee members to take steps to alter the situation without delay, emphasizing that the one-day seminar was only a first step. Extensive hearings before the CSA, as well as before other Congressional committees, were needed. He gave examples of good Blue Book cases that had been either totally ignored or explained away, and he also cited several multi-witness civilian sightings, including the February 5-6, 1960, **Hollywood sightings** that had been thoroughly investigated by LANS. He told the committee members that he leaned strongly toward the extraterrestrial hypothesis "by a process of elimination of other alternative hypotheses, not by arguments based by which I could call 'irrefutable proof'."

Carl Sagan's 14-page testimony emphasized the difficulty of accepting the ET hypothesis, and the problem of estimating the possibilities that Earth had been visited in the past or in the present. He concentrated on the "emotional factors...which predispose some not to want to accept UFOs because that would threaten our conception of being the 'pinnacle of creation,' and some to want to believe UFOs are extraterrestrial for religious reasons, and the hope that 'they' will save us from ourselves." He stressed the need to bring the scientific method to the problem, to pursue whatever facts are at hand with as many diverse hypotheses as possible. Like Hynek, he felt that "harder evidence" was necessary before mounting a major scientific effort.

Dr. Robert L. Hall, in 13 pages of testimony, examined the UFO problem from a sociological viewpoint. He stressed the psychological effects on the public when the government refused to conduct forthright investigation and release information freely. For the few strong cases which defied explanation, he put forward **three possible hypotheses: mass hysteria and contagion; extraterrestrial devices; and an unknown natural phenomenon**. He emphasized the risk of accidental nuclear war if UFOs were misinterpreted by military sources as missiles from another country. He also suggested that, in order to clarify the problem, a "formal adversary proceeding" modeled after our system of justice be set up to build the strongest possible case for each of the three hypotheses.

53. *UFOs: A New Look: A Special Report by the National Investigations Committee on Aerial Phenomena*. NICAP, Washington, D.C., 1969. This contains a 1969 summary of the 245-page House document.

Dr. James A. Harder, in his 13-page testimony, discussed cases in which apparent "physical evidence" had been left behind, including the **Ubatuba case** in which a UFO allegedly had exploded over the **coastline of Brazil**. Small pieces of **magnesium** were recovered, which were determined by at least one laboratory to be "of an **unusually high degree of purity**." He speculated that such pure magnesium might be used in a spacecraft because its **crystalline structure could have fantastic strength**.

He also speculated on propulsion systems which might be involved in UFO flight, in particular the anti-gravity hypothesis popular in UFO literature, while admitting that gravitation itself remains an enigma of modern science. "There are theoretical grounds, based on general relativity, for believing there must exist a second gravitational field, corresponding to the magnetic field in electromagnetic theory, and that the interaction between these two fields must be similar to that between the electric and magnetic fields," he stated. "**Some-day perhaps, we will learn enough to apply gravitational forces in the same way we have learned to apply electromagnetic forces....** In the UFO phenomena, we have demonstrations of scientific secrets.... It would be a mistake, it seems, to ignore their existence."

Robert M.L. Baker's testimony also comprised 15 pages. He discussed several of the UFO films he had analyzed, including the 1952 Newhouse film and a **Montana film** which showed the same type of **round, whitish objects**. He pointed out that the chances for obtaining high-quality hard data on the reality of UFOs were small unless **special sensor systems** were designed to obtain scientific data on UFO overflights. **This "tracking" question started a lively discussion among several of the participants.** At times, also, various Committee members interrupted the testimony of each scientist in order to clarify some specific point they were making.

After the hearing ended, about a dozen participants, including Hynek, Harder, McDonald, Roush, and Donald E. Keyhoe, celebrated with cocktails at the **DuPont Plaza**. The group toasted Roush, who had pushed through the hearings.⁵⁴ But not all the conversation was amicable. **Dan Boone**, the Committee's technical consultant, challenged James Harder on his gravitational ideas and his polarization and "spin field" hypothesis as a clue to UFO propulsion; he had also asked hard questions of Harder during the hearings.

Rep. **John W. Wylder**, a Republican from New York, also confronted Harder. Unabashed, Harder asked McDonald if he could take a copy of McDonald's paper to Colorado, where he planned to meet with some of Condon's staff members with whom both were working closely, though unofficially. McDonald was

54. McDonald, fourth journal, p. 20.

taken aback but gave a copy to Harder nevertheless. Then some of the group had dinner at the Plaza and trooped off to **Dick and Marty Hall's** for further discussion of the day's proceedings.

Late that evening, Hynek confided to McDonald that he had actually seen the mysterious document called "**Top Secret Estimate of the Situation**" which had been prepared by Project Sign in 1947 but had never been available to researchers. Keyhoe and NICAP had tried for many years to procure a copy of it. Its existence had been confirmed to Keyhoe by **Maj. Dewey Fournet**, a NICAP Board member, and it was described in *The UFO Evidence*. Its importance lay in the fact that it purportedly contained statements that the Air Force had come to a firm conclusion that the UFO phenomena were real and possibly extraterrestrial.

McDonald pursued this issue with Hynek. Why hadn't he come out publicly and admitted that the "Estimate of the Situation" actually existed? Hynek squirmed, speculating that the USAF **never** officialized the document because when it found its way up the ladder to Gen. Vandenberg, the general refused to accept its conclusions and handed it back down the ladder. Therefore, it never existed as an accepted Air Force report. "However," repeated Hynek, "I've seen it somewhere along the line."⁵⁵ Hynek's vagueness didn't help McDonald's mood; any pleasure the hearings had given him rapidly vanished.

"How could you have kept quiet all these years!" challenged McDonald.

"I don't feel anyone in the Air Force ever looked at the whole picture," Hynek replied calmly. "It was **always one case** at a time. I tried to get the Air Force to change their policies, Jim. It didn't do any good, of course, and I felt awfully alone about it."⁵⁶

Despite this new confrontation with Hynek, McDonald expected that the printed *Proceedings* of the CSA hearing would act as a boost to spur the NAS Panel that was slated to review the upcoming Condon Report. Roush had assured him the *Proceedings* would be available within days from the Government Printing Office. McDonald expected it to be widely disseminated among the scientific community, as well as Congress, and that it would lead to extended UFO hearings by the CSA, as well as other House and Senate Committees.

Sometime during that day, McDonald and the other panelists signed vouchers for their expenses. McDonald's amounted to \$319.00 for air fare plus \$9.00 per diem for one day. He still had no funds to pay for his continuing UFO research. In fact, in the midst of the seminar planning, McDonald had written

55. *Ibid.*

56. *Ibid.*

a letter to Jim Hughes, updating him on UFO events, and expressing his hope that contract 2173 might be renewed. That contract, of course, was never renewed, but McDonald forged ahead, hoping for funding from other sources.

The morning after the Congressional hearing, McDonald stopped in at Roush's office to re-hash it over coffee. Roush told him that Donald Menzel had been thoroughly galled at not having been invited to participate as a panelist, and had sent him a complaining telegram. McDonald treated this with good humor; it was decided that Menzel would be invited to send a paper which would be included in the back of the *Proceedings*, along with five other papers which had been requested from scientists active in UFO research. McDonald then went up to the stenotypist's office to edit his own hearings transcript.

I agree I should have expected errors, but He found his own statements loaded with errors. "Horrible," he wrote in his journal.⁵⁷ Although his plane was taking off that morning, he worked about an hour and a half with CSA technical consultant Dan Boone, trying to correct the draft. But time ran out before he could finish. He asked if he could take the draft home to work on it, but Boone wouldn't permit it. He called O'Callaghan from the airport and asked her to try to get a Xerox of the unfinished pages and send them to him.

While waiting for their flights, Dr. Robert Hall told McDonald about the concept of "pluralistic ignorance," i.e., "everyone is under the misimpression that he is the only one who knows something." From a sociological viewpoint, Hall felt this concept might impact on the UFO question.

When McDonald arrived home, Dan Boone called to tell him that August 2 was the deadline for the edited papers—only two days away. Luckily, O'Callaghan had sent the Xeroxes so he could complete his corrections. McDonald called Roush to appeal for more time, and learned to his relief that the participant's submitted statements (in which they would expand on their spoken testimony) had a longer deadline of August 12, and that these would be printed verbatim.

In the meantime, other scientists who were quietly involved in UFO research were being approached to submit papers for the *Proceedings*.⁵⁸ Dr. Robert

57. *Ibid.*

58. Those scientists were the following: Stanton T. Friedman, M.S., a nuclear physicist assigned to the NERVA nuclear rocket program at Westinghouse Astronuclear Lab in Pittsburgh; Dr. R. Leo Sprinkle, Professor of Psychology at the U. of Wyoming; Dr. Garry C. Henderson, Senior Research Scientist at Space Sciences, Fort Worth, TX; Dr. Roger N. Shepard, Professor of Psychology at Stanford; and Dr. Donald H. Menzel, Professor of Astronomy, former Director of Harvard College Observatory. All but Menzel accepted the reality of the UFO question. All but Menzel urged the implementation of a plan to acquire hard data which could be scientifically analyzed.

② This really deserves a whole diatribe. In science if our best & brightest made a guess about a new discovery and it's thoroughly documented we accept it. Does that not then mean that after a certain statistical percentage is achieved we collectively accept it as true?

Nathan, a computer-enhancement scientist at Jet Propulsion Laboratory, whom McDonald knew to have an interest in UFO research, was asked by Roush to send a paper. Nathan asked his boss, Dr. Pickering, who became very excited and worried. Pickering had heard gossip that the hearings were simply a campaign effort by Roush. Pickering's secretary, checking further, came up with the "information" that "the Committee had invited a lot of kooks to submit statements." McDonald personally urged Nathan to ignore these deceptive rumors, but Nathan decided not to submit a paper.⁵⁹ What was the source of these rumors? *I would say it was "conventional wisdom" that started the rumors.* McDonald would learn, within a couple of years, more than he would care to know about disinformation that was preventing the free, scientific investigation of UFOs. But this was 1968, and McDonald was still hopeful, tireless and "head of the band."

In all fairness to scientists who quietly worked in the UFO field but never publicly, they faced problems which McDonald didn't have. Some worked for government, or for corporations dependent on government funding. They rightly feared loss of their professional reputations, for they were not shielded by an atmosphere of academic freedom such as protected McDonald. Others worked in environments which were intimately connected with aerospace work; cutoff of government grants was a real threat. Others, although not threatened directly, simply did not have his fearless nature. Although they shared his curiosity about UFOs, they did not want to be publicly associated with what was regarded by other scientists as "a fringe subject."

The historic Congressional UFO hearing was quickly published by the Government Printing Office and made available to the public (see footnote 50). The 245-page document was widely disseminated throughout the UFO field, and McDonald and other interested scientists did all they could to distribute it to their colleagues. He also continued to "work" his Congressional contacts, as revealed by detailed entries in his journal:

8/30/68 Called Mo Udall, TUS office 12:10 noon. Proposed very quick UFO study, probably within NASC. Said he'd explore it next week in D.C. Said it'd probably require support from Roush, Miller & others in CSA.... I p. o. it'd have to be done fast & with high-level support. I suggested recent UFO Symp. offers a point of departure, since several [of the participating scientists] spoke for E.T.H. He said he doubted one could change minds fast enough back in D.C. to do this by October, might sound too "gimmicky." I mentioned I'd spoken several times to NASC personnel & they answer directly to [Vice President] Humphrey, & to do this fast enough would probably

59. McDonald, *op. cit.*, 4th journal, p. 21.

*I suppose this makes sense. Not only we they fit executive authority they head panels. require doing it within executive branch.... Time too short, too many minds would have to be changed quickly.... Good to stress the atmospheric physics in it. Cite need to reduce to an absolute minimum the chance of atmospheric explanations....*⁶⁰

In spite of McDonald's expectations that the one-day seminar would lead to extended Congressional hearings, he would never again see the subject discussed openly in the halls of Congress. It was as if a door had slammed shut, after opening a crack. Jacques Vallée suggests a possible answer. "I think they were all naïve," he says. "The Symposium was an opportunity to have potential opponents to the Condon Report 'let off steam,' to give them a harmless day in Court. It couldn't accomplish anything, and was a classic tactic to disarm adversaries!"⁶¹

Back in Tucson, McDonald was long overdue for a sabbatical, and his wife Betsy was again pressuring him to rest. He wanted to take time off to write a comprehensive book on the UFO problem. He was slowly coming to the conclusion that talks before scientific groups and media appearances were fine, but a major book by a reputable scientist giving credence to the problem would do much more to prod the scientific community into action. He also needed time to polish and publish dozens of atmospheric physics papers which were piling up in his files. But these involved time he didn't have.

Instead of resting, he began the new semester with a full teaching schedule, continuing to guide graduate students toward advanced degrees. The Congressional hearing had heightened public interest in UFOs and in this adventurous scientist who'd spoken out so boldly. He felt obliged to seize the opportunity, and squeezed in a full schedule of carefully selected media appearances, plus another round of talks before scientific groups. Something else was pressing on his mind, however—the growing problem of atmospheric pollution. His colleague, Dr. Al Mead, who was head of the Zoology Department from 1956 to 1966 remembers:

"I knew him well. Morally and personally he was a tremendously fine man.... I respected him so much, and I enjoyed just sharing in what he was thinking. I was working in the field of Biology and he was working in Physics, but we had great appreciation for our mutual dedication to what we were doing. He and I had talked every so often about his concern in regard to contaminants going up into the upper atmosphere. His integrity, the depth with which he was exploring things, and, well, the genius! There was genius there. He literally was anticipating the problem we're having now with the ozone...the chemistry of the upper atmosphere, and what it was doing to the radiation that we get

60. *Ibid.*, reverse p. 21.

61. Author's communication with Jacques Vallée.

from the sun. His fear was that we were upsetting the upper atmosphere to such an extent that it would endanger human life.”⁶²

The growing air pollution in Tucson was more subtle and more extensive than even McDonald realized. The desert city was deeply involved with the military-industrial complex, with its aircraft factories and Air Force base to the south. It would be many years after McDonald's death before the true condition of Tucson was fully realized. The present serious problem of trichloroethylene (TCE) pollution in South Tucson's well water, for instance, has been traced to the haphazard dumping of solvents and other chemicals into the ground since the 1950s.

McDonald's early concern in the 1960s about pollution in the delicately balanced upper atmosphere had impelled him into research on the problem. He was reading insatiably on the subject, and in the mid-sixties, he had enlisted the aid of his colleagues for on-the-spot research. His university colleague Dr. Ray Turner relates:

“We lived on the northern outskirts...and I'd come into town in the morning...look across the city and see the atmospheric pollution, especially in the wintertime. And Jim got me and two or three other people, that lived elsewhere in the city, to stop each morning on our way into town. Because we had a definite schedule, we'd get to the same point each morning. He'd have us look in several directions at different landscape features.

“He visited our sites and set this all up, and said, ‘Okay, I know how much air there is beneath that mountain top over there,’ and he'd say, ‘if you'd just give me an idea of how well you see that mountain peak....’ He had some sort of an index, a rough scale, and we would write down what our observations were, how clearly we could see these landmarks.... We were looking from different vantage points all around town and we'd give him this information.”

Side by side with his professional life, McDonald's children were becoming involved in various academic and civil-rights activities, and Betsy was becoming more and more active out of the home, as slim and attractive as ever. Their oldest son, Kirk, was at Caltech, earning his Ph.D. in Physics. Ronilyn was at Harvard on a scholarship, working toward a Ph.D. in Psychology. Lee was studying at the University, as were Nancy and Gail. Jan was still in high school, but planned to attend the university, too.

Nancy and Gail worked as lifeguards in the summer, to earn extra money. Gail gave her mother the money to buy a Selectric typewriter for the Peace and Freedom Center and helped out the Center financially in other ways. Jan did art-

62. Author's interview with Dr. Al Mead, 18 July 1994.

work for the Center in her spare time. McDonald was not a member of the Peace and Freedom Center, but he backed up Betsy openly. Many people in Tucson were involved actively with the Center, and the world was changing in other ways. The hippie movement had begun, and it did not bypass the McDonald family. Out at Caltech, Kirk wore his hair long, and Ronilyn wore "flower-children" clothes. Gail got into rock climbing, and she would later climb mountains around the world.

"The other girls thought of Nancy as being kind of 'straight,'" Betsy laughs. "I remember them teasing her." Lee, the second son, was more low-key and planned to become an astronomer.

In spite of all his responsibilities, UFOs still preoccupied McDonald a great deal of the time. The fact that he'd been instrumental in bringing about a Congressional UFO hearing made not a whit of difference to his university colleagues. He was generally regarded as a sort of campus legend ~~on-campus~~, and, in spite of his low-keyed appearance, he was capable of unpremeditated drama of the most astonishing kind. His university friends and colleagues were used to this; they were accustomed to unorthodox research by McDonald.

His colleague, Dr. Dean Staley sums up the situation picturesquely: "Everybody in the Meteorology Department liked him. Some of the people in the administration hated his guts and wished he'd go away. [University President] Harvill, deep down in his heart, may have wished that McDonald would just disappear in a UFO." Staley laughs, then softens the statement. "But Harvill was sensible enough to realize that he had to give people freedom of action. There may have been some concern...that the tail was wagging the dog, that the UFO business was passing for science. But everybody with any maturity had to recognize that McDonald was a first-rate scientist, and this is one reason you have tenure, so people can pursue unpopular lines. And considering what he was doing, it was better McDonald than someone else!"

Campus controversies were raging at the time. Throughout the sixties, McDonald was a source of annoyance to President Harvill; he was working with a small but vocal faculty group which pressed Harvill hard on certain matters. Dr. Paul S. Martin describes one donnybrook. "I remember a faculty meeting, which always followed an agenda that was controlled by the President and the Secretary of the Faculty and was pretty much a rubber stamp operation for whatever business at hand supposedly should be 'considered' by the faculty," relates Martin. "At this point I don't remember exactly what the issue was, but...Jim was communicating hotly with the university president, and they were both furious. McDonald told Harvill, 'You, sir, are what is wrong with this university!'" Dr. Martin laughs fondly, remembering his friend's passion for justice. Dr. Dean Staley also recalls McDonald making this statement to Harvill.

His IAP colleague's reactions to McDonald's intense interest in UFOs were varied, if not always vocal. Many felt he was wasting his time. Dean Staley defends him: "McDonald was a physicist, and there is no better preparation for investigating UFOs," he states. "He was trained to be a scientist, not necessarily to stay in a narrow line of research. Although his work on the UFO problem may not have yielded significant results, from the vantage point of hindsight, he should not be faulted for deviating from what he was 'trained' to do."⁶³

In spite of his defense of McDonald's UFO studies, Staley's opinion is that investigating UFOs isn't the way to go about finding extraterrestrial life. "I would dearly love to have them discover some kind of signals that would have to represent some kind of extraterrestrial intelligence," states Staley. "If they want to learn about such things, there are scientific ways with the radio telescopes, and just the general advance of science, where this may turn up.... [M]y own personal view is that some study like the surface of the moon in detail, that turned up tracks that could not possibly have been made by a human, that kind of a discovery...might be a way in which extraterrestrial activity would manifest itself."⁶⁴

McDonald's close friend, Dr. Dick Kassander, felt that the UFO question must hold something of serious scientific interest if it could manage to grip the attention of such a talented researcher. Consequently, most of his university colleagues left McDonald alone to pursue the UFO question, although many of them felt he was wasting his time. Only a few of his university friends were more accepting, including Dr. Paul Martin, who at the time was doing fossil pollen analysis at the university's Desert Lab, and who, at the time of this writing, was involved in a scientific controversy regarding the sudden extinction of the mammoth and other large Ice Age mammals. "I can't help but value scientists who are willing to take calculated risk, a high-stakes gamble, like Jim seemed to do," he says. "You can turn this thing upside down. Some experts timidly hole up in their special field, forever. We need both kinds—ever-so-cautious and high-risk-takers."

Dr. Gerard Kuiper of the Lunar and Planetary Lab on Kitt Peak, however, openly ridiculed McDonald on occasion, publicly telling him that UFO research was the worse kind of pseudo-science. He especially seemed to object to the fact that McDonald favored the extraterrestrial hypothesis (ETH) as the "least unsatisfactory" one he could think of (See Chapter 6). As pointed out in

63. Author's interview with Dr. Dean Staley, 28 February 1994.

64. *Ibid.* Staley states in a 15 June 1995 letter that UFOs might be possible in the "big picture of science." This author (AD) feels that it is likely that McDonald's mind had the capacity to study both the "big picture of science" as well as its minute ramifications, had the opportunity been presented to him.

prior chapters, however, McDonald was not convinced that UFOs were extraterrestrial, because there was not enough empirical data to draw this conclusion. The ETH, however, seemed to him a logical place to start. George Earley, a high-profile engineer with United Aircraft Corporation, who headed the NICAP affiliate in Bloomfield, Conn., understood his position:

"I don't think Jim was 100% sold on the UFOs being extraterrestrial spacecraft with beings in them," states Earley. "His essential thrust was that here was a topic worthy of scientific study which has not been studied scientifically, and we should find out what the answer is. He had a definite commitment to the truth, and if the truth turned out to be something else, he wouldn't have backed away from it."

McDonald's need to discover the truth of this unsolved problem was too overwhelming to let go. He knew that controversies and unorthodoxies in science had existed before and had been solved by pioneers who weren't afraid to research the fringes of science. About three weeks after the July hearings, he started a special file which he labeled "Controversies and Unorthodoxies" and kept adding to it. It begins:

8/25/68 At 7/29 Symposium Hynek cited aurora as good example of a phenomenon science could not possibly have explained 100 years ago.... I've used cosmic ray phenomenon to illustrate same. When Milliken & Compton began studies in 1920s...they couldn't possibly have given an intelligent explanation of some of the salient characteristics of C.R.'s.⁶⁵ Have to creep before you crawl. Nature of radioactivity couldn't have been rationalized in 1897, & still is not satisfactorily fitted into physics.⁶⁶

There were so many contributions he could make, so many good UFO reports which held forth promise of empirical data. McDonald was impelled forward, not only through the force of his own will, but by the nature of the field itself. Yet the basic philosophy by which he had lived all his scientific life was "Truth leads on to truth." If he could begin the process of discovering the truth about UFOs, others would follow, clarifying, adding on, even perhaps correcting mistakes he might make. In his seemingly tireless schedule, he gave no sign to anyone that, deep inside, he realized he might have to creep before he could crawl.

65. cosmic rays

66. McDonald, James E. "Controversies and Unorthodoxies," file in McDonald's Personal Collection, University of Arizona Library at Tucson.

The Judas Kiss: Condon's Betrayal

*The rolling of the sea, it's beckoning to me, singin',
"Come, my son, I'll show you things you've never seen before.
"They'll set your spirit free, on the wings of history,
"So hoist your sails and chart your course and go out and explore...."*
—From "The Rollin' of the Sea"

*When a distinguished but elderly scientist states that something
is possible, he is almost certainly right. When he states that
something is impossible he is very probably wrong.*
—Arthur Clarke

Two days after the Congressional hearings, in the early morning, incessant calls from the media began. On July 31, 1968, McDonald appeared on eight TV and radio shows by phone interview—CBS radio in Hollywood, KHJ-TV in Los Angeles, and the New York office of the Australian Broadcasting Commission. At 2:30 that afternoon, he was in the middle of a CBS-TV interview when the show was interrupted by a special announcement by President Johnson. He was threatening escalation of the Vietnam conflict if North Vietnam didn't come to terms at the Paris talks, which were ongoing at that time.¹ The CBS host was dismayed at the interruption, but McDonald courteously continued after the bulletin.

That same day, Lynn Pierce of CBS Chicago called. McDonald declined; by this time he had developed a keen sense about which media personnel were serious-minded about the UFO question and who just wanted to use it as "fluff." Many other media offers were accepted, and some were put off until he had more time.

1. McDonald, James E., fourth journal, reverse side, p. 20.

Adding these media interviews to his already crowded schedule necessitated even more after-hours work at his IAP office. His secretary, Margaret Sanderson-Rae, relates:

He would come in late at night and use the dictating machine. It was a little, inexpensive one, but it worked pretty well. He'd get numerous tapes filled, and then he'd dump them on my desk for transcription.

Sanderson-Rae, however, was not his secretary exclusively. She was the manager of the secretarial pool and had to divide her time between several IAP professors. At one point, she had to help at a water resources conference on campus by being the hostess, and at that time, she couldn't help McDonald with his work.

I had this older lady, Georgia, come in and work on some of Dr. McDonald's tapes. She did the best she could with them, but when she came to a word she couldn't understand, she would type a blank. Dr. McDonald was not accustomed to getting back material loaded with blanks! He said to me, 'I'm sorry, but Georgia's auditory acuity is not what it used to be.' Only Dr. McDonald would say 'auditory acuity'!

McDonald showed her a sheaf of Georgia's transcriptions, with all the blanks. "Look what I have to deal with," he said.

"OK," she said. "I would like you to listen to this tape and tell me what goes into those blanks. When you're alone in your office at night, you have the tape recorder sitting on your desk. "You lean back in your chair and swivel away from the recorder, and it doesn't pick it all up. It isn't high tech, you know."

"Then how do you transcribe it?," McDonald asked,

"With great difficulty," she replied, and McDonald laughed with her.

"You know," she told me, "you could do this with Dr. McDonald, this back-and-forth and give-and-take.... He could understand, 'Hey, the joke's on me.' So Georgia's job was not in jeopardy at that point."²

McDonald kept squeezing in as much time as he could on UFO research. When he talked before scientific groups, his travel expenses were paid by the sponsoring organizations and scheduled for weekends or days when his academic responsibilities were light. He put his modest honoraria into what he called his "private UFO funds" to pay for telephone calls and other research expenses. He had intense interest from the very beginning in the forthcoming government study. This well-funded program had been okayed by Congress

2. Interview with Margaret Sanderson-Rae, 23 May 1993.

only one day after the NAS had agreed to fund McDonald in a quiet, one-man UFO study. The abrupt withdrawal of the NAS offer was not generally known to researchers in the UFO field, but McDonald had hand-typed a letter about it in early 1966 to Jim Hughes at ONR. It read in part:

About a month back I decided to try to get NAS to look into the UFO problem. I wrote Tom Malone a long letter asking that something be undertaken within the Committee of the Atmospheric Sciences.... Things were shaping up to permit me to do some kind of a low-keyed study with NAS support when Rep. [Gerald] Ford's Congressional noises led to some changes.... DoD has gone to NAS to get suggested names and universities to participate in some kind of a UFO study. At least that's one version I've heard. I understand I'm at the head of the list of those who might tilt with the little green men, but to date I've heard nothing from DoD or USAF....³

McDonald had been led to believe first by the NAS and later by other highly placed contacts in the DoD and the USAF that he would:

1. be funded in a one-man study of UFOs; and
2. that he was on the "head of the list" to be chosen for the new half-million-dollar Air Force study.

Early in the formation stages of the government study, having heard nothing directly, McDonald called Jacques Vallée. J. Allen Hynek and Gerard Kuiper of the U. of A.'s Planetary and Lunar Lab also had expressed interest in participating.

As much as he approved of Vallée's approach, McDonald still had grave doubts about J. Allen Hynek's Blue Book record. The two spent the next half-hour hashing over Hynek's past record. Vallée was understandably loyal to his friend and mentor.

"Allen couldn't possibly have spoken out," he said. "He has paved the way for the present scientific interest in the subject."

"I don't concur," said McDonald flatly. "I feel Hynek contributed to obstructing progress. Anyway, I know Kuiper has tried to call Hynek, but hasn't reached him."

Vallée, by this time, had recognized McDonald's "rushing personality." "He was trying to change things too fast," says Vallée. "A lot of difficulty that Jim ran into was caused by this. He did not understand that scientific opinion would be very difficult to change."⁴ But McDonald simply did not want to be

3. Letter from JEM to Jim Hughes, 30 April 1966. (See Appendix Item 11-A,)

hampered by time constraints, or by officials connected with the new Air Force study who couldn't make up their minds! He continued to tap his high-level contacts. As early as July 1966, he called his friend Dr. Finn J. Larsen, then Deputy Director of Defense Research and Engineering in the Office of the Secretary of Defense. He'd been told that Larsen didn't know of McDonald's activities regarding UFOs, but chance remarks by Larsen suggested that he did. In fact, Secretary of the Army Harold Brown had discussed McDonald's efforts in the UFO field with Larsen ten days earlier, in connection with the Air Forces's "difficulty" in locating people for the Air Force UFO funding project.⁵ It was apparent that McDonald's UFO interest was being discussed in high places behind his back. *Brown always sounded resistant, but this is reasonable!*

An Air Force *ad hoc* committee had met in February 1966, chaired by Dr. Brian O'Brien, and was the first to suggest the "university team" approach, specifying that each "team" should have one physical scientist and one clinical psychologist plus field investigators, and an average of ten man-days per investigation. By these means, the committee thought, the teams could deal with the "roughly 100 sightings per year" that fell in the "unexplained" category.⁶ O'Brien's committee also advised that the public be kept better informed on the results of UFO investigations.

"How do you feel about the idea of teams headed by a clinical psychologist and a physical scientist?" McDonald asked one of his colleagues, Arthur Lowery. "It wouldn't bother me," Lowery replied. "Some people might welcome the opportunity to 'clear themselves'."

"Why should they feel the need to 'clear themselves' if they're just reporting something strange they actually saw?" asked McDonald.

"Well, maybe you're right," the colleague agreed. "It could dissuade certain others from reporting in the first place."⁷

Intrigued by Lowery's reaction, McDonald conducted a private survey on the question. He asked Lou Battan, several other IAP colleagues, as well as Betsy, and reported the results in his journal:

4. Author's communication with Jacques Vallée, 13 August 1995.

5. McDonald, James E., second journal, reverse p. 25.

6. O'Brien's *ad hoc* committee must have had classified material available which Blue Book did not share with McDonald. Blue Book's "unexplained" cases did not total up to anywhere near "100 cases per year."

7. McDonald, James E., second journal, reverse side p. 1.

*Most agreed it'd give a wrong slant to it. Lou felt if he was sure he did see something, a psychologist wouldn't bother him, but I think laymen wouldn't react that way.*⁸

One week after the Air Force first announced they were seeking "university teams" to research UFOs, McDonald developed a concept of various "manuals" that he thought should be developed for the teams' use, and included a brief description of what each manual should contain:

*Need collection of cases where reasonably experienced observers were fooled temporarily, (Leon's gnats, Kuiper's spiders, my Mars, kite & balloon incidents.) Another manual needs to cover known characteristics of principal phenomena like meteors, meteorological optical effects, ball lightning, contrails, aircraft lights, etc. Another might review past hoaxes. Another on radar anomalies, inversion effects on light & radar, mirages.*⁹

NICAP's Dick Hall told him there seemed to be confusion as to just what the "university teams" would do—whether they would review past sightings or begin field team work on new reports. McDonald shared a newsclip with Hall that stated that Rep. Gerald Ford was under the impression the university teams would study 600 older sightings.¹⁰ However, McDonald had heard from NAS sources that the teams would also study new UFO cases. Hall shared some privileged information with McDonald that indicated the government wanted to get the UFO subject away from the Air Force entirely. Another rumor going around was that the Air Force might put one university in charge of the whole thing.¹¹

It took a full year for the Air Force to choose, as rumors in the field continued to surface. Various institutions had been approached to find "university teams," but none wished to tar their halls with the UFO brush. Finally, the University of Colorado agreed to accept the assignment—and the \$500,000—and

8. *Ibid.*

9. *Ibid.*

10. Rep. Gerald Ford, who later became President of the United States, was very vocal on the need to study the UFO question openly. His interest might have been politically motivated, however, since his district was in Michigan, where the "swamp gas" cases had occurred. After becoming President, he made no further announcements on the question even though hundreds of letters from NICAP members urged him to do so. (The same situation occurred when James Carter became President. He had seen and reported a UFO himself and made a campaign promise to declassify all UFO documents if he was elected. Upon his election, nothing more was heard from Carter on this subject, either, in spite of numerous inquiries from civilian UFO researchers.)

11. McDonald, *op. cit.* reverse side, p. 1, p. 2.

one scientist, Dr. Edward U. Condon, was selected to head it. A staff, including scientists, behavioral psychologists and other experts, was selected.

McDonald, Hynek, Jacques Vallée and others who were eminently more qualified to assess the UFO question than Condon and his staff, were not chosen. The Air Force claimed they had selected scientists they felt would be "objective." ("Objective" meant that they had little or no knowledge of the UFO subject!) The study became known as "the Colorado Project" or "the Condon Committee" and consumed the interest of UFO researchers for three full years. McDonald held no bitterness; his basic concern was that competent scientists, whoever might be chosen, would address the question of UFOs scientifically. Betsy felt otherwise, and expressed her displeasure.



FIGURE 14. Some of the members of the Los Angeles NICAP Subcommittee, 1967. Top, from left, Idabel Epperson, visiting guests Richard and Marty Hall from Washington, D.C., NICAP headquarters, LANS chairman Dr. Leslie Kaeburn. Bottom, from left, Marilyn Epperson and Ann Druffel (author).

"You do the work and somebody else gets the money," she told him. "It's just like what happened with the civil defense research for the Titan missiles. Why shouldn't it be you? You're taking a lot of time with absolutely no remuneration from the Institute, to study UFOs, and somebody else gets the money and the credit."

"Condon's a good scientist. He's contributed a lot to physics," replied McDonald.

"But he gets chosen because he doesn't know anything about UFOs!," maintained Betsy. "It's like not choosing a scientist to study the moon because he knows too much about the moon!"

The Condon Committee set up an "early warning network" through which NICAP, APRO and other knowledgeable sources could inform Condon's investigators immediately when promising new sightings surfaced. It was the **stated intention of the Condon Committee to send out a scientific team to thoroughly investigate such reports within 24 hours; as it turned out, this was never done.** Everyone expected that the best cases would be included in the Committee's Final Report. UFO researchers cooperated fully with the Committee; a promising relationship developed between them and Condon's staff. With the help of scientists like McDonald, Hynek and Vallée, objective members of Condon's staff, which included Drs. **Dave Saunders, Norman Levine and Franklin Roach,** learned quickly that the UFO question was a puzzling scientific enigma.

McDonald participated eagerly in the effort to send data to the Condon Committee. On **March 13, 1967,** he sent Condon a list of "100 best sightings," advising that they be studied by the project's investigators. (see Appendix Item B). His list included many widely known cases which had been documented by competent researchers and which McDonald had also re-investigated personally. These 100 cases had characteristics of special interest, such as (1) **Multiple, reliable witnesses;** (2) UFO photos which had been **analyzed by professionals and considered most probably genuine;** (3) **radar-visual (R-V)** cases where the UFO had been caught on ground and airborne radar at the same time they were seen by witnesses on the ground or in airborne planes.

In sending his "100 best" list, McDonald hoped that the Condon staff would investigate, judge, and include the most puzzling in their Final Report. In 1967, he also invited the Condon staff to his home for a general discussion of the UFO question and one of Betsy's prize dinners. Condon declined to attend, but so many others accepted that the party was held in the large, enclosed flagstoned patio, instead of the family's dining room.

He also continued close contact with NICAP headquarters and its affiliates and subcommittees around the nation. Whenever he was in the vicinity where a NICAP group was located, they met and freely exchanged information. From 1967 through 1969, one of the chief topics of discussion was the Condon Committee. Early on, however, Condon gave objective researchers cause for concern, for he amused himself "investigating" the contactees and ignoring promising cases. Within a few months, objective researchers on his staff expressed their concern to McDonald and others in the field. It began to be feared that Condon's Final Report would be essentially negative.

At this point, Hynek and Vallée found themselves in the position of trying to "play the diplomat." They had the largest number of UFO files outside of NICAP and were the first scientists to brief Condon and his committee on the UFO question. They had proposed to their own university, Northwestern in Illinois, a method of computer-processing UFO data, but Northwestern officials refused to submit it to the Air Force. Vallée had processed his and Hynek's files, however, and eventually Dave Saunders of Condon's staff used Vallée's computerized files.¹²

I would
love to
know
more
about
this!

In spite of Condon's personal negativity toward the subject, McDonald resolved to be as much help to Condon's staff as possible, and consulted with them on many aspects of the study during the next three years. He continued to network with NICAP members all over the country, for they not only were referring cases from their areas to Condon's staff, but continued to investigate all UFO reports that came to their attention. Whenever McDonald had a talk scheduled before a scientific group in the Southern California area, Mrs. Idabel Epperson and her daughter Marilyn would host meetings of LANS, the acronym for the Los Angeles NICAP Subcommittee (see Figure 14).

From 25-30 local scientists, engineers and other experienced UFO researchers would be invited to LANS meetings, which took place whenever any prominent individual in the UFO field came into town. McDonald eagerly participated in these meetings. He invariably sat on a large ottoman in the Eppersons' comfortable living room, opened his large briefcase and spread out piles of material in a half-circle on the floor, the better to organize his thoughts. To everyone present, it was apparent that he was unique. Though a top scientist, he spoke at the level of the least scientifically literate person in the room. Most LANS members had college degrees and beyond, but not all were scientists or engineers. Idabel Epperson was a public relations expert, Marilyn Epperson was an accountant, and the author's background was in sociology and social case work. When McDonald discussed promising UFO cases which LANS was investigating, he spoke in lay language. Yet with technically trained persons, he eagerly discussed the most complicated scientific concepts. His wife and daughter Jan confirm:

"He took time to explain," states Betsy McDonald. "He didn't believe in obscuring issues," states his daughter Jan. "That wasn't his thing."

"Some people make it sound so difficult to show how smart they are," adds Betsy McDonald. "Mac never did that."

12. Author's communication with Jacques Vallée, 13 August 1995. Also, see Vallée's book, *Forbidden Science: Journals 1957-1969*, Berkeley, CA, North Atlantic Books, 1992, for enlightening glimpses into this same time period.

McDonald's immutable sociability made all NICAP personnel nationwide look forward to his visits. His confident air and endless curiosity convinced all who interacted with him that here was a rare ally. His persistence and energy led them to hope that a solution to the UFO question might soon be found. However, as late as October 1968, entries in his journals indicated that he wondered whether the Air Force still held his part in the Titan controversy against him. Although he never expressed any bitterness, he must have wondered, for his knowledge of the UFO field was second to none.

In late October 1968 he wrote Jim Hughes, at the latter's request, listing ten items bearing on the origin and final outcome of the controversy over missile-siting hazards in which he was involved in 1960-61. The most revealing remarks in this letter were as follows:

Mistakes the Air Force made on the missile sites are minor ones compared to the blunders they...made with respect to UFOs. [I]n each case, they've had less than the best advice.... I've told Air Force generals they're in deep trouble; there's no sign yet that I've made much of a dent.¹³

In the UFO field, however, he was "making a dent." He continued on, energy unabated. His wife Betsy continued to worry about him.

"It was just the last two or three years that he got so busy," she relates. "He was gone so much of the time." She worried in vain, for no amount of urging or logic could change him. The UFO question was all-consuming. He continually received confidential reports of sightings from military personnel and other government sources. He was in a position to receive these reports because of his accessibility to various military bases, U.S. Weather Bureaus and other government facilities around the country. Many scientists who had witnessed UFOs, who had never spoken openly about them, shared their experiences with him, knowing that he would keep their reports confidential. This private knowledge of startling UFO activity, including radar-visual sightings from the Vietnam war zone, preyed on his mind and increased his concern about the serious nature of the UFO question.

One of the most fascinating sightings he received came by way of his colleague, Dr. William R. Wilson, of the University of Washington Psychology Department. A prominent scientist had seen a large UFO in the Cascade Mountains, and Wilson repeatedly encouraged him to speak candidly to McDonald about it. Wilson could not get permission to reveal the scientist's name, so Wilson and McDonald referred to him as "Dr. X." McDonald's colleague Dr. Dean Staley

13. Letter from JEM to Jim Hughes, 29 October 1968.

also knew "Dr. X," having taken a course from him as a student at the University of Washington. McDonald asked Staley's opinion of "Dr. X's" reliability as an observer and scientist.

"I had [Dr. X] as a professor in one course in physics, and he was a hard-nosed guy," Staley remarks with a little chuckle. "I guess I always thought that it was significant that he saw something he didn't recognize. But it could have been a radiosonde balloon losing gas, or—who knows?"

McDonald bird-dogged this case for three years, for it had potential value in "making a dent" in the scientific community's acceptance of UFOs. Finally, through sheer persistence, he learned "Dr. X's" identity in a way totally unrelated to Wilson and Staley. "Dr. X" turned out to be Dr. Edwin A. Uehling, and McDonald promptly obtained a telephone interview with him.

Dr. Uehling was hiking in the Cascades in August or September of 1952 or 1953, with his cousin, Aletha Malone. They were near Lake Tipsoo, at Chinook Pass, 15 miles east of Mt. Rainier. While walking on a ridge, Malone saw an immense object in the west, low in the sky and headed toward the mountain. Uehling saw it for three to four seconds before it disappeared behind Mount Rainier. The huge object was intensely bright; its metallic glint had a bluish glow. Its shape was elongated and symmetrical with well-defined edges, "like a dirigible without a tail or gondola." Both witnesses got the impression of "apertures" but were not certain enough of this to give any details. The huge object subtended an angle of at least 1°, about two lunar diameters; this is an unusually large angular size for UFOs which are viewed airborne.

The object moved about five lengths after Uehling first spotted it. He made a rough estimate of its speed after the sighting but, by the time he was interviewed by McDonald, he remembered only that it was "a very high velocity." Yet there was no sound or visible trail. When first seen, it appeared quite near, because of its large size and clarity. However, when it disappeared behind Mt. Rainier, Uehling and his cousin realized it had been a great distance away and was much larger than they'd first guessed. He later computed the actual size of the object to be about 1600 ft. "It was incredibly long," he told McDonald.

Mrs. Uehling, whom McDonald also interviewed, stated that, when her husband and his cousin returned to their campsite, they were both very excited about what they had seen, even though, as Mrs. Uehling stated, "they are both fairly unimaginative people."¹⁴ Uehling noted the event in his diary, but a concerted effort to find the entry, in order to establish the exact date, was unsuccessful.

14. McDonald, "Summary of Sighting by Dr. Edwin A. Uehling (U. Wash.) near Mt. Rainier." Five-page typed report on November 11, 1969, interviews.

Uehling was extremely well regarded as a scientist, a solid, trustworthy man. From reliable sources, McDonald learned that he had been advised by his superiors not to talk openly about his sighting, lest it cast aspersions on the University of Washington! McDonald made several attempts, through Dr. Wilson, to persuade Edwin Uehling to report his sighting to the Condon Committee, but this was before McDonald learned "X's" identity. By the time he interviewed Uehling, the Condon Report was out; subsequently, Condon's staff never knew about the sighting.

NICAP was also deeply involved with the Condon Committee's study. In November 1966 Donald Keyhoe and Dick Hall were invited to Boulder to brief the Committee's staff. "Major Keyhoe and I drank a toast to the Air Force when we were flying out to Colorado," relates Hall, jesting. "'Here's a toast to the enemy!' we said, as we drank it." Dick Hall made other trips to Boulder to brief the Committee; all UFO researchers who worked informally with the Condon Committee were impressed with many members of Condon's staff. "I interacted with lots of people on the Project and got to know a lot of them," relates Dick Hall, "They were very nice, down-to-earth, direct people. Lots of them were very sympathetic and supportive.... It's too bad that they had no leadership from the top."

McDonald also got on extremely well with many members of the staff, but Condon's lack of interest irritated him. He expressed inordinate interest only in "contactees," claiming it was an interesting "study in psychology." From time to time Condon would "investigate" one who claimed to have ridden in a UFO or obtained the "Space People's" wisdom through "mental channeling." Condon did not even keep himself informed about the investigations his staff were conducting around the country.

Soon after the Condon's staff went into full swing, a curious document surfaced in the Committee's files, a memo written by Robert Low, Condon's Assistant Project Director, to James Archer, the Dean of the University of Colorado. The memo indicated that the Condon Committee was to pretend to research the UFO question, with an anticipated negative outcome. It read in part, "The trick would be, I think, to describe the project so that, to the public, it would appear a totally objective study but, to the scientific community, would present the image of a group of nonbelievers trying their best to be objective, but having an almost zero expectation of finding a saucer."¹⁵ Just who first found the memo in the files is still unclear. As early as August 1966, however, Dr. Roy Craig of Condon's staff saw it. Dr. Dave Saunders later described it in his book, *UFOs Yes!*:

15. Memo from Robert Low to Dean James Archer, dated August 9, 1966.

*When Roy read Low's August 1966 memo, he couldn't think of anything to do but take it to Norm [Levine] with the comment, "See if this doesn't give you a funny feeling in the stomach." Norm read it and agreed that it did.*¹⁶

Dr. Saunders had been on Condon's staff almost from the beginning. He was a psychologist and computer expert, an extremely ethical and dedicated scientist, who early on realized that the Project was not likely to be the objective, far-reaching study everyone assumed it would be. He allowed Donald Keyhoe to copy the memo in November 1967 and encouraged him to share it with the NICAP Board of Directors.

"I wanted Keyhoe and NICAP to be aware that I was under no illusions as to the one-sided nature of the Colorado University Study," wrote Saunders. "I felt that this might facilitate NICAP's continued support of our efforts to salvage something from it."¹⁷

Even before the existence of the "trick" memo became general knowledge, civilian researchers had become concerned by Robert Low's negative attitude; Condon's frivolous attitude served to strengthen their suspicions. The memo was so puzzling that one of Condon's staff members showed it to Dick Hall in January 1967, during one of his visits to Boulder. Hall did not, at the time, realize its significance.

"Jim Wadsworth, one of the junior members, pulled me aside and showed it to me," says Hall. "I read it in the context of everybody happy, talking, and drinking in a motel room. And I said, 'Well, he [Robert Low] sounds pretty skeptical. We'll have to change his mind,' or something like that and brushed it off. I underestimated it, obviously.... Keyhoe didn't learn about it until later, because I don't think I even mentioned it."

Marty Hall remembers seeing the memo with Dick Hall. "Dick and I went to Denver at the invitation of the Condon Committee," she says. "Someone on the Committee staff brought us a memo...saying that the point of the Committee was to 'investigate' and show that there was nothing there."

Jim Wadsworth, who first showed it to Hall, was discouraged that Robert Low should take on his part of the project with such a biased attitude. Wadsworth's attitude was understandable. Like most of Condon's staff, he was objective, and looked forward to the opportunity to research UFOs with what he assumed would be proper protocol. Hall's initial reaction toward the memo

16. Saunders, David R. and R. Roger Harkins, *UFOs? Yes!*, New York, A Signet Book, New American Library, p. 134.

17. *Ibid.*, p. 179

was understandable, also. In 1966 and early 1967 the entire UFO field hoped that the Condon Committee would study the UFO question impartially; there was no reason to believe that a half-million dollars of government money would be wasted.

When Donald Keyhoe saw the memo, he realized its implications but was forced to remain silent because he'd promised Saunders to keep it confidential. He shared it privately with McDonald some time later but felt ethically forced to exact a promise of confidentiality and did not give McDonald a copy because of his own promise of confidentiality.

Robert Low's lack of objectivity, exposed by the memo, outraged McDonald, but he said nothing publicly because he'd promised Keyhoe. He continued to work with Condon's staff and aided them in their field investigations every way he could. The memo, however, preyed on his mind. Gradually, among NICAP's top echelon, its existence became known but was not revealed to the general membership. The main reason for keeping it quiet was the quandary faced by the Committee's staff person who had found the memo in the files—they feared that Condon or Low would accuse them of having "stolen" it. McDonald finally obtained his own complete copy without going against Keyhoe's trust.

"Jim got it on a trip to Boulder," relates Dick Hall. "The issue came up, is this open information or is this a restricted file? Did they have any right to show it to him?" He was told, 'This is the open file.... We're not showing it to you....' They just arranged for him to look in the right place."

Saunders expands on what happened. In December 1967 he, Levine, Hynek, McDonald, and Mary Lou Armstrong, who was Robert Low's administrative assistant, met in Denver. The staff had decided to bring McDonald and Hynek together in hopes they could start working effectively together in the common cause. They got along better than they had during their first meeting at Northwestern, but Hynek was not feeling well and went home early. Then McDonald bluntly brought up the memo. The staff members were surprised he knew about it, because the copy Saunders had given to Keyhoe was to be shared with the NICAP board, but McDonald was not a member of the board.

"However, since McDonald did know of the memo, the three of us agreed it was better for him to have an accurate version of it," wrote Saunders in *UFOs Yes!*.¹⁸

By October 1968, McDonald learned how the Low memo had first surfaced and how it had been made available to Roger Harkins for use in *UFOs Yes!*,

18. *Ibid.*, pp. 179-80.

which he co-authored with Saunders. This book, a masterly exposé of the Condon Committee, detailed how another UFO research fraud had been perpetrated upon the public. Their book was published just before Condon's Final Report was released. It revealed how Saunders and Norman Levine had been charged with "incompetence" by Condon and summarily fired. Harkins was a reporter on the Boulder, Colo., publication, *Camera*, who was also fired in the course of the general blowup; Mary Lou Armstrong was also dismissed. McDonald had great interest in Saunders' book and talked frequently with him while it was being written. *UFOs? Yes!* essentially was the "pro" side of a difficult time in the UFO field, with the Condon Report providing the "con."¹⁹

McDonald was thoroughly irritated. He now had a copy of the memo burning a hole in his briefcase. He discussed it privately with a few trusted colleagues who had knowledge of the memo, but everyone was uncertain what to do. Plainly, it constituted evidence that the Condon Committee's top personnel did not intend to come to any objective conclusions. The situation was intolerable for McDonald. To him, scientific inquiry must be open, objective, and unrelenting.

In January 1968, he was invited to speak on UFOs at the Research Lab of United Aircraft Corporation (UAC) in East Hartford, Conn.²⁰ UAC was a megacorporation where NICAP's George Earley was employed. In spite of his sensitive position, Earley spoke out openly about NICAP and UFOs on radio, TV and public appearances (See Figure 15). He also was head of the Bloomfield Affiliate, NICAP*CONN, whose members included more than 30 scientists and engineers who were not afraid of being publicly involved. McDonald had become acquainted with Earley soon after he entered the field in the spring of 1966. Richard Hall had highly recommended Earley, assuring McDonald that NICAP*CONN was a "good batch of engineers and scientists because of Earley's leadership."²¹

UAC was a major aerospace corporation, and at the time Earley was most active in UFO research, about 90% of its business was from government defense contracts. "They didn't say much when I started it, but when the 'profile' started to get a little higher I got called in twice," says Earley. "A newspaper reporter used my name and our local Congressman Emilio Daddario's name, the Air Force and UFOs all in the same paragraph."²² They got a little upset about this."

19. McDonald, third journal, reverse side p. 27.

20. Now United Technologies Corporation.

21. McDonald's second journal, page 17.

22. Author's interview with George Earley, 21 April 1994.

His superiors called the reporter up and confirmed that Earley had been misquoted. Earley gave them a copy of his "stock speech," wherein he didn't even mention that he worked for UAC, but simply stated that he was an aerospace administrative engineer. The second time Earley was called "on the carpet" was when he was asked to speak on UFOs at the **Design Engineering Conference of the American Society of Mechanical Engineers (ASME)**, in New York. "The Corporation wanted to look at my speech," relates Earley. "And when they saw that my speech said nothing about the Corporation, they said, OK.... I never was threatened with loss of a job, or had any indications that I had a smaller pay raise because of this. A number of people over the years have claimed that their companies discriminated against them, but I was never subject, as far as I know, to any of that."



FIGURE 15. George W. Earley, head of NICAP*CONN Affiliate in Bloomfield, Conn. Although an aerospace administrative engineer with United Aircraft Corporation, Earley was also a high-profile UFO researcher with NICAP.

A bonus to McDonald's invitation to present a UFO seminar at UAC was that Earley invited a small group of scientists who would attend his talk and then have dinner at Earley's house afterwards. One of the guests was Dr.

Thornton Page, head of the Astronomy Department at Wesleyan University in Middletown, Conn. Dr. Page had been one of the five scientists who participated in the infamous "Robertson Panel" (See Chapter 3). McDonald had a lot of questions he wanted to ask Page about that CIA-Air Force debacle.

Some days prior to McDonald's seminar at UAC Research Lab, Earley was informed that McDonald had asked that he introduce him and act as an official chaperone. Earley was flattered by this request. Before McDonald conducted the seminar, he was given a tour of the Lab. Earley had a secret clearance because of his job, but McDonald, so far as is known, did not have any clearance at that time because his professional work did not require it.

"The UAC security people were sufficiently happy with Jim McDonald that they let him go wherever the Research Lab people wanted to take him," relates Earley. "He got to see a variety of experiments...different technologies they were working on. I assumed that he was cleared somehow, or they wouldn't have let him into some of the rooms where we were.... We saw some programs that were not public knowledge at the time. There was some laser work going on—I don't recall the details now, because this was scientific stuff above my level of competence. But he talked to a number of scientists...and they showed him this and they showed him that. I just sort of tagged along and nodded."

Although Earley had corresponded with McDonald and talked with him on the phone, this was the first time they'd met personally. "I liked him, he was a real nice guy," Earley states. "He was intense, but I was intense in those days, too. A lot of us involved in UFOs were intense!"

McDonald entitled his seminar "Science, Technology, and UFOs." The large room was filled, and people were standing anywhere there was space. The overflow went into the Lab's cafeteria, where the talk was piped in through the intercom. "There would have been several hundred scientists, engineers, and technicians, plus anybody else that might have weaseled their way in," Earley says.

Typically, James McDonald's talks were a combination of pure science and humor. He often lightened his scientific presentations with a few humorous slides, depicting the government's neglect of the UFO problem, and he'd add a quote or two revealing his penchant for philosophy and poetry. On this occasion McDonald stated: "A truism about science that has strong bearing on what I shall be saying to you concerning the UFO problem is this: 'Proud as we can be of today's cumulative record of scientific exploration of the world about us, we certainly do not yet know all that deserves the name of fundamental scientific knowledge.' Indeed, do we not all subscribe to the spirit of the closing lines of Alfred Noyes's moving trilogy about science,

The Torchbearers, 'Who that has once seen how truth leads on to truth, shall ever dare to set a bound to knowledge?'"

He gave a general talk about the importance of the UFO question and explained the eight hypotheses, adding: "My list of eight hypotheses is not exhaustive because other hypotheses still more bizarre...can be proposed—time travel, hidden terrestrial societies, mad millionaires with secret laboratories."²³

He also told the audience about a recently published book by NICAP's Ted Bloecher that outlined 800 UFO sightings in a two-week period in the summer of 1947, when "flying saucers" were first receiving public attention.²⁴ "To assert that some secret technology was, right after World War II, producing superlative vehicles still far beyond the known state of propulsion technology should sound particularly unbelievable here at United Aircraft," he stressed.

He also outlined several classic cases, explained in detail why Blue Book's and Menzel's explanations did not wash and addressed the "grand foul-up vs. cover-up" question. He then took on the Condon Committee, telling of his early hopes that it would work vigorously and open-mindedly to unravel the UFO problem, but that those expectations had dimmed as time went by.

"We had a nice time together when he came to my house for dinner," relates Earley. "I even got a present from him. United Aircraft had paperweights made up, depicting the solar system in a little globe like ball bearings. And it had 'United Aircraft Corporation Research Labs' on it. Jim got one of those when he spoke." Earley looked at the little globe. "Hey, that's kinda neat," he told McDonald. "I'm going to have to see my buddy in the PR office and see if I can squeeze one out of him." McDonald handed it to him and said, "You take it. I have so many souvenirs."

"That was my little souvenir, my little gesture from Jim," Earley relates. "I really appreciated that."

The dinner guests that evening were what Earley calls "the supergroup." They included McDonald, Page and David L. Morgan, Ph.D., who was doing post-doctoral research at Yale in an obscure branch of physics. A couple of years later, Morgan transferred to Livermore Labs in California and, as far as Earley knows, was never seen again in the UFO community.

23. McDonald, James E., "Science, Technology and UFOs," printed version of talk presented before United Aircraft Corporation Research Laboratories, Hartford, Conn., 29 January, 1968.

24. Bloecher, Ted, *Report on the UFO Wave of 1947*, Washington, D.C., NICAP.

Richard Hoagland, who at the time was assistant curator in a Hartford planetarium, was the fourth member of the "supergroup." He had great interest in UFOs and space research but was not officially a NICAP*CONN member.²⁵ The fifth member was John Fuller, the prominent journalist who had written several articles in top newsstand magazines on the subject of UFOs and two books, *Incident at Exeter* and *Interrupted Journey*.



FIGURE 16. The "supergroup" which met at the home of George and Margo Earley on January 26, 1968. From left: Dr. Thornton Page, Dr. David L. Morgan, John G. Fuller, Richard Hoagland, and Dr. James E. McDonald.

Earley didn't have a complete NICAP*CONN meeting that night. The supergroup, himself, his wife Margo, and their two growing sons were the only ones present. "My boys sat there kind of goggle-eyed, because they knew 'Dad' was involved in UFOs, and we had all these big names," he says.

During the next few hours, the UFO problem was discussed energetically. At one point, Earley snapped a picture of the super-group, and McDonald was caught for posterity, deep in thought, perhaps even unaware of the camera (see Figure 16).

25. Richard Hoagland is one of several prominent researchers and scientists currently studying "the face on Mars," a mile-long rock formation. Research of three scientific teams who have studied the "face" and other anomalous features on Mars are detailed in *The McDaniel Report*, by Stanley V. McDaniel, Berkeley, CA, North Atlantic Books, 1993.

"It was basically a bull session," says Earley. "Page talked a little about his experiences with the Robertson Panel, and Jim quizzed him on that."

McDonald had been waiting all day to quiz Page. He respected his contributions to science and wanted him as an ally in the UFO battle. Although he did not actively pursue the UFO question, he at least seemed more interested than most scientists. McDonald appreciated this, but he also wanted to try to figure out why a scientist who'd had a superb chance to protest the Air Force's handling of the problem back in 1953 had held back the way he did. He turned toward Page. "There evidently weren't any believers at the Robertson Panel. What were you doing there, Thornton?"

Page laughed. "That panel never had any real interest in the subject, Jim," he confided. "We only met for four days, eight sessions. How much research can you do in that amount of time?"

"What about your CIA 'hosts'?" McDonald pursued. "Didn't they object to your just skimming over the surface?"

"Object?" grinned Page. "Nobody objected. Not the Air Force, not the CIA, and as far as the other four on the panel were concerned, what did they care?"

"And what about you, Thornton," asked McDonald. "Didn't you care?"

"To tell the truth, Jim," said Page, "until you entered the field publicly, I thought it was a fringe subject, misidentifications, mass hysteria, whatever. You've changed all that."

"I'm trying to do my part," said McDonald, looking grim. "But one man, one group, can't do it alone. It's an interdisciplinary problem. It's going to take a number of good scientists, working from slightly different viewpoints, to get any kind of handle on it."

Page started joking about his Astronomy 101 class at Wesleyan, which he'd set up for business majors who couldn't be easily trapped into taking science courses. The name of the course was "Observing UFOs." He'd invited George Earley down to Wesleyan a few times, to talk about NICAP and UFOs. "It's basically a science course on how to learn to observe, how to derive data by interviewing, that sort of thing. But it sucks students in by using the UFO title."

"So it really isn't about UFOs?" queried McDonald.

"It is when George here comes down to speak to the class," said Page. "I'm willing to give him a chance to have his say."

"Is he using you to see how well the class would ask hard questions of a UFO 'believer'?" asked McDonald, turning to Earley.

"I don't mind," replied Earley. "We get the word out wherever we can."

McDonald continued to ask Page piercing questions about the Robertson Panel. "In my opinion, that panel set back UFO research 20 years," he said. "Five of the finest scientific minds in the country, each one a specialist who could have attacked the problem from the most puzzling aspects UFOs present us! Dr. Robertson, a mathematical physicist, a veteran of wartime intelligence missions, specializing in relativity and cosmology? Luis Alvarez, a nuclear physicist who co-invented the GCA system for tracking aircraft in fog and rain? Sam Goudsmit, discoverer of the theory of electron-spin? Lloyd Berkner, an expert on the ionosphere and terrestrial magnetism? And you, Thornton, an astronomer and an underwater weapons specialist.

"Do you have any idea how many 'underwater anomalies' are listed in Blue Book files?" he asked Page. "Aren't you curious about UFOs that are reported by groups of witnesses—including men on Navy ships—emerging from, and diving into, lakes and oceans? And Lloyd Berkner, right there on the panel with you, and an expert on ionization. Would he be interested in knowing that a top scientist at JPL is hypothesizing that the Heflin photos possibly show that the UFO was surrounded by ionized air?" (See Chapter 12)

The others looked at each other, intrigued. "Maybe Phil Klass isn't that far off, after all," said McDonald. "A JPL computer-enhancement scientist talking about ionization surrounding the UFO in the Heflin photo, and Klass claiming that some UFOs are just big, long-lasting 'plasmas'? Maybe Phil needs to realize that there's something 'unidentified' inside his 'plasmas'!"

McDonald was not satisfied with Page's answers to his questions, but he realized he couldn't do anything more that night to straighten out the mystery of the Robertson Panel. There were plenty of other topics of conversation, such as Menzel's second book, co-authored with Lyle Boyd, in which the prominent astrophysicist had tried to convince his readers that UFOs were nothing more than a "modern myth."²⁶ Then the discussion turned to the Condon Committee and the reality that Condon's approach was, to say the least, not scientifically vigorous. The subject of the "trick memo" came up rather casually, although most of the "supergroup" previously hadn't known about it. McDonald seized the chance and pulled his copy from his briefcase.

26. Menzel, Donald H. & Boyd, Lyle G., *The World of Flying Saucers: A Scientific Examination of a Major Myth of the Space Age*, Garden City, NY, Doubleday & Company, Inc., 1963.

Who?
This is very important
Why even if
scientists in
their response
fields are saying
that should be of interest
to them?

"Jim showed it to Fuller and the others," relates Earley. "Fuller leaped on it with great eagerness. 'I'm supposed to do another article on UFOs for *Look Magazine*,' he told McDonald. 'This would be just great!' The two of them put their heads together right there in my living room. And that was the genesis of Fuller's article on the *Low memorandum*, which appeared around *May of 1968*." It was now quite late, but for McDonald the evening had barely begun.

"Page and Hoagland and Morgan went home, and John and Jim sat and talked, well after midnight," relates Earley. "It finally boiled down to the fact that Jim had to go home early in the morning, so it was time for everybody to hit the sack." Earley said to John Fuller, "Why drive back down to the Coast? *Westport* is a good two hours away. We've got room, we can put you up."

"No, no," replied Fuller. "Just let me sit down in your contour chair and relax a little bit. I've got to meet with my agent in New York tomorrow morning." He settled himself in a big contour chair in front of the fireplace, where Earley found him the next morning, sound asleep in his clothes.

John Fuller, with McDonald's help, took upon himself the responsibility of exposing Condon's fraud. When his article appeared in the *May 14, 1968*, issue of *Look*, it pulled no punches. Its title was "*The Flying Saucer Fiasco*," and the subtitle told the story: "The extraordinary story of the half-million-dollar 'trick' to make Americans believe the Condon Committee was conducting an objective investigation."²⁷

It took four and one-half months to hit the stands, however. In the meantime, four days after the meeting at *Earley's Connecticut home*, McDonald wrote a lengthy letter to Robert Low, outlining his charges that the project was being mishandled and giving a list of suggestions on how the project could, even at that late date, turn itself around. He included a long quote from Low's August 6, 1966, memo, including the damning phrase, "The trick would be..."²⁸ McDonald's letter enraged Condon, who phoned Dr. Dick Kassander, IAP's Director, to protest that McDonald had encouraged one of his [Condon's] employees to "steal" a privileged document from the Committee's files for highly objectionable purposes. *He insisted that McDonald be fired*. Kassander suggested that Condon deal with McDonald directly. *'Bad damn Condon is petty*

McDonald had also contacted John Coleman of the NAS suggesting that the Academy set up an independent review panel of the Condon Committee, in order that scientists could be informed about Condon's negative actions, Low's memo, and the Committee's general neglect of many promising cases. He enclosed a

27. Fuller, John G., *Look Magazine* 14 May, 1968, pp. 58-63.

28. McDonald's letter to Robert Low, 31 January, 1968.

copy of his letter to Low and, with some trepidation, a copy of the "trick memo" itself so that Coleman and the NAS could fully realize its implications. When Condon heard about the letter to Coleman, he shot back a letter to McDonald with a copy to **Dr. Frederick Seitz, NAS President**. The letter mentioned "theft" several times and accused McDonald of "gravely unethical" conduct. Condon's letter to McDonald read in part:

Two men confessed their part in giving the memorandum to you.... I telephoned Dr. Kassander to ask whether he could persuade you that the stolen memorandum should be returned to us.... He suggested that I ought to deal with you directly, but I was so astonished by your attitude....that I felt this would be useless.²⁹

Dick Kassander was used to seeing his friend embroiled in controversy, but this state of affairs was a bit extreme, even for McDonald. Kassander set about trying to defuse the situation. He quickly wrote Condon, outlined his understanding of the situation and added, "...although Dr. McDonald and I have wide areas of disagreement, after 20 years of close association, I categorically reject any question of his tampering with the truth."³⁰

Condon never spoke personally to McDonald about all this, probably because he knew that any argument he might try to make would be ripped to shreds. McDonald never intended to cause such controversy. He was acting strictly out of his own love of science and was taking an honest approach to what he perceived as solvable problems. It took him a few days to realize he had unintentionally set off a **firestorm**. On February 11th, he hand-typed a confidential letter to his friend, Jim Hughes at ONR:

Dear Jim:

The fat's in the fire. My letter to Low...led not to deep scientific concern and response to the scientific implications and criticism, but to raging concern for the image of CU and the principal investigator. Condon had every member of the staff in for a grilling...to try to determine who was the treacherous, disloyal person or persons.... Now the Colorado project has lost the two persons most concerned to really dig into the problem.... Instead of hanging the horse thief [Condon] has hung the two who saw the horses being stolen.... There's more dynamite in all this than you can imagine—and probably more than I imagine, myself!³¹

29. Letter from Condon to McDonald, dated 15 February 1968.

30. Letter from Kassander to Condon, 23 February, 1968.

31. Letter from McDonald to James Hughes, dated 11 February 1968.

Now I understand the title of the book

McDonald had always attempted to steer clear of the politics of science; he considered it a waste of time. His comment about “dynamite” indicates that he was beginning to realize that political entanglements might be part and parcel of openly studying an “unacceptable” scientific question.

“Hynek had tried to warn him about this, that this wasn’t the way to get results,” states Jacques Vallée. “He overestimated the way that scientific opinion could change. **It must have dawned on him that something other than scientific skepticism was at work here!**”

Jacques is pretty smart, and given he had seen astronomic photos destroyed I'm starting to see the conspiracy angle.

Typically, McDonald forged ahead. He made notes about various aspects of the Colorado study as they occurred to him. He jotted down one list late at night on February 15, which included the following:

[1] *One goal re NAS confrontation might be more projects, with new & independent people on it.*

Was this done?

[2] *Request my Statement be entered as part of record to be reviewed by [NAS] Review Panel - if Project not terminated.*

[3] *Needed several independent Univ. groups, as per AFSAB record.*³²

See I just works mil & are university. I think I now understand the need for it to be broader.

[4] *Condon, instead of checking crackpot cases should have dug into contact [occupant] cases. No guts needed to study nuts...chance to study contact & paranormal cases.*³³

This list, found in McDonald’s “Condon” files, addressed a number of things that were very much on his mind. The NAS was slated to review the Final Report of the Condon Committee before releasing it to the public. McDonald fully expected that members of the scientific community would be allowed to give input to the NAS review panel, and he was planning to submit data to them.

His comment about Condon’s obligation to study contact cases, that is, cases like that of Betty and Barney Hill (See Chapter 10), as well as reports which included “paranormal” aspects is even more interesting. It shows that he had not abandoned the paranormal/psychic phenomena hypothesis entirely (See Chapter 8). In his notes of February 15 he was suggesting that Condon should have explored as objectively as possible those promising cases where credible witnesses had reported contact with “occupants” of landed UFOs and/or had experienced some type of paranormal phenomenon in the course of their sightings.

32. A reference to the Air Force Scientific Advisory Board *Ad Hoc* Committee chaired by Dr. Brian O’Brien, which had suggested a university team study. This recommendation was later disregarded, probably because most universities approached showed no interest in studying this “fringe subject.”

33. “Miscellaneous Notes” found in McDonald’s “Condon” File.



FIGURE 17. The Yorba Linda photograph, taken January 24, 1967, through the window of the 14-year-old photographer's home. Developed by a 14-year-old friend, the picture is stained and also shows scratches caused by a faulty winding mechanism in the inexpensive "Imperial Mark XII" camera. What seems to be a "string" holding up the UFO was proven by four photographic analysts to be one of these scratches, and the UFO was verified as "free-flying" and at least 100 feet from the camera.

UFO researchers were investigating promising cases of all sorts, from "hard data" cases to ones tinged with psychic aspects. As an example of a "hard data" case, NICAP had sent Condon information about "UFO-chase planes," particularly one credible case from Pease AFB, which strongly intimated that Air Force bases kept planes ready to chase UFOs, with the intention of gathering photographic, radar, and other forms of data. Condon and Low never bothered to follow up on this fascinating lead.³⁴

Another case that was baldly ignored by the Condon Committee occurred in Yorba Linda, Calif., on January 24, 1967. A 14-year-old boy had photographed a black UFO with antennae or "legs" dangling down from its underside (see Figure 17). In the same time period, a similar-type UFO was reported independently to the Air Force, by another 14-year-old in Iowa. The two witnesses did not know each other. Though young, they were judged reliable and

34. McDonald, fourth journal, reverse side p. 19.

trustworthy; the case was thoroughly documented by the Los Angeles NICAP Subcommittee over a four-year period.

The Yorba Linda family experienced other UFO close encounters during the same time period and were plagued for months by psychic phenomena, including poltergeist manifestations, a glowing apparition, and psychokinetic effects. The Yorba Linda photo was analyzed by three photographic experts, including a geodetic survey company which performed photogrammetry for the military in Vietnam. In spite of the fact that the photo was badly stained and scratched, no evidence of fraud or hoax could be determined. The photo, according to the best photo analysis, showed a free-flying unidentified object, about three feet in diameter, at a distance of about 100 ft. from the camera.³⁵ At the urging of LANS, one of Condon's scientific investigators journeyed to Los Angeles to investigate the Yorba Linda case, but their intended plans to interview the young witness were abruptly broken off without explanation.

The Yorba Linda photo and the Pease AFB "UFO chase" were not the only promising cases the Condon Committee ignored. One of the most startling occurred in Redlands, Calif., on February 4, 1968. A team of scientists from Redlands University researched the case in minute detail: the team included Dr. Philip Seff, a geologist; Dr. Judson Sanderson, mathematics; and John Brownfield, an art instructor. The team personally interviewed more than 100 witnesses. They appeared with McDonald on a Redlands TV station where minute details of the case were presented.

The strange object passed over Redlands in early evening. Its passage took three to five minutes, and it was viewed by more than 200 witnesses. Through triangulation, accurate estimates of its size and height were obtained—it was about 50 ft. in diameter and 300 ft. above the ground. The witnesses were generally terrified by the strange machine, and dogs barked ferociously as the object traveled leisurely over the city. The object gave off a high-pitched whine, which was caught on a tape recorder in a nearby church.

The nearest radar base was at Norton AFB, several miles away. Military personnel there claimed that it had not been detected on their sets. After passing over Redlands, the object shot into the sky; minutes later it appeared over Victorville, to the east. The Condon Committee sent Frederick Ayer to investigate the sighting. Dr. Reinhold Krantz, director of the university's Science Division, was asked to assist the original research team from Redlands.

35. Druffel, Ann, "The Yorba Linda Photograph," *FSR Special Issue NO. 5*, FSR Publications Ltd., P.O. Box 162, High Wycombe, Bucks, HP 14 5DZ, England, Nov. 1973. *FSR* is considered a premier journal in the field and contains articles on many aspects of the UFO phenomenon by respected researchers worldwide.

"We were very skeptical, and we tried hard to prove that the sighting over Redlands was a natural phenomenon," Seff was quoted by the San Bernardino *Sun-Telegram*. "But what we did was prove beyond any doubt that it was not natural." John Brownfield, working from the descriptions of dozens of witnesses, produced a composite sketch of "the thing" which showed seven "exhausts" and a row of brightly lit windows. The windows were strikingly similar to those on the huge UFO encountered by Betty and Barney Hill (see Chapter 10). At one point, the object hovered briefly and the seven "exhausts" sent huge flames downward. Seff hypothesized that this could have been "some sort of energy discharge...a tremendous amount of energy, unlike anything known today."³⁶

McDonald was greatly impressed by the Redlands University scientific team's investigation. He was also encouraged by the scientists' lack of fear. Seff had stated, "We can't be worried about ridicule. We're scientists, and there just isn't a reasonable doubt any more that this happened."³⁷ The Committee made an audiogram of the sound made by the object, and concluded that the sound was the same as that of a city emergency vehicle which was in the area at the same time. Yet the high-pitched sound associated with the UFO was much louder than that of the emergency vehicle. The door of the church was shut, yet the UFO recorded louder than the comparison tape. Seff and his associates were stumped by the discrepancy.

Months later, J. Allen Hynek expressed an interest in having the Redlands recording analyzed by an independent source. "Hynek wants the tapes real bad," McDonald wrote, yet all of Hynek's efforts to get the tapes back from the Condon Committee were unsuccessful.³⁸ Jim Lorenzen of APRO, which participated in Condon's "early warning network" called Condon directly asking for the tapes, and Condon promised to send them. Three weeks passed—and nothing. McDonald tried to get the tapes also, but met only stalling tactics. He surmised in his "Redlands" file notes that the Condon Committee would end up saying that the tape which Hynek, APRO and other researchers were attempting to retrieve was "thrown out." It would not be the first time. Did the sound-tape associated with the Redlands UFO disappear into the same dark hole into which the Drury film, the original Newhouse film, three of the Heflin photos, and many other bits of particularly interesting UFO evidence had already vanished? In July 1968 McDonald listed 13 reasons why he considered the case "almost a classic:"

36. "Redlands UFO Sighting May Spark Investigation," by Karl R. Edgerton, *Sun-Telegram*, San Bernardino, CA, December 1968.

37. *Ibid.*

38. McDonald, handwritten notes in "Redlands" file, University of Arizona McDonald Personal Collection.

Seff's
like the
radiological
physical
Castellanos
case

- (1) Close-range, low altitude sightings;
- (2) Multiple witnesses (estimated 200);
- (3) Machine-like, structured object;
- (4) Unconventional motion (jerked, hovered, shot up);
- (5) Animal reactions—dogs;
- (6) Physiological effects—hair stood up, chills, tingling, nausea;
- (7) Anomalous sounds— even taped;
- (8) Ridicule lid—police switchboard swamped;
- (9) Press response— local only;
- (10) Well documented & reported by three university persons;
- (11) Artist's documentation unusual & convincing;
- (12) Moderate panic response on streets;
- (13) No USAF interest, despite Norton Air Force Base proximity.³⁹

The Condon Committee had investigated the Redlands sighting at length, and it was assumed by UFO researchers that it would be included in the Final Report. The Condon Project was winding down and the entire UFO research field held its breath, wondering just how negative the Report would be. As the time drew near for the Committee's investigations to cease, McDonald made his plans, writing in his journal:

*Idea would be to prepare for 3 possibilities re Condon report: (1) Very negative; (2) Equivocal; (3) Positive, UFOs demand much more work.*⁴⁰

If the Report proved to be equivocal or positive in tone, McDonald reasoned, the way was paved for extended hearings before the House Committee on Space and Astronautics, with further assistance from any panel which might be formed within the NAS. But if the Report should be negative, he would need all available ammunition even to get it before Rep. George Miller's Committee! McDonald felt that what he called his "bill of particulars" would be part of that ammunition. The bill of particulars was a scholarly statement detailing all aspects of the UFO problem, which McDonald had written at Roush's request and which Roush had passed on to the NAS.

In the very next paragraph in McDonald's journal, after mentioning the bill of particulars, he mentions "the final revised drafts that went out from ONR to Udall and to Roush." It isn't clear whether these "drafts from ONR"

39. *Ibid.*

40. McDonald, James E., fourth journal, p. 6.

were the same document as his "bill of particulars," which was sent to Roush and NAS. If they were, this would be a most interesting development. It would mean that the Navy had taken an official interest in McDonald's study of "anomalous airborne objects" and that this ONR document might still be somewhere in ONR files. McDonald's journal specifies, however, that the revised drafts made no mention of UFOs, because "Capt. Van Ness does not wish to give any indication that the Navy recognizes UFOs exist."⁴¹ For the sake of clarification, the pages of McDonald's journal describing the "bill of particulars" and the "final, revised drafts" from ONR are reproduced as Appendix Item C.

McDonald fully expected that he could get the names of the scientists on the NAS panel which would review the Condon Report. To his surprise, NAS officials informed him that the panelists' names would be kept secret until the review was finished! McDonald could not understand this need for secrecy. He felt sure that his bill of particulars, presented to the NAS by a concerned Congressman, could be crucial, a document to cite, and a yardstick to aid the panel in its reviewing process.⁴² At this point, however, Fuller's article appeared in *Look* Magazine, blowing the whistle on Low's "trick memo" and documenting Condon's neglect.⁴³ McDonald was quoted by Fuller, regarding the sorry situation at Blue Book and the fact that the Condon Committee seemed headed for the same dereliction of duty. Donald Keyhoe was also quoted at length, stating that NICAP was withdrawing its support from the Condon study.

The *Look* article caused waves throughout the scientific community and brought to McDonald both kudos and criticism. When the magazine hit the stands he was in Albany, participating in a panel on weather and climate modification for a joint meeting of the AMS and the NAS. "Unanimous surprise re *Look* among Conference participants," wrote McDonald in his journal.⁴⁴ While there, he received a telephone call from the Huntsville, Ala., AIAA and was asked to speak on the subject of UFOs at a conference there. Joach Kuettner, who was at the conference with McDonald and who was head of the AIAA's UFO Subcommittee, assured him that the Alabama section was a "good, big group." McDonald accepted.

While flying to Alabama, McDonald discussed the forthcoming NAS review of the Condon Report with his colleague Gordon MacDonald, who confided that he doubted the anonymous NAS panel would "act voluntarily" in its

41. *Ibid.*, p. 6, reverse p. 6. (Appendix - Item C)

42. *Ibid.*

43. Fuller, John G., *op. cit.*

44. McDonald, *op. cit.*, p. 1.

forthcoming review, and that its chief concern would be its own image.⁴⁵ Another colleague, whom McDonald identifies only by the initials "JFM" told him that he would "nudge Daniel Greenbert" regarding coverage about the Condon Committee in the refereed journal, *Science*. "JFM" had been surprised at the *Look* article and felt that something should be done to get the facts of Condon's neglect out to the scientific community.⁴⁶ *Science* was a most prestigious journal, and McDonald knew it would be a rare coup to have it print the real situation regarding Condon's lack of responsibility and misuse of a government grant. In spite of "JFM's" efforts, however, *Science* refused to accept an article on the UFO subject from McDonald, just as it had refused UFO articles from other scientists active in the field.

The next day, after speaking to the AIAA, McDonald stopped at Washington, D.C., where he met with some loyal NICAP staff members at a favorite Chinese restaurant. They told him about a press conference which Don Keyhoe had held, immediately after the *Look* article appeared on the newsstands. It had been well attended, with 27 reporters eager for the complete story. Keyhoe passed out about 30 copies of the Low "trick" memo to the media. Phil Klass was also there, in his role as an *Aviation Week* editor, but was not neglecting his UFO skeptic role. "Phil taped the conference, and harassed Don," McDonald wrote in his journal. Klass also objected to Keyhoe's criticism of Condon for having only investigated a few contactee "cases" and asked Keyhoe how many cases he'd investigated during the last two years. Keyhoe, even though he was immersed in data on contactee cases, declined to answer.⁴⁷ Back in Tucson, McDonald received a phone call from Jim Hughes.

McDonald asked him if there had been any repercussions about his part in the *Look* exposé. Hughes informed him that there had been "no great reaction" to the article at the Office of Naval Research.⁴⁸ There was continued reaction from the media, however, who were still eager for more details. Keyhoe phoned McDonald on May 5, 1968, to ask for his participation in a St. Louis television show. McDonald obliged, and host Bill Field of KPR-TV called him for a phone interview. Phil Klass had also been invited to appear on the show for "balance," which displeased McDonald.⁴⁹

McDonald shared with John Fuller the encouraging reaction he'd gathered from a few scientific colleagues. In the meantime, however, Condon called Bill

45. *Ibid.*

46. *Ibid.*

47. *Ibid.*

48. *Ibid.*, reverse p. 1.

49. *Ibid.*

Arther, *Look's* editor-in-chief, to complain bitterly about the article and intimating that Fuller should be fired.⁵⁰ Fuller also told McDonald that the Air Force's Dr. Thomas Ratchford, who'd been in charge of choosing Condon as the "lead investigator," was not particularly upset by the *Look* piece and at first was inclined to let Condon "fight it out." However, when Keyhoe handed out copies of the "trick memo" to the press at his news conference, Ratchford was angered.⁵¹ From that point on, the Air Force defended the Condon study with no holds barred.

The battle continued into June, 1968. Seven weeks after the *Look* article appeared, McDonald received a phone call from A.J. Cote, Jr., editor of *Industrial Research*, based in Silver Spring, Md. Condon was on the editorial board of this publication.

"Cote tried to draw me out on the Colorado mess," McDonald wrote in his journal. "I made some off-record statements and a few on record." He also sent copies of all pertinent materials to Cote, including NICAP publications and Rep. Roush's statement about the urgency of scientifically studying the UFO question.⁵² Cote also interviewed Condon, sharing with him the materials he'd collected from McDonald. Condon violently objected to including Roush's statement in the article and asked Cote to cut some of the references to NICAP's work, Cote wouldn't bend; he published an article in *Industrial Research* in the June 1968 issue from McDonald's point of view. Condon, angered, resigned from the editorial board.⁵³

Cote was surprised at Condon's response. He phoned McDonald again to ask more questions, and McDonald told him that Condon had suggested to Bill Arthur at *Look* that Fuller should be fired. He also told him that the AAAS, a prestigious scientific organization, was planning a UFO symposium in December. McDonald suggested he call Carl Sagan, who was the symposium's co-organizer.⁵⁴

McDonald's logic was hurting Condon in ways he hadn't expected, and he began to hit back any way he could. He informed Cote that as a result of the *Look* article he was receiving phone threats and that he'd had to ask the police for protection.⁵⁵ Condon also contacted *Science*, and asked for space to reply to the charges in Fuller's article but was unsuccessful. Discussing the situation

50. *Ibid.*

51. *Ibid.*, p. 4.

52. *Ibid.*, p. 9.

53. *Ibid.*

54. *Ibid.*

55. *Ibid.*, reverse p. 9.

with Phil Boffey of *Science*, Condon told him that his Committee had had to fire Mary Lou Armstrong, Robert Low's Assistant, but gave an entirely fraudulent reason.⁵⁶ In reality, she'd been fired during the hullabaloo that ensued over the release of the "trick" memo. Although Boffey was not very interested in the UFO subject, he had previously spent several days at Boulder discussing the Committee's work with Dave Saunders and Mary Lou Armstrong, had come to know them as responsible people, and he knew that Condon's charge against Armstrong was completely unfounded!⁵⁷

In the meantime, Thornton Page and Carl Sagan were busy planning the AAAS UFO Symposium, but Condon interfered, violently expressing his opposition. He argued that his Final Report would not yet be reviewed by the NAS panel, and it wouldn't be fair to have McDonald and other speakers criticizing him publicly before they knew what was in it. Page and Sagan bowed to Condon's wishes, and called off the symposium. They planned to postpone it for a year, but Condon took their action to mean that they intended to drop the whole idea.⁵⁸

The repercussions of Fuller's *Look* article continued into the autumn of 1968. James McDonald tried repeatedly to contact his friend Tom Malone to discuss various aspects with him; he finally succeeded in reaching him in mid-November. The time for release of Condon's Final Report was imminent, and McDonald had heard a rumor that the Air Force and Condon would try to keep the Report secret. Malone agreed with McDonald that *Look* had made the situation so public there was no way the Report could be withheld. McDonald told him that he wanted a chance to lay his criticisms before the NAS panel before they decided as to its validity, rather than after. Malone agreed to check at NAS for him. He talked to John Coleman, a high NAS official but Coleman didn't mention the review panel so Malone didn't bring it up either! He told McDonald he didn't have any information to share regarding whether or not the NAS would allow McDonald to voice his criticisms before the review panel met. Malone then, in confidence, told McDonald that, as early as August, Fred Seitz, the Chairman of NAS, told him he planned to discuss the review panel with Malone himself!

Malone agreed that McDonald should send Seitz a letter "as a person much concerned," and point out that he felt the review panel might find it helpful to have his comments during the review, rather than hear them later. Malone, it seems, did not try to use his influence with NAS and had thrown the problem

56. *Ibid.*, p. 19.

57. *Ibid.*, reverse p. 18.

58. *Ibid.*, reverse p. 44.

(1) (2) Seitz & Coleman
are pretty central to all
this. It would be worthwhile
to write bias on these letters.

Do we
ever get
to the
point
where
we say
on this
panel?

back in McDonald's lap. Or perhaps Malone was simply entrapped in the politics of science! He said he would call "if he heard anything open," but McDonald heard nothing back.⁵⁹ *If I was Malone I wouldn't want to get trapped playing favorites either.*

On January 7, 1969, J. R. Siever of NAS abruptly informed McDonald that the Academy had finished its review, and that the Air Force planned to release the finding within 48 hours! McDonald immediately phoned Dick Hall, so that he and NICAP could coordinate plans to comment on the Report's findings in the media. CBS had gotten its hands on a copy of the three-volume Condon Report and had promised to get it to NICAP by Wednesday evening so that Donald Keyhoe could tape a commentary on it. McDonald had airline tickets for a professional trip a few days later, but immediately replaced them, putting a "leg on his trip" so he could study the Condon Report in D.C. He wired Seitz, asking for a chance to see the NAS review, and informed Congressman Mo Udall about it "for backup." Seitz made no response.⁶⁰

All available NICAP personnel gathered together to prepare a thorough estimation of the Condon Report. CBS's copy did not arrive as promised, but NICAP procured a copy from a friendly reporter at ABC, who warned them that the DoD had "chewed ABC out" for planning to break the story prematurely, at noon the next day. How DoD knew that ABC had a copy is a mystery! Dick and Marty Hall drove McDonald to NICAP, where he sat up most of the night studying the immense three-volume Report. It was quickly discovered that Condon had come up with extremely negative "Conclusions," which were placed at the front of the Report—which most people in the UFO field, including McDonald, considered a strange place to put "Conclusions."⁶¹

It was logically suspected by McDonald and NICAP that Condon had put his conclusions in the front to discourage any potential readers, especially scientists, from reading the rest of the immense report! Condon's "Conclusions" stated flatly that UFOs were not worthy of further scientific study. Most of the 900 pages was "fill," discussions of how radar anomalies could be caused by weather and other natural causes; psychological implications; sections on optics, plasmas and the like. No specific UFO cases were even discussed in these long, "fill" sections!

59. *Ibid.*, reverse p. 29.

60. *Ibid.*, reverse p. 33.

61. According to Jacques Vallée, every scientific report he has submitted had an "executive summary" in the front section containing his conclusions. Vallée does not consider the fact that Condon put his "Conclusions" at the beginning of his "Report" particularly significant, in contrast to the opinions of other researchers in the field.

The UFO cases which the Report did address were tucked in the middle of the book, together with samples of hoaxes and familiar meteorological and astronomical phenomena often reported as UFOs. The few promising cases which Condon's staff had investigated competently were given coded numbers. The Redlands case and some others the staff had investigated thoroughly were not even included. No names of witnesses were given and the dates and locations were obscured. By arranging his Final Report in this manner, Condon effectively stymied most scientists who might wish to investigate the "meat" themselves!

January 8, 1969, was a hectic day, even by McDonald's standards. He stopped by Rep. Udall's office to pick up a second copy of the Report and also stopped at Rep. Ryan's office to pick up copies of a floor statement Ryan had made about the UFO problem. He did a 15-minute interview with Bill Downs at ABC-TV, and then spent the rest of the day getting ready for the press conference, which was held at the National Press Club Building. Dave Saunders, whose own book, *UFOs? Yes!* had just been released, came in from New York to participate. Phil Klass was there, taping the proceedings.⁶²

I wonder are these tapes available

There was plenty of TV coverage that night, all based on the press conference. However, all of the TV footage used seemed to be on Keyhoe, while McDonald and Saunders were omitted. While McDonald watched the broadcasts, he also studied the "Thayer section" of the Condon Report. This was the radar section, and McDonald realized with inner dismay that that particular section was much poorer than he'd first "guesstimated."⁶³

The next day, McDonald, Dick Hall, and Isabel Davis spent several hours assembling data for NICAP's official rebuttal of the Condon report. They finally had to stop when McDonald's plane was due to leave in late afternoon for Chicago. An *Arizona Star* editorial had mentioned "borderline dingalings" in conjunction with UFO research, so the trio drank a toast to "borderline dingalings" as McDonald prepared to board.⁶⁴ At Chicago's O'Hare Airport, he phoned J. Allen Hynek to touch bases and was surprised at Hynek's reaction. Hynek seemed almost pleased at the negativity of the Condon Report. "Now the 'big boys' won't take the problem away from you and me!" he told McDonald.⁶⁵ This wasn't what McDonald was concerned about! In fact, he'd written a colleague just a few weeks before, stating an inclination that he wished that somehow the UFO question could be solved

It's possible Hynek was just trying to be optimistic

62. McDonald, *op. cit.*, p. 34.

63. *Ibid.*

64. *Ibid.*

65. *Ibid.*

as a conventional natural phenomenon, so that he could be free of it and return full-time to atmospheric physics.

The whole situation galled McDonald. Returning from Chicago, it took him only three days to put together a scientific colloquium at the IAP, where he proceeded to educate his colleagues, and everyone else at the university who wished to attend. The colloquium's title was "Condon Report." No other explanation was necessary; the subject was spread all over the media. Practically everyone in the country was aware that a "scientific, government-funded panel" had come to the conclusions that UFOs were a bunch of nonsense.

As if to nail the coffin lid shut on the pesky objects, the Air Force's Project Blue Book was officially closed in mid-December, 1969. Air Force Secretary Robert C. Seaman, Jr. assured the public that "none of the 12,618 reports of sightings of flying saucers investigated had ever indicated a threat to national security. Furthermore, there has been no evidence that any of the 701 UFO sightings classified as 'unidentified' represented advanced technology or might be vehicles from another world."⁶⁶ One cannot help but wonder if Blue Book was phased out because it no longer served the purpose of assuring the public that the UFO question was "in good hands." McDonald had proved that it was inefficient, incompetent, and dishonest.

Whatever forced this ultimate Air Force action, the final "Judas kiss" had already been given the subject by the Condon Committee Report. This fact was thoroughly covered in McDonald's IAP colloquium. He pointed out that the main question about UFOs was not: (1) Did they present a threat to national security? or (2) Was there any evidence that they might be extraterrestrial craft? The main scientific question UFOs presented was that there was evidence of some type of unknown, solid aeroforms traversing earth's atmosphere and overflying national borders. They had been photographed by reliable people and tracked on ground and airborne radar. Many of these radar-visual cases, stressed McDonald, involved aerial maneuvers and speeds which defied currently understood laws of physics.

He emphasized that the ET hypothesis was a working hypothesis only, and it meant nothing for the Air Force and Condon to reassure the public that UFOs represented no extraterrestrial threat! What UFOs were and why they were here were peripheral problems which should be set aside until the scientific community accepted the fact of their existence and began to adequately study them. A quandary still surrounded McDonald, however. Scientists with little or no knowledge of the subject, and other detractors, persisted in stating that

66. "Air Force Investigation of Flying Saucers Ends," *Los Angeles Times*, 18 Dec., 1969, Part I, p. 26.

Get copy!

INVESTIGATE

This is extremely compelling because it shows the USAF distinguish between National Security & Alien crafts.

Thus proving that Seaman was lying.

he was convinced UFOs were extraterrestrial. Gordon Lore clarifies his position, as other researchers have also done throughout this book (See Chapter 8).

"He left it open," explains Lore. "He didn't think that the ETH was the only hypothesis. He thought that, based upon all of the evidence that he had seen, that was the best working hypothesis, but he was certainly open to others."

Dr. William Hartmann, who had been on Condon's staff and who had in the Condon Report summarily dismissed the Heflin photos as a crude hoax, was present at the colloquium (see Chapter 12). McDonald asked him pointed questions about his role on the Committee, and Hartmann conceded that Dr. Condon and Robert Low were biased from the start, and that the Committee should have "done more on the old Classics."⁶⁷

After the colloquium, McDonald set about studying the entire 965-page Report line-by-line, and arrived at a surprising conclusion. Fully one-third of the cases which were included, tucked among the voluminous pages, were solid cases, labeled "Unidentified"! Condon's "Conclusions" did not match what was hidden inside the 965 pages of text. McDonald wondered if Condon had even bothered to read his own report! He set about tracking down the coded reference assigned each case, so that he and other researchers might know the "when, where, who and how" of each "Unidentified." His intention was to rebut Condon's Report case by case and line by line.

67. McDonald, *op. cit.*, p. 34.

The Pictures That Almost Proved It

*I gave Uncle Walter a new coat to wear,
When he came home it was covered with hairs.
Lately I've noticed several new tears,
I'm afraid Uncle Walter is waltzing with bears....*
—from “Waltzing With Bears”

*Show me a man who is not confused and I will show you a man
who has not asked enough questions.... It takes courage to
engage confusion deeply.*

—John Ciardi

Quoted by Dr. R. Leo Sprinkle in *FSR* June 1969

In spite of McDonald's interest in numerous types of UFO reports, he realized that only those reports where documented proof could be obtained would convince the scientific community that UFOs were real. Two types which seemed to hold out hope of proof were: 1. Photo cases which held up under the most careful scrutiny; and 2. Radar-visual cases, where the objects were seen visually and monitored on radar at the same time.

There are, unfortunately, very few UFO photos that survive scientific analysis. Many that surfaced during the McDonald years proved to be **Frisbees, hubcaps** or even **“disc-shaped” lamps reflected in windows**. There was even a strange-looking picture of an antennae “craft” which the photographer claimed had been taken aboard a ship at sea (see Figure 18). NICAP accepted this photo for years as “possibly genuine” and included it among a ten-photo packet that was distributed to researchers. Although the other nine pictures have retained credibility through the years, the photo of the antennae “craft” was eventually proven to be a model carved from a **potato!**

There was one set of photos, however, which engaged McDonald's interest intensely. These were the famed Heflin photos, a set of four Polaroid

prints, taken in Santa Ana, Calif. By the time the case was considered “documented” by LANS, the photos had been examined by six photographic experts, and the integrity of Rex E. Heflin had been established beyond doubt. The event received media coverage all over the world; the full story of McDonald’s part in the investigation is told here for the first time from his point of view, gleaned from 30 handwritten pages in his “Heflin” file.



FIGURE 18. A photo of a UFO which was accepted by the UFO field as “possibly genuine” for years but was eventually proven to be a model carved from a potato.

On August 3, 1965, at about noon, Heflin, 38, stopped his work van by the side of Myford Road, where some branches of a tree obscured a railroad crossing sign. His van was facing north, and was about one-half mile outside the perimeter of El Toro Marine Base. Heflin was a highway maintenance engineer for the Orange County Road Department, and part of his job involved keeping all traffic signs clearly visible to motorists. He picked up his Model 101 Polaroid work camera, which was loaded with ASA 3000 film, to photograph the traffic hazard. At the same time he also attempted to report the hazard to his supervisor on his van radio so a road crew could come out to clear it, but there was unexplained strong static on his radio.



FIGURE 19. Rex E. Heflin's first photo, taken as the unidentified flying craft crossed his line of vision, as seen through the windshield of his work truck.

As he started to photograph the railroad sign, a flash of motion in the sky caught his eye. A strange, disc-shaped craft which he judged to be about 20 ft. in diameter flew from left to right across Myford Road. It appeared to be about 1/8 mile away. The strange craft had a shiny dome and rim which reflected the sunlight; a broad black band circumvented its middle. Struck by its unfamiliar shape, Heflin shot Photo #1 through his windshield as it crossed his line of vision (see Figure 19). As the object moved toward the east it tipped, revealing its dark underside. He observed a light beam rotating clockwise around the bottom, from the center out to the rim. The light was greenish-white and seemed to be oscillating or blinking and took about two seconds for each rotation. (He later hypothesized that it might have been light reflection from a slow-moving "propeller" or other rotating blade.) Heflin took Photo #2 through the passenger window of his van (see Figure 20).

As the craft moved farther to the east, Heflin snapped Photo #3 (see Figure 21). By this time, the object was smaller in size and the sunlit features were less distinct, although the black band still showed clearly. The craft then seemed to "stabilize" its flight, made a turning motion and headed toward the northeast,

out toward the 405 San Diego freeway, which cut across the landscape about 3/8 of a mile away. It gained in speed, and went out of sight leaving behind a ring of bluish-black smoke. (See Appendix Item 12-A, page 559.)



FIGURE 20. Heflin's second photo, taken through the truck's passenger window as the craft tipped, revealing a dark underside.

Heflin drove his van toward the smoke ring, which was slowly rising in altitude. He got out of the van and photographed it as it slowly traveled toward the northeast, at an elevation of about 50°. The only reference points in Photo #4, besides clouds, were a telephone wire and a limb of a tree. By this time, the ring was three to four times larger than the diameter of the craft from which it was apparently emitted and was bent out of shape by the winds (see Figure 22). Heflin was surprised at the smoke ring's "solid" appearance; it did not dissipate like ordinary smoke. Little did he realize that Photo #4 would become the source of vigorous controversy in the UFO field, deeply frustrating McDonald and causing an unexpected rumpus between the scientist and his UFO colleagues.

After the craft flew out of sight, Heflin noted that the interference on his radio had ceased, and it worked well again. Since he assumed the unusual object was an experimental aircraft from El Toro, he didn't get very excited about the pictures. He showed them to a few co-workers when he arrived back at his office, but some of these work mates seemed agitated by the smoke-ring pic-

ture. It was something that one wouldn't expect to see associated with any kind of experimental craft or, for that matter, any kind of UFO! Heflin agreed that "three pictures were enough for one day!" He thought little more about them, but some of his relatives and friends, however, took great interest in them. They borrowed the three photos of the craft, had them copied and eventually his sister took Photos #1, #2 and #3 to the *Santa Ana Register*.



FIGURE 21. Heflin's third photo, taken as the UFO changed course and sped north out of sight.

The *Register* checked at El Toro Marine Base and inquired if anyone else had seen the craft, but El Toro insisted that no other reports had been received. They told the *Register* that it was not an experimental aircraft from their base. Copies were also made by the newspaper's chief photographer, *Clay T. Miller*, and the three pictures were published for the first time in the newspaper on *September 20*, six weeks after the event occurred. Heflin was never asked for permission to print the photos, and even though they were subsequently published widely in journals and magazines throughout the world, he *never asked for any remuneration*.

Years of harassment from curiosity seekers and interminable investigation by *UFO researchers* began. Through it all, Heflin consistently displayed lack of interest in publicity, but when he was questioned by objective researchers

he was always forthright. The complete details of what happened to the photos after Heflin brought them to his office are complex and lengthy, but what is most important here is that qualified NICAP investigators including John Gray and Ed Evers—two aviation engineers employed at North American—learned of the sighting. Gray and Evers were methodical and objective members of LANS, headed by Dr. Leslie K. Kaeburn, a noted biophysicist.¹ By the time LANS became involved in the case, Marine Corps Intelligence officers had come by Heflin's house, interviewed him and borrowed the pictures to make copies. Heflin didn't ask the Marines for a receipt, yet they carefully requested him to sign a receipt when they returned the photos!

Could this somehow be related to the effects of the Prandtl-Glauert singularity?



FIGURE 22. Heflin's fourth photo, showing a bluish-black smoke ring which the craft apparently left behind as it rapidly sped away.

The USAF also contacted Heflin and conducted an official inquiry. The investigating officer, Capt. Charles F. Reichmuth, also copied and returned the photos. He checked with Heflin's supervisors and learned that he was a valuable employee—mature, alert and trustworthy. Reichmuth noted in his report that he “could find no evidence to disagree with this estimate.”² However, a

1. Dr. Leslie Kaeburn died in 1968, and Idabel Epperson succeeded him as LANS Subcommittee Chairman.

Project Blue Book "Photo Analysis Report" describes a "comparison shot" the Air Force made with a Polaroid 110 A, of a 9" vapor tray, or pan, tossed in air at 15-20 ft. distance. In spite of Reichmuth's generally positive report on Heflin, the results of the vapor-tray experiment evidently satisfied Blue Book. It listed the Heflin photos officially as "a hoax," in spite of the fact that Capt. Reichmuth's report stated, "From all appearances, he is not attempting to perpetrate a hoax."

A man representing himself as a NORAD Colonel phoned Heflin on September 20 and arranged to meet him two days later, warning him, meanwhile, not to discuss the event with the press. On the evening of September 22, two men in civilian clothes, claiming to be from NORAD, came to his door. One of them flashed a salmon-and-green card which Heflin thought looked similar to those carried by El Toro marines, but he did not remember the name on the card. The second man did not participate in the conversation. The first man asked to borrow the photos and Heflin obligingly lent him Photos #1, #2 and #3, fully expecting that they would be returned. Since the man did not discuss Photo #4, Heflin said nothing about it.

The self-proclaimed NORAD men failed to return the three photos. Heflin tried to track them down, assisted by NICAP investigators, but NORAD disclaimed any knowledge of them. Heflin even contacted Congressman James Utt, in whose Congressional District he resided. Utt inquired on behalf of Heflin, and was "assured" that NORAD offices had been searched from top to bottom with no results. As a consequence of this theft, Heflin and UFO researchers were left with only copies of what would eventually prove to be some of the best UFO photos which have even surfaced. The identity of the two "NORAD" men remains unknown.³

Heflin was roundly criticized by some individuals in the UFO field for lending out his original photos in what they considered a "careless" fashion. Heflin

2. Young, Mort, *UFO: Top Secret*, New York, An Essandess Special Edition, 1967, contains a copy of a report filed by Capt. Charles F. Reichmuth, USAF, who learned of the existence of the Heflin photos on September 14th, borrowed them on the 18th and returned them on the 22nd. However, McDonald's "Heflin File" indicates that Idabel Epperson of LANS was under the impression that El Toro learned of the existence of the photos from the September 20th *Register*.
3. A "NORAD Colonel" phoned Heflin on the 20th, asking to borrow the originals. The same day the El Toro Marines returned the photos to Heflin, two "NORAD" men came to Heflin's door and "borrowed" the originals. Is this timing coincidental? Or was there cooperation among official sources of which Heflin and LANS investigators were unaware? It is not uncommon for official sources to take furtive interest in UFO events while publicly dismissing them.

was used to working with officials in government and the military in the course of his work, however, and was by nature a trusting and cordial man. The fact that he was untroubled about lending the photos was due to indifference. He was basically a skeptic regarding UFOs, and for weeks after the event thought that the object was an experimental aircraft. Not until scientists and engineers connected with NICAP-LANS and other organizations took interest in the photos did he begin to think he had photographed something highly unusual.

James McDonald learned about the Heflin photos from NICAP headquarters. He promptly took an interest in them and established close relationships with the members of LANS. Long letters regarding every aspect of the incident, answering all of his piercing questions, traveled between Los Angeles and Tucson. He was impressed by NICAP's careful, objective investigation of the case. He came to the conclusion that Heflin's photos were "outstanding" and considered them among the very few which could be considered "genuine." His acceptance was demonstrated by the fact that he included them in his list of 100 best cases which he later sent to the Condon Committee staff. Extremely dubious of the Air Force "hoax" explanation, he wrote in his Heflin file, "Wonder if anyone had taken Rex's camera, set it for 15 ft., shot a 9" pan, then checked for blurring of the freeway power lines visible in Heflin's photos?" Photogrammetric analysis on the photos had already shown that the telephone lines were remarkably sharp.

McDonald not only worked closely with LANS members but telephoned Heflin personally and interviewed him at length. Heflin told him that Air Force Investigator Reichmuth had asked him about his politics and religion. Heflin had a keen sense of humor, and questions like these amazed and amused him. Why should witnesses' politics or religion be part of a UFO investigation? "The general public would scarcely believe it!" Heflin remarked to McDonald.

McDonald investigated the matter of the interference on Heflin's van radio, because this was a reported physical effect which could be checked out. He interviewed Heflin's superiors and confirmed that the radio malfunction had indeed occurred and that other radio systems in the area had been affected at the same time. McDonald consulted Walt Evans, a U. of A. colleague, and satisfied himself that it was quite conceivable that a strong field (for example, on the order of 1 v/m) at the same frequency as Heflin was using could "blank" the system. The type of amplifier generally used in the first stage of transmission would simply block or saturate at very high receiver signal-strength and transmit nothing at all. McDonald wrote in his "Heflin" file that he didn't get the full picture of how it "blocks," but Walt Evans assured him it could occur. In a rare personal comment, McDonald also wrote, "I now wish I knew more of just what happened to the radio, and in what order?"⁴

In early March 1967 McDonald phoned Idabel Epperson. Although Dr. Kaeburn was LANS Chairman, Epperson handled the administrative duties of the group, as well as investigating cases with exceptional skill. Judging from the positive photo analyses and the LANS investigative reports, McDonald felt that the Heflin photos were worth investigating on-site. Typically, he still had some questions which he felt had not been answered. He was particularly worried about the haphazard way in which Heflin had initially treated the photos. Epperson explained that Heflin felt he'd got pictures of experimental technology that he perhaps shouldn't have photographed, not a rare set of UFO photographs. *proper escalation*

"Rex had mixed feelings about his actions," McDonald noted in his journal after his phone call to Epperson. "County Roads people had various troubles with El Toro Base, traffic regulations, drunks, and keeping weeds clean." Heflin simply didn't wish to add to the troubles and for that reason made very little personal use of the photos. However, he lent them out to whomever asked. After El Toro borrowed his originals to copy, and returned them promptly, Heflin's anxiety eased off, for El Toro gave no sign that the object was an experimental craft.

In Tucson, it was McDonald's habit to discuss interesting cases with any colleagues or family members who would listen! A member of his family saw something in the Heflin photos that no one else had noticed. The first three pictures of the craft in flight, taken from inside Heflin's van, showed "flat," overcast skies, while the fourth, which Heflin stated was taken only about a minute later, showed what McDonald's meteorologist's eye identified as heavy cloud cover in the vicinity of the ring. McDonald checked with every available weather service within 50 miles of the Myford Road site. From their logs, and from scientific data concerning humidity and temperature in the locality for that date and time, he became convinced that the clouds in #4 Photo could not possibly have formed in the sky at that location on the date in question. He also began to wonder why the smoke-ring photo had not been printed in the Register's original article. *don't see the heavy clouds, but the report is probably good & McDonald is the expert.* He began to suspect that Heflin, for some reason, had been "holding out" on Photo #4. Heflin had not emphasized Photo #4 picture for reasons explained above; it had not been copied by any source except LANS. He'd never intended to hide its existence from anyone. Early on, he'd lent the fourth photo to LANS investigator Ed Evers, so LANS members knew he wasn't "covering it up."

Idabel Epperson had checked weather data, too. G.W. Kalstrom of the U.S. Weather Bureau at LAX International Airport had assured her that thick clouds could form in portions of the Los Angeles Basin when the rest of the

4. McDonald, James E., "Heflin File."

sky was simply overcast. He told her, "The weather people simply looked out the wrong window!"⁵ Epperson also noted that her copies of the photos showed quite heavy clouds, especially in Photo #1, while McDonald's copies, which were a different "generation," showed a flat, overcast sky. The reason for the difference was that the two copies had been made under different degrees of exposure.

McDonald wasn't convinced. He was confident that the thick clouds in Photo #4 couldn't possibly have formed under the temperature-dew point difference which prevailed in the area at the time of Heflin's sighting. Pursuing the issue, he learned that Epperson's conversations with the National Weather Records Center and local weather bureaus had produced the information that an overcast sky could look essentially "flat" in pictures taken at a low angle from inside Heflin's van, as the first three photos had been. However, there could have been fairly thick clouds in the easterly sky where the ring was photographed, according to weather conditions Epperson obtained from the U.S. Weather Bureau. At the 50° angle at which the Photo #4 had been taken outdoors, these fairly thick clouds could have looked like a substantial cloud layer. McDonald remained unconvinced.

As the investigation continued, Heflin was bothered incessantly by curiosity seekers as well as members of the media; the Road Department also was swamped with calls. He realized by now that he had photographed an "unknown," and he began to wish heartily that he'd never told anyone that he'd taken the pictures. He vowed to LANS that he "wouldn't tell a living soul" if he ever had an opportunity to photograph a "UFO" again.

LANS members assured Heflin that it was typical of McDonald to affirm and re-affirm every possible aspect of UFO cases he worked on, and McDonald had written personally to Heflin: "As you know, your 1965 photos remain the outstanding photographic evidence yet submitted concerning UFOs."⁶ Because of LANS's respect for McDonald's expertise, Heflin appreciated his interest and looked forward to meeting him personally. By this time, LANS had done a two-year check on Heflin's character and work record, and had been assured by his superiors and co-workers that Rex Heflin was a straightforward individual, had 15 years of responsible duty in the County Road Department, and was not the type to pull a hoax that could jeopardize his job. The fact that Heflin had an off-beat sense of humor, and joked at times in a deadpan fashion, in no way detracted from his truthful and responsible nature.

5. Personal communication from Epperson to author.

6. Letter from McDonald to Heflin, 27 December 27 1967.

Early in November 1967, McDonald spoke to Dr. William Hartmann, a young photographic expert who was on Condon's staff and was also a faculty member at the U. of A. Hartmann had most of the documents concerning the Heflin sighting, for he was in charge of photo cases for the Condon Committee. He'd also confirmed the radio interference that had occurred at the time of the sighting. He'd called Heflin's supervisor, Mr. Herm Kimmel, who had been in a second county van, moving in freeway traffic 1/4 to 1/2 mile away, at the time Heflin photographed the UFO.

Kimmel had heard the base station trying to call Heflin on the radio, but the radio cut off in the middle of the transmission. Kimmel's opinion was that the sudden interference on the radio was akin to "button release," except that there was no blip of noise as occurs when the button is released. He felt the incident was very odd and had encouraged Heflin to have the radio checked, even though Heflin's radio worked perfectly after the UFO flew out of sight. The radio was checked, and the technician found nothing wrong with it. Both McDonald and Hartmann were satisfied that Heflin's description of the radio failure—a common occurrence during UFO close encounters—was accurate. McDonald and Hartmann decided to investigate the case on-site.

In January 1968, McDonald and Hartmann interviewed officials and radar technicians at El Toro. Reviewing the official report, they noted that the investigating officer had also checked Heflin's character, work record, and reputation and had interviewed his relatives and friends. The photos were reported to have been shown to the commander of the 11th Navy District.⁷ McDonald surmised that the photos had also been copied there, although no one he knew could confirm this. The most cogent question on his mind was: Had the unidentified craft been viewed on radar from El Toro or adjacent military facilities? If so, he would have a unique piece of empirical evidence, a UFO caught on three observing channels at the same time—visual, camera and radar. However, the radar log at the Marine Corps Air Station (MCAS) had not noted anything unusual at the time of the sighting.

Even though it was Hartmann's assessment that would appear in the Condon Committee's final report, he knew little or nothing about radar systems and didn't know what questions to ask the radar technicians! McDonald briefed him regarding ground clutter, MTI,⁸ lobe effects, and the like and, fortunately, was allowed into the radar room. "Bill didn't have to ask all the questions alone as we feared," he wrote. "The MCAS radar room was a typical RAPCON⁹ facility."¹⁰

7. Staff Sgt. H. P. Dolyak was the investigating officer from El Toro Marine Base.

8. Moving Target Indicator

It's sounding like Callahan's statement really may be accurate. The MCAS may have been the first time they really had a new radar on site. That pretty disturbing!

It also makes me wonder how he got in there to get a copy to put online.

They were also taken to **Electronics Communications Maintenance** on the base, where they met with a **First Lt. Leahy** and "a fellow in civvies." The latter "seemed to have the dope, but refused comment till got clearance," McDonald noted. The "fellow in civvies" introduced himself as **Paul Schaen**, and he went to lunch with Hartmann and McDonald. We can only surmise that McDonald inquired of Schaen's interest in UFOs, but no notes exist to that effect. We only know, from the next notation in McDonald's handwriting, that Schaen apparently "got clearance" and talked freely when the three men went on to the Radar Air Traffic Control Center, a **joint FAA-USMC facility**.¹¹ *I wonder how many on joint?*

This facility's radars had three ranges, the first of which watched very carefully in the Myford Road area for helicopter traffic. Automobiles on the nearby freeway, however, presented a big problem, since an additional blip from a low-flying UFO, with an estimated diameter of about 20 ft., would be lost in the maze of freeway traffic. McDonald obtained plentiful information about the nature and capabilities of the facility's radar systems, all of which he carefully noted in his handwritten notes.

That evening, there was a lively LANS meeting at the Epperson home to welcome McDonald and Dr. Bill Hartmann, about whom LANS had heard much but had never met. It started out as usual—friendly, lively and informative. Unfortunately, however, this particular meeting was packed with skeptical newcomers who had never attended a LANS meeting, but who had been invited to give them a chance to meet McDonald. Some of them simply did not know how to interview a UFO witness with proper objectivity. McDonald carefully made his own list of the 17 attendees, which read: "Hartmann, Idabel Epperson and her daughter, Marilyn; Dr. Robert M. Wood; **Maralyn Benton**, **Wood's secretary**; **Darryl Harmon**; George and Mrs. Kocher; Dr. Robert Nathan of JPL; the Druffels, Charles and Ann; the **Eugene Coltons**; John Gray."¹² Also present were Dr. **Stephen Black** and **Philip Daly**, two **BBC personnel** who were in the U.S. **shooting a UFO documentary**. *(which?)*

George Kocher would be a very interesting person to interview due to his experience at RADC.

The scientists took over the interviewing of Heflin on this occasion, and the questions flew hot and heavy. It soon became apparent to LANS members that some of the questions were openly skeptical, but Heflin kept his cool. Hartmann, for instance, doubted that anyone could take **three Polaroid photos in, roughly, 20 seconds**, the conditions under which Heflin had taken Photos

9. Radar Approach Control

10. McDonald's handwritten "Heflin" file, in James E. McDonald Personal Collection, University of Arizona, Tucson Library.

11. *Ibid.*

12. *Ibid.*

#1, #2 and #3. Heflin calmly told Hartmann that he would do it right there if Hartmann had a 101 Polaroid! In fact, LANS investigators had asked Heflin the same question two years prior and he'd demonstrated it promptly for them with his own work camera. Another visiting scientist asked: Did Heflin know if the object was really coming from directly behind him? "No, I don't," Heflin replied, wondering privately about the logic of the question! "I didn't see it until it was on the periphery of my eye." And on and on.

Then it was John Gray's turn to answer questions. Gray was in the Systems Measurement Division at North American Aircraft; he checked ground equipment for the Apollo Project. His technical qualifications and methodical investigative skills could not be questioned. That did not, however, stop James McDonald from asking him a rather unusual question. The smoke ring had been photographed over an orchard, and McDonald wanted to know why Gray wasn't sure which branch of which tree had been photographed in Photo #4. For 40 minutes, this "problem" was discussed. Gray was taken aback at McDonald's intensity but held his ground. He had identified the tree and the branch, but twigs on branches change over the seasons, and over two years had passed! It was apparent from McDonald's expression that Gray's answers didn't completely satisfy him. In his detailed notes, written soon after the meeting, McDonald noted, "John Gray did not seem to do twig-by-twig check on the tree in #4."¹³ John Gray, in later correspondence, reiterated his stand that he and other LANS members who investigated on-site were satisfied that the shape of the branch matched the image in the picture, taking into account the time that had elapsed. (See Appendix Item 12-B, page 560).

Dr. Nathan had computer-enhanced the photos at JPL and had concluded that the black band around the UFO was particulate matter—perhaps a band of atmospheric pollutants picked up by the craft in flight. Other scientists present speculated that perhaps the black band was held around the craft by some type of electrostatic effect and was possibly an effect of the craft's propulsion system. Dr. Nathan also had determined, with his advanced enhancement equipment, that the smoke ring in Photo #4 was also particulate matter. He called it, in scientific terms, a "vortex ring." He saw no reason why Photo #4 could not be accepted as an essential part of a set, with the smoke ring in that picture being essentially, the black band surrounding the craft, which was visible in Photos #1 through #3.¹⁴

Heflin gave no outward sign that McDonald's doubts affected him, but a little later in the evening he excused himself and went out into the Epperson's

13. *Ibid.*

14. *Ibid.*

back yard. The author noticed him there a few minutes later, standing by himself. Concerned, she asked him if there was anything she could do. He replied that he'd be in later. In spite of his sturdy personality and remarkable good nature, the constant hammering was getting to him. The "interviewing" methods being used by some of the visiting scientists, regrettably including McDonald himself, left much to be desired. Presently, Heflin recovered his sense of humor and returned to the meeting. McDonald was waiting with more questions.

The first question concerned a minor detail, but McDonald was curious about it. He'd read virtually everything which had been printed about the case, and two sources had reported that one NORAD man had interrogated Heflin, while others reported there were two. The official USAF report by Captain Charles Reichmuth recounted how one "NORAD" man had visited Heflin. McDonald's penchant for exactitude was gnawing at him.

"I might have mentioned one person because only one of the two men spoke to me, and only one showed his ID," stated Heflin, calmly. "I don't recall exactly what I told Reichmuth, but I assumed I told him two men had come to the door, since two men did come to the door."

McDonald looked doubtful. The atmosphere at the meeting grew more tense. He again brought up the problem of Photo #4. (He had privately begun to think that the smoke-ring photo had been taken at a later date under different weather conditions and was not part of a set of four photos taken in rapid succession.) Heflin told him that he had the impression the smoke ring was emitted at about the same altitude the craft was in Photo #1, i.e., about 150 ft. high. One could almost see wheels turning in McDonald's head. That very morning, he had been told by Marine Corps personnel that the surface winds were from the NNW at 4 knots. He drilled into Heflin.

"If the smoke ring was only 150 feet high," he asked, "why was it not blown by the surface winds in a southerly direction instead of to the northeast like you stated?" Heflin calmly answered, again, that the smoke ring was blowing in a northeasterly direction. The winds in the El Toro location had been checked at the beginning of the LANS investigation. LANS had learned that surface winds at 10:00 A.M. PDT on August 3, 1965, were calm, but by 2:00 P.M. the winds were from the southwest at 4 knots. McDonald added the discrepancy to his growing list of items to be re-checked.

The question of whether the manufacturer had put numbers on the back of the Polaroid film on which Heflin's photos were taken was brought up next. Most of the scientists at the LANS meeting insisted that all film packs bore numbers. Heflin insisted that there had been no sequence numbers on the originals (which had been taken by the "NORAD" men.)

"What about Photo #4, the smoke ring," McDonald inquired. "Does it have a number on the back?" "I don't know where it is right now," Heflin replied, "but I'll look for it and let you know."

I can see why McDonald would be bothered by evidence of this nature, would be very important to him personally. This was of statement wouldn't be true. McDonald

The Polaroid Special 3000 film packs used by the County Roads department at the time of his sighting had no numbers, Heflin explained. This was a serious issue in the department, because the Polaroid cameras were often exchanged among the employees, and lack of numbers was a departmental problem. These and other details of the Heflin investigation, as evidenced by the January 15, 1968, meeting at the Epperson home, might seem irrelevant to some. However, they show the importance of the Heflin photos to the UFO field. Never before had so much technical and scientific expertise been directed toward a set of UFO pictures.

The meeting, on which McDonald later wrote detailed notes, took a more dramatic turn, when McDonald asked Heflin to describe the recent visit of a "USAF man" to his home. Not many people present at the LANS meeting had heard about this. It had not been part of any media coverage but Heflin had confided to LANS investigators about it. On the evening of October 11, 1967, a man in the USAF uniform came to his door and identified himself as Capt. C.H. Edmonds. His ID had no photo and was salmon and green, like the ID the "NORAD" men had used two years earlier. Heflin talked with him on the porch. He noted that his visitor stood to one side while speaking with him. About 30 ft. away, directly in Heflin's line-of-sight, was a 1965 or 1966 Chevy, parked at the curb. The auto was dark blue, with dark lettering on the door which blended into the surface so that Heflin could not read it.

+ 20 years later

He saw movement in the back seat of the vehicle, which he took to be a second man. This individual was dimly lit by a purplish glow which emanated from the back seat. Heflin's visitor asked if he planned to recover the photos he'd lent the "NORAD" men. He also asked various personal questions, such as what UFO groups Heflin was affiliated with. (Heflin had joined NICAP only.) The "Air Force" man continued to chat, rather idly, stating he'd been involved in numerous important UFO cases, including one in the Bermuda Triangle!

Are these open photographs?

While this was going on, Heflin heard crackles and pops coming from his hi-fi, which he had been listening to when the visitor knocked on his door. He'd had never heard interference like this on the hi-fi before; he felt that the interference was definitely odd and wondered if it was somehow linked to the strange purplish glow in the back seat of the vehicle parked at the curb. Later, he wondered if he had been secretly photographed or recorded. When the "Air Force man" left a few minutes later, Heflin called John Gray and told him what had happened, thoroughly angry at the unwarranted intrusion. Heflin had also had trouble with his phone. His friends complained they were never able to

reach him at home, but Heflin was invariably home at the time they'd called and the phone hadn't rung. He had his number changed more than once, obtaining unlisted numbers each time. Somehow, strangers managed to get his new telephone numbers and the crank calls continued. Besides all this, a neighbor woman told him that she saw Marine Corps and Air Force officers nosing around his home while he was at work. *According to who? With for the 4th picture? It's so, like?*

The tense LANS meeting wore on until midnight, and then McDonald dropped a final bombshell. He voiced objection to Photo #4 on the basis that he had received positive information from the most reliable weather sources available that there could not possibly have been any substantial, dark clouds at the time of sighting, like those visible in Photo #4. McDonald emphasized that he'd cross-checked all possible cloud observation sources, concerning Los Angeles area meso-meteorology and the role of mean inversion depth and dry supra-inversion air. The scientific terms didn't impress Heflin.

"The meteorologists are going to have to find some clouds to go in these photos!" he replied. He was not claiming there were dark clouds in the atmosphere beyond the dark smoke ring because he hadn't noticed whether there were any clouds or not. But he had photographed the smoke ring only about a minute after taking his three photos of the UFO, and if the photo contained clouds, then there had to be clouds! His defiant statement impressed McDonald. He later wrote down Heflin's response in his "Heflin" file, and added that Heflin had said to him earlier in the evening, "I'm on trial here!" He noted that Heflin made this remark "in a manner expressing annoyance."

After the LANS meeting, Heflin traveled back to Santa Ana with James McDonald in John Gray's car. Heflin was silent, and McDonald tried to mend the situation. He spoke to him at length, pointing out aspects of the case which were positive, as far as proving that Heflin's sighting and photos of the craft itself were, to McDonald's mind, genuine: First, the Marine Corps Air Station wind data, in his opinion, was not conclusive; and second, LANS had located another Orange County multiple-witness sighting which tended to corroborate Heflin's sighting—the Ralph Joseph case. McDonald must have been his most engaging self, talking to Heflin during that ride. As a scientist, he tried to interpret the need he had for strict objectivity in the investigation, for it was only by carefully weighing the pros and cons that the true facts would emerge. Heflin listened carefully. The fact that McDonald took the time to talk encouragingly to him shows that he was at heart a compassionate and sensitive man. He wrote, "Had been strained session at end, when went over [the cloud problem], but sought counter to it."¹⁵

15. *Ibid.*

The Ralph Joseph case to which McDonald referred occurred the first week of August, 1965; the exact date was unknown, but both LANS and McDonald felt the Joseph case corroborated Heflin's sighting. It came to light when Mr. and Mrs. Joseph answered a LANS notice in a Santa Ana paper, asking independent witnesses to Heflin's sighting to come forward. This is commonly done in UFO research when an important case occurs. About 9:00 P.M. on that early August evening, the Josephs were driving on the Santa Ana Freeway near the Broadway overpass in Anaheim, a city not far from the location of Heflin's sighting. As they approached the overpass, they saw a large glowing object that seemed to be sitting on top of high-voltage lines ahead of them. It was disc-shaped with a rounded bottom; the top was rounded also in a domelike configuration. The UFO was brightly glowing, but the white light seemed self-contained; it did not light up its surroundings.

As the Josephs' car approached nearer the overpass, the UFO began to move along the wires, began to cross high above the freeway, then went back again toward the embankment. Many cars stopped on the shoulder of the freeway and the motorists were staring at the object. Several groups of people got out of their cars and were moving toward it, trying to get a closer look. At their closest point, the Josephs were about 40 ft. from it. The object was absolutely silent.

They couldn't judge its size, only that it was "much bigger than a car." Mr. Joseph estimated that it was about three times the width of the power-pole yardarms, and the width four times the height. They saw no features on the object, and no seams or protrusions. They expected that the occurrence would be reported on the radio. They listened to the car radio as they drove on, but nothing was mentioned. They searched the papers the next few days, but nothing appeared in the press. Yet the object had been totally visible from a heavily traveled freeway. McDonald had called Mr. and Mrs. Joseph after hearing about the case from LANS, and had conducted a detailed phone interview which left him satisfied that the witnesses were solid and reliable. LANS tried to locate other witnesses to the Joseph sighting without success.¹⁶

The next day after the fiery LANS meeting, McDonald interviewed Heflin's supervisor, Mr. Herm Kimmel of Traffic & Planning, in his engineering building office in Santa Ana. Kimmel confirmed that Heflin had been a traffic investigator in the road department for 15 years and was a very stable individual. Heflin showed him the photos when he returned to the office on August 3, 1965, but Kimmel had been unimpressed with the photos except that they were "very

16. Due to continued interest in the Heflin photos, we urge any witnesses who can verify his or the Josephs' sighting to contact the author through the publisher.

sharp." "Just another burden in an overloaded job; wasn't too excited about it," McDonald quoted him.¹⁷

McDonald and Bill Hartmann then journeyed to the site where Heflin had taken Photo #4. McDonald measured the telephone pole; it was about 30 ft. high. They also found a tree which agreed reasonably well with the branch shown in that fourth photo, but the branch pattern was "not perfect," he noted. Two and one-half years had passed since the photos had been taken, but this did not dissuade McDonald's exploration for "the facts."

By 11:30 a group of varied investigators had gathered at the Myford Road site, among them McDonald, Hartmann, Heflin, and the two members of the BBC film crew, Daly and Black. They hoped to have a chance to interview Heflin on-camera for their British UFO documentary. Hartmann and Black made test shots using a small model, as comparison photos for Heflin's pictures. These test shots came out surprisingly sharp, even with the model 15'-20' from the camera.¹⁸ Heflin watched while Hartmann hung a lens cap out the right window of the vehicle. This picture also came out sharp, even though the lens cap was only two feet from the surface of the window, but the string which supported it showed plainly. Hartmann and Black, of course, were testing the theory that Heflin had hoaxed the photos with a model on a string. McDonald was aware that Dr. Robert Nathan of JPL had stated at least two years before that, using his advanced enhancement equipment, he could detect no strings or other supporting mechanisms visible in the photos. This didn't matter to Dr. Bill Hartmann, however. Later, writing in the Condon Report, he judged Heflin's photos "inconclusive."

Watching all this, Heflin did not visibly show annoyance. However, Dr. Black began to ask him questions, beginning with "was he religious?" Heflin replied, with a straight face, that he was a Christian Scientist, adding that he realized that his religion "didn't let him recognize laws of the state." This statement puzzled Black, but he didn't follow it up. He then asked Heflin if he was married. Heflin replied, "More than once, but I don't want you to refer to it on camera lest my five wives find out where I am."¹⁹ Dr. Black was again taken aback, but suggested that they film an interview. Heflin flatly refused, stating that an American producer, John MacDonald, had already done a credible job for ITV. Why didn't they simply borrow his film? Dr. Black was bewildered and stopped talking to him.

17. McDonald, *op. cit.*, p. 4.

18. *Ibid.*

19. McDonald, *op. cit.*, reverse p. 4.

Why did Rex Heflin act in this enigmatic manner? Only people who knew him personally could possibly understand. For two and one-half years this honest, affable man had been hounded and harassed because he'd photographed a UFO at close quarters and presented to science a fine set of UFO photos! Not being a man who showed anger easily, his natural defense was backhanded, deadpan humor. It was not his fault that the photos contained more data than scientists could absorb. The smoke ring, and the clouds in the sky, were not his fault!

The Myford Road team went on to more fruitful pursuits. James McDonald asked Heflin to point out the area of the sky where the object had emitted the bluish-black smoke ring; he indicated 20°-30° east of the road. McDonald figured out the mathematics and came up with a rough estimation of 400 ft. altitude at which the smoke ring had been photographed. Since Heflin had, just the evening before, estimated the ring at 150 ft. altitude, another bone of contention was thrown onto McDonald's plate, but this bone was in Heflin's favor. The MCAS personnel had insisted the surface winds were blowing from the NNW, but the position of the smoke ring convinced McDonald that the wind data gathered by both himself and LANS were accurate, and that the MCAS data for some reason was faulty. *an explanation would be nice.*

McDonald was determined to check out the "ID" presented by the mysterious "Air Force" man who had visited Heflin. Arriving back home in Tucson, he learned from the local FBI and the OSI office at Davis-Monthan AFB that no official investigating agency had ID cards without photos, and none were salmon-colored. This satisfied McDonald that the "Air Force captain" who'd visited Heflin was an imposter. The eerie purplish glow which had affected Heflin's hi-fi so oddly remained a mystery. He also tackled the problem as to whether or not packets of Polaroid ASA 3000 film had sequence numbers. He phoned seven photo shops in Tucson, but the results were inconclusive. *That makes it sound like they all reported yes they had photos.*

Philip Daly and Dr. Black had accompanied McDonald back to Tucson. They drove him into the picturesque desert outside town and filmed a segment for the BBC documentary. Much of the private conversation between the three men revolved around whether or not Heflin was serious about his religion and his "wives." McDonald, because of his own sense of humor, understood that Heflin had been pulling Dr. Black's leg, but he said nothing, curious to know what the two Englishmen thought. Both Daly and Black thought Heflin was completely serious. Dr. Black, however, thought that Heflin had not had five wives, but rather five relationships which were, in Rex's eyes, marriages in some odd legal sense, possibly tied to his religion! Daly felt Heflin was serious about his religion and his wives! Dr. Black commented that Heflin was well informed on Christian Science beliefs, and he thought Heflin was being truthful about his "marriages" and religious beliefs conflicting with state laws!

Daly and Black were unaware that McDonald had phoned Idabel Epperson the day before to get her reaction on the "wives-religion" question. "She had already talked to John Gray on all this, and John had guffawed at the five-wife bit," wrote McDonald in his "Heflin" file. "They all felt rather sure Rex was pulling the leg of the BBC because he was inwardly seething at being called out there to witness the 'hoax' tests." Idabel Epperson stressed again how cooperative Heflin had been with LANS over the past two and one-half years. "She was obviously distressed," McDonald wrote, "and partly with me."²⁰

"Rex didn't deserve that," Epperson told him, referring to the "hoax" tests. McDonald pointed out that no set-up had been intended. They were merely trying to see whether the photos could be replicated, a technique commonly used in UFO research. He admitted he might have had something to do with it, because he and Hartmann had discussed making replication tests on the airline flight out to California.

Epperson reminded him that Bob Nathan of JPL had essentially replicated Hartmann's experiments long before and that he'd told Hartmann about this earlier! McDonald was surprised; his regard for the talents of the LANS investigative team rose even higher. He had begun to think that, if the 101 Polaroid was capable of sharply focused photos at close range, Heflin could have photographed a small model but the LANS photogrammetrists, using the very finest enhancement equipment, had found no evidence of any string or supporting mechanism. She also confided that Dr. Nathan had found an unusual "blurring" around the UFO, that was not, in his opinion, caused by motion of the craft or the camera. Scientists whose input was available to LANS had speculated that the blurring might possibly be suggestive of ionized air around the craft! This fascinated McDonald, for researchers had hypothesized for years that the propulsion systems of UFOs ionized air surrounding them.

McDonald brought up the problem of the clouds in Photo #4 again, and Epperson repeated what meteorologists at LAX had told her. McDonald stressed that he'd checked widely, and that entries in multiple weather logs indicated a rather thin overcast layer. He offered to phone Heflin and explain again why all this detailed checking was being done, namely, because the photos warranted it. Idabel urged McDonald not to phone Heflin for a few days, because Heflin was too upset. When he did phone Heflin a few days later, Heflin informed him in no uncertain terms that he was very disappointed in his attitude, particularly toward Photo #4. Heflin bluntly told him that he felt McDonald had "let him down." McDonald felt this criticism keenly, for he mentioned it to several persons concerned in the Heflin investigation during the next few days.

20. *Ibid.*, reverse p. 7.

McDonald continued his own photographic analysis of the Heflin photos with the help of a friend, Leon Sclampel, at the U. of A. While examining Photos #2 and #3, McDonald realized with a start that the sharp focus of the nut-and-frame of the van's rear-view mirror in these two pictures revealed that close-in photos were possible with Heflin's camera and, furthermore, that the camera could be set at 8-10 ft. or less and still photograph distant objects in good focus. He called Hartmann to discuss this.

McDonald worried about the Heflin case for three more weeks and called Idabel Epperson again in mid-February. She told him that she'd had a lengthy meeting with Heflin and had clarified many of the issues. Heflin was a bachelor, had never had any wives, and was a Christian Scientist. He had felt Dr. Black was getting too personal and had simply decided to pull his leg. He had decided to hunt through the Road Department office for other 1965 photos that didn't have sequence numbers. He wanted to prove to McDonald that his originals didn't have sequence numbers. Heflin had told Epperson that he was willing to continue cooperating with NICAP-LANS, but that he wouldn't cooperate with "everybody." McDonald had an uneasy feeling he might be included among "everybody."

Heflin had located Photo #4 at his sister's, where he'd inadvertently left it; he'd shown it to Idabel, and it had no sequence number on the back. She also told McDonald that LANS had settled the question of sharp images in the van's rear-view mirror two and one-half years ago at the very start of their investigation, when LANS investigator Zan Overall had borrowed Heflin's own Polaroid work camera shortly after the story broke, and found that, if set at infinity the photos would be sharp down to three feet! At the end of the long phone call, McDonald noted, "Net effect of phone call seemed to be to irritate Idabel re. all this digging into Rex."²¹

Some doubts had been answered, but others remained. McDonald continued to try to solve the puzzle of the missing sequence numbers. The importance of these in UFO photo cases is as follows: Most types of photographic film have sequence numbers on the back. When witnesses hoax a series of photos, it's not likely they will succeed in getting a plausible photo every time they try. Therefore, the sequence numbers on a "set" of hoaxed UFO photos will skip and jump, as unsuccessful photos are discarded and only the plausible-looking images kept for presentation to researchers. For this reason, McDonald needed to confirm that sequence numbers were not on the back of Polaroid ASA 3000 film packs, as Heflin had stated. He wrote to the Polaroid company to get information. In the meantime, Heflin had written to Polaroid, too, and received

21. *Ibid.*, p. 10.

verification that ASA 3000 Polaroid film was manufactured in August 1965 without sequence numbers.

Heflin also searched the official files of the Roads Department and came up with three other 1965 photos of accidents and accident hazards which traffic investigators had taken with the same type film. None of these original photos bore any sequence numbers. This information was sent in a notarized statement, signed by several LANS members, to McDonald. In a subsequent letter, McDonald accepted the fact that Heflin's statement was fully substantiated.

There was another question he wondered about, and made an extended phone call to Paul Cook, who had been a Planning Engineer for Orange County at the time of Heflin's sighting. Cook knew Heflin well and regarded him as reliable, definitely not a story teller.

"Do you happen to know whether or not Rex is a Christian Scientist?" asked McDonald. "I don't know anything about his religion," replied Cook. "He never talks about it."

"Does he do dead-pan humor?" asked McDonald. "When he does, it is dead-pan type," responded Cook. "But usually he takes things calmly. He could see a big accident and come into the office and barely mention it. He was the same way with the photos."

Heflin had shown Cook the fourth photo, but seemed to be reluctant to show it around too much. He told Cook, "Four are too many for one day!"

Cook also told McDonald about an acquaintance, the owner of Turk's Bar in Pico Rivera, California, who on a summer night, possibly in 1965, saw an object shaped like Heflin's UFO hovering soundlessly several hundred feet up. McDonald took the witness's name, address and phone number and planned to call him when he had time. LANS investigator Ed Evers had also located a witness who'd seen a similarly shaped craft, two or three nights after Heflin's incident. It also had a rotating light on the base. These possible corroborating events excited McDonald.

By this time, Dr. Nathan of JPL had produced an enlargement of the bottom of the UFO in Photo #2, and had brought out a solid wedge-shaped portion of light against the solid black of the UFO's underside; the wedge didn't show in unenhanced copies. The position of the wedge-shape corresponded to Heflin's description of the revolving/oscillating light.

In spite of his concern about the "smoke ring" photo, McDonald decided that Heflin's photos #1, #2, and #3 were most probably authentic. He knew it was impossible to declare a UFO photo as absolutely authentic, unless one had the UFO nearby to compare with the photo! The best that the UFO field had

been able to do was to decide whether or not a UFO photo was a hoax, because **hoax pictures can be replicated. Authentic UFO pictures cannot.**

Sally this is no longer true.

<http://www.youtube.com/watch?v=gRcE5N2BHm9>

What if, we're seeing a vortex from its suspended in a near microgravity environment sucking in atmospheric pollutants due to surface tension. Creating an impulse that makes the vortex?



FIGURE 23. The second photo of Private George L. Stofko, Jr., showing a cohesive black ring, low over a building at Ft. Belvoir, Va.

McDonald redoubled his efforts to solve the enigma of the smoke ring in Photo #4. He searched through the UFO literature to see if there were any other cases of dark smoke rings associated with UFOs. The *APRO Bulletin* of July 1966 described a "blue-black smoke ring in Ohio," [which] also had a ball of fire swinging around the outside of it." But another smoke-ring photo case, occurring at Ft. Belvoir, Va., was far more interesting. At 9:00 A.M. sometime in September 1957, Pvt. George L. Stofko, Jr., had taken six photos of a strange black ring, low over a building on the base. The first photo showed an ellipsoidal black ring hovering against a cloudy sky, but this photo is dark, especially on one side, and does not reproduce well. His second photo (see Figure 23) shows the ring very clearly. The third shows the ring surrounded by what appears to be whitish vapor or smoke (see Figure 24). In the fourth photo (see Figure 25) the "smoke" has almost obliterated the smoke ring, but a curious "ribbed" effect is noticeable as if "projections" on the black ring are poking out through the vapor. In the sixth photo, the black ring is completely hidden in a "rosette-shape" cloud, which is much lower than other clouds in the sky (see Figure 26).

The Fort Belvoir photos came to the attention of NICAP through Z.J. Halaut and Don Berliner. McDonald noted that similar “open-ring” reports were also seen in Toronto in December 1955, and a double ring had been sighted in Greenfield, Mass., in 1952. Ralph Rankow, a NICAP photographic adviser, followed up on the Ft. Belvoir case. He learned from Stofko that the ring was viewed by other soldiers. The black ring seemed solid, and was approximately 60 ft. in diameter.



FIGURE 24. The third Stofko photo shows the ring surrounded by what appears to be whitish vapor or smoke.

Private Stofko and five or six other soldiers in the Post Engineer Section viewed the object for one to two minutes. He grabbed a camera from his car and shot six photos in rapid succession. The group of soldiers were on detail and had to return to their jobs; they did not see what eventually happened to the “rosette-shaped” cloud. Stofko had no idea what the “object” was. He told Rankow that other witnesses in the Engineering Post had taken pictures of the object at the same time, but he wasn’t well acquainted with his work mates and they hadn’t kept track of each other. The soldiers discussed the strange event among themselves and agreed that probably they had inadvertently witnessed a secret military experiment. As a consequence they did not tell anybody on the base that they’d taken pictures.

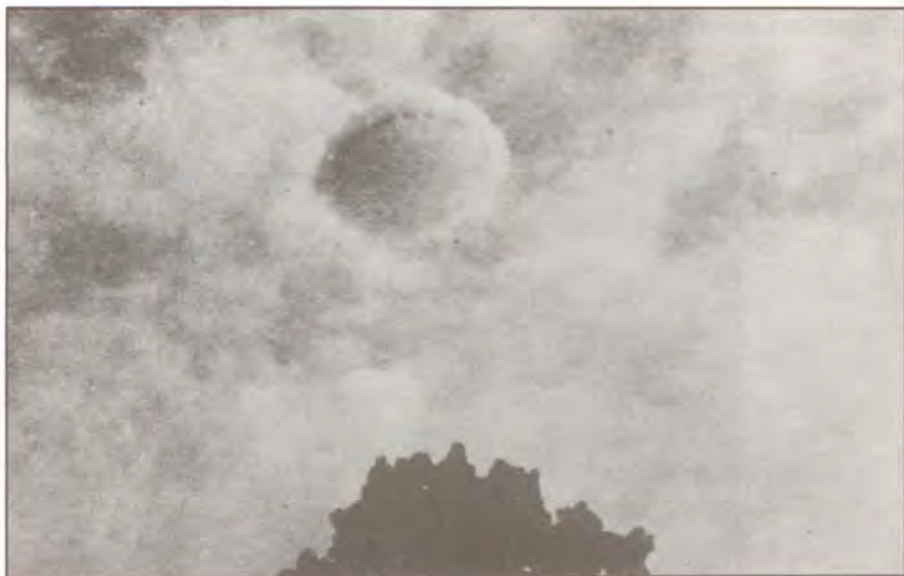


FIGURE 25. In Stofko's fourth photo the "smoke" has almost obliterated the smoke ring, but a curious "ribbed" effect is noticeable as if "projections" on the black ring are poking out through the vapor.

Several years passed before NICAP learned about Stofko's smoke-ring photos. When contacted, he couldn't find the negatives: he had moved seven times since the September 1957 occurrence and the negatives had been misplaced. He was still looking for them when Rankow contacted him in August 1966. He'd shown the photos to various friends over the years, but met with ridicule and disbelief, and soon stopped talking about them. Several years passed before he showed them to Mr. Z. J. Halaut, who sent them to NICAP headquarters. Ralph Rankow shared the Ft. Belvoir photos with other researchers, including Prof. Charles A. Maney, a NICAP Board member.²² Maney knew of the 1952 Greenfield, MA, sightings, which involved a double ring. The diameter of each of the rings had been estimated at 30 ft. They were bright, like polished chrome, and moved together in tandem at varying speeds and angles. However, this case had been included in a 1953 book by Desmond Leslie

22. Professor Maney co-authored a book with Richard Hall, NICAP's Secretary and later Assistant and Acting Director, *The Challenge Of Unidentified Flying Objects*, by Maney and Hall, Washington, D.C., NICAP, 1961.

and George Adamski.²³ Since Adamski was a noted contactee, McDonald concluded the Greenfield case was “tainted” and did not follow up on it.



FIGURE 26. In Stofko's sixth photo, the black ring is completely hidden in a “rosette-shape” cloud, which is much lower than other clouds in the sky.

He was struck by the similarity of Stofko's photos with the black ring in Heflin Photo #4, and set about investigating the Ft. Belvoir case for himself. Stofko's ring appeared more “solid,” as Stofko had described it, whereas Heflin's, though essentially cohesive, was blown out of shape by the wind. McDonald was struck with the precise shape; it maintained an ovoid shape during the 1-2 minutes it was in sight. McDonald also wondered about the “vapor” which rapidly

23. Leslie, Desmond and Adamski, George, *Flying Saucers Have Landed*, New York: The British Book Centre, Inc., 1953.

enveloped it.²⁴ McDonald felt that if he could solve the Ft. Belvoir incident it might shed light on Heflin's Photo #4.

Charles A. Maney, a professor at Defiance College in Ohio, was a careful, yet open-minded, researcher. He felt free to speculate openly about the Ft. Belvoir ring in a letter to Rankow. "As regards the ring's appearance, I refer to an old expression—"There is more to it than meets the eye'," Maney wrote. "There are laws of physics yet to be discovered.... I believe that the human eye and the camera saw only a part of the aerial object.... I am inclined to think that ionization of the air in the vicinity of the [Ft. Belvoir] aerial object produced the vapor which was seen to form around and inside the ring." Maney also referred to a 1952 newspaper clipping, which described experiments by Noel W. Scott, an army physicist at Ft. Belvoir. Scott had produced a partial vacuum in a bell jar, then allowed a tiny stream of ionized air to enter from the bottom of the jar. As the ionized air rushed in (cooling by expansion) a cloud of vapor rose upward like a mushroom, later filling the jar. Scott, according to the newspaper article, "was trying to simulate a flying saucer."²⁵ In fact, Scott's experiments were cited by the Air Force as possibly explaining some of the 1952 sightings which occurred during the unprecedented flap when groups of UFOs overflew the Capitol and invaded White House air space, resulting in military jets being sent up to investigate them (see Appendix Item 12-C, page 561).

Unlike Maney, McDonald was not convinced that the Ft. Belvoir photos depicted a true UFO. He needed more information. The Stofko photos were of cloud-physics interest, right down his alley of expertise. He reached out into the field. He phoned Jacques Vallée and inquired if the French scientist knew of similar sightings in European UFO literature. Vallée responded that "donut-types" had been reported, in which the hole was about one-third of the entire radius. They did not have the "hula-hoop" appearance of the Ft. Belvoir object. Impatient for information, McDonald phoned Ralph Rankow, trying to track down the other witnesses and the (reported) additional photos. Rankow couldn't give him any clues to track down the other witnesses; Stofko did not even remember their names. However, McDonald's personal reaction was that there was no evident reason to doubt Stofko's story or to doubt the authenticity of his photos.

24. Further analysis of the Heflin photos, from 1993 to 1999, indicates that the "smoke ring," although bent out of shape by the wind, is inexplicably cohesive. What was widely assumed at first to be disintegration of the ring is actually clouds forming around it, as in the Ft. Belvoir photo.

25. This strange incident is included here in the event some reader may be able to provide additional information or deduce something logical from it.

In the meantime, the case was published in a newsstand publication, *Dell UFO Magazine* #4. Stofko was referred to as "Mr. Stone." The article seemed to knock information loose from several quarters. Jack Strong, an alleged ex-soldier, wrote to Rankow stating that he'd seen the smoke ring while stationed at Ft. Belvoir around the same time Stofko took his photos. In precise technical terms, Strong stated that the black ring had been caused by something which Strong called an "atomic bomb simulator," a device which allegedly consisted of a charge of high explosives which produced a small black mushroom cloud. Strong claimed that the morning Stofko photographed the black ring, the atmosphere was "dead calm" and the air "cold and moist." He claimed that at a height of about 40 ft., the "cap" of the mushroom developed into a perfect smoke-ring vortex and detached itself from the main column of smoke. The vortex, being stable, continued to rise into the cold, saturated air. Strong's letter went on to explain how the vortex ring "swept moisture out of the air...and the smoke particles on the periphery of the vortex provided condensation nuclei for the formation of a visible cloud, which formed the lens-shaped body with the vortex still visible within it." Strong speculated that the "ribbing effect" in the Ft. Belvoir photos may have been due to slight variations in velocity at different points around the periphery of the ring (see Appendix Item 12-D, page 562).

Even though Strong's letter was expressed in technical terms, he claimed he didn't know enough about atmospheric physics to advance an explanation of why the center of the ring clouded in so rapidly, but that he believed "the presence of a stable ascending vortex containing particles suitable for condensation nuclei must, in connection with such conditions, be very rare."

Jack Strong's explanation was out of Rankow's field, but squarely in James McDonald's. "After reading [Strong's] letter," he wrote to McDonald, "one of the thoughts which ran through my head was, is the government behind this explanation? If you tell me that the explanation doesn't stand up from a physical point of view, I would consider my thought more seriously."²⁶ McDonald tried to reach Jack Strong by phone, but he had no telephone listed. He also wrote to him, suggesting that they discuss the technical aspects of the case. He also wrote back to Rankow, expressing his feeling that Strong's letter did not "ring true" to him, either, but asked Rankow to keep those remarks "off the record for the time being."²⁷

"I find it almost ludicrous that the Army would be using anything like what he describes as 'the atomic bomb simulator'," McDonald wrote. "Disney

26. Letter from Ralph Rankow to McDonald, 25 October 1967.

27. Letter from McDonald to Ralph Rankow, 6 January 1968.

might, the Army scarcely, in my opinion. Secondly, the suggestion that anyone could find a means of generating a 'perfect smoke-ring vortex,' with the sharp outlines and perfectly circular form that appears in [Stofko's] Photos No. 1 and 2, is not reasonable. Vortex rings are intrinsically quite unstable and maintain circularity for only a very brief time.... Any vortex ring of such small dimensions and low altitude would be most unlikely to produce condensation of atmospheric moisture, and, even if it did, would generate a much more fragmentary mass of cloud than is exhibited by the Stofko photos.... All ordinary clouds of any substantial size (restricting attention to cumuliform types) develop essentially flat bases, whereas the base of the cloud-rosette in the Belvoir photos is distinctly rounded."²⁸

"It...strikes me as having been formulated by somebody with rather more than casual knowledge of vortex-ring dynamics." McDonald continued, referring to letter-writer Jack Strong. He "ought to know enough to realize that parts of his argument are just not very sensible. That inference may be quite incorrect, and for that reason I repeat my request that you keep all of this confidential for the time being. I think that the suspicions that you hint in your letter are by no means unreasonable. The letter has a peculiar ring."²⁹ For perhaps the first time, McDonald seems to be saying that the government might be seriously involved in the UFO problem, to a greater extent than his "grand foul-up" theory allowed for.

Rankow was not the only one to whom he expressed doubt. Some time before Jack Strong's letter to Rankow identified the Stofko smoke ring as an "atomic bomb simulator," Dr. William Hartmann, in his capacity as a Condon staff member, attempted to seek an explanation from Ft. Belvoir officials. He had been told that the black smoke ring had "resulted from a 'demonstration device' for visiting firemen," and that the main function of this device was not to simulate a mushroom cloud but rather, under favorable atmospheric conditions, to blow smoke rings! Hartmann had spoken to Ft. Belvoir officials on-site, who had told him that the device had been in use for many years, including September 1957, but was presently not in operation.

In a long memo McDonald expressed doubt to Hartmann that either explanation was convincing. Hartmann had been told by an unnamed sergeant at Ft. Belvoir that "there were some days when it [the 'training device' for visiting firemen] didn't work at all." McDonald couldn't help himself here. He playfully added "understandable" in parentheses at this point. Considering the

28. *Ibid.*

29. *Ibid.*

physics involved, he wondered how it ever worked! (Because of the importance of McDonald's memo, it is included as Appendix Item 12-E, page 563.)

Dell UFO Magazine also sent Rankow a letter they'd received from Andrew H. Taylor of Pittsburgh, Pa., who claimed he was one of a group of soldiers who set off an explosive device at Andrews AFB in May 1959 during an Armed Forces Day show. They filled ten 55-gallon drums with #2 diesel fuel, arranged them in a 60-70 foot circle and set them off by a small charge, to simulate an atom bomb explosion. After the explosion, Taylor wrote, a black ring formed, ribbed effect and all, exactly like Stofko's photos. Taylor also claimed that a "cloud" had also developed around the ring. Hartmann was ready to accept the Army's explanation for the puzzling Ft. Belvoir photos, but McDonald was convinced more research was needed. He urged his younger colleague to try to locate written reports describing the history of the device. Since Hartmann had been told it was used over a period of many years, surely it had been the subject of some kind of official report. Yet no such documentation had been given to Hartmann.

What disturbed McDonald most of all was the Ft. Belvoir officials' claim that their device could, under the right conditions, produce a stable smoke ring which remained perfectly circular, very tight, with no evidence of turbulent dissipation, even when rising hundreds of feet into the air. McDonald could not buy this. His own calculations on the Stofko photos indicated that the Ft. Belvoir smoke ring retained its exact shape while rising to an altitude of a few thousand feet. There was also the matter of the cloud which formed around and inside the black ring. If there had been enough moisture in the surface layers of the air to produce condensation of the vortex ring, as stated by Jack Strong, there should have been clouds at roughly the same altitude as the ring itself. Instead, the ring-cloud was distinctly lower than the background cloud deck.

McDonald continued to push. He outlined the problem to a colleague, Clayton H. Reitan of the Department of Meteorology at the University of Wisconsin, asking him to try to locate Strong at his given address in Madison, Wisconsin. He told Reitan that Jack Strong's explanation did not seem meteorologically reasonable. He added a postscript on a separate sheet, pointing out that "some of the other information that has been recently obtained from military sources on the background of these photos has a slightly phony ring." He also alluded to the possibility that Jack Strong might "somehow be involved in these maneuverings." (See Appendix Item 12-F, page 564.)

With Reitan's help, both Strong and Taylor were contacted, and McDonald had long phone conversations with both of them. In a turnaround which greatly surprised LANS and other UFO colleagues, he became convinced that the

"atomic bomb simulator" was a real device, even though neither Strong, Taylor, nor Ft. Belvoir officials offered any further documentation of its existence.

"As I mentioned in my earlier letter," he wrote to Rankow in January 1968, "I found it very hard to credit the idea that the Army would 'play soldiers' to the extent of using a little detonation to simulate so awesome a weapon as the atomic bomb. However, the use of such a demonstration at an air show (as outlined in detail by Taylor) puts it in a quite different light, in my opinion. Also, to have these two independent confirmations from persons no longer in military service is, to me, quite convincing."³⁰

His long phone interviews with the two apparently independent witnesses, Strong and Taylor, assured him of their intelligence, observational powers, and honesty. Strong's description of meteorological conditions on the day he saw the smoke ring apparently convinced him that a stable smoke ring could have resulted from an explosion of a device such as described by Taylor. In addition, a written confirmation to Ralph Rankow from Col. J.H. Jackson at Ft. Belvoir led McDonald to accept that a stable vortex ring could form and be enveloped in cloudlike vapor under the right circumstances. (See Appendix Item 12-G, page 565.)

"If I had only Taylor's comments alone, I would still be dubious," he wrote to Rankow. But the combination of the two witnesses' written testimony, plus Col. Jackson's confirmation, cast aside his initial suspicions that UFO investigators and he, himself, were being led astray by "government" forces. To his mind, the puzzle presented by the Ft. Belvoir photos had been solved—and the authenticity of Heflin's Photo #4 was still in doubt.

Many UFO investigators, however, doubted that an "atomic bomb simulator" explained Photo #4. There was no adequate documentation available, except letters from three sources. Col. Jackson no doubt was *bona fide*, but Strong's and Taylor's military credentials were not checked out. However, lay UFO investigators respected McDonald's scientific expertise. Their personal regard for him kept the controversy from destroying the amicable cooperation between them. This did not, however, keep them from adding their own expertise to the controversy. In a March 1968 letter to McDonald, John Gray put forth his argument regarding Heflin's Photo #4:

*Two points lending credence to its authenticity should be emphasized:
1. The most logical theory pertaining to the origin of the black smoke (or dust?) ring is that it is the same as that enveloping the object in Photo 1 discovered by Dr. Nathan from an enlargement, more so than*

30. Letter from McDonald to Rankow, January 16, 1968.

that of an atomic bomb 355 simulator. Where, it could reasonably be asked, in Southern California does one find an atomic bomb simulator or be permitted to approach so close (as Photo 4 seems to suggest) to take the picture? 2. ...The cloud formations depicted in your enlarged copy of Photo 4... [are] considerably darker than that in the Polaroid original thereby presenting an ominous or exaggerated appearance. This, of course, is achieved in the process of copying the original.³¹

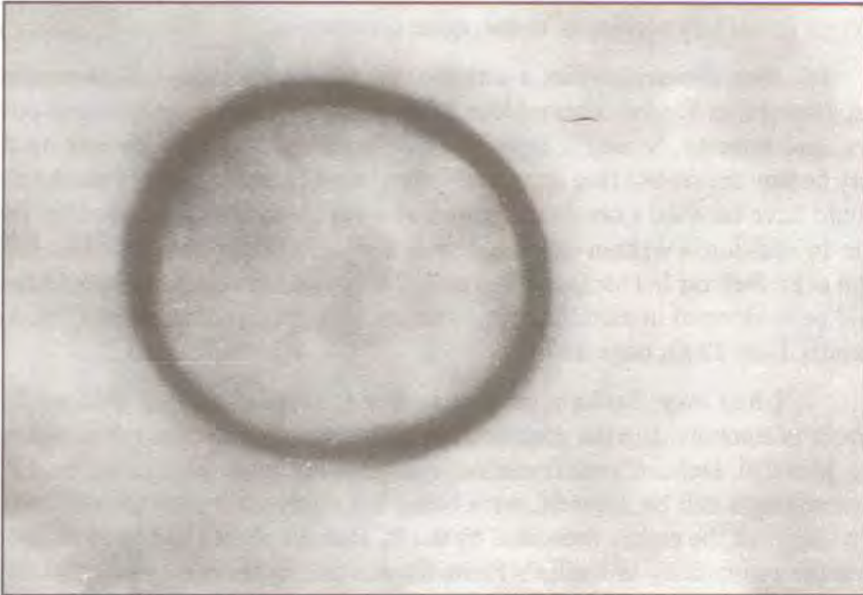


FIGURE 27. A series of 16 photos sent to McDonald by an Australian colleague, Dr. E. G. Bowen, show a long-lasting, perfect black ring resulting, according to Bowen's statement, from the explosion of some hundredweights of over-age explosives in a pit at the Liverpool Army base near Sydney.

If Photo 4 is not acceptable evidence to support the sighting, then, its value having not been disproved, it should be set aside as questionable evidence considered not relevant to the case.... With the human element involved in an inexplicable event, science should not expect its explanation to be more than the expression of an opinion. This is the practice you have followed, and rightly so, in your public statements concerning the reality of UFOs. With [Heflin's] reputation at

31. Letter from John Gray to McDonald, March 1, 1968.

stake...the explanation issued by science must be based on certainty. If his sincerity cannot be disproved or his insincerity cannot be proved, then it behooves science to shelve his case until disclosure of further evidence (preferably proof) rather than run the risk of be-smirching his character. This questionable practice should be left to Project Blue Book who seem to be rather adept at it!



FIGURE 28. In a subsequent Bowen photo, clouds formed in and around this ring, somewhat similar to the Ft. Belvoir photos, but blacker.

Letters like Gray's pushed McDonald to find further proof of stable vortex rings. He found what he termed "stunning cases" from Vandenberg AFB missile launches, including pictures of nicely formed white smoke rings forming above the missiles as they began to rise from their silos. And in early December 1968 he hit pay dirt. An Australian scientific colleague, Dr. E.G. Bowen, Chief of the Division of Radiophysics, Commonwealth Scientific Industrial Research Organization (CSIRO), sent him a series of 16 successive photos which showed a long-lasting, perfect black ring resulting from the explosion of some hundred-weights of over-age explosives in a pit at the Liverpool Army base near Sydney.³² Three of the 16 photos are reproduced here (Figures 27, 28, and 29.)

32. Letter from Bowen to McDonald, 4 December 1968.

Clouds also formed in and around this ring, although the clouds were black, not white as in the Ft. Belvoir photos. The whole effect was not nearly so neat as in the Ft. Belvoir photos, but McDonald nevertheless sent back an appreciative letter. "You're dead right," he wrote. "The ring-photos that I showed when I was in Australia, and which were unidentified at that time, were rather positively identified as a detonation-effect."³³

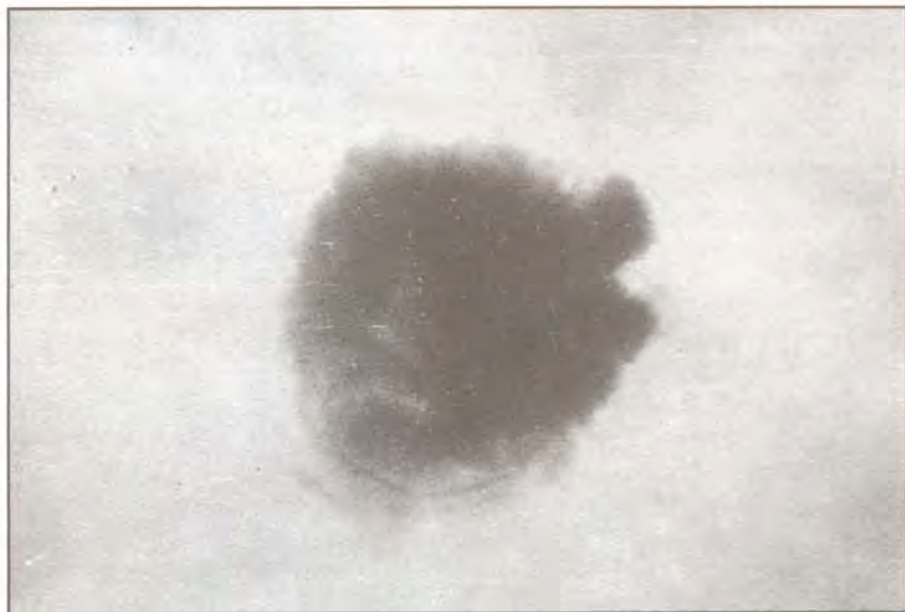


FIGURE 29. In another subsequent Bowen photo the black clouds have completely covered the Australian ring. Note, however, the ragged cloud effect, completely different from the Ft. Belvoir "cloud rosette."

As a result of the growing evidence that perfect, long-lasting black smoke rings could be formed under favorable climatic conditions, McDonald suspected that Heflin photographed a black ring produced by an "atomic bomb simulator" at some air show and attempted to pass it off as part of a set of four UFO photos. LANS violently disagreed with his conclusion, although its members remained his fast friends. Strong's and Taylor's "evidence," Colonel J. H. Jackson's, and even McDonald's Australian colleague Dr. Bowen's, was in large part anecdotal. Proof of stable vortex rings should have been demonstrated in real-time before the "explanation" of the Ft. Belvoir

33. Letter from McDonald to Bowen, 9 December 1968.

object was accepted.³⁴ And even if stable vortex rings resulting from explosions can eventually be proven, this still would not negate the authenticity of Heflin's Photo #4 as an integral part of a UFO event.

Idabel Epperson, John Gray, and all the other LANS members, including this author, remained convinced that Heflin's integrity was, and still is, impeccable. His first three photos of the metallic craft survived as an example of an apparently genuine unidentified flying object. McDonald's doubts about the fourth photo, however, caused some lay researchers to question them.

McDonald's "solution" of what he called the "Photo #4 puzzler" led him to research vortex rings in more depth than he had ever done before, however, and he listed "vortex rings" in a proposal he planned to send to the NSF. He was a scientist, first and foremost, and his chief reason for being involved with UFOs was to bring the problem to the full attention of science. Anything he learned along the way was absorbed into his mind like a sponge.

Information has surfaced during the past 15 years about "UFO" activities at Ft. Belvoir, information that was not known to McDonald. Through researcher William L. Moore, documents have surfaced that reveal the 1127th Field Activities Group (F.A.G.) at Ft. Belvoir, Va., was an Air Force special projects group connected with UFO investigation.³⁵ Although heavily censored, 1960-1961 "Histories" of the 1127th, downgraded from *secret* and *privileged*, together reveal it conducted UFO investigations out of Ft. Belvoir, at least as far back as 1959 and possibly even earlier. Three sample pages from these "Histories" are included as Appendix Item 12-H, page 566. Was the 1127th active there in September 1957, during the period that Private Stofko took his "smoke ring" photos?

The fact that the 1127th was based at Ft. Belvoir, of course, does not prove that it was definitely linked with the Ft. Belvoir "smoke ring" any more than Noel Scott's "ionized air" experiments at Ft. Belvoir can be definitely linked with 1127th "UFO" experiments. Many other activities were conducted out of Ft. Belvoir besides the Air Force's 1127th. However, the possibilities remain.

The declassified documents constitute additional proof that Project Blue Book was not "the only official group investigating UFOs," as McDonald had been told. This fact was not surprising to UFO researchers in the 1990s, but it would have been extremely enlightening to McDonald in the 1960s. Even more important perhaps, the 1127th documents mention Projects

34. Any reader who has information about the "atomic bomb simulator" is invited to contact the author through her publisher.

35. William L. Moore heads the Fair Witness Project, 4219 West Olive Street, Suite 247, Burbank, CA 91505.

I should
write Bill &
ask him
about the
authenticity
of this doc.

"Moon Dust" and "Blue Fly." Moon Dust is specifically identified as a project that recovered "space vehicles." Both projects were initiated in 1953. The 4602nd Air Intelligence Service Squadron (AISS) was originally charged with these responsibilities, as well as the investigation of UFO reports, according to a 1961 document obtained by another researcher, retired Army Sgt. Clifford E. Stone. This 1961 document specified that Moon Dust was established to "locate, recover and deliver descended foreign space vehicles" and Blue Fly "to facilitate expeditious delivery to the FTD of Moon Dust or other items of great technical intelligence interest."³⁶

It is unclear just when the responsibility for Moon Dust, Blue Fly, and UFO investigation switched from the 4602nd to the 1127th. Documents obtained by McDonald in 1970 from Blue Book archives at Maxwell AFB in Alabama designated the 4602nd as one of the investigatory units for the August 13-14, 1956, Lakenheath-Bentwaters sightings in England (see Chapter 16.) The only years uncertain, therefore, are 1957 and 1958. Blue Fly and Moon Dust were both initiated around 1953, however, and this was four years before earth's first artificial satellite, Sputnik, was blasted into orbit. As researcher Clifford E. Stone asks in the respected publication, *UFO Magazine*, "What were the missions of these projects in 1953?"³⁷

UFO researchers continue, 30 years later, to analyze Heflin's photos. The originals of Photos #1, #2, and #3 were returned anonymously to Rex Heflin in 1993 by persons unknown. This unexplained event happened just a couple of weeks after the television documentary series "Unsolved Mysteries" had contacted him requesting his participation in a segment for the program. The plans did not materialize, however. About two weeks later, Heflin received a phone call from an unidentified woman who asked, "Have you looked in your mailbox lately?" Heflin went to his mailbox, but it was empty. The woman called again a half-hour later, asking the same question. She would not identify herself or the reason why she was calling. Heflin's curiosity was aroused, however, and he went again to his mailbox. This time, inside the mailbox, he found a plain manila envelope which bore no markings whatsoever. Inside he found the three original Polaroids of Photos #1, #2, and #3.

There was absolutely no explanation given, and to this day Heflin does not know who returned the photos in such a mysterious manner. Were they the "NO-RAD" men who first stole them from Heflin, persons whose consciences had finally driven them to make restitution? Or was there possibly some person

36. "Point Piece: Air Force Lied About Projects, Researcher Says," *UFO Magazine*, Vol. 10 No. 4, 1995, Sunland, CA, Vicki Cooper, Editor.

37. *Ibid.*

connected with the "Unsolved Mysteries" program who brought about their return? Dr. Robert M. Wood was the first in the UFO field to be informed of the return of the originals, and Heflin entrusted them into my care, since his state of health is uncertain, and he was acquainted with me from the original, prolonged LANS study of them. He requested that I preserve them and make them available for study by scientists and other objective professionals in the UFO field.

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In March 1994, a team was formed for the first scientific re-analysis of the four photos. It included Dr. Robert M. Wood, Dr. Eric Kelson, a professor at a major California university, and myself. While examining the photos with state-of-the-art computer enhancement equipment, Dr. Kelson noticed what appears to be a definite link between Photos #3 and #4—i. e., a trail of black particulate matter in Photo #3 streaming from the unidentified craft. This stream of black particles trails at considerable length behind the craft, but is densest just behind the craft itself. This finding constitutes possible evidence that the black ring around the object was beginning to separate just before the object emitted the circular smoke ring. This stream of particulate matter in Photo #3 had apparently never been noticed by any photogrammetrist who analyzed the photos over the past three decades, or, if so, they had neither recognized the significance nor published the finding.

In addition to this apparent link between the third and fourth photos, other fresh data emerged. Dr. Kelson also independently detected an unusual "blurring" effect of the craft, particularly in Photo #1, which did not seem to be due to motion, camera focus, or to the Gaussian effect. Kelson's independent discovery of the unexplained "blurring" effect correlates with Dr. Nathan's detection of a "fuzziness" of the craft image which was not due to motion of either camera or craft.

Also noticed was an apparent "vapor cap" on top of the smoke ring in Photo #4, which seems very similar to the clouding effect which formed around the "smoke ring" in the Ft. Belvoir photos. This may mean that the ring had remained more cohesive than originally thought, just as the Ft. Belvoir "ring" had done. In previous analyses done in the 1960s, the possible "vapor cap" feature was assumed to be part of a general disintegration of the smoke ring, but instead it might mean that somehow moisture in the air was being drawn into the vicinity of the ring.

Study of the cloud backgrounds by Dr. Kelson, using state-of-the-art computer enhancement techniques, revealed that the sky background in all four photos had similar overcast conditions in all of them. The team's findings, which answered all of McDonald's doubts, were published in a refereed scientific journal.³⁸ Dr. Kelson plans a second more technical article, in which even more sophisticated computer techniques will be employed. Following publica-

tion of the second article, first generation copies from the now-archived originals will become available to other scientists and researchers to conduct their own analyses.³⁹

The originals of Photos #1, #2, and #3, of course, were not available to James McDonald. For the most part, he'd had to work from copies of copies—an unsatisfactory process at best. He had engaged confusion deeply and had come up with partial information that seemed to satisfy him. He had been led by persons who were perhaps untrustworthy or had agendas of their own to conclude that Heflin's fourth photo was not part of a set, but a vortex ring produced by a so-called "atomic bomb simulator." Yet, the puzzle of the "projections" on the Ft. Belvoir smoke ring (which Ft. Belvoir personnel had assured him were also caused by an "atomic bomb simulator") were never clarified in his mind, and he continued to wonder about them. As shown on Figure 25, these projections are regularly spaced and solid enough to appear as if they are projecting out of the vapor-cloud. Strong's easy "solution" had seemed so weak to McDonald that he had written his colleague, Clay Reitan, to be wary of possible "phony maneuverings."

If McDonald had also had our recently surfaced information about Ft. Belvoir's 1127th, he would not have trusted the assurances of Ft. Belvoir officials so easily. He would have followed up on the 1127th, and the history of UFO research might have been dramatically changed.

38. Druffel, Ann, Dr. Robert M. Wood, and Dr. Eric Kelson. "Reanalysis of the 1965 Heflin UFO Photos," *Journal of Scientific Exploration*, Vol. 14, No. 4, Winter 2000, pp. 583-622.

39. Publication of a follow-up article is expected in 2003.

What's Out There?

*The October winds lament around the Castle of Dromore,
Yet peace is in her lofty halls, my loving treasure store...
Though autumn leaves may droop and die, a bud of Spring are you...
A little rest and then the world is full of work to do.*

—from “The Castle of Dromore”

It is certainly likely that our present knowledge of [elementary] particles is incomplete. I remind you of the story of the fisherman who was fishing with a net of 6-inch mesh. He concluded that all of the fish in the sea were larger than six inches.

—W. K. H. Panofsky

A few days before the Condon Report was released, McDonald was invited to participate on a panel for the “Paul Harvey Show” in Chicago. He accepted, for it would give him an opportunity to present the UFO question to a network television audience. Harvey was a logical, intelligent host whose curiosity about natural anomalies rivaled McDonald’s, and the show was being filmed for a potential series. On December 13, 1968, Harvey greeted his guests before the cameras.

The participants, all favorable to the UFO question except one, were: J. Allen Hynek, Rep. Ed Roush, NICAP’s Assistant Director Gordon Lore, Berthold E. Schwarz, M.D., McDonald, and the one skeptic, Lt. Col. Lawrence J. Tacker, who had been head of Blue Book before Hector Quintanilla. Tacker had written a book, which followed the typical Air Force line.¹

As the panel chatted with each other Phil Klass arrived. He had been invited by Harvey’s wife, Angel, to participate on the panel. Harvey, however, explained to Klass that he wanted him to appear only for the first 15-minute segment, and then Dr. Hynek would take his place for the next seven seg-

1. Tacker, Lt. Col. Lawrence J., *Flying Saucers and the U.S. Air Force*, New York, Princeton, Toronto, London, D. Van Nostrand Company, Inc., 1960.

ments. This plan was unsatisfactory to Klass; it was not what he had been led to believe and he bowed out. Since there was no transportation available back to the airport until after the taping, he watched off-camera.² Harvey's wife apologized to Klass for the mix-up and tried her best to make it right with him.

McDonald's journal notes describing the Harvey show are a mixture of the actual filming plus private conversations he had with the participants. A copy of this program has not yet been located in Paul Harvey's archives. We do know that Harvey asked the panel about Air Force neglect of the UFO problem. He spoke from experience, for he'd seen a totally anomalous light from a small passenger plane in the Pacific Northwest. He asked Hynek tactful questions about the way he, as Air Force consultant, had discarded valuable data with "explanations" that did not fit the facts. Hynek defended himself well. He was cordial and generally gave the impression of a folksy intellectual, which indeed he was. The FTD at Wright-Patterson AFB now had a new commanding officer, a Col. Weinbrenner, who was a bit more accepting toward UFOs than Col. Sleeper, with whom Hynek had been having trouble and about which he had previously sought McDonald's advice (see Chapter 5). Hynek had taken McDonald's advice and written a formal report, giving FTD his growing impression that UFOs were a valid scientific question. His report was now at FTD, and Major Hector Quintanilla, who was still head of Blue Book, had gone to Sleeper's office to read it.

McDonald questioned Hynek closely about the Minot AFB case, which had been referred by NICAP to the Condon Committee. Hynek and Robert Low had been assigned as co-investigators. McDonald was curious to know what was being done about the Minot case, for it gave promise of being a verified R-V event.

"I'm not sure what they're doing about that case, Jim," responded Hynek. "I think the OSAF³ is calling it 'aircraft'."

An irritated look swept into McDonald's eyes; he'd studied the Minot case and considered it solid. Hynek hurriedly added, "I still regard the case as significant, however." "Was the radar fix at the same time as the visual sighting?" pursued McDonald. "Yes, it surely was," replied Hynek. "But of course we can't say for certain that the radar fix was the same object that was seen. All the same, it's still a significant case."

"What does Bob Low think about it?" asked McDonald, taking a different tack. "Well, Bob Low didn't go with me to Minot," replied Hynek. "He was

2. Letter from Klass to author, dated 5 February, 1996.

3. Probably Office of Special Projects, USAF

checking out the Donnybrook case. Now, that one, within the limits of a single-witness case, of course, is strong. Daytime observation, law enforcement officer for a witness. You know how it goes."⁴

McDonald indeed knew how it went. He might have felt like starting a donnybrook of his own, but out of regard for Paul Harvey he remained cordial toward Hynek, ignoring his ambivalence. He did no better when chatting with Rep. Ed Roush. The Representative who had been so helpful and fearless during the July hearing before the Committee on Space and Astronautics (CSA) was facing an election and was watching his back. McDonald, and the scientific team who'd done such a fine job with the Redlands sighting, had interested Rep. Jerry Pettis of California in the UFO problem; he also was a member of the CSA. Roush told McDonald that he doubted Pettis could swing new hearings because he was a Republican, whereas the majority of the CSA were Democrats. If Pettis couldn't convince the Democrats on the committee, Chairman George Miller would not approve extended UFO hearings.

"However, Jim," advised Roush, "John Davis, a Democrat on the CSA, would be an ideal fellow to shake things loose. The only thing is, Davis is not interested in UFOs, but I think George Miller can help with that situation." Listening to Roush, McDonald's head might have whirled a bit, as he recognized that further UFO hearings were mired deeply in politics and were not being treated by Congressmen as a scientific problem.

"I don't know if I'll be running again, or if I'll interview for a job with the Ford Foundation or ITT," continued Roush. "Phyllis O'Callaghan is leaving, you know. She'll be teaching next semester, and Bill Stanton has been offered a job with the Department of Commerce."⁵ McDonald didn't reply, realizing that the Congressional team he'd so carefully nurtured was disintegrating like a dying thundercloud after a Tucson monsoon.

Roush had just confirmed what McDonald had suspected; there would be no further Congressional action on the problem of UFOs, at least as far as CSA follow-up was concerned. Phyllis O'Callaghan had told him that it was "hopeless to try to get much done" until after the November election and that there would be no follow-up of any sort by the CSA. The committee's general counsel Ducander had told her, "The Symposium was a one-shot affair. UFOs will now revert to the Armed Services Committee."⁶

4. McDonald, James E., fourth journal, p. 31.

5. *Ibid.*

6. *Ibid.*, p. 27.

McDonald was pleased with panelist Berthold E. Schwarz, M.D. He was quickly calling him "Bert" and listened with interest as Schwarz outlined some of the UFO cases he'd investigated. Schwarz was a noted psychic researcher as well as a psychiatrist. A most careful researcher, he was always on the lookout for any sign of psychopathology in UFO witnesses which might indicate that they were hallucinating, fantasizing, or otherwise telling capricious stories. Schwarz had determined, through statistical study, that people who reported UFOs—even those who interacted with odd-looking humanoids associated with landed UFOs—simply were not part of the mental hospital population. In speaking to McDonald, Schwarz described one such witness as "a character," but since he could not find, even after psychiatric evaluation, any record of mental aberration, he felt that case was also significant.

"Paul Harvey was so kind and respectful, and just wonderful to all of us on that panel," Dr. Schwarz recalls. "Harvey's wife, whose nickname was 'Angel,' was wonderful, too, and we were all calling her 'Angel.' Jim, too, was so respectful of my involvement with psychic research and parapsychology. He was accepting of all sides of a question, being a true scientist. I liked him very much; it was the first time we'd met personally, but I felt he was doing a very good job."

Schwarz is one of the few UFO researchers who remembers that James McDonald had at one time included the parapsychological hypothesis among his eight hypotheses. He thinks it quite likely that McDonald might have been criticized by peers for mentioning the parapsychological/psychic hypothesis in his first public talk. "To come out openly, especially in those days, for such an hypothesis would have been considered very unscientific," says Schwarz. "Yet his mind was like that, completely open and scientific. He would read everything and consider everything."

In an unusual switch, McDonald also got along well that day with Col. Tacker. He made a point to talk with him and found out that the Colonel had accepted Harvey's invitation only because the Killian case was due to be discussed. This case was a classic which had been thoroughly investigated and documented by NICAP and APRO. In February of 1959, three UFOs were sighted over Pennsylvania and Ohio by the crews of four airliners. The sightings hit the papers with a loud thud; it was one of those rare multi-witness cases where extremely credible witnesses talked freely to the press before the Air Force could shut them up.

Capt. Peter W. Killian, piloting American Airlines Flight 713, was the first to see three bright objects pacing his plane at a distance. One of the UFOs separated from the others and came rapidly nearer. He started to turn away, but the object stayed a safe distance, pacing. It then made a rapid, second approach;

this time Killian kept a straight course and got a good look at the object. It was immense, much larger than his aircraft. He alerted the passengers, only one of which showed any sign of panic. Killian got on the radio and learned that a United Air Lines crew was watching the objects. Then two other United flights verified Killian's description. All airmen agreed that the objects were round, were not any type of known aircraft, and stayed in precise formation except for the time when one paced Killian's airliner at close range. A report was made to the FAA, who forwarded it to the Air Force.

Don Keyhoe investigated this case thoroughly and wrote a detailed account, giving names of witnesses. The Air Force refused to talk to him. When he called the FAA, the official he reached was hesitant and nervous. He abruptly answered Keyhoe's questions about airline safety, the right of flight crews to report publicly any hazards in the skies and the responsibility of the Air Force to follow out such reports. "FAA's responsibility ends when a UFO report is forwarded to the Air Force," he told Keyhoe. "Beyond that, no comment." Project Blue Book, incidentally, took no public action.

Although the three other flight crews fully confirmed Killian's statements, he received the most publicity. The Air Force finally "identified" the three objects as "stars seen through broken clouds," yet Killian's plane was flying above the clouds. They then tried to "identify" UFOs as an "aerial refueling tanker," but that didn't work either. Finally, an anonymous Air Force spokesman implied that Capt. Killian had been drunk when he saw the objects, an unfounded charge directed toward a pilot with a spotless record and 15 years' experience! Killian, thoroughly angered, went on television and publicly denounced the Air Force. Within 24 hours, American Airlines, prodded by the Air Force, informed Killian that he was forbidden to defend himself publicly in any way. The FAA reacted against the Air Force's slander, releasing the logs of the incident. Throughout the sixties, it also revealed several other pilot reports that the Air Force tried to conceal. Eventually, however, the FAA realized that reporting UFOs was not "acceptable." Airline pilots everywhere, seeing what had happened to Capt. Killian, got the same message.⁷

Apparently, the Killian case was not discussed much on the Paul Harvey show, even though it was the main reason Tacker had agreed to appear. James McDonald's journal states that Tacker's only assertion on the air was that the USAF "never said that extraterrestrial intelligence was out of the question." McDonald later described Tacker in his journal:

7. Keyhoe, Maj. Donald E., *Aliens From Space*, Garden City, NY, Doubleday & Company, Inc., 1973, pp. 197-99.

*No ogre. Now Vice President of Loretto Heights College, in Denver (girls' school). Leaving WCN [ABC-TV] we discussed the 7/11/59 Pacific case. He not adamant.*⁸

Hector Quintanilla, the then-current head of Blue Book, possibly had moved aside to let Tacker handle McDonald, in case a debate developed. This did not happen, probably due to Tacker's soft approach. To this day, no one in the UFO field knows just what exactly was discussed on that "Paul Harvey Show."

"The show, strangely, was never shown nationwide, as it was supposed to be," relates Dr. Schwarz, "I think it might have been shown once in Oklahoma. It should have been shown [nationwide], because it was a good show, very fast moving and full of information."⁹

Phil Klass has a different take on the situation. He contends that the show never aired widely because it was dull. "Because I declined to participate, and Tacker was a bit reserved, there was no argumentation, no differences of opinion," he writes in a September 14, 1996, letter. Klass points out that many of the segments were re-filmed until Harvey was pleased with the final product, and that this reduced its spontaneity. If the program can be found in Paul Harvey's archives, it would fascinate many, especially in the UFO field.

After the show had been filmed, there was apparently fast-moving action. Some of the panel, including McDonald, Schwarz and Klass, went to the airport in a limo the network provided. Schwarz relates what happened.

"Somehow Jim and Phil were in the back seat, and I was sitting in the middle of the limo. I heard them talking. The conversation got louder and louder, and Phil started shouting remarks...toward Jim and toward the UFO subject in general. He made remarks like... 'How can you say that!' and 'Who are you that you think you know anything!' The argument was very loud on both sides, and Phil and Jim were almost coming to blows. I was amazed that Phil would call Jim names like that. It was a personal attack that simply astonished me.... It was so bad I just can't remember the whole episode."¹⁰

Phil Klass remembers the incident another way. "I have absolutely no recollection of 'almost coming to blows' with Jim McDonald," he states. "I knew that [he] had contacts 'inside' the University of Colorado UFO-study team, and my recollection is that I tried to get Jim to reveal what he had learned about the Condon Report's conclusions, but he was close-lipped."¹¹

8. McDonald, fourth journal, p. 31, and reverse, p. 31.

9. Author's interview with Berthold E. Schwarz, M.D., 24 January 1993.

10. *Ibid.*

11. Letter from Philip J. Klass to author, 5 February 1996.

To which Bert Schwarz replies: "I stick by my guns and have nothing to add but that Phil Klass has memories that do not match my consistently held belief of what happened.... The whole imbroglio was so odd and so unexpected that it naturally stuck in my mind."¹²

Although the program might have lacked a certain spontaneity, it was based on a popular subject, had a top host, yet was never shown nationwide. The Paul Harvey Show brought guests together from every part of the country, paid their expenses, treated them royally, and worked hard to produce a fine product. Paul Harvey was, and still is, one of the finest television and radio personalities around. The "fight in the limo" as described by highly-regarded researcher Dr. Bert Schwarz is equally puzzling.

Regarding the "ride in the limo" McDonald wrote later in his journal: "To airport in ABC limo, Phil Klass aboard."¹³ Phil Klass feels that this short entry shows that their discussion never reached the "argument" stage. McDonald's friends might disagree, knowing his penchant for minimizing the importance of emotional confrontations.

Shortly after the negative Condon Report was released, McDonald realized that his most important task now, as far as UFOs were concerned, was to prepare a thorough rebuttal. It would be three-pronged:

1. to address the fallacies in the Report and repair the damage its "Conclusions" had done in the scientific community;
2. to investigate the promising new cases hidden within its pages;
3. to reach out wherever opportunity presented itself for more and more ideas and data on technology which could be used to track UFOs.

I wonder if McDonald were alive what he would recommend in the application.

As far as the public and the scientific community were concerned, a top scientific panel, with government funding, had thoroughly researched the question and had come to the conclusion that UFOs were not worthy of further study. The first task McDonald listed was extremely crucial to civilian UFO research organizations.

"The interest was there when Jim was alive to bring it out," relates Dick Hall. "At a certain phase in NICAP, during the years the Condon Committee was active, we had so many requests for information from scientists, even clinicians—people who were household words—showing an intense interest. But it went underground after the Condon Report came out negatively. There was one scientist, Lloyd Herwig at NSF, who knew and respected McDonald. He became strongly interested and approached us, but he drew back after the Condon Report

12. Letter from Berthold E. Schwarz to author, 22 February 1996.

13. McDonald, *op. cit.*, reverse p. 31.

came out.” Herwig had come to hear McDonald and the other scientists at the July 1968 Congressional hearing,¹⁴ and McDonald’s journal mentions another time he met with Herwig in June 1969 at NSF, but relates no details.¹⁵

McDonald also felt keenly the closure of Project Blue Book, much more than lay researchers did. NICAP didn’t feel its loss, because it had been essentially a source of irritation, “a public relations scheme.” McDonald realized that its closure meant that now there was no visible evidence that any part of the U.S. Government was even interested in studying UFO reports; his five trips to Blue Book files/archives revealed many astounding hidden cases, and now even this source was cut off. He had hoped that Blue Book would be expanded into a genuine scientific study. Instead, it came to an end.

He continued adding to his “Controversies & Unorthodoxies” file, perhaps as a way of steeling himself against renewed negativity he was receiving from some of his colleagues, after Condon found the UFO subject “worthless.” At the end of 1968 he wrote:

...[O]ne might use Gilbert’s illumination of magnetism. One of his main tasks was to explode myths & superstitions, which he did systematically. To many modern scientists, Gilbert would epitomize the hard-headed scientist clearing away the debris of popular delusion and misconception. [See] “Magnetism” by Lee & other references on magnetism.¹⁶

A paperback edition of the Condon Report was published in February 1969.¹⁷ Using this convenient format, McDonald began, in his own words, “to clear away the debris” Condon had caused. He weeded through the “fluff and fill” and uncovered more hidden treasures within it, many of which had not been noticed. One-third of the cases in the Report, about 30 in all, were labeled “Unidentified” by various members of Condon’s staff! He also studied the other two-thirds labeled “Identified” to confirm whether or not they had been logically explained. His friend Jim Hughes picturesquely describes: “Condon did go through some dandy, twisted efforts to explain these things, from spots on people’s eyes to everything else.”

Many of McDonald’s colleagues encouraged him to rebut the Condon Report. Within a couple of months, he was giving talks rebutting portions of the Report. In May 1969 he spoke at the Sacramento Section of the AIAA,

14. *Ibid.*, reverse p. 19.

15. *Ibid.*, reverse p. 43.

16. McDonald, “Controversies and Unorthodoxies file,” reverse p. 1.

17. Condon, Dr. Edward U., *Scientific Study of Unidentified Flying Objects*, New York, Toronto, London, Bantam Books, January 1969.

as part of their Distinguished Lecturer Series. He titled that paper "A Very Creditable Effort?" The title referred to the NAS's official review of the Condon Report, where the Panel had termed Condon's Report "a very creditable effort." McDonald's impish question mark in the title of his talk plainly indicated how he regarded the NAS panel's judgment.

More letters from scientists poured in, encouraging his efforts. Even without encouragement McDonald's desire for honesty in science would have spurred him on. He arranged a methodical graph, using the "case" and "code" numbers Condon had assigned to each case, identifying witness names, page numbers, and type of each case—radar-visual (R-V); photo; power outage; etc. He identified the date and location of each case and other identifying information he was able to glean from his wide knowledge. The last column on his graph listed Condon's "explanations" (See Appendix Item 13-A, page 577.)

Condon had jumbled and hidden the data deliberately, making it difficult (and even impossible) for new researchers who might want to re-investigate the cases. McDonald obtained several copies of the paperback version, sending some to colleagues and keeping a couple of copies for himself. He heavily annotated one of these copies, indicating other page numbers that would further clarify the annotated text. He attached plastic tabs to each section, in order to easily find specific material. His tabs divided the lengthy text into:

1. Section I: "Introduction," by Walter Sullivan of the *New York Times*, a letter to Air Force Secretary Brown, and a Preface by University of Colorado officials giving assurance that a scientific study had been concluded in accordance with Contract No. F44630-67-C-0035
2. "Table of Contents," and Condon's "Conclusions and Recommendations"
3. Section II, a 42-page "Summary of the Study," presumably written by Condon, in which McDonald underlined statements as: "We were assured that the federal government would withhold no information on the subject."

Condon's section contained a lengthy reference to the "fantasy believers in the ETH," and recounted a well-known contactee's story, about a mythical planet named "Clarion," allegedly the source of some UFOs. Condon also discussed Menzel's theory of afterimages, faulty vision, and autokinesis as "explanations" for UFO reports. He devoted nearly a page to the Zanesville photo (which was proved to be a hoax), but only two sentences to the McMinnville, Ore., photos, dismissing them as "too fuzzy to allow worthwhile photogrammetric analysis." (See Figure 30) Yet Dr. Bill Hartmann's investigation of the McMinnville photos, buried deep in the text in the middle of the book, was quite complete and objective.¹⁸ Hartmann concluded, "This is one of the few UFO photos in which all

18. Condon, *op. cit.*, p. 407.

factors investigated, geometric, psychological, and physical, appear to be consistent with the assertion that an extraordinary, flying object, silvery, metallic, disk-shaped, tens of meters in diameter, and evidently artificial, flew within sight of two witnesses. Yet Condon dismissed the McMinnville photos as “too fuzzy” to be analyzed. Apparently, Condon had not bothered to read his own report!



FIGURE 30. One of the two classic McMinnville, Ore., photos “in which all factors investigated...appear to be consistent with the assertion that an extraordinary, flying object, silvery, metallic, disk-shaped, tens of meters in diameter, and evidently artificial, flew within sight of two witnesses.”

Condon addressed the question of R-V sightings in a half-page and referred the reader to Section III, Chapter 5, written by Gordon Thayer, who was described as “a radio propagation specialist on the staff of the ESSA in Boulder.” Thayer included 35 reports in his section, and Condon states (erroneously): “There was no case where the meteorological data available tended to negate the anomalous propagation hypothesis....¹⁹ Thayer’s Chapter 5, Section III was 61 pages long. Yet there was another “Chapter 5” in Section IV, titled “Radar and the Observations of UFOs” written by Roy H. Blackmer, Jr.,

19. *Ibid.*, p. 42.

and several other authors, none of which were on Condon's staff but were sub-contracted from **Standard Research Institute (SRI)**. It was not until July 1968, just at the close of the committee's active investigation, that SRI revealed they did not intend to discuss any specific UFO cases in their sub-contracted section! Condon claimed that he had expected SRI to include specific UFO cases and acted surprised when they didn't. In May 1968, however, **Dave Atlas** of Condon's staff had told McDonald that SRI personnel had told him they were told not to look at any specific radar-UFO cases but only to prepare a summary on radar propagation anomalies. Atlas himself had advised SRI what their report should contain, emphasizing quantitative analysis, etc.

A lot of this "radar" section was devoted to insects, including their cross-section diameters that could, hypothetically, cause radar blips! Complex graphs were included, which denoted the heights at which various species of insects flew, and other "information" that had nothing to do with radar-echoes of UFOs confirmed by competent operators as unidentified, solid "craft" tens of meters in diameter, performing complicated maneuvers, and also verified by eyewitnesses! Forging through the fill, McDonald found several errors in the text. He wrote rebuttals right on the pages, referencing scientific textbooks which corroborated his own conclusions. He also wrote in his journal one of Atlas's remarks: "**The SRI report gets quantitative only in one area. In insects.**"²⁰

Gordon Thayer's radar section was filled with errors and misconceptions on many cases with which McDonald and other researchers were thoroughly familiar. In Thayer's section, McDonald inserted extra pages, identifying the cases that were discussed, for they, too, lacked specific locations, dates and witness names. McDonald learned that Thayer was assigned the task of writing his section in July 1968 and **given only five and one-half weeks to complete it!** It was **done on a "leave without-pay" basis.**²¹ Thayer had a B.S. in physics from the University of Colorado. At the time of the shake-up on the Condon staff, McDonald had written to Jim Hughes that Saunders's and Levine's dismissals left **Robert Low**, the project administrator, as **"the radar expert"** (see Chapter 11). Apparently the task of writing the radar section was not to Low's liking, and it is to Thayer's credit that he took it on at all. He did not see Condon's "Summary and Conclusions" until the Report was published.²² Dr. Roy Craig of Condon's staff selected most of the radar cases to be analyzed. Thayer, who wrote the Section, selected only two or three. He **did no witness interviewing** and was not well acquainted with the 35 R-V cases he wrote about.

I admit I'm a little shocked at all the negativity towards Thayer.

20. McDonald, *op. cit.*, reverse p. 7.

21. *Ibid.*, p. 45.

22. *Ibid.*, reverse p. 45.

Thayer's was the section which McDonald annotated most heavily. The little paperback is a treasure trove for anyone versed in calculus and higher math, for he wrote down equations which proved Thayer's math mistakes right on the pages. There are also notations containing highly technical information regarding radar. For example, Thayer had mentioned a subgroup of radar cases which he named, "B - Blip Like," where the radar targets showed characteristics of a return from a solid object. In discussing these, Thayer wrote, "Acceleration or velocities in excess of known aircraft capabilities, or periods of immobility, were not considered to be contrary to normal target behavior." Above this rather astonishing sentence, McDonald wrote, "Didn't catch this until 12/28/69!"²³

McDonald worked more than a year on this section, as well as other parts of Condon's Report, analyzing it whenever he could find time. As late as August 19, 1970, a note appears on p. 120, referring to "Thayer's goof on labeling gradients."

Upon occasion, however, Thayer was objective when it came to labeling an "unknown." One in particular should be mentioned. On June 23, 1955, about 15 miles east of Utica, N.Y., the co-pilot of a Mohawk Airlines DC-3, cruising at 3,000', noticed an object passing "at great speed" about 500' above the plane. The object was light gray, almost round, with a center line, and had several windows which emitted a brilliant blue-green light. The pilot also saw the object and the two witnesses watched it for several miles. A few minutes after it went out of sight, two other airliners sighted it and reported it on the radio. The Albany control tower also saw an object go by one of their airways, and Boston radar tracked an object speeding along the same airway. The two Mohawk Airline witnesses computed the speed of the object at 4,500-4,800 m.p.h. There was no associated sonic boom. Thayer wrote:

*...a most intriguing report, that must certainly be classed as an unknown pending further study, which it certainly deserves. Statements from some of the other witnesses would help in analyzing the event, and should prove useful even 13 years after the event. It does appear that this sighting defies explanation by conventional means.*²⁴

This was the type of R-V sighting McDonald was looking for, involving:

1. multiple technically trained witnesses
2. several airborne sources from different locations reporting a similar unidentified object within a short space of time

23. Condon, *op cit.*, handwritten note by McDonald in Thayer's radar section, p. 118.

24. Condon, *op. cit.*, p. 143.

3. ground observers and ground radar contact from another location along the object's flight path.

Realizing that the Condon Committee had had access to R-V cases which were not known to the UFO community, he decided to visit Wright-Patterson AFB again to search for them. At the end of June 1969, he journeyed to Dayton, but found that Project Blue Book had been moved into smaller offices, with the staff again downgraded. He spent the next two days going through the files for the fourth time and hand-typed notes on 18 cases.

On this trip, he carried with him a list of cases, mostly R-V, which he was most interested in tracking down. Part of his list is included here, as it demonstrates the wide distribution of UFO phenomena:

8/24/66 Minot AFB, N.D. 3/2/67 Holloman AFB

12/19/66 Patuxent R NAS 8/1/52 Bellefontaine, Oh.

7/3/67 Leewood, Ks. 4/20/52 Fleet, Mi.

7/29/48 Indianapolis, In. 8/19/65 Cherry Creek, N.Y.

7/29/52 Port Huron, Mi. 5/2/57 Edwards AFB, Calif.

At the new Blue Book offices, Sgt. Jones was no longer there and Quintanilla, who'd been promoted to Colonel, was also gone. It is possible that the job had gotten to Quintanilla when McDonald started dropping by in 1966. By mid-1967, Quintanilla had been sending out strange letters to inquiring researchers, for example, the following, that was published in NICAP's *The UFO Investigator*:

To P. Flatley

677 East 29th Street

Brooklyn, New York 11210

Dear Flatley:

Reference your undated strip of paper. I can prove that the Air Force does exist, but you can't prove that flying saucers are real. Evidently the asphalt jungles of Brooklyn are beginning to get to you. Why don't you take a walk out in the country...and quit living in a dream world....
Sincerely,

(s) Hector Quintanilla, Jr., Major²⁵

In his journal, McDonald notes that Quintanilla's replacement, Lt. Carmen Marano, was "worse than Col. Q!"²⁶ When McDonald saw the Edwards AFB

25. *The UFO Investigator*, January 1968.

case available at last, he typed several pages, gathering details for which the research field was hungry. Marano was not pleased. McDonald described how, as he was typing: "Marano hover[ed] around to pick an argument."²⁷

On this fourth Blue Book visit, McDonald was still denied access to classified R-V cases. Returning to Tucson, he took "the little rest" which his wife Betsy had been urging. Previously, each summer, when the children were smaller, the family went off together to relax and enjoy tranquil surroundings. This year, McDonald and Betsy traveled for a week by themselves through Taos, Trana Amarillo and Canyon de Chelly.

"A long dormant period then ensued," McDonald wrote in his journal after returning home on July 8, 1969.²⁸ "Dormant period" meant something different to McDonald than to other people. He tended to a pile of correspondence which had collected on his desk, regarding not only his professional work but UFO matters as well. He then devoted an entire week fixing up a VW bus he'd bought so that Betsy could drive it to Oakland, Calif., with some of her fellow activists, to attend a Black Panther conference. Betsy was a supporter and member of the Socialist Workers Party. Besides her other causes, she regarded the Black Panthers movement, in its early days, as part of the civil rights struggle. A few months later, she decided that she didn't want to be involved any longer.

McDonald did not participate actively in this cause, but when two Black Panthers came to Tucson, early on in their movement, Betsy had invited them to stay at their home. McDonald talked with them far into the night, asking questions about their philosophy, their plans and their progress. The Panthers slept with their guns at hand, explaining that government agents sometimes broke into places where they were housed.

McDonald, too, was proficient with firearms. He had a small, snub-nosed pistol, which he had purchased in 1953 in Chicago. He had begun to be concerned about his family's safety when he went on extended professional trips. He kept it in a handy drawer for home defense. He urged Betsy to learn how to shoot, but she told him she could never use a gun against an intruder. In Tucson he traded the pistol for a larger revolver with a neighbor down the block, who provided him with a supply of cartridge "re-loads." But Betsy disdained the larger gun, too. It simply rested in their bedroom drawer.

Betsy began her long drive to Oakland in the family's re-fitted VW van. McDonald took advantage of the time alone to brush up on the theory of rela-

26. McDonald, fourth journal, reverse p. 43.

27. *Ibid.*

28. *Ibid.*, p. 44.

tivity. He also studied evolution, heredity and genetics. Betsy returned home, but McDonald continued studying for ten more days.

As the August 8th meeting of the POWACM approached, McDonald noted in his journal that he was in "nadir state."²⁹ It was, for him, an unusually private remark—it meant that he had reached "the lowest point." The POWACM was an NAS panel and ordinarily he would have been looking forward to the meeting. He was not used to "feeling low." In the past, he'd had a couple of bouts with severe depression, brought about by particularly difficult projects he'd taken on and which seemed unsolvable. According to Betsy McDonald, these depressions occurred about once every ten years. The last one had occurred in 1961 during the Titan controversy (see Chapter 1).

It is not known what brought on the "nadir state" in 1969. Nothing like it is mentioned elsewhere in his writings. His UFO journals indicate that he had immense enthusiasm for that research. His intense involvement was evident not only to his new-found colleagues in the UFO field, but also to his scientific colleagues who did not share this interest. Marilyn Epperson describes observations of her mother, Idabel Epperson, who was chairman of LANS. Idabel often corresponded and spoke by telephone with McDonald, as well as hosting meetings whenever he was in the Los Angeles area.

"She had a feeling that he seemed to be rushing, as though he couldn't get it all done in his lifetime," Marilyn relates. "He was so intense about his work.... She never thought about him dying. She just thought 'he was trying to get it all done,' was the way she put it. I don't mean that he did things in a hurried way. He was a perfectionist. He was in a hurry to get everything done in the sense that he didn't want to miss anything that went into this."

McDonald journeyed to Palo Alto, Calif., for the POWACM and while there, he recovered from his nadir state. Upon his return, he spent an entire week researching the legal, economic, and social problems inherent in weather modification, and spent the next week in intensive review of Bureau of Reclamation questions. By that time, the date for the Denver, Colo., UFO Symposium rolled around. He noted succinctly in his journal:

*The 8/22 Denver symposium renewed UFO interest.*³⁰

He was one of six scientists who gave talks on the UFO question at the National Astronomical Association (NAA) Symposium. Another packed period of UFO activity began for him; he rebutted the Condon Report case by case in articles, talks, and media appearances. He also intensified his research into

29. *Ibid.*, p. 44.

30. *Ibid.*, p. 44.

possible ways by which a monitoring network could be set up, with government and military, the scientific community, and the public cooperating together to detect, track, and document UFO sightings. He felt this would be the most logical way to gather hard, irrefutable evidence.

An early instance of tracking data he'd come across was during a Navy Stormfury session in 1968, when he'd learned about a Navy satellite "FENCE" across the lower states, which was a setup of several continuous-wave radar interferometers. It had detected many meteors but rejected them because of their steepness of entry angle; it also had other selectivity factors built in. It was actually set up to detect objects in orbit, including all the small debris from earth satellites. FENCE had been described to some extent in *Aviation Week*. McDonald derived this information from talking with Jack Townsend, a NASA physicist, who told him that "*Aviation Week* drags out most such facts eventually, despite classification."³¹

McDonald realized it would take a while to gather enough ideas on a tracking network to put together a proposal which would be acceptable to major funding agencies, but his abiding principle was "First things first." Establish ideas for a network first, get data flowing in, and then worry about how much data was necessary. At the same time he was gathering tracking ideas, he continued rebutting the Condon Report, for this was an immediate contribution he could make. The Report officially negated the importance of UFOs, so what would be the use, scientists would ask, of setting up a tracking system to monitor a "non-existent" phenomenon? McDonald endeavored to have one of his articles about the flaws in the Condon Report published in a scientific journal. He had voluminous data, written in polished form, for he was speaking on a regular basis before scientific and academic groups on the subject, revealing new information about the inadequacy of the Condon study each time he spoke. He was tracking down the witnesses on stunning cases that had been included in the Report, but about which very little was known in the UFO field.

Most scientific journals, fearful of peer pressure and disapproval, refused to print his UFO papers, just as they refused to print Hynek's. McDonald did succeed in having one paper on the inadequacies of the Condon Report published in the prestigious journal, *Icarus*.³² Ostensibly a book review, the article went far beyond the boundary of an ordinary review, comprising three and a half pages. In the same issue of *Icarus* was another review of Condon's Report,

31. *Ibid.*, reverse p. 32.

32. McDonald, James E., "Book Reviews: The Condon Report, Scientific Study of UFOs, E. P. Dutton & Co., New York, 1969; also Bantam Books, New York, 1969," *Icarus: International Journal of Solar System Studies*, Vol. 11, No. 3, Nov. 1969, pp. 443-447.

authored by the NAS panel of scientists who'd been appointed to review the Report before it was released. Their names were at last made public: Gerald M. Clemence; H.R. Crane; David M. Dennison; Wallace O. Fenn; H. Keffer Hartline; E.R. Hilgard; Mark Kac; F.W. Reichelderfer, William W. Rubey, C.D. Shane, and Oswald G. Villard, Jr. The contrast between the two reviews was startling—the NAS whitewash clashed vividly with James McDonald's logical analysis.

The eleven scientists on the NAS Panel wrote: "[Condon's Report] has been a very creditable effort to apply objectively the relevant techniques of science to the solution of the UFO problem.... The Report also shows how difficult it is to apply scientific methods to the occasional transient sightings with any chance of success.... [A] study of UFOs in general is not a promising way to expand scientific understanding...."³³

McDonald's *Icarus* review outlined in detail the weaknesses and faults of the Condon study, including the fact that only 1% of all the promising cases which lay researchers had funneled into the committee had been investigated at all; that many historically important cases were omitted entirely; and that basic facts about the cases which were included were defective and incomplete. "I find it extremely difficult to understand how so inadequate a report could have received such clear-cut Academy endorsement—except for the fact that none of the eleven panelists had any evident prior scientific contact with the subject," McDonald wrote. "None, so far as is known, undertook any cross-check investigations of cases to be found in the Condon Report. Few scientific subjects receive Academy endorsement on such a superficial basis."

His "book review" also revealed that key witnesses on truly puzzling reports were not interviewed by Condon's staff, even though they were available, and that extremely important and well-documented cases the staff had checked, such as the Levelland and Redlands cases, had been omitted from the Report. It pointed out that the Report was heavily weighted with trivial UFO reports. "The Colorado Project was supposed to explain the tough ones, not the easy ones," he wrote in plain English. In many interesting cases which the Report did discuss, the analysis was "woefully inadequate," McDonald continued. He particularly mentioned the 1957 Lakenheath case in England and the Louisiana-Texas B-47 events of Sept. 19, 1957, both of which were military R-V cases previously unknown to the UFO field (See Chapter 16).

33. *Icarus*, "Book Reviews," "Review of The University of Colorado Report on Unidentified Flying Objects by a Panel of the National Academy of Sciences," NAS, 1969, Vol. 11, No. 3, Nov. 1969.

He demonstrated how Condon had arranged the Report so that the dates, locations, and names of witnesses were missing on most of the 59 cases which comprised the core of the text, a totally unscientific technique. Condon had contended that witness names were omitted to avoid embarrassment, but many of these cases had received full media attention and the witnesses were readily available. He emphasized how Condon's format prevented verification by independent researchers—and verification was the heart of science! He also pointed out examples of "scientifically weak or specious argumentation" in the Report's case analyses. In the few pages *Icarus* allowed him, he couldn't go into details on all these cases, but he mentioned several, including the Flagstaff, Ariz., (May 20, 1950) and Vandenberg AFB, Calif., (Sept. 10, 1967) sightings. He added that many other examples could readily be cited. One of his most devastating criticisms of the Condon Report was especially cogent:

[S]o much basically non-relevant padding has thickened the Report that it will give some readers the impression of great scope and others the impression that it's so detailed as to defy easy study.

*Some of the bulk was fairly businesslike, but does not support the mission laid before the Condon project, namely, showing whether careful scientific analyses can give satisfactory conventional explanations of the most puzzling UFO reports of the past twenty years.*³⁴

McDonald had enough space in his "book review" to go into detail on the Haneda AFB, Japan, incident of August 5, 1952—a classic case which had been described in books by Ruppelt, Keyhoe and Hall, among others. On a clear cloudless night with 60-mile visibility, an intensely bright light, attached to a darker object at least three times the light's diameter, was viewed from widely-separated USAF bases in Japan. The object had smaller lights also, some of which ran in a curved line along the lower edge. The object changed altitude rapidly at times, faster than a jet. At other times it winked out abruptly.

McDonald had a 25-page Blue Book report on the Haneda case—the original intelligence reports from the Far East Air Force units which investigated the incident. He'd copied these under Lt. Marano's scowling gaze. The same intelligence reports had been available to Condon's staff, but had apparently been ignored. The Haneda base alerted the USAF radar station at Shiroi, which had state-of-the-art radar equipment. The Condon Report noted this, but asserted, "It is not clear whether the GCI³⁵ radar ever tracked the fast-moving target...." This particular statement irritated McDonald. It was only one of the

34. McDonald, "Book Reviews...", *op. cit.*, p. 445.

35. Ground Control Interception

details omitted in Condon's version, but it was one of the most important, for the USAF radar station at Shiroi did detect an unknown target moving over the north end of Tokyo Bay, and an F-94B jet with airborne radar had been scrambled from Johnson AFB.

The Blue Book intelligence report clearly stated that the F-94's radar officer picked up a target which matched the target being picked up from the radar station on the ground. His testimony reads in part, "The target was rapidly moving from port to starboard and a lock-on could not be accomplished." Ground radar from Shiroi, the airborne F-94 radar, and radar blips from Haneda corresponded almost exactly—a remarkable correlation considering the UFO's violent maneuvers. Yet Thayer's radar section attributed these correlated radar readings to "unusual radar propagation effects." Worst of all, the Condon Report "identified" the Haneda object as Capella, a bright star, which was at 40° azimuth, 8° above the horizon.

"Shades of Menzel," McDonald might have murmured, when he read the Haneda report for the first time. In his *Icarus* article, he demonstrated why the object could not have been Capella. It was seen from two different Air Force stations 50° apart: witnesses at Haneda AFB had seen "Capella" in the NNE and tower control operators at Tachikawa AFB had seen it in the ESE? The term "diffraction" was loosely bandied around in the Condon Report's explanation, but McDonald shot that down by pointing out that Capella's elevation angle was far too great to be affected by an inversion layer. Besides, the visual description of the object did not fit any type of optical distortion.

Surprisingly, in spite of Condon's negativity, he had stated in his Final Report: "We believe that any scientist with adequate training and credentials who does come up with a clearly defined specific proposal for study should be supported." This encouraged McDonald to try again to obtain funding, not only from ONR but from NSF. Part of his planned proposal would address the need for UFO tracking systems. Most UFO researchers wondered why the U.S. government had not long ago formed a monitoring network, to detect and document UFOs. The idea had been discussed enthusiastically by several of the participants on the Congressional UFO panel on July 29, 1968.

I should definitely include this in my proposal

The idea of a tracking system to detect UFOs did not originate with James McDonald. The Air Force had thought of it back in the fifties. An obscure document, known as the *Pentacle Memorandum*, submitted by the Battelle Memorial Institute, together with members of the intelligence community, had proposed a tracking network in 1953. Capt. Edward Ruppelt of Project Blue Book had suggested it in 1956, as had Hynek in his capacity as Blue Book astronomical consultant. Jacques Vallée had published photographs which showed unidentified "tracks," which had been taken by auto-

mated astronomical cameras. The team of Hynek, Vallée and Powers at Northwestern University had made proposals along these lines and had discussed their proposals with McDonald during their meetings. And NICAP had formally proposed the idea of a tracking network in a press conference.

All of these early proposals had been ignored by officialdom, at least as far as the UFO community was aware. Vallée offers a possible reason: "The first problem is cost, the second is that, contrary to satellites and missiles, you don't know what you're tracking," he says. "It is an insurmountable technical problem, unless you have complete coverage, a multi-billion dollar undertaking at the time. Who would have paid for it?" Still, tracking systems seemed the best way to obtain solid evidence of the reality of basic UFO phenomena, that is, unidentified metallic aeroforms buzzing around Earth's skies. Once the reality of the basic phenomenon was firmly established by science, then the peripheral question of its nature, motives, purposes, etc., could be addressed. McDonald was already convinced that UFOs did exist. Dick Hall explains:

"The lack of real physical evidence never really bothered him, because he was impressed by the quality of the people who reported UFOs," states Hall. "He had a way of determining for himself if they were trustworthy and telling the truth."

However, McDonald was fully aware that the scientific community had to be convinced by hard evidence. Consequently, he discussed the idea of a nationwide tracking system with other scientists who were pushing for the same thing, whenever the opportunity presented itself, and he wrote down many of the conversations and ideas in his journal. As a direct result of his influence, the AIAA had initiated a "UFO Subcommittee" in 1968, and the idea of a tracking system had been discussed with much interest among its members. Supposedly, plans were being put into effect to establish it. The subcommittee was headed by Dr. Joach Kuettner, a scientist who served on the Navy Stormfury Panel with McDonald, and whom he saw personally two or three times a year at Stormfury meetings. At first Kuettner seemed enthusiastic and managed to get a few influential scientists to serve on the UFO Subcommittee. Yet there are items which McDonald jotted down in his journal which give rise to speculation about how earnest Kuettner really was.

In mid-June 1968, Kuettner called McDonald from Denver, where he was trying to set up a session for the subcommittee. Kuettner had stopped in at the Condon Committee offices. Ed Condon had fallen into conversation with him, complaining about the "trick" memo, on which McDonald had helped blow the whistle in *Look*. Kuettner told him that Condon claimed the memo was taken from Low's personal files. "It must be true," Kuettner said. "Robert Low was standing right there when Ed said that." McDonald did his

best to convince Kuettner that Condon didn't have his facts straight. He then called Mary Lou Armstrong, Robert Low's Administrative Assistant, to clarify Kuettner's remark. She strongly defended the circumstances under which the memo had surfaced. "It had been in the 'Air Force Contract' and 'Blind files'," she stated.³⁶

In spite of minor disagreements with Kuettner, McDonald was willing to speak any time at the AIAA's UFO Subcommittee sessions. Toward the end of May 1968, Kuettner called to say that the session that had just been planned had been canceled, because there were no travel funds available. McDonald took the news in stride, and when Carl Sagan phoned sometime later the next day, asking his advice as to his choice of speakers for the forthcoming AAAS session, McDonald listed Kuettner's name among a dozen other scientists who were, by then, publicly involved in the UFO field, pro and con. He continued to hold out hope that the AIAA UFO Subcommittee would succeed, not only in interesting many more scientists to study UFOs, but also in setting up an actual UFO tracking system. Toward the end of July 1968, in one of his phone conversations with Dr. Robert Wood, he was gratified to hear that Mr. Andy Mosley, deputy chief scientist of Douglas Aircraft, had agreed to serve on Kuettner's UFO Subcommittee. Mosley was "Douglas's No. 2 man," wrote McDonald in his journal.³⁷

About the same time, Kuettner asked if McDonald could speak to a session of the UFO Subcommittee in mid-September in Boulder, Colo.; he'd also invited Hynek and Condon to speak at the session. This was before the negative Condon Report was released in January 1969, but after the *Look* article had been published. On this occasion, McDonald asked Kuettner for a list of the scientists who were on the AIAA UFO Subcommittee, since Kuettner had never even shared this information with him. Kuettner agreed to send it. On September 11, McDonald traveled to Boulder for the AIAA session and discovered it had abruptly been changed to a 7:00 P.M. dinner meeting! The car pool which was supposed to pick him up at the airport didn't show, and he had to rent a Hertz car to get to the banquet. A less cheerful and tireless man would have become discouraged with the AIAA UFO Subcommittee, but McDonald never mentioned in his journal that he was at all concerned.

In mid-October 1968, during a discussion with Dr. David Saunders, he learned that Kuettner would report on the AIAA UFO Subcommittee findings in New York the coming week, and that "the report would be partly positive." Surprisingly, McDonald had not been informed about this. Weeks went by without

36. McDonald, fourth journal, p. 2.

37. *Ibid.*, reverse p. 17.

Kuettner contacting him; in mid-November he called Kuettner to find out more. Kuettner told him he'd arranged for the UFO position statement to come out in the AIAA journal, *Astronautics and Aeronautics*. Over the phone, he read what would be in the article, and McDonald later summarized it in his journal:

Position, tho conservative, urging [UFO question] warrants more study, etc. He says they're trying to get Subcomm beefed up, esp in area of tracking. "K[uettnner] added that he's coming around to view that I'm probably right & that others agree but are afraid to 'stick their necks on block.' Feels it is serious problem."³⁸

Although the position statement wasn't as strong as McDonald wanted, he accepted the status quo. His own bold personality probably couldn't fully understand the reluctance of colleagues to come out in the open, but long talks with scientists such as Bob Wood had acquainted him with the undeniable fact that many scientists' careers would be in jeopardy if they publicly entered the field.

McDonald next saw Kuettner in mid-December 1968 at a Stormfury Advisory Panel Session in Miami. During the three-day session McDonald spoke to both the AMS, which was meeting in Miami, and to the AIAA at Cape Kennedy. His talk was titled "UFOs and Atmospheric Physics," and Joach Kuettner attended both. McDonald discussed the Redlands case, the Levelland sightings, and some other classic cases, such as the Chiles-Whitted sighting, which he had thoroughly re-investigated by tracking down the original witnesses. He did not discuss any Air Force cases, since the Condon Report had not yet come out, and many of the good cases which the Air Force had shared with Condon were still unknown to outside researchers. After the talk, Kuettner and McDonald discussed the UFO Subcommittee position paper which had appeared in *Astronautics and Aeronautics*. It wasn't as positive as he'd hoped, McDonald told him. "I've given the best of the data to you, and it doesn't show."

"We're doing the best we can," answered Kuettner. "After all, with scientists afraid to speak out, this is something that's going to have to proceed slowly."

"Why not get people on the committee who have academic protection, who don't have to be afraid?" asked McDonald. His question may have been too logical, because Kuettner abruptly changed the subject.

This conversation took place before the Condon Report was released, but is inserted here in order to show Kuettner's rather strange attitude toward the whole UFO problem on this occasion. "Say, Jim," he said, "I think you're going to be surprised when the Condon Report comes out."

38. *Ibid.*, p. 28.

"Surprise isn't quite the word I'd use, Joach," replied McDonald. "Everything points to a negative report, from what I've heard and read."

"No, Jim," said Kuettner, with an air of mystery. "You and Condon aren't as far apart as you think." *Strangely I agree w/ this sentiment. For instance the difference between me & Gaudzila is paper thin. I simply accept one*

"I don't know how you can say that," McDonald replied. "I'm pessimistic over the whole deal, beginning with the Low memo and Condon's preoccupation with the contactees. And that's only the beginning. Various members of Condon's staff have let me in on what's really going on. I'll bet you a beer that my pessimism is more correct than what you're saying." *pieces of evidence where he does not*

"Well, I know you've checked more cases than the whole Condon Committee project," Kuettner said. "But I'll take you up on the bet. A beer I'm right."³⁹

He then confided that he'd had his own unexplained sighting just a few weeks before, while traveling on an airliner near Denver. He'd sighted several glowing objects which seemed associated with a larger red light which was on the right of the plane and presumably pacing it. The smaller objects were maneuvering up and down—erratic maneuvers which didn't correspond with anything he was familiar with. Kuettner got one of the stewardesses to watch, and she was also thoroughly mystified. She told the pilot, who sent back the message that he thought the objects were "aircraft." Kuettner also related a recent sighting which had occurred to an airline pilot whom he knew well, whose airliner was followed by a "lighted unknown."

*Tower broadcast appeal to any other A/C, asking if anyone else saw it. Pilot friend answered: No. "Then they came!" (Airliner & glowing object ahead) JK asked pilot if he then reported it to tower. Did not. Gave JK some phony reason. JK felt sure was unwilling to report it.*⁴⁰

McDonald knew enough about airline pilot sightings to understand why Kuettner's friend hadn't reported the sighting. By this time, the FAA would not accept pilot sightings of "UFOs" and, if an airline pilot was bold enough to report one, his job and his reputation would be on the line.

"There's a sighting we know about, of a 'Farmer Johnson' in Clarinda who got up at night, looked out the window, and saw a UFO close to his house," McDonald told Kuettner. "The farmer looked at the object awhile, wondering what he should do about it. You know what he did? He went back to bed."

Kuettner replied, "I can believe that. Same attitude, basically, as my pilot friend." Kuettner then showed McDonald a letter from Phil Klass, who was

39. *Ibid.*, p. 32.

40. *Ibid.*, p. 32.

protesting that the recent AIAA position statement didn't take his work into account. McDonald suggested that Kuettner review the paper he'd delivered before the Canadian Aeronautics and Space Institute the previous March, in which he'd scientifically taken apart Klass's and Menzel's theories. McDonald wondered whether Kuettner had even seen that important paper.⁴¹ He didn't hear from Kuettner for more than two months. In early February 1969, shortly after the public release of the Condon Report, he traveled to Denver to appear on Canadian Broadcasting System TV, and phoned Kuettner from the airport. Kuettner told him he was meeting with the UFO Subcommittee on February 12th in Washington, D.C., missing McDonald by only one day.

"I may stay for your AMS banquet talk on the 13th," Kuettner said.

"I hope you will," replied McDonald. "And afterwards, we can have that beer."

"But I'm not sure who won the bet!" said Kuettner. "Who'll pay?"

McDonald thought that remark very odd. "How can you say that?" he asked, launching into a brief summary of the sham Condon had perpetrated in the name of science.

"But Condon's comments regarding future proposals being acceptable certainly leaves the UFO question open!" answered Kuettner.⁴²

"I keep trying," said McDonald, who was on the verge of irritation but managing to hide it. "I've tapped the ONR, NAS, NASA, and NSF for funding over and over, and the answer's always the same. But I'm going to try NSF again."

Kuettner deftly changed the subject. "Our UFO Subcommittee is preparing a report for publication in *AIAA Journal* on the Condon Report." "Well, I'll mail you some pages of the talk I'm delivering to AMS," replied McDonald. "That'll give you a general notion of my position on Condon."

In spite of receiving advance copy on McDonald's Washington, D.C., AMS talk, Kuettner remained unconvinced. As the audience was walking out after the Q & A period and a post Q & A period, Kuettner came up to him. "I thought Gordon Thayer's radar section was pretty good," he said. Kuettner's remark thoroughly irritated McDonald. Later, he wrote in his journal, using one of his rare exclamation points: "J. P. Kuettner made comment.... Thayer section pretty good! I demurred!"⁴³

41. *Ibid.*, reverse p. 32.

42. *Ibid.*, p. 35.

43. *Ibid.*, reverse p. 35.

Seems like Kuettner either doesn't care, he got busy, or perhaps something more nefarious as Ann seems to insinuate.

Toward the end of March 1969, McDonald tried twice to phone Kuettner, to find out how the UFO Subcommittee was getting along, particularly in the matter of setting up a tracking system, but Kuettner didn't return his calls. Nine months passed before Kuettner is again mentioned in the journal. The two met at the Miami Stormfury session in early December 1969. This time, Kuettner told him that Condon had tried to get him to call off the January 1970 AIAA session, saying it would encourage "irresponsible speculations" about UFOs, etc." Even when Kuettner asked Condon if some other scientist who'd served on the Project would speak in his place, Condon refused, saying "no one else could represent him."⁴⁴ I find this odd, since Condon really didn't work on the project.

Another full year passed before Kuettner was again mentioned in the journal of James McDonald. In late January 1971, while McDonald was deep into ozone-layer research, Kuettner and Thayer called from Denver, asking him to lend Thayer his copy of the Blue Book's Lakenheath case, so Thayer could write it up for the AIAA. Thayer had earlier asked him for his copy, but McDonald had suggested that he borrow the copy in the Condon committee's files. Thayer called Condon, but Condon had told him bluntly that he didn't have any of the files anymore.

"Why?" asked McDonald. "I've been told by archivists at the Colorado U. library that Condon had the files and was going to keep them. I've been trying for over a year to get access to them." At this point Thayer turned the phone over to Kuettner.

"Condon said he destroyed the files, Jim," said Kuettner.

"Destroyed the files?" said McDonald. "Why would anyone do that?"

"He had a lot of reasons, Jim," said Kuettner. "One of them was that they took up too much space." McDonald's irritation boiled over. "There's plenty of space in the University of Colorado archives!"

"That's all he'd tell us, Jim," said Kuettner. "But that leaves Gordon Thayer without a copy of the Lakenheath case. He wants to go over it again, in view of the information you've been able to pull out of it that no one else could because of the mess it was in when Blue Book sent it to us (see Chapter 16). Could you get your copy to him?"

"I'll send you a copy of my copy," said McDonald. "But maybe Condon only destroyed the Blue Book items." Kuettner replied, "All I know is what he told Gordon Thayer."⁴⁵

44. *Ibid.*, reverse p. 44.

45. *Ibid.*, p. 49.

In spite of the less-than-brilliant record of the AIAA UFO Subcommittee, McDonald never stopping researching data for a UFO tracking system, hoping that it would soon materialize. While exchanging ideas on the subject with Don Keyhoe and Dick Hall, they reminded him that the **Ground Observer Corps (GOC)**, which operated from **1950 to 1959**, had produced numerous fascinating reports which defied explanation. **Leonard Stringfield**, an active **NICAP researcher**, had cooperated with the Air Force in conjunction with the GOC in the 1950s, for the express purpose of logging UFO reports from the public.⁴⁶

McDonald had also been intrigued by a remark which J. Allen Hynek had made in a press interview, just a few months after the **Rivers Committee hearing** in **April 1966**, where Hynek had given negative testimony on UFOs. In the later press interview, he'd done an about-face and had listed several reasons why the UFO problem should be taken seriously. McDonald noted Hynek's seventh reason: "Radar, **meteor cameras**, and **satellite tracking stations** have picked up 'oddities' on their 'scopes or films which have remained unidentified."⁴⁷

McDonald had also discussed tracking-network ideas with Dr. Robert M. Wood, who was vitally interested in the subject. **Several unidentified objects had been photographed by astronauts in orbit**, and Wood had had a lengthy telephone discussion with **Scott Carpenter**, one of the original seven astronauts, who had taken a picture of a UFO. Carpenter had told Wood that he'd photographed a piece of space debris, but in his debriefing, NASA officials had queried him for two hours about the "debris" and the photo he'd taken! Carpenter was very frank in his discussion with Wood. He commented on the fact that the Condon Committee was studying UFOs, but then fell silent for a little while. Finally he said, "On the other hand, there's something wrong with the management up there."

Bob Wood suggested to McDonald that he try to get a copy of that particular debriefing. Carpenter had also confirmed that **John Glenn**, the first American to orbit the earth, had seen what he described as "**fireflies**," a phenomenon which other astronauts had reported but which had never been explained, at least publicly. The "fireflies" were small glowing objects which clustered around Glenn's view-window and also flew alongside his spacecraft. Although not typical UFOs, the phenomenon had captured McDonald's interest, and Glenn's confirmation of the event was important to him.⁴⁸

46. Stringfield, Leonard H., *Inside Saucer Post 3-0 Blue*, Cincinnati, Civilian Research, Interplanetary Flying Objects, 1957.

47. Kotulak, Ronald, by-line article, *Chicago Tribune*, October 22, 1966.

48. McDonald, fourth journal, reverse p. 16.

McDonald had begun gathering specific ideas for the design of a tracking network as early as 1966, drawing on earlier work by other scientists and adding his own unique touches. In June 1966 he had written in his journal:

6/18/66 Tom Malone phoned me.... OK'd my idea of...phoning Egg-ers at NASA.... Tom asked if 1. I'm organizing a concise presentation; 2. I have specific ideas on design of an experiment. I pointed out "yes" to both.⁴⁹ This I would really like to see!

During his 1966 briefing to NASA officials in 1966, it seems from the above journal entry that McDonald had offered a specific plan by which NASA could track UFOs with existing technology. If he had a specific plan, however, he did not talk about it freely among his UFO colleagues, and instead continued to gather other ideas and encouraged other UFO researchers to do the same. In a 1966 letter to A. Donald Goedeke, chief scientist of the Space Science Department at Douglas Aircraft in Santa Monica, Calif., he wrote, "Your efforts to work out some direct sensing methods for collecting data on UFOs sound excellent. Blind groping may be necessary at the start, but I'm optimistic about ultimate possibilities."⁵⁰ He was referring to Wood's and Goedeke's "lightning van."

Early in June 1966, he had discussed UFO tracking systems with Dr. Eugene Epstein of the Aerospace Corporation based in El Segundo, Calif. Epstein had talked with Duke McCroskey at the Harvard Center for Astrophysics in Cambridge, who had, during a five-year period ending about 1956, participated in all-night watches in New Mexico, observing meteors. He'd told Epstein he'd never seen anything "unusual." J. Allen Hynek had set up this Smithsonian network and had tried to use it for UFOs. Yet McDonald knew that technically trained observers had seen UFOs in Tucson during a similar "meteor watch." McDonald wrote in his journal that perhaps the negative New Mexico results might have been due to lack of interest, or adverse climate of opinion.

Dr. Epstein also told him that satellite-tracking Baker-Nunn cameras had "unusual stuff" appear on some of their photos, and he felt this situation might be worth special research.⁵¹ The unusual tracks were recorded on single-shot plates, and were not stereo pairs; therefore, triangulation to obtain true height and size was not possible. The Smithsonian had similar Baker-Nunn cameras around the world; they were doing orbit work, with no close pairs, so triangulation was not possible here either. McDonald pointed out that one could scan the singleton plates for 90° trails.

49. McDonald, second journal, reverse p. 16.

50. Letter from McDonald to A. Donald Goedeke, December 13, 1966.

51. McDonald, second journal, reverse p. 20.

Or perhaps this suggests the phenomenon is also psychological in nature?

George Earley of NICAP*CONN knew of at least one curious object that had been photographed by Smithsonian cameras. He'd been shown a startling example by Dr. Thornton Page, who'd shown him photographs taken by the Prairie network cameras in the Midwest, that were supposed to take photos of meteors. "They were big 6" or 8" Newtonian Schmidt-type cameras, and they were all controlled by timers," relates Earley. "They looked at one section of the night sky and took pictures.... I don't know what the length of the exposure was. Page pulled one out and said, 'If you want to see something really strange, look at this.' What this picture showed was a series of lozenge-shaped white spots. The exposure was long enough so that when something went across, it would show it as a streak.

"The white spots were, as I recall, maybe a half inch or so long, and about half as wide as they were long, maybe a little longer...on an 8.5" by 10" piece of film," continues Earley, "A series of lozenges running along, let's say, the bottom right corner parallel to the bottom. Then the line bends 45° and goes up to the top of the page, and bends again, and you've got a series of lozenges going to the upper left corner. Dr. Page said this was a plate right out of one of the Schmidts. He wouldn't let me have it. I didn't ask him then to turn it over to see if there was any date on the back so I could write to the Smithsonian and ask for a print. I remember querying him about this some years later and him saying, 'it would be impossible to find that,' because there were literally thousands of photographs taken. The tricky thing was at the point where the line went from horizontal to a 45° climb and then changed back to parallel again. At those two points, the lozenge bent. It's frustrated me ever since. It may have been some sort of a funny little glitch in the machine. Maybe somebody five years later figured out what caused it, but still, you want to know."⁵²

It is doubtful that Page ever showed this particular photograph to James McDonald; no mention of it has been found in his files. Also not mentioned was the fact that Jacques Vallée had shown McDonald a photo by Grumman of an unidentified satellite, similar to one which Vallée had tracked optically at the Paris Observatory in 1961.

On the May 21, 1966, television program, "CBS Presents, UFOs: Friend, Foe or Fantasy," Capt. Gary Reese of NORAD stated that the space-tracking network at Colorado Springs covered 100,000' to 2,000 miles, but that "no UFO had ever been seen." The USAF radar at the site was capable of detecting a watermelon-size object at 200-400 miles.

McDonald early on discussed the question of tracking systems with his friend, Prof. Charlie Moore, in Socorro, N.M. Moore told him that the govern-

52. Author's interview with George Earley, 31 April 1994.

ment had radar with 200-mile range and a network of Baker-Nunn cameras with the capacity for wide-angle search photos and that the Baker-Nunns did show many unidentified object tracks. Moore also felt that one ought to get radar data from USAF and USN high-power long-range sets. He'd seen the "lapse time" of a certain English radar system which could see birds at 200 miles. Then he added, "They must see all kinds of stuff in there." He also confirmed that NASA had Spacewatch radars positioned in the Southern part of the U.S. with the capacity to track orbiting satellites. In this journal entry regarding Moore's input, McDonald also mentioned that NICAP had some data on Baker-Nunn tracks.⁵³

McDonald therefore had plentiful reason to believe that official monitoring systems did pick up unidentified objects. For more than one reason, however, he felt that a tracking network set up to detect UFOs should not be in the hands of the Air Force alone. Gen. Cruikshank, who was head of the FTD, where Blue Book was headquartered, had stated that he felt the best place in government to study UFO reports was "right here in FTD," emphasizing Air Force capabilities for detection of objects in the sky.

"Other military services besides the Air Force might be interested in UFOs," McDonald had responded. He also pointed out that the UFO problem was worldwide, that national boundaries did not worry UFOs, and that tracking systems should not be concerned about national boundaries, either. He told Cruikshank that U Thant, who at the time was the Secretary-General of the United Nations, was actively interested in the question. He also mentioned a colleague who had told him that the chief Russian scientist in UNESCO was actively studying Russian reports.⁵⁴

McDonald had had a superb opportunity to gather other data about tracking systems when he participated in the July 1968 Congressional hearing. Dr. Robert M.L. Baker had introduced the subject, detailing existing instrumentation in the U.S. that was deliberately designed to screen out all except particular targets which were being watched for, such as incoming Soviet bombers and missiles. The built-in selectivity made it quite unlikely that anomalous phenomena would be detected. Nevertheless, some had been detected but, to Dr. Baker's knowledge, had never been adequately studied. He stated that optical tracking equipment, too, was specialized in purpose. He gave the example of minor planets (asteroids), which had been detected on old astronomical plates that had been photographed for other purposes, and then set aside. He suggested that instrumental equipment to detect UFOs be put in place, and that

53. McDonald, *op. cit.*, p. 3.

54. *Ibid.*, p. 12.

study of older data involving visual observations be phased out. It was then that Baker exploded this bombshell:

*There is only one surveillance system, known to me, that exhibits sufficient and continuous coverage to have even a slight opportunity of betraying the presence of anomalous phenomena operating above the Earth's atmosphere. This system is partially classified and, hence, I cannot go into great detail at an unclassified meeting.... Since this particular sensor system has been in operation, there have been a number of anomalous alarms. Alarms that, of this date, have not been explained.*⁵⁵

In the 1/6/67 *Electronic News*, Hynek had stated at a NASA Goddard Space Flight Center seminar that the U.S. had a superb tracking system to detect and study UFOs—i.e., the extensive Early Warning military radar networks. He stated that on several occasions these networks had tracked UFOs, and that the IGY world optical network had photographed UFOs which could not be explained. Yet at the Congressional hearing Hynek said nothing about this. There was general agreement that the U.S.'s ICBM-tracking system rejected all objects above 90,000 ft., except those on a ballistic trajectory from the direction of the Soviet Union. All "uninteresting" trajectory objects were "thrown away."

"But since all these 'uninteresting' objects are thrown away," stated Dr. Carl Sagan on that occasion, "we have no way of knowing at the present time whether there are or not large numbers of interesting objects at altitudes above 90,000 feet." He might have been thinking of reports of immense UFOs—sometimes described by credible witnesses as being a half-mile or more in length—which seemed at times to "orbit" the Earth and occasionally to release smaller objects which were assumed to be typical surveillance-type UFOs. Dan Boone, the CSA technical consultant, participated in this vigorous CSA Congressional hearing discussion, clarifying which different tracking systems were monitoring at different altitudes. Some were pertinent to national defense, others served air-travel needs, but most were throwing away or ignoring "uninteresting" objects, which might well be genuine UFOs! His most meaningful statement, at least to McDonald, was the revelation that software to detect UFOs at different altitudes could be added to the present systems, with some difficulty, but there was no question that it could be done.⁵⁶

McDonald had listened quietly. He knew that a laser-radar built by Stanford Research Institute in California had detected "invisible clouds" just before they formed visibly and also after they had dissipated. In a written communi-

55. Symposium on Unidentified Flying Objects: Committee on Science and Astronautics (U.S. House) 29 July 1968, Washington, D.C., USGPO, PB179541, 1968, p. 131.

56. *Ibid.*, p. 191.

cation, Jim Hughes had discussed sonar observations by the Italian navy of apparently unidentified undersea objects. These observations had later been explained as returns off underwater peaks, returns that had been mistaken for "moving objects" by the sonar operators.⁵⁷ When asked by Rep. Roush if he had a comment, McDonald cut through to the heart of the matter:

*In almost every monitoring system you set up, whether for defense or scientific purposes, if you don't want to be snowed with data, you intentionally build selectivity in.... You do not see what you are not looking for. Consequently...the fact that they don't repeatedly turn up what appear to be similar to UFOs, whatever we define that to be, is not quite as conclusive as it might seem.*⁵⁸

It is not known what efforts McDonald made to follow up on Dr. Baker's intriguing comment that unidentified targets were already being tracked by an ADC surveillance system in Boulder, Colo. Perhaps when his missing notebooks are found, they will contain entries that will throw light on this enchanting information.

Several years after McDonald's death, Dr. Robert M. Wood was able to confirm that UFOs were being detected by satellite technology. From about 1978 to 1982, Wood worked on what he describes as a routine McDonnell-Douglas program. He'd had secret clearances to an Air Force facility, whose classified library contained documents from the Navy, the CIA and, in Wood's words, "everybody else." In the course of his work there, Wood met a person who had very high security clearances. He had read Wood's 1967 paper, "The Giant Discoveries Of Future Science," in which Wood discussed the subject of UFOs.

"We became good friends," relates Wood. "Every time I was there I'd pop in to see him. And we started talking about UFOs—he seemed to be interested in that. He'd read in the paper that there was a report of a UFO in the Philippines, really bright. I asked, 'Do you suppose our overhead satellites would pick up something like that?' My contact replied, 'I don't know, but I know just the guy to call.' He picks up the phone—a secure phone, and asked, 'What have you got about such and such a date, in the Philippines?'"

About a week later, Wood received a communication from his contact, that our satellites did detect the bright light at that place, just at the time the newspaper said the natives reported the UFO.⁵⁹ Wood stressed that his contact had gotten the information from classified files. He could not reveal the location or name

57. Letter from James Hughes to McDonald, 25 May 1966.

58. Symposium, *op. cit.*, p. 192.

59. Interview with Dr. Robert M. Wood, 23 August 1993.

of the library, only that he himself was permitted to use it because he was engaged in classified work at the time.

"The classification levels would be, typically, *Secret*, *Top Secret*, or *Top Secret Code Word*," Wood relates. "Actually since then, they have changed the rules, again and again. It used to be that contractors could go to study [in] these libraries as a contractor and look through the files.... If you found the document you wanted, you could check it out and read it at your own pace. Whenever I had occasion to go to the library... I pawed through the other stuff to see if there was any on UFOs. There were entries there the first few times I checked. And then about 1980 all of a sudden they vanished. All entries in the entire category were expunged from all the Secret files."

The existence of libraries like this was apparently not known to McDonald, if they existed at all during his lifetime. In his work for ONR and NAS, as well as for IAP at the University of Arizona, he apparently did not require *Top Secret* clearance. The ONR contract, at least, which was discontinued after his Australian trip, required no use of classified materials.

"He would have required the 'need to know'," states Jacques Vallée. "Remember that Hynek had asked and had been told he didn't have 'need to know.'"⁶⁰

I wonder if this is in reference to the conversation Hynek allegedly had w/ Dr. Ransfield.

In August 1968, right after the Congressional hearing, McDonald discussed the matter of a UFO tracking network with Dr. Robert Nathan, who had been helpful in analyzing the Heflin photos (see Chapter 12). Nathan knew that Gen. Bruce Holloway, who was second in command in the USAF and head of the SAC, was sympathetic to the idea of tracking UFOs. Nathan had an appointment to see Holloway in a few days, but he couldn't decide if he should come out publicly regarding his own UFO work.⁶¹ McDonald urged him to talk to Holloway about how SAC could participate in a scientific UFO tracking system and also urged Nathan to come out publicly. He pointed out how important it was that well-regarded scientists, who understood the importance of the UFO question, should speak out.

There is no mention in McDonald's journal about what Nathan told Holloway, if anything. A few months after the Congressional hearing, both Dr. Robert Nathan and Dr. Robert M.L. Baker rather abruptly turned skeptical on the subject of UFOs. They had both worked avidly in the field, contributing time and expertise, but now both of them withdrew to a large extent.⁶² It is one

maybe the spec. and public posturing or losing interest due to lack of data?

60. Author's communication with Dr. Jacques Vallée.

61. McDonald, fourth journal, p. 21.

62. Author's personal knowledge.

of the mysteries of the "McDonald years." He was aware of similar withdrawal by other scientists, but this did not affect his own pursuit of the data. During a three-day trip, he spoke on UFOs at a Du Pont banquet meeting in Philadelphia and, the next day, at a meeting of the AMS in Washington, D.C., and came across a startling example of the worldwide nature of the UFO problem.

Following the banquet talk, McDonald went to a gathering in colleague Ken Spangler's hotel suite. A German émigré scientist who was working at a U.S. Army Research lab was also present, and described a 1945 sighting event, witnessed by 20 German scientists who were fleeing from Russian soldiers. They were on a ship harbored in a North Germany bay near Schlesweig Holstein. They had viewed, in broad daylight, a bright object high in the sky. During the 20-minute sighting, the object, which was "larger than Venus," moved 30° to the east. Binoculars were handed around in an attempt to identify it. "There was no explanation from any of the highly trained scientists and technicians," McDonald wrote.⁶³ It was not a balloon or a plane, and was never reported officially by any of the scientists.

McDonald was intrigued by this early sighting, because it occurred close to the end of World War II, about two years before Kenneth Arnold's first public UFO report on June 24, 1947. The name of the German scientist whom McDonald interviewed that evening was not noted. The case, however, correlates with a 1945 event witnessed by this author in Long Beach, California, in the early summer of 1945. It also occurred in broad daylight, two or three weeks before atomic bombs were dropped on Hiroshima and Nagasaki and around the time the first experimental nuclear weapon was exploded in the New Mexico desert. The Long Beach object was also viewed by the author's mother, Aileen McElroy. It was seen at about 60° elevation for over an hour. The object's great height, slow angular movement, size and brightness match the German scientists' sighting, the only difference being that the object seen by the émigrés was moving east, whereas the object, as seen from Long Beach, Calif., was moving slowly west.⁶⁴ McDonald never shared the 1945 German émigré case with his UFO colleagues in Los Angeles. As a consequence, he was never aware of the California sighting that might have correlated with it.

In February 1969, McDonald met in Denver with David Saunders and other former members of the Condon staff. Herb Roth, who was helping McDonald obtain data on some of Condon's cases, told him that the NORAD workers tend-

63. McDonald, fourth journal, p. 36.

64. Druffel, Ann, "An Early Sighting at the Beginning of the Atomic Age," *UFO Magazine*, Vol. 17, No. 4, August/September 2002, pp. 68-71.

ed to be quite interested in UFOs, because of the relatively large number of "uncorrelated targets" which were programmed out or else ignored entirely. Dave Saunders confirmed that during an early Condon staff briefing session at Colorado Springs, they were given the impression that "non-satellites and non-missiles get filtered out."⁶⁵ McDonald came to the conclusion that a sophisticated tracking system for UFOs was well within the capability of the U.S. government and scientific facilities. "Mac was hoping to get through to an NAS committee on the idea of setting up an international UFO observation and data-collection agency...similar to the International Weather Bureau, because he was familiar with that," Betsy McDonald relates. "What was needed to solve the question would be an international observation and data-collection agency."

A remarkable example of how multinational cooperation could accumulate immediate data on a UFO's presence had occurred on September 8, 1970. It is unlikely that McDonald ever knew of it, for a full account was not printed until October 1992.⁶⁶ Saxa Vord, an isolated radar station off the coast of Great Britain, picked up the blip of an unidentified "aircraft" midway between the Shetland Islands and Alesund in Norway at 8:17 P.M. It was monitored for several minutes proceeding southwesterly at a speed of 630 m.p.h., at 37,000' altitude. Then, veering 30°, it headed due south, increased speed to 900 m.p.h. and climbed to 44,000'.

The radar controllers at Saxa Vord alerted the nearest NATO airfield, RAD Leuchars on the east coast of Scotland. Two Lightning interceptors were scrambled and vectored toward the bogie. It was assumed this was a routine scramble, for Russia often sent out reconnaissance aircraft to test the nerves of the RAF. However, the blip abruptly turned 180° on a due north bearing and within seconds disappeared off the screens, at a speed calculated around 17,000 m.p.h. It was now plain that this was not a Russian aircraft! During the next hour, the mystery blip reappeared several times, each time out of the north. The British interceptors attempted to intercept it each time, but each time it went back to the north and disappeared.

Two F-4 Phantom jets of the USAF were scrambled from the American base at Keflavic, Iceland. Their radar was more sophisticated than the British

65. McDonald, fourth journal, p. 35.

66. Otter, Pat, "Captain Schafer's Last Flight: The Tantalizing Story Behind the 'Ditching' of Lightning Foxtrot 94 in September 1970," *Flying Saucer Review (FSR)*, Vol. 39, No. 1, Spring 1994, London, England. Otter was Assistant Editor of the Grimsby Evening Telegraph, in which the account first appeared. *FSR*'s article was republished with Otter's permission. In his introductory note, *FSR* Editor Gordon Creighton likens the Schafer case to the Australian case of Frederick Valentich, a young pilot who disappeared, with his plane, over Bass Strait, Victoria, in October 1978.

jets; they picked up the mystery aircraft on their airborne sets. Each time they approached the object, it disappeared as before. By now, the situation was being monitored by the Ballistic Missile Early Warning System (BMEWS) at Fylingdales Moor, near Whitby, and by a second BMEWS in Greenland. They relayed their information to NORAD at Cheyenne Mountain and to the Detection and Tracking Center at Colorado Springs. The UFO reappeared on ground and airborne radar at 9:39 P.M. traveling 1,300 m.p.h. southwesterly heading at 18,000' altitude. Four British Lightning jets were scrambled, and the RAF at Fylingdales, which was in constant contact with NORAD at Cheyenne Mountain, heard SAC Headquarters at Omaha, Neb., order its B-52 bombers into the air, an order which could only have come from the highest level—President Nixon at the White House.

Then Pentagon officials told NORAD that a USAF pilot of "great experience" was on an exchange visit with the RAF and was stationed at Binbrook in North Lincolnshire. This was Capt. William Schafer, who had seen combat in Vietnam. He'd been in Binbrook for some time as an exchange pilot. He was, by coincidence, "flight available" and was ordered to join the four Lightnings. Two other Phantom jets and three refueling tankers were also airborne and were joined by a Shackleton MK3 from Kinross, which was ordered to patrol along the East Coast of the United States.

Binbrook was a front-line fighter station and its aircraft shared Quick Reaction Alert (QRA) duty with other East Coast airfields. Normally, QRA aircraft took off in pairs. On this occasion only Capt. Schafer's jet took off, and it was not one of the QRAs. He raced out and climbed into a Lightning jet which was being refuelled. Its call-sign was Foxtrot-94. He ignored the standard pre-flight checks, waved away ground crews, ordered the refuelling lines disengaged and immediately took off, using re-heat to gain speed and height as quickly as possible. The Lightning turned out over the North Sea and Capt. Schafer disappeared forever, in one of the great aviation puzzles of recent times.

Early the next morning, September 9, 1970, Foxtrot-94 ditched in the sea off Flamborough Head, witnessed by the crew of a Shackleton reconnaissance aircraft, and flares were spotted by the trawler *Ross Kestrel*. It took search crews more than a month to find the wreckage on the sea bed. The cockpit was empty, the canopy closed, the ejection seat in place. No trace of Schafer was ever found. The aircraft was taken to RAF Binbrook, and kept under wraps in the corner of a hangar. The ditching of the aircraft and the fact that the pilot's body was not recovered was reported in the British press. Pat Otter, Assistant Editor of the *Grimsby Evening Telegraph*, who contributed this account to *FSR*, was alerted by Barry Halpenny, an aviation writer, to the fact that "there was more to the story than met the eye."

Otter “birddogged” the case for six years, seeking additional clues to Capt. Schafer’s mysterious disappearance. The Ministry of Defense, the U.S. Embassy, and the USAF base at Alconbury all proved dead ends. Even Bob Bryant, Northcliffe Newspaper’s aviation correspondent who had close links with the RAF and the USAF, met dead ends. Bryant became convinced there was an official blanket of secrecy surrounding the crash of Schafer’s jet in the North Sea.⁶⁷

News of the astounding UFO chase, caught on multiple airborne and ground radar sets never reached McDonald from across the Atlantic. It was the kind of case he would have birddogged with every resource at his command.

67. *Ibid.*

Secrets Upon Secrets

*Here's to health for one and all, to the big and to the small
To the rich and poor alike, and foe and friend.
And when we return again, may our foes have turned to friends.*
—from “The Rambling Rover”

There are two levers for moving men: Interest and fear.
—Napoleon Bonaparte

As the spring of 1969 drew near, McDonald continued sorting out the cover-up controversy in his mind. His NICAP friends and other colleagues debated the problem with him. Keyhoe's contention, since the early 1950s, was that there was ample evidence that a “secrecy group” in the Air Force was covering up UFO information. The Robertson Panel, its CIA sponsorship, the “debunking” curtain it had thrown over the entire subject, the inability of pilots and military personnel to speak out openly—all this and more convinced the UFO community that an official cover-up was in place. McDonald still was not convinced.

“We all along debated the cover-up vs. foul-up thing,” says Dick Hall, who shared, in part, McDonald's skepticism regarding a widespread “conspiracy.” “He did acknowledge that some of the things we came up with shook his faith a little bit.”¹

At times, McDonald conceded that particular situations into which he'd stumbled didn't really fit his foul-up theory, but were more like a cover-up. He'd found cases where the documentation had vanished, such as the B-36 case which Rudy Pestalozzi had described to him (see Chapter 3). On each of his visits to Project Blue Book, McDonald tried to locate that particular report in the Air Force files, and each time came up empty. Several other B-36 sightings were in Blue Book, but none fit the facts as

① Couldn't it also be the case due to the lack of manpower it was misplaced or like the 57 RB-47 case maybe an incorrect date?

1. Author's interview with Dick Hall, 7 May 1994.

Pestalozzi described them. Also, there were instances of confiscated film, such as the Drury photo case in Australia (see Chapter 8) and the Newhouse movie film (see Chapter 8), from which the best frames had been plucked.

“[Instances like these] gave him a little bit of a problem,” relates Dick Hall. “But then he always went back to the fact, ‘Well, you know, it’s too mind-boggling’.... And looking into daily Blue Book operations, there’s ample evidence of a foul-up.... But we debated, ‘It’s a little-of-both kind of thing.’ But he never came around to accepting the cover-up theory.” *This maps nicely to situational cover-up.*

McDonald had been impressed by Thornton Page’s description of the general disinterest the Robertson Panel scientists had in the UFO subject. From his acquaintance with the full Robertson Report, which Major Quintanilla had mistakenly lent him, he knew that the Panel had recommended that UFOs be officially “debunked,” out of fear that a potential enemy, such as the Soviet Union, might fake a widespread “flap” of fraudulent reports, thereby clogging U.S. military communication channels. Such action could render our nation incapable of defense if an enemy wished to launch a “first strike.” McDonald conceded that such a fear was logical in the 1950s. *By the late 1960s, however, the military had access to more sophisticated communication channels that could not be clogged even if the Soviets hoaxed a widespread “flap.”* McDonald reasoned that the “ridicule lid” had become self-perpetuating, adding to the “foul-up” surrounding the government’s neglect of the UFO question.

His friend Dr. A. Richard Kassander, Director of the IAP, states: “He did feel that he was not getting the straight stuff from the Air Force, and...the assumption might reasonably be made there were things that, by a matter of policy, the AF did not wish discussed.”² But even when McDonald ran into information blocks, they didn’t necessarily translate into “deliberate cover-up.” The information he’d gathered about the satellite, radar, and optical tracking systems which the U.S. had in place around the nation and in other parts of the world contributed to his belief in a “grand foul-up,” since he reasoned that the government had the ability to track UFOs but was not bothering to do so.

CIA theory
In 1966, he had felt that perhaps the main basis for Air Force security was “cover-up for bungles and errors of radar and pilot errors, etc., so that one wouldn’t get far by starting in USAF radar records.”³ By January 1968, however, his view was changing. At his talk at United Aircraft Corporation, to an overflow crowd, he stated:

2. Author’s interview with Dr. Richard Kassander, 19 November 1993.

3. McDonald, James E., second journal, p. 3.

The UFO problem has been so badly mishandled, for so many years, by Project Blue Book that it is almost easier to imagine this part of a grand design of some high-level intelligence agency than to accept the conclusion that any program could possibly be handled so ineptly. I have to concede a point to those who criticize my position when they stress, "It's hard to imagine that they could be that incompetent...." For the record...I have never been dogmatic about insisting the 'grand foul-up theory,' and I have never scoffed at those knowledgeable students of the UFO problem who defend the only seemingly sensible alternative, "grand conspiracy." The existence of repeated small [localized] UFO cover-ups so confuses the issue that one cannot be certain.⁴

By September 1968 McDonald had come face-to-face with a puzzling situation which promised possible proof of "Air Force cover-up." It was so intriguing to him that he pursued it for many months. Dr. Benjamin M. Herman, whom McDonald had guided through doctoral studies, first learned of it from Donald Dewey, editor and publisher of a small magazine called the *R/C Remodeler* in Sierra Madre, Calif. Sometime between 1956 and 1957 Dewey, who at that time was employed as a Prudential & Northwestern Mutual Life agent, became acquainted with an Air Force officer who lived in a residential area of Altadena, Calif.

The officer was about 45 years old at the time and was either a brigadier general or a colonel. Dewey got to know him pretty well, visiting him at home several times in the process of selling him insurance. He claimed the officer, who was always dressed in an Air Force uniform, told him that, for many years, he had been "in charge of UFOs" for the Air Force but now "worked out of his home and traveled a great deal." He showed Dewey four or five dozen UFO photos taken in Australia, Japan, Russia and the U.S. He told Dewey that the UFO photo research was the most extensive investigation the Air Force had ever undertaken, in which they secured the collaboration of foreign nations, "including Russian scientists who were not involved with Soviet intelligence." The Air Force, according to the officer, considered UFOs to be extraterrestrial in nature. "We know UFOs are for real," Dewey quoted him as saying, "But how do you tell the public?"⁵

The photos Dewey was shown were "not top secret," Dewey's source claimed, but they shouldn't be discussed generally "because there were too many quacks and the public would panic." The officer kept other photos in a

4. McDonald, "Science, Technology, and UFOs," Presented January 26, 1968, at a General Seminar of the United Aircraft Research Laboratories, East Hartford, Conn.

5. McDonald, "Cover-up vs. Foul-up" file, handwritten notes. In McDonald's Personal Collection, University of Arizona Library, Tucson.

locked safe and did not show them to Dewey; the implication being that these were classified. McDonald and Herman realized that some aspects of Dewey's story seemed dubious, principally: Would an Air Force man still on active duty work out of his home and invariably wear an Air Force uniform? Would a colonel or brigadier general be buying life insurance? Wasn't that all taken care of by the military services?

McDonald set about trying to confirm the story. Dewey couldn't recall the officer's name, but remembered that he was Scottish and had a five-foot Scottish crest in his home. McDonald flooded Herman with questions to ask Dewey, including, "Is there any possibility the guy is a nut?"⁶ As far as Herman could determine, Dewey was independent of the Air Force. He was married with one child. Herman had met him the previous summer, with brief correspondence before that. McDonald and Herman eventually assessed Dewey as "generally reliable" and continued researching the case. If the USAF officer who allegedly had official photos of UFOs could be tracked down, and his stock of photos confirmed, this might yield valuable information concerning the reality of UFOs. It might also confirm an Air Force "cover-up."

Dewey, at McDonald's suggestion, tried to find out where in Altadena the Air Force officer had lived and found a house on Meadowbrook Road which he felt fairly sure was the right one.

McDonald confided the basic facts of the case to Jim Hughes and asked him to tap his contacts, to try to track the officer down. He also sent Dewey another list of questions, including a list of Irish and Scottish names thought to be possibly involved in UFO research, which might jolt his memory. Dewey answered in detail. He'd been shown four or five dozen photos, all taken from the air. Some were taken from specially equipped Air Force aircraft; none were gun-camera photos. Some taken by airline pilots were less impressive. Some of the objects showed distinct features, including domes, and appeared to be flying vehicles.

In September, 1968, Betsy McDonald went to Los Angeles to engage in civil rights activities and visit their son Kirk, who was working on his doctorate at Caltech. McDonald wrote to her, outlining the Dewey case and asking her to research some of Dewey's statements on-site, since Altadena was close to where she was staying. His letter read in part:

I've thought, of course, of the ever-present possibility of intentional misleads; but it seems to make no sense at all here.... Ben can't imagine [Dewey] fabricating this.

6. *Ibid.*, p. 1.

McDonald's letter ended on a personal note:

I hope you get some rest, Sweetie, which you sure need after "the long hard summer" of P[er]e & F[reedom]. See you next week. Love, Mac.⁷

Betsy consulted the Pasadena-Altadena Street Directory, and learned that the house address Dewey had located was not the residence being sought; one family had owned and lived in it for 20 years. Dewey searched again, making a list of all conceivable addresses on Meadowbrook Road. Betsy checked these out and solved the problem. An Air Force colonel, Robert Crawford, had lived just next door to the house Dewey had first pegged.⁸ The next door neighbors remembered that the former occupant, who'd lived in the house in 1956 and 1957, "had been involved with the space program." They referred Betsy to a family named Posey, who were under the impression Crawford was now in Thailand and retired from the military.

When Dewey was asked if he was willing to contact the life insurance company he'd worked for to get more information on Crawford, he was reluctant because "the company is careful on that." At this point McDonald wrote to Don Keyhoe at NICAP, telling him about the case which seemed to have a bearing on the cover-up hypothesis.

I find it very hard to understand an officer, actively connected with a secret UFO investigation, disclosing to a young insurance salesman not only several dozen impressive photos but also information on co-operation with foreign air intelligence programs.... Dewey may be somewhat confused in his recollections....

To me it is much more reasonable to think that Crawford had some past UFO connections, managed to compile a personal library of photos... would regard such photos as of diminished intelligence value, and might, in a confidential way, disclose those to someone like Dewey.⁹

Keyhoe checked but was unable to find out anything about Col. Crawford. McDonald then referred the matter to Drew Pearson's aide, Jack Anderson, who agreed to try to locate the traveling colonel. McDonald then wrote another letter to Betsy, which reveals how much the cover-up vs. foul-up controversy concerned him:

7. Letter from McDonald to Betsy McDonald, 2 September 1968.

8. The exact address of Col. Robert Crawford in Altadena, Calif., is not given, to spare the present occupants inconvenience and/or annoyance. However, anyone with precise information who can help me solve this puzzling case is urged to contact me c/o the publishers.

9. Letter from McDonald to Maj. Donald E. Keyhoe, September 4, 1968.

*If there's accuracy in what [Dewey's] told us, if, as late as 1957 or so, USAF really was still engaged in an extensive UFO investigation behind the scenes, and was enjoying the cooperation of foreign air intelligence groups...then maybe Don Keyhoe's long-standing insistence on grand cover-up is correct....*¹⁰

In this letter, he continued to muse:

*NICAP has information on a number of other instances in which large files of UFO photos were reportedly shown to important witnesses to find what shape they'd seen. One...involved a Navy Constellation in 1956. The crew...was shown an album of photos to pick out similarities to what they'd seen.... So many other items from Keyhoe have proved reliable and well founded that I can't write it off as meaningless despite it being only hearsay for me.*¹¹

To our present knowledge, McDonald never tracked down the elusive colonel. His inquiries to Jim Hughes, Drew Pearson and Jack Anderson yielded no feedback.¹² He tended to regard the inability to track down Crawford as evidence which strengthened the "foul-up" hypothesis rather than the "grand conspiracy," but his mind remained open.

NICAP's Dick Hall, who tended to be on the fence regarding the cover-up vs. foul-up controversy, was leaning more toward the grand conspiracy hypothesis at about the time McDonald was pursuing the Dewey-Crawford case. NICAP had procured from the Air Force a large number of 1951-1953 Project Grudge and Project Blue Book Reports which had recently been declassified. The reports were formerly *Top Secret* or *Confidential*, and some described startling UFO events which had remained "unidentified" for 15 years or more. NICAP published these reports in a large soft-cover book. This NICAP publication revealed many important snippets of information, including the fact that *diffraction-grating cameras had been used by the government in an effort to obtain spectrographic data which could reveal the chemical elements of which UFOs were composed*. However, the Grudge-Blue Book data emphasized that this particular aspect was not being handled directly by Blue Book and that the exact status of the diffraction-grating research "was unavailable at the time of this report."¹³ McDonald, in studying this 235-page NICAP document, still rational-

10. Letter from McDonald to his wife Betsy, dated 4 September 1968, p. 2.

11. *Ibid.*

12. In 1994-95, combined research on this case by William L. Moore and myself revealed that Crawford has dropped out of sight, and is possibly dead.

13. *United States Air Force Projects Grudge and Blue Book Reports 1-12*, Washington, D.C., published by NICAP, 1968.

ized that the information within was part of an incredible “foul-up”: although he continued to qualify this judgment with the statement, “One can’t ever be sure here.”

A 1950 telegram to a Virginia FBI office, released under the Freedom of Information Act, indicates the extreme seriousness with which certain units of the U.S. government treated UFOs:

FBI, RICHMOND 12-03-50

DIRECTOR: URGENT

RE. FLYING SAUCERS. THIS OFFICE VERY CONFIDENTIALLY ADVISED BY ARMY INTELLIGENCE, RICHMOND, THAT THEY HAVE BEEN PUT ON IMMEDIATE HIGH ALERT FOR ANY DATA WHATSOEVER CONCERNING FLYING SAUCERS. CIC HERE STATES BACKGROUND OF INSTRUCTIONS NOT AVAILABLE FROM AIR FORCE INTELLIGENCE, WHO ARE NOT AWARE OF REASON FOR ALERT LOCALLY, BUT ANY INFORMATION WHATSOEVER MUST BE TELEPHONED TO THEM IMMEDIATELY TO AIR FORCE INTELLIGENCE. CIC ADVISES DATA STRICTLY CONFIDENTIAL AND SHOULD NOT BE DISSEMINATED.

-Counter
Intelligence
Corps

(S) AUERBACH.

The acronym “CIC” in the telegram stood for “Counter Intelligence Corps.” The wording of the telegram is rather obscure, but reading between the lines it might be assumed that the CIC was privy to the fact that the UFOs were being clandestinely studied, that the FBI was being let in at least partially on the secret, but that Air Force Intelligence was not aware of this in 1950! McDonald knew nothing of the existence of this document, however, for it was not declassified until mid-1970. Completely unaware of such official, furtive government interest in the UFO problem, McDonald continued on his crowded schedule. In a typical two-week period, between May 22 and June 10, 1969, he was featured speaker at the Tulsa AIAA, the Kansas City AIAA, the Los Angeles AIAA and at an Edison Conference in St. Paul, all talks being on UFOs. Then he went on to Washington, to attend the Science Advisory Panel of the NSF.

He spent five days in Washington, taking care of various professional responsibilities. In his “spare time” he gave a NICAP-sponsored talk, titled “UFO’s—Unsolved: A Challenge to Science,” before an enthusiastic crowd of 250 at Hotel Presidential Arms.¹⁴ Phil Klass was there, taping it from the audience and McDonald noted in his journal that “Klass offered a similar dona-

14. McDonald used the acronym “UFO’s,” with an apostrophe as indicated. Various researchers in the field prefer “UFOs.”

tion lecture!"¹⁵ One purpose for this talk was to raise funds for NICAP, since the research organization was in financial straits. Memberships were dropping, due partially to the fact that the Condon Report had helped cut off public interest. His main topics, as in all his 1969 talks, revolved around the inadequacy of the Condon Report and results of his investigations into the excellent cases hidden within the ponderous text and the continuing cover-up controversy.

During an official meeting at the NSF, on June 9-10, 1969, he learned of an organization called **Interdisciplinary Research on Problems of American Society (IRPOS)**. He reasoned that the UFO question might be an apt subject to approach the NSF for funding, under the umbrella of the IRPOS. The NSF colleague to whom he spoke told him that the NSF could not support mere publication of what McDonald had already done in the field but set up a meeting with **Dr. Joel Snow, NSF's acting chairman**. Snow told McDonald there were no NSF funds available until about autumn but that a proposal would be welcomed. NSF colleague **Fred White** also suggested that he "would be glad to look over a draft proposal if I wanted to try him."¹⁶

At NSF, McDonald was questioned at some length on certain UFO cases by Dr. **Wayne Gruner**, head of NSF Physics. McDonald mentions "Basthen" and "Van de Graef," etc., as being the situations in which Gruner was most interested.¹⁷ He also noted in his journal, "Saw Herwig," but gave no details about his meeting with this prominent scientist who had expressed much interest in UFOs to NICAP officials, but who had abruptly withdrawn his interest after the Condon Report was issued.¹⁸

When McDonald arrived home from this marathon trip, many letters were waiting on his desk, among which was an interesting addition to his growing data on possible UFO tracking systems. The letter was from **Richard Striner** of Washington, D.C., who'd heard his NICAP talk and who wrote to disagree regarding his dismissal of the "conspiracy" thesis. Striner's letter specified:

I maintain that someone in the intelligence community must be aware of the problem.... [S]atellite reconnaissance-filtering, such as...the BMEWS system, would not eliminate UFO data. The "Samos" system...provides films which are highly scrutinized for details as well as patterns. Imagine viewing a 500 ft. diameter disc from overhead on

Samos
is a term
for NRO
hardcore
back in
J.E.M.
day

15. McDonald, fourth journal, p. 43.

16. *Ibid.*

17. *Ibid.* Due to difficulty in reading some of McDonald's handwriting, "Basthen" might not be the correct spelling. It would be of interest to know in which cases the NSF official was so interested!

18. Author's interview with Richard H. Hall, 7 May 1994.

*film that can be enlarged to reveal well-defined objects down to 20 ft!.... [T]he whole globe is watched; even if the free world is ignored by film analysts, the whole Asian land mass must provide the men in Sunnyvale with a constant sampling of UFO maneuvers....*¹⁹

McDonald's involvement in UFO research was growing ever more complicated. This in itself did not trouble him, for he was used to tackling convoluted scientific problems and coming up with answers. In the case of his UFO research, however, many of the ideas he pursued at first seemed to hold out promise and interest from influential officials, but then the promises and the interest would be abruptly snatched away. He came to the conclusion that contacts with scientific, military, and government officials, his talks before scientific groups, and the few articles on the UFO subject which he'd had published in refereed journals, were not enough.

McDonald decided to write a book which would tell the history of scientific UFO research and present the best evidence—documented physical aspects such as radar-visual cases, power outages, car ignition failures and other EM interference resulting from UFO passage. He was confident that such a book would be well received in the scientific community because of his good reputation and his many contributions to atmospheric sciences. He prepared an alphabetized outline of numerous aspects of the UFO problem and placed it in the front of a three-ringed notebook. In the body of the notebook—its pages divided with tabbed sections—he wrote preliminary notes on these aspects. The numerous subjects he wished to cover included: Animal Reactions to UFOs, Ball Lightning, Cloud-Related UFOs, **cover-up vs. foul-up**, etc. The complete list of aspects he planned to include are in Appendix Item 14-A, page 568.

A few brief notations in his fourth journal demonstrate how deeply the UFO subject absorbed him. During a three-day trip in February 1969, when he gave talks to the **Scientific Research Society of America** (RESA) in Wilmington, Del., and the AMS in Washington, D.C., Betsy called him at his hotel in Wilmington with sad news. After their conversation he wrote in words devoid of emotion: "2/12/69 At c. 11:15 Bets called, said Mom had died 0130 Wed 2/12. I sent wire to TUS mortuary re. cremation."²⁰

"He had been spending a lot of time with his mother, because she had been seriously ill," relates Margaret Sanderson-Rae. "We always were up against a deadline to prepare the printed handouts for his talks, but this was one of the worst. I had three secretaries typing parts of it." The copies of the handout which he carried in his briefcase to Delaware were flawless, as usual, but only

19. Letter to McDonald from Richard Striner, June 14, 1969.

20. McDonald, fourth journal, p. 35.

I think McDonald realized as much as possible that no person is going to do this science if it's wrapped up in military/political obscurantism. That's no way to get work done.

two pages long, due to the rush under which it had been prepared (see Appendix Item 14-B, page 569). After receiving the news of his mother's death, he continued on this non-stop schedule, stopping only to buy a new tie to wear at the memorial service, which would be held when he returned home.

*2/12/69 Called Hans, set up plans for afternoon. Lunch with Bo, bought tie @ Kennards. Sci writer for WIL News-Journal papers, John Roberts, did interview 1500-1615. Then picked up by Joe Pope of local EDUC TV Channel 12 WHYY-TV & did 4 min interview for PM news plus 8 min for later feature use. Both re. Condon Rept.*²¹

He still had many hours left in the day. He met with the RESA officers at a pre-banquet gathering in the Hotel Du Pont, then gave his talk before a crowd of 800. The audience was a lively one, asking many questions. But he still could not return home. Next day he went on to Washington for a NICAP meeting. Accompanying the regular NICAP staff was a new staff member, Stuart Nixon, whom Isabel Davis had "taken under her wing" and was steering through the ways and means of scientifically oriented UFO research.²² NICAP was busy preparing its own formal rebuttal of the Condon Report, and the group exchanged data and ideas. McDonald then went on to his other appointments. He went to VOA for about an hour with Al Johnson, chiefly regarding the Condon Report.²³

"VOA" stood for the radio station, Voice of America. Its director, Al Johnson, was acquainted with the Condon situation. He'd tried to get Condon on VOA but only got informal comment from him, which was very negative. In his journal, McDonald underlined "very".²⁴ Johnson read notes which he'd taken during his phone conversation with Condon, who had remarked, among other things, that the "whole UFO biz is kooky" and that McDonald was "not an ethical scientist." This remark might have stung, but McDonald kept his cool and discussed with Johnson his new hypothesis, which he had formed during the past two or three months, namely, "that bad science advice is substitute for Conspiracy [hypothesis]."²⁵

*I like it. Also fits Robertson rec. fits Condon.
Doesn't fit Proj. Sign EDS-though.*

His "new hypothesis" showed that he was not convinced that the Air Force, or any part of the government, was deliberately covering up information on UFOs. He could not forget that Blue Book had been given bad advice from scientists such as Donald Menzel and J. Allen Hynek, as well as the five scien-

21. *Ibid.*

22. Author's interview with Marty and Gordon Lore, 11 September 1993.

23. McDonald, *op. cit.*, reverse p. 35.

24. *Ibid.*

25. *Ibid.*

tists on the 1953 Robertson Panel. McDonald was bending over backward to be objective.

Before he left the VOA, McDonald called Jim Hughes at the ONR and brought his good friend up-to-date. He then called Dick Olsen, Sen. Morris Udall's aide, who was busy gathering Blue Book cases mentioned in the Condon Report which McDonald wished to study but which he had not been able to wrench free from Lt. Marano at Blue Book. Then, at the Washington Hilton, he met with colleague Gary Gill and afterwards gave a banquet talk to the AMS on various UFO cases which had been downplayed in the Condon Report. For this talk, no handout had been printed because time hadn't permitted; instead, McDonald distributed dittoed copies of the draft of his talk.

A considerable discussion about Gordon Thayer's radar-visual section in the Condon Report ensued in the Q & A session which followed this AMS talk. Colleague Don Sweigle concurred with him that Gordon Thayer's section was "weak."²⁶ McDonald found out later, from talking with Joach Kuettner and Sweigle, that Condon's staff had not seen Condon's "Conclusions" section until the book had been published and made available to the public in its Bantam edition!

McDonald had become even more careful by 1969 in stating his hypothesis that UFOs might be extraterrestrial in nature. His RESA talk in Wilmington, Del., had been titled "A Dissenting View of the Condon Report," and the care with which he presented the ETH is apparent in his summary handout: "Even a bare possibility that this hypothesis could be correct would call for the most determined effort of scientists throughout the world to elucidate as quickly as possible all aspects of the UFO problem."²⁷

After the AMS banquet talk on the 13th, McDonald talked with colleagues until after midnight. Restless and needing exercise, he walked to his hotel instead of taking a cab, then phoned home to talk to his family. His son Kirk had arrived home from Caltech for the memorial service. No one in the family was sleeping, for all were as restless as McDonald: The memorial service had been set for 4:00 P.M. McDonald left D.C. that morning and arrived just a few hours before the service. It was held at the Presbyterian church which his mother, Charlotte Linn McDonald, had attended for 14 years. Many friends and acquaintances she'd made in Tucson attended.

26. *Ibid.*

27. McDonald, James E., "A Dissenting View of the Condon Report," presented to the DuPont Chapter of RESA, Wilmington, Del., 12 Feb., 1969.

A less intense man would have taken off a few days to grieve for his mother, but McDonald had commitments which he couldn't ignore. Only three days after the service, he spoke on the UFO question at the Pacific Naval Missile Range at Pt. Mugu, Calif. The talk had been on his schedule for some time. He'd been alerted by Idabel Epperson of LANS that valuable UFO information could be gathered there from a confidential source. At a pre-meeting luncheon, Capt. Tom Andrews, Vice-Commander of the Pacific Missile Range, related a personal UFO sighting, which had occurred at White Sands, N.M. It was a long-lasting UFO event which had occurred the week of April 30-May 4, 1956, which had been observed by multiple, technically-trained witnesses.

Capt. Andrews was one of 200 Navy officers attending Ft. Bliss Missile School that week in 1956. The group had been bussed up to a White Sands range to witness an Aerobee missile firing, but the Aerobee malfunctioned. Some of the officers, including Andrews, saw a round, metallic object "like an aluminum ball" in the clear, daytime sky. Its angular size was relatively large—one-fourth of the moon. The group with Andrews lined up the stationary object with a phone pole and put a stick in the pole to mark the exact position of the object. The UFO did not move.

The object was seen by many missile-range personnel, also. At one point, the UFO changed from its round configuration to cigar-shaped, remained that way for 20 minutes, then changed back to circular, but it never moved from its stationary point. The malfunction of the Aerobee cut short the officers' time at the range. They were loaded back on the buses and taken back to their quarters. The trip back was lengthy, but the object remained in the sky for about four hours and was viewed by Andrews and many of his colleagues through the windows of the bus. They asked their instructors about it the next day, but no White Sands personnel would discuss it with them.²⁸

On his 1969 trip to Pt. Mugu, McDonald had handouts for his talk, which he titled "UFOs and the Condon Report: A Dissenting View." He distributed them along with some copies of earlier talks and papers he'd written. The Pt. Mugu personnel were eager to know all that McDonald had learned, and his talk was well attended. Later in the evening, with the help of officials, he chased down the address of an FAA radar controller, Jeanine Hill, who was a witness to an important sighting in Oxnard, Calif., which had occurred on March 23, 1957. James McDonald had long sought Jeanine Hill's address to learn more about this radar-visual event which had caused much interest in the UFO community. As usual, once he was on the trail of a promising case, he tracked it down and didn't rest until he had wrung out every available bit of data from it.

28. McDonald, fourth journal, reverse p. 36.

He also phoned **Juanita Evans** at China Lake, Calif., regarding an intriguing Ridgecrest sighting which had occurred in September 1960. He was gradually becoming aware, through LANS and other Southern California sources, that the naval air station at China Lake and the surrounding mountains were scenes of fascinating UFO activity. These sightings were being investigated and documented by LANS and by scientists and engineers from the San Diego area. McDonald took this opportunity to interview Evans by telephone. She described the object she and her family had seen in September 1960. Lenticular and faintly glowing, it made six passes overhead in two hours, in an overcast, rainy sky. No sound was heard by the witnesses except a faint whir, "such as a glider would make." Through Evans, McDonald was invited to give a talk in late May at the **China Lake Naval Weapons Center**. This would also give him an opportunity to investigate on-site many other sightings in that area.

After he arrived back in Tucson from Pt. Mugu, he was visited by Larry D. Morton, an FAA Chief at Santa Monica, Calif. Morton attended many LANS meetings, and was extremely interested in the subject. He told James McDonald about two Los Angeles International Airport (LAX) radar cases, where the anomalous objects were not seen visually but were, however, seen on two types of radar from the LAX tower. He also shared other earlier Los Angeles area cases. McDonald made copious notes on Morton's visit and filed them in his "Oxnard file." He also called Capt. Robert J. Wooten (USN Ret.), a former Naval aviator, about whom Capt. Tom Andrews had told him. McDonald interviewed Wooten at length on the phone, but mentioned only succinctly in his journal that he had "interviewed him."²⁹ The Wooten case notes are part of the "Pt. Mugu: Pacific Missile Center: AIAA: Wooten and Andrew AFB cases" file in James McDonald's UFO archives in the Personal Collections Section, University of Arizona Library, Tucson.

McDonald was getting close to some very important material, but was forced by circumstances to treat most of it confidentially. He could not know that, tucked away in secret places and accessible only to a few military and government officials who had "need to know," were a multitude of *Top Secret* documents describing the same kind of sensitive events. Literally thousands of documents from all branches of the military services and all government intelligence agencies have slowly surfaced from 1975 through 2000 and beyond via the FOIA—now known as the FOI/Privacy Act. They constitute evidence of massive government interest in UFOs which was hidden from the public—in essence, the UFO cover-up.

29. McDonald, "Oxnard" file, in McDonald's Personal Collection, University of Arizona Library, Tucson.

A few documents regarding government cover-up have not surfaced through the FOIA, but instead have been "leaked" to certain UFO researchers. Most of the documents to be discussed below have surfaced by this second method, and have undergone minute analysis by well-regarded members of the UFO community. Many researchers consider some of them genuine or probably genuine, while other equally objective researchers consider them hoaxes or "disinformation." One of these is the controversial "Briefing Document" dated November 18, 1952, which was allegedly prepared for President-Elect Dwight D. Eisenhower at the request of President Harry S. Truman.³⁰ The document was received anonymously through the U.S. mail by Jaime Shandera, a film producer who worked closely with UFO researcher William L. Moore. The document was on a roll of undeveloped film and included a *Top Secret: Eyes Only* memo from Truman, which was dated September 24, 1947, and addressed to Secretary of Defense James Forrestal. Truman's letter reads:

Memorandum for the Secretary of Defense

Dear Secretary Forrestal:

As per our recent conversation on this matter, you are hereby authorized to proceed with all due speed and caution upon your undertaking. Hereafter this matter shall be referred to only as Operation Majestic Twelve....

(s) Harry Truman

The Eisenhower briefing document lists the members of "Operation Majestic Twelve." The MJ-12 members, as listed in the alleged Eisenhower briefing document, are arranged alphabetically. Because one member died soon after MJ-12 was allegedly established, his replacement's name also appears, making a total of 13: These individuals were all prominent scientists and government leaders:

1. Dr. Lloyd Viel Berkner (b. 2/1/05, d. 6/4/67) scientist, explorer; first Executive Director of the Joint Research and Development Board (JRDB), World War II era; an expert on ionization and on radar; engaged in atmospheric pollution studies at the time of his death.
2. Dr. Detlev Bronk (b. 8/13/1897, d. 11/17/75) space-medicine expert and aviation-physiologist; Chairman of the NRC and Director of the NAS.
3. Dr. Vannevar Bush (b. 3/11/1890, d. 6/28/74); outstanding R&D leader at MIT and, afterwards, Carnegie Institute; Head of the National Advisory Committee on Aeronautics (NACA), the predecessor of NASA.

30. "TOP SECRET/MAJIC, EYES ONLY, Briefing Document: Operation Majestic 12, Prepared for President-Elect Dwight D. Eisenhower: (EYES ONLY), 18 November 1952." William L. Moore Publications & Research, 1987.

4. Secretary of Defense James Forrestal (b. 2/15/1892, d. 5/22/49) who allegedly committed suicide while hospitalized for "stress" in Bethesda Naval Hospital in Maryland.³¹ He was replaced by Gen. W. B. Smith (see below.)
5. Mr. Gordon Gray (b. 5/30/09, d. 11/25/82) former Secretary of the Army, a wide background in intelligence services, holding many high-security positions for Presidents Truman and Eisenhower.
6. Roscoe H. Hillenkoetter (b. 5/8/1897, d. 6/18/81) Rear-Admiral, Naval Intelligence; Director of the CIA from 1947 to 1950 and, after retiring from the Navy, became a NICAP Board of Directors member from 1957 to 1962.
7. Dr. Jerome Hunsaker (b. 8/26/1886, d. 9/10/84) who was associated with the Aeronautical Engineering Department at MIT, and head of NACA after Vannevar Bush. His death occurred only three months before the "Briefing Document" film was received by Jaime Shandera.
8. Dr. Donald H. Menzel, (b. 4/11/01, d. 12/14/76) Head of the Astronomy Department at Harvard, expert on widely diverse subjects, such as eclipses, cryptoanalysis, and radio propagation; a prominent UFO "skeptic."
9. Gen. Robert M. Montague (b. 8/7/1899, d. 2/20/58) Army General who presided over White Sands Missile Range/Ft. Bliss; head of Armed Forces Special Weapons Control (AFSWC), Sandia Corporation, NM.
10. Gen. Walter B. Smith (b. 10/5/1895, d. 8/9/61), who replaced Forrestal; President Eisenhower's World War II Chief of Staff and later Ambassador to the USSR; fourth Director of the CIA.
11. Mr. Sidney W. Souers b. 3/30/1892, d. 1/14/73 an Admiral in the Navy who retired by the age of 55 but continued in the Naval Reserve; first Executive Secretary of the National Security Council (NSC) and an intelligence consultant to the President.
12. Gen. Nathan F. Twining (b. 10/11/1897, d. 3/19/81) Head of the Air Materiel Command (AMC); Chairman of the Joint Chiefs of Staff; his September 23, 1947, letter to the Commanding General of the Army Air Force directed the establishment of a study of UFOs, Project Sign.
13. Gen. Hoyt S. Vandenberg (b. 1/24/1899, d. 4/2/54) second Chief of Staff of the U.S. Air Force; G-2 intelligence rank in 1946. (The so-called "Estimate of the Situation," in which Air Force officials stated that UFOs were real and probably extraterrestrial, was handed up the line of command and landed on Vandenberg's desk. The general reportedly considered it so sensitive that he ordered it destroyed (see Chapter 5).

The briefing document also cited eight "attachments"—A through H, but only one attachment page actually was included in the roll of film sent to Shan-

31. Stacy, Dennis, "Forrestal's Fall: Did He Jump or Was He Pushed?", *FSR*, Vol. 38, No. 3, Autumn, 1993.

dera. If the document, which has become known in the UFO community as "the MJ-12 briefing document," is eventually proved genuine, it will probably be the most important evidence to date that an official cover-up group exists which structures U.S. government policy on UFOs. After developing and enlarging the filmed pages, Moore and Shandera confided in Stanton Friedman, a nuclear scientist who has been active in the UFO field since the mid-1960s. The three worked together for almost three years, attempting to determine whether it was a clever hoax or a genuine government document, before releasing it to the UFO community and to the public. By 1990, Friedman had gone as far as one can go in proving that it was "probably genuine in the original." In the meantime, a second copy of the same document was sent independently in the spring of 1987 to Timothy Good, a prominent UFO researcher in England.³²

As stated above, the MJ-12 briefing document and related documents which subsequently surfaced, have not been wholly accepted throughout the UFO community. Dr. Jacques Vallée is one of many respected researchers who consider it a well-planned hoax. "I think there was a secret group," says Vallée, "but the MJ-12 documents are just a hoax to hide the secret group." He continues with a humorous, but thought-provoking example. "If you buried your uncle in the lilies, you would spread a rumor he was buried in the geraniums. [People] would check and find nothing under the geraniums, and people would stop looking for your uncle."

The quandary UFO researchers face in analyzing the "MJ-12 documents" which have been "leaked" to various researchers is that most of them have been anonymously received in the form of filmed copies. Forensic methods which could prove conclusively whether or not these documents are authentic eventually depend on having original paper copies, so that the ink and the paper itself can be physically analyzed. Copies of reportedly classified documents have recently been obtained by Dr. Robert Wood, Ryan Wood and Timothy Cooper, but until they are studied and documented, questions and doubts must remain. Skeptics like Philip J. Klass have also entered the controversy. In the winter of 1990, Klass released a "Special Report," which cast doubt on the authenticity of the Truman signature in the September 24, 1947, letter which accompanied the November 18, 1952, briefing document, and his work influenced many in the UFO field to regard the Truman letter, at least, as a hoax.³³

32. Experienced researchers, including Bill Moore, Jaime Shandera, Stanton Friedman and Dr. Robert Wood, who have studied the "Eisenhower briefing document," have come to the conclusion that the document is quite possibly genuine. The Center for UFO Studies, the Fund for UFO Research, and Stanton Friedman have published material on the MJ-12 documents, both pro and con. These materials are available to the public.

Since 1987, several other documents have been released through the FOIA or through other anonymous sources, which bear the phrases "MJ-12," "Majestic-12," or "Majic-12." These do not contain detailed information about the history of the MJ-12 group which the Eisenhower briefing document embodies. These documents are described below, not in the order in which they were released, but chronologically by the dates in their text. Some of these documents are described below, not in the order in which they were released, but chronologically by the dates in their text. This list is not complete, as other alleged MJ-12 documents have continued to surface. At the time of writing they are being intensely studied by objective and scientific researchers but are considered controversial by some in the field. The controversy itself demonstrates how avidly the truth is being sought.

The first significant document which points to the existence of a secret U.S. government group studying UFOs, is "the Smith memo," allegedly written by Dr. Wilbert B. Smith, Senior Radio Engineer of the Department of Transport, Ottawa, Ontario. Marked *Confidential* and dated November 21, 1950, it was sent by Smith to the Controller of Telecommunications in Canada. For several years, Smith's group had been investigating various aspects of radio wave propagation, which had led them into several aspects of science, including geomagnetism. Smith's memo states in part: "[W]e are on the track of a means whereby the potential energy of the Earth's magnetic field may be abstracted and used..."³⁴

According to this document, which some UFO researchers do not consider genuine, an experimental unit extracted sufficient energy from the Earth's magnetism to operate a volt-meter at approximately 30 milliwatts. The team refined this design into a self-sustaining unit which provided a small amount of surplus power, leading them to believe they were "on the track of something which might well prove to be the introduction to a new technology." Smith attended a NARR Conference³⁵ in Washington, D.C., and while there, heard about Donald Keyhoe's first book, *Flying Saucers Are Real*.³⁶ It occurred to him that the Canadian work in geomagnetics might provide a link to the technology by which UFOs operated. Smith made discreet inquiries through the Canadian embassy staff in Washington, who were able to obtain for him certain information. The Smith memo continues:

33. Klass, Philip J., "New Evidence of MJ-12 Hoax," *Skeptical Inquirer*, Winter 1990.

34. Smith, Dr. Wilbert B., memo to Canadian Dept. of Transport, November 21, 1950, p. 1.

35. No meaning of this acronym has been found to date.

36. Keyhoe, Donald E., USMC (Ret), *Flying Saucers Are Real*, New York, Fawcett Publications, Inc., 1950.

- a. *The matter is the most highly classified subject in the United States Government, rating higher even than the H-bomb.*
- b. *Flying saucers exist.*
- c. *Their modus operandi is unknown but concentrated effort is being made by a small group headed by Doctor Vannevar Bush.*
- d. *The entire matter is considered by the United States authorities to be of tremendous significance.*³⁷

Smith discussed the matter with Dr. Omand Solandt, Chairman of the Canadian Defence Research Board, and a proposal was officially made that "Project Magnet" be set up within the framework of the Canadian Department of Transport. Keyhoe wrote in one of his later books about Wilbert Smith and "Project Magnet," but subsequent inquiries to Canadian officials failed to verify it. It was not until the "Smith memo" surfaced years later that it became evident to the UFO field that "Project Magnet" might actually have existed. No record has been found in McDonald's files describing any interaction with Wilbert Smith or Dr. Solandt.

Although Smith's description of a working model using geomagnetic energy for a self-sustaining motor is interesting, more impressive is the statement that in November 1950, a group of American scientists headed by Vannevar Bush was secretly at work trying to unlock the secret of UFO propulsion. Vannevar Bush is listed in the Eisenhower briefing document as an MJ-12 member.

"This proves nothing," states Jacques Vallée. "The author of the MJ-12 hoax would have known about the Smith memo, as everyone in the UFO community did. He just arranged his text to fit the memo." Dick Hall also is skeptical of the authenticity of MJ-12 documents, as are other well-regarded UFO researchers. But as stated above, documents relating to "MJ-12" keep surfacing. Detailed information regarding all such documents can be found in the websites of Dr. Robert M. Wood and Ryan S. Wood,³⁸ and Stanton Friedman,³⁹ as well as other sites on the Internet.

Besides the Eisenhower Briefing Document and the Smith Memo, another document classified *Secret* has surfaced. It was a teletype dated November 17, 1980, from AFOSR headquarters at Bolling AFB, Washington D.C., to the AFOSR detachment at Kirtland AFB, N.M., requesting information regarding official analysis of UFO photos by government sources. Below the Bolling/Kirtland addresses is the phrase, "Info 7602 AINTELG Ft. Belvoir, VA, (Note that

37. Smith, Dr. Wilbert B., memo to Canadian Dept. of Transport, November 21, 1950, p. 1.

38. www.majesticdocuments.com

39. www.v-j-enterprises.com/sfpage.html

the section name had been changed from 4602d (See Chapter 12) to 7602d, but other declassified documents in the hands of UFO researchers today confirm it was the same unit. The UFO photos described in this teletyped message include:

1. A C-5A on approach with a large UFO streaking in the lower portion of the film;
2. a cylindrical UFO which, when compared to terrestrial reference points was judged to be "a legitimate negative of unidentified flying object";
3. an irregular-shaped UFO in seven frames of 8 mm film⁴⁰;
4. a strip of 8 mm film (34 frames) depicting a colored object moving across the sky, spectroscopy revealing the colors as basic prism features;
5. a saucer-shaped object, approximate diameter 37 feet, with a trilateral insignia on the lower portion. The conclusion here was "Legitimate negative of unidentified aerial object."⁴¹

Other intriguing statements are found in later paragraphs in this document (which is regarded by many objective researchers as at least partially faked.) It states that the Air Force was "no longer publicly active in UFO research, however USAF still has interest in all UFO sightings over USAF installation/test ranges." It also states that several other government agencies, led by NASA, "actively investigate legitimate sightings through covert cover." One such cover is listed as "UFO Reporting Center, U.S. Coast and Geodetic Survey, Rockville, Maryland." Then a possibly significant sentence: "The official U.S. government policy and results of Project Aquarius is still classified *Top Secret* with no dissemination outside official intelligence channels and with *Restricted Access* to MJ Twelve."⁴² This sentence would help establish that MJ-12 was, indeed, a secret government group devoted to covering up information on UFOs, as indicated by the Eisenhower Briefing Document and *relata*. The suspicion among some researchers that this sentence might have been inserted into a real document by unknown disinformation sources casts doubt in the mind of some UFO researchers about this so-called "Aquarius document."

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40. Could these frames have been clipped from the Australian Drury UFO movie film, which was taken with an 8 mm camera? Or might the "irregular shape" have been the object emerging at high speed from the anomalous cloud Drury was photographing? (See Chp. 8.)
 41. The number of pictures stated in the text matches quite well with a situation known personally to me. A scientist of my acquaintance, who has requested anonymity, analyzed "about 50-55 photos" with state-of-the-art, classified photogrammetric equipment in the mid-sixties. The conclusion of the analysis, done at the request of the CIA, the USAF and "one other agency," was that the objects were "unidentified aircraft from an unknown source."
 42. Many UFO researchers regard this "Aquarius document" as at least partially faked. Richard Hall points out in a 10 June 1997 letter to the author that one of the glaring inconsistencies in the document is the reference to the Coast & Geodetic Survey, which had ceased to exist long before the date of this document (17 November 1980), its functions having been taken over by the National Oceanic and Atmospheric Administration (NOAA).

McDonald found it hard to accept that a question as serious as the UFO problem was being furtively studied by a "secret group" of scientists in the Air Force, as Don Keyhoe and NICAP hypothesized, while the scientific community had no means of knowing who was involved. We have discussed some of these controversial MJ-12 documents in detail because McDonald interacted closely with, or was known to, several of the members of the "MJ-12" panel, as they are listed in the Eisenhower briefing document. In the event that MJ-12's actual existence might some day be authenticated, these interactions might prove significant. It is reasonable to suppose that any official government group involved in UFO cover-up would have been aware of McDonald's high-profile study of the UFO question.

Whether or not "MJ-12" as a specific group ever existed, it is the opinion of most objective UFO researchers that a "cover-up group" did exist, but not necessarily known as "MJ-12."⁴³ The Air Force was officially designated by the government to investigate both military and civilian reports, yet Project Blue Book's operation was, in most part, incompetent and superficial. Logically, there had to be some competent government group working on the problem. Indeed, after Blue Book was dismantled in December 1969, McDonald found files in its archives which revealed that the Air Defense Command (ADC), Air Force Intelligence (AFIN), the Strategic Air Command (SAC) and other highly placed facilities of the government were involved in UFO incidents (see Chapter 17). He came home from this trip exclaiming what he found was "a real bonanza."⁴⁴

He never thought that scientists like Menzel and Hynek were deliberately sloughing off sound data by assigning inane explanations which did not fit the facts. One of the reasons he remained unconvinced of an official "cover-up" was his own experience concerning the Manhattan Project. Contrary to the prevalent opinion that the project which developed the atomic bomb was kept strictly secret, he wrote in his "cover-up vs. foul-up" file, "Most of the scientists around the country knew about [the Manhattan Project] early on." He was perplexed, however, how Capt. Killian had been effectively silenced following his multi-witness UFO sighting (see Chapter 13). He compared it to another case, the Ryan sighting, which Don Keyhoe had written about in *Flying Saucers Top Secret*. About this, McDonald wrote, "Makes out Ryan case 4/8/56 as a cover-up somewhat like the Killian case. Does seem odd Ryan would have denied it after press & TV statements."⁴⁵

43. It is the opinion of many experienced UFO researchers that the name "MJ-12" and equivalent (if MJ-12 did, indeed, exist) has been changed over the years. This possibility is being researched by several UFOlogists, as the controversy over "MJ-12 documents" continues.

44. McDonald, fourth journal, reverse p. 47.

45. McDonald, "Cover-up vs. Foul-up" file.

He discussed the cover-up vs. foul-up puzzle with any colleague he thought could throw any light on it. Following a discussion with Dr. Robert Hall in O'Hare Airport, McDonald wrote, "[He] brought up the old point that CIA/NSC might try to cover up, to exploit the UFO situation in some way—to gain any sort of advantage in international affairs.... But from all I know of UFO's, this is about as implausible as some ant trying to keep quiet the fact that he knows *Homo sapiens* exists (and occasionally comes near the home anthole) in an effort to improve his own political fortunes back down in the anthole. And always I come back to 'Why not a competent cover-up? Why no talent [assigned to the problem]?' The only sensible answer is that authorities lost track of the whole problem years ago."⁴⁶ The most plausible answer to McDonald's question was that there was an extremely competent cover-up in place.

Nine of MJ-12's alleged members, as listed in the Eisenhower briefing document, were still alive during the period McDonald publicly researched UFOs. Generals Vandenberg, Montague and Smith had died by 1961, but the replacement of Forrestal by Gen. Smith indicated that the group replaced deceased members. McDonald interacted closely with four of the nine remaining. The most obvious of the four is Dr. Donald Menzel.

When the Eisenhower briefing document first surfaced, the presence of Menzel on the list of MJ-12 members was a shock to UFO researchers; some quickly dismissed the document as a hoax on that point alone, because Menzel was the original "debunker." However, he might have played the part of "skeptical" because by doing so he effectively diminished scientific interest in the subject. Menzel was an active scientist and academic and attacked McDonald viciously and often. McDonald never hesitated to correct a colleague who made errors in scientific matters where McDonald himself was expert. He rebutted Menzel's attempts to "explain" solid UFO cases every opportunity he had. This enraged Menzel, whose 1963 book, which "explained" UFOs as common aerial phenomena such as sundogs and mirages, had been well received by most of the scientific community. He might have regarded McDonald at first as an upstart, but surely he realized quickly that he had misjudged him.

Menzel was also a patriot, who had served in highly classified cryptanalysis work during World War II (as McDonald had done also). We now know that he held the highest clearance, *Ultra Top Secret*, to the end of his life,⁴⁷ indicating that he very possibly had been engaged in top-secret intelligence work of which

46. *Ibid.*

47. UFO researcher and scientist Stanton Friedman uncovered this surprising bit of information shortly after first MJ-12 document surfaced.

his colleagues were unaware. Menzel must have been embarrassed at times by McDonald's slashing logic.

Another of the original MJ-12 members with whom McDonald interacted closely was Dr. Lloyd Viel Berkner, who had a wide and varied career. He was a naval aviator, an expert on terrestrial magnetism and the ionosphere, a polar explorer and space leader. He was also the first Executive Director of the JRDB under Vannevar Bush in 1946.⁴⁸ He was president of the Graduate Research Center of the Southwest (GRCS), but he retired at the age of 60 because of a heart ailment. He continued as Chairman of the Board of Trustees of GRCS, however, and was extremely active in scientific research. He was particularly interested in the growing problems of world pollution, the possibility of life on Mars, and new concepts of evolution—three fields of study in which McDonald also was interested.

Berkner had been one of the five eminent scientists on the 1953 CIA-sponsored Robertson Panel, and this was probably the main reason McDonald sought to meet him. In McDonald's journal, the first mention of Berkner reads: "7/18/66 Hartford, Monday. Tom Malone, had good discussion.... Tom thinks he may call Berkner."⁴⁹ A brief notation, indicating that Tom Malone knew Berkner and considered contacting him on McDonald's behalf. Malone might have dragged his feet; almost a full year passed before McDonald and Berkner met face-to-face.

In McDonald's files is a copy of a 1965 letter which Julian Hennessey, an English UFO researcher, had received from Berkner. Hennessey was interested in learning Berkner's present attitude toward the UFO problem. Berkner wrote back on GRCS letterhead: "In the cases of all so-called unidentified objects brought to my attention to date there are none which cannot be explained as definable physical phenomena."⁵⁰ Even if McDonald was aware of Berkner's negative attitude, that would not have stopped him! The contact which finally brought it about was with Frank S. Johnson, then director of the Earth and Planetary Sciences Laboratory of the Southwest Center for Advanced Studies (SCAS, formerly GRCS), a colleague of Berkner. Apparently Johnson and McDonald knew each other on a first-name basis.

McDonald's itinerary for April 15-24, 1967 indicates that he had "put a leg" on a flight schedule to Washington, D.C., in order to visit Berkner in Dallas, Tex. His itinerary specifies a "three-hour briefing session" with Berkner and Johnson.

48. Now known as the Research and Development Board of the National Military Establishment.

49. McDonald's second journal, p. 28.

50. Letter from Lloyd V. Berkner to Julian Hennessey, January 25, 1965.

He met with them in the afternoon, and traveled on to his professional appointments in Washington, D.C., that evening (see Appendix Item 14-C, page 570). The briefing was on a Saturday, for there was difficulty in finding a gap in Berkner's schedule—a week-day appointment, according to Johnson, “would be difficult before June.” Johnson's statement was tragically ironic. On June 4, just seven weeks after McDonald, Berkner and Johnson met in Dallas, Berkner collapsed and died of a heart attack at a meeting of the Council of the NAS.

According to his *New York Times* obituary, Berkner devoted his life to assaults on challenging frontiers and helped to shape scores of government policies. He was widely accepted as the “Father of the International Geophysical Year (IGY)” of 1957-58, and his ability to make scientific problems dramatic to legislators and government were factors in the success of the American part of the program.⁵¹ The fact that Berkner had “retired” in 1965 because of heart trouble had not slowed him down one whit. An associate described him as “a forceful speaker, who seemed to speak in capital letters,” and that he had “the vigor of six oxen.”⁵² Six-foot two and weighing 200 pounds, he did not seem to be a candidate for an abrupt, fatal heart attack. His work was in Dallas, Tex., yet his home was in Ft. Lauderdale, Fl., which indicates that he traveled a great deal, not only in his professional work but also in his personal life. Both of his parents were still living at the time of his death; he came from a long-lived family.

No notes or record of the three-hour briefing session which McDonald held with Berkner and Johnson have been found in his files, but it is logical to think that McDonald discussed the many solid radar-visual cases which gave evidence of the reality of UFOs, as well as the data which indicated UFOs seemed associated with ionization. It is also possible that he discussed Canadian researcher Wilbert B. Smith's group which had produced a working motor powered by the Earth's geomagnetic field.⁵³ We can only assume that McDonald used all the tact and data at his command.

Was McDonald able to persuade Berkner that the time had come for public, well-funded studies of the UFO problem? Could Berkner have wondered whether secret government UFO data should be shared with some scientists like McDonald? Berkner was a persuasive speaker. Might he have recommended to other MJ-12 members that the time was right for at least a limited turnaround on secrecy, before he was stricken with his fatal heart attack at the NAS meeting? The NAS was inextricably linked with other alleged members

51. “L. V. Berkner Dies: Research Leader” (Obituary), *The New York Times*, Monday, June 5, 1967.

52. *Ibid.*

53. Smith, *op. cit.*, p. 1.

of MJ-12, and it certainly held the possibility of adequate funding in its hands for research on the problem. Berkner was, at the time, Treasurer of NAS, and McDonald had once come close to obtaining funding from the NAS to study the problem and had continued similar proposals for funding. Was this another reason why McDonald sought Berkner out?

Rear Admiral Roscoe H. Hillenkoetter also was doubtless aware of James McDonald's influence in the UFO field. It seems more than coincidental that MJ-12 was (allegedly) initiated on September 24, 1947, the very month and year that Hillenkoetter became the third Director of the CIA.⁵⁴ He retired from the Navy in 1947 (where he had been fully involved in Naval Intelligence), and his immediate transfer to directorship of the CIA shows that he had merely stepped from one intelligence position to another. He was Keyhoe's friend and classmate and accepted a position on the board of directors at NICAP when Keyhoe assumed the Directorship in 1957. If he was, as alleged, a member of MJ-12, did he involve himself in NICAP's activities for hidden reasons? By 1950, the year Hillenkoetter ended his CIA directorship, Keyhoe was publishing vital UFO data in prominent magazines and had written his first of four UFO books. Hillenkoetter had made a public statement about the reality of UFOs and the necessity of investigating them openly. He allowed Keyhoe to use this statement in NICAP publications for several years, and this added greatly to NICAP's prestige and credibility. Hillenkoetter also helped funnel important UFO cases from NICAP to various government agencies.

Gordon Lore, a former Assistant Director of NICAP, states: "For several years, Keyhoe began funneling information about UFOs, at Hillenkoetter's request, as I recall, to certain government agencies. He chose the best of what he thought was proof or evidence...the kind of stuff that we sent [later] to the University of Colorado. And I'm sure that Keyhoe didn't think then that Hillenkoetter was collecting it for ulterior motives." Keyhoe trusted Hillenkoetter and assumed that the data was being shown to military and government officials who might be influential in ending the UFO cover-up.

Then, in a completely unexpected move, Hillenkoetter resigned abruptly from NICAP's Board of Directors in 1962, stating that UFO research had "reached a stalemate." In a letter to Keyhoe, he stated that the UFOs were not secret U.S. or Soviet devices, and "if they are extraterrestrial we can do nothing but wait for them to act."⁵⁵ His inexplicable turnaround did not result in hard

54. On May 1, 1947, Hillenkoetter was named Director of the Central Intelligence Group, the group which became the CIA through a presidential directive in September 1947. MJ-12 was allegedly instituted on Sept. 24, 1947.

55. "Adm. Hillenkoetter Denies Menzel Claim," *UFO Investigator*, Washington, D.C., Published by NICAP, Early 1965 (exact date not available).

feelings on the part of his friend, Donald Keyhoe, at least not publicly. Keyhoe wrote in the *UFO Investigator*, "Though we did not agree there was a stalemate, we did not argue the point."⁵⁶

Hillenkoetter's resignation from the NICAP Board and his puzzling letter caused more serious damage to the UFO field than the mere loss of an influential board member. In May of 1961 the House Space Committee, largely through the efforts of Keyhoe and NICAP, formed a group to study the subject of UFOs. In August of that same year, Keyhoe sent them a strong statement, signed by Hillenkoetter, in which the former Rear Admiral and CIA Director urged immediate Congressional action. However, shortly afterward, when the House Space Committee was on the verge of holding open hearings, these plans were abandoned. Hillenkoetter had also sent a letter to the Committee Chairman, suggesting that the hearings not be held because the Air Force had done their best to identify the UFOs, and should not be criticized any more for failure to deal honestly with the public on the UFO question!

McDonald was greatly interested in Hillenkoetter's unexplained turnaround and questioned NICAP officials closely about it. His only journal notation regarding him reads, "Hillenkoetter never retracted his serious concern."⁵⁷ Nothing found in his files indicates he ever contacted Hillenkoetter personally, but it is logical to assume that he at least made attempts to communicate with him. The former admiral was apparently in good health; he did not die until 1981.

Dr. Detlev W. Bronk was another member of MJ-12 who was very possibly aware of McDonald's pursuit of the UFO problem. The only reference to Bronk in McDonald's papers is found in a letter to George Wald, which was tucked into his edition of *National Academy of Sciences Centennial Celebration, Oct. 21-24, 1963: The Scientific Endeavor*. This book is, paradoxically, included in his UFO library. This letter mentioned that Bronk was a past president of the NAS and chairman of the 1963 Centennial. An aviation-physiologist, he was chairman of the NRC of the NAS. McDonald was active in the NAS and had succeeded, in early 1966, in securing a promise of NAS funding for a "quiet, one-man study" of UFOs, which was abruptly withdrawn. We do not know which NAS officials promised him the funds, but his friend and mentor, Tom Malone, was also well-connected there and spoke several times to top NAS officials on McDonald's behalf.⁵⁸

56. *Ibid.*

57. McDonald, fourth journal, reverse p. 19.

58. McDonald's second and fourth journals.

We have not accounted for five alleged MJ-12 members who were still alive during 1966-1971—Dr. Vannevar Bush, Gordon Gray, Sidney W. Souers, Dr. Jerome Hunsaker, and Gen. Nathan Twining. No mention of these five has been found in McDonald's papers, but there are possible links which might indicate that at least some of them were aware of McDonald's research.

Souers was 74 years old in 1966. Previously an admiral, he later became the first Director of the forerunner of the CIA in 1946 and was the first Executive Secretary of the NSC, which answers directly to the President. Souers was an intelligence consultant to President Truman. The NSC was established just about the time the UFO problem came to public attention in June 1947, following the Kenneth Arnold sighting. He probably had left NSC by 1966, but, as an alleged member of MJ-12, he logically would be knowledgeable of any UFO intelligence work under subsequent Presidents. On August 30, 1968, when McDonald became aware that the House Committee on Space and Astronautics would not be holding extended UFO hearings, he told his Arizona Congressman "Mo" Udall that he had spoken to several National Aeronautics and Space Council (NASC) personnel who answered directly to Vice President Humphrey. He suggested that a more immediate UFO study "would probably require doing it within the executive branch."⁵⁹ Udall listened but was non-committal, so McDonald called Dick Olsen, Udall's staff assistant whom he knew well and suggested the same action. Olsen said he would think about it, but when McDonald again spoke with him four days later, Olsen was still undecided. "Time too short, too many minds would have to be changed quickly, as Mo said on phone," McDonald wrote.⁶⁰ A request that the NASC okay a UFO study would surely be known to the NSC.

Dr. Vannevar Bush and Dr. Jerome Hunsaker also had connections that would have alerted them to McDonald's activities. Bush had been an outstanding R & D leader at MIT. Dr. Tom Malone, who had guided McDonald through post-graduate studies at MIT, must have known Vannevar Bush, and possibly mentioned McDonald's work to him. Also, Dr. Jerome Hunsaker was head of Aeronautical Engineering at MIT. He was 79 years old when McDonald entered the UFO field, but was apparently still active in the scientific community. He died at the age of 98, in 1984.

No personal contact with Gen. Nathan F. Twining is mentioned in James McDonald's papers, either, though his library contains an unclassified version of Project Sign reports, with which Twining was involved. Twining lived until 1981 and would seem a logical person for McDonald to track

59. McDonald, fourth journal, reverse p. 21.

60. *Ibid.*

down. He had established Project Sign, the first publicly acknowledged U.S. UFO study. A letter dated September 23, 1947, sent by Twining to Brig. Gen. George Schulgen, the Commanding General of the AAF, concluded that the UFO phenomenon was "real and not visionary or fictitious" and that the objects were "the shape of discs...appear[ing] to be as large as man-made aircraft."⁶¹ Was it coincidence that Truman's letter allegedly establishing MJ-12 was written just one day after Twining's letter to Schulgen?

McDonald's visits to the super-secret facility, Sandia Corporation in New Mexico, might possibly impact on our puzzle, also. An alleged MJ-12 member, Gen. Robert M. Montague, who died in 1958, was Commander of White Sands Missile Range/Ft. Bliss and also head of AFSWC at Sandia, an extremely sensitive area. McDonald was invited at least twice to Sandia in the late 1960s, and gave briefings there on the UFO question. After one visit, he jotted down the enigmatic phrase in his journal, "See small notebook," giving no further explanation in his journal as to whom he saw or what was discussed.

His first trip to Sandia was more open; he'd been invited to speak there in August 1967 by John A. Anderson (see Appendix Item 14-D, page 571). After his initial talk, McDonald held an afternoon interviewing session, during which he interviewed a half-dozen Sandia employees who'd had personal UFO sightings. He also collected older cases from Sandia employees, including a report from two (anonymous) employees, who'd seen an unconventional object at Sandia in full daylight in 1952. And during this visit, Capt. Tom Andrews, Vice-Commander of the White Sands Missile Range, spoke openly to assembled Sandia personnel of his 1956 sighting at the Missile Range, which is adjacent to Sandia.⁶² Andrew's sighting had occurred while Gen. Robert Montague was Head of the Missile Range!

The point in going slightly off track here is to enter a speculation: When Robert Montague died in 1958, was the person appointed to succeed him also appointed Commander of the White Sands Missile Range/Special Weapons, Sandia? Vice-Commander Capt. Andrews might have been speaking out of turn, revealing a mass sighting that was most probably classified at some level. McDonald would probably have been monitored closely after that. Only three months later strange happenings began to occur which seem to indicate that was the case.

If some secret "silence group" did in fact exist in McDonald's time, who might have been logical replacements for those in the group who died before

61. This "Twining memo," as it is known, is widespread in UFO literature. It is even included in the Appendices of the Condon Report.

62. See Note 28, page 372.

McDonald became active in the UFO field? It is logical to speculate that at least one person high in the Air Force might have been a replacement, because the Air Force was linked to UFO research from the beginning. Were there any particularly obstructive, highly-placed Air Force officials who seemed to be trying to prevent his success, à la Menzel? In studying the journals, more than one name stands out. A scenario is presented here, backed by facts taken from his journals. Any suspicions voiced here are merely conjecture.

Looking back to mid-May of 1966, we see that McDonald had written a letter inquiring about the "university team" approach to Dr. Brian O'Brien, head of an ad hoc committee under the USAF Science Advisory Board, which had been formed in February 1966. Its chairman was Dr. O'Brien, who was formerly chief scientist at the American Optical Company, but was now a private consultant. The committee included scientists like Carl Sagan, Jesse Orlandsky, and Richard Porter of General Electric.⁶³ O'Brien wrote to the Science Advisory Board in March, a confidential copy of which was received at NAS in April. O'Brien had been quite negative toward McDonald's interest, even though Tom Malone, who knew O'Brien well, had attempted to act as a go-between. Then, on May 17, Malone called McDonald to inform him that O'Brien had undergone a sudden change of heart:

5/17/66 Then Monday O'Brien got my letter dated 5/14 & that somehow changed his mind quite radically. O'B had talked it over with some general and then ran Tom down by phone in D.C. Said he wanted to get going on it right away...wants me to do consulting work directed towards laying down some guidelines for the University investigating teams.⁶⁴

Just like the "consultancy" offered McDonald at Blue Book, the "university" consulting offer never materialized either, with no reason given. But James McDonald didn't realize this was going to happen. He wrote in his journal after his third Blue Book visit, "Tony said we could work out contractual arrangements [after the NASA visit]. He stressed I'd be entirely free, no strings attached."⁶⁵

While McDonald waited for the two consultancy plans to jell, Dr. Thomas J. Ratchford, a solid-state physicist at the Air Force Office of Scientific Research (AFOSR) contacted Tom Malone. Ratchford had been asked to look into the UFO problem and had contacted Malone, ostensibly seeking suggestions on assembling a panel of high-caliber scientists to review the whole prob-

63. McDonald, second journal, reverse p. 1.

64. *Ibid.*, p. 5, and reverse p. 5.

65. *Ibid.*, reverse p. 24.

lem. Malone helped McDonald set up a meeting with Ratchford, and they met in Washington just around the time he went to Blue Book for his third visit.⁶⁶

The first hour, McDonald spoke with Ratchford alone; then Dr. William Price, AFOSR Executive Director, phoned and asked him to bring McDonald up to his office. Ratchford claimed he was having trouble getting any scientist to take on the position of "lead investigator." He was not forming a scientific panel as Tom Malone had led McDonald to believe, but rather was searching for an individual scientist to head the study. Both the "university team" and the panel approaches had been discarded! McDonald expressed surprise at this change in plans, but learned that Col. Robert Hippler, who'd been in charge of finding suitable "teams," had presented ideas for official "work statements"⁶⁷ which had been turned down by Price and Ratchford. They explained to McDonald that Hippler's ideas would necessitate too much Air Force control.⁶⁸

Tom Malone had emphasized that Ratchford was looking for a scientific panel. It was not like Tom Malone to make mistakes. McDonald wondered about this privately, and noted later in his journal, "Tom Malone's evidently not gotten it straight."⁶⁹ It did not occur to McDonald, apparently, that perhaps Malone was not getting straight information from Ratchford and Price. Jacques Vallée's own journals of that era paint a very similar picture of confusion and obfuscation on the part of Air Force officials: promising offers were also proposed to him and J. Allen Hynek, then abruptly withdrawn.

Continuing to take Ratchford and Price at face value, McDonald discussed the apparent "dilemma" they were facing. Using hard logic he told them, "It's going to take a lot of selling to [a scientist] to take it on in the face of present scientific attitudes.... It's hard enough to find a good panel chairman of the type I thought you were seeking, and much harder to think of a person to become your lead man. It's not obvious who you're going to get to fill this bill. You'll have to find somebody who's going to put a very large amount of time into it, and continue to do so over a period of many months."⁷⁰

66. *Ibid.*, reverse p. 28.

67. A few UFO researcher/historians have been interested in Hippler's part in that Air Force study. For example, when approached by William L. Moore in 1986, Hippler stated that he did not wish to discuss the subject, that he was tired of it, and that it was "a long time ago." He suggested that Moore should "talk to the Air Force if he wanted to know more." Furthermore, Hippler told Moore that "the Air Force shouldn't have been taking up its time with such a ridiculous project."

68. Letter from McDonald to Malone, July 20, 1966.

69. McDonald, second journal, reverse p. 28.

70. *Ibid.*

"What do you think about NCAR?" asked Price. He was referring to the National Center for Atmospheric Research in Boulder, Colo., where McDonald's friend and colleague, Dr. Will Kellogg, was based. "Probably they can't take on contract research of this sort, because they're a direct 'stepchild' of the National Science Foundation," said Price. "But they certainly have a number of people with the right talents we'll need."

Another idea struck McDonald.

"What about Gordon MacDonald and the Institute of C&PE as a nucleus, with UCLA as the lead university," he suggested. "Of course, you've got the problem there that Gordon's about the busiest guy on the block." No response. "I'm not much help in proposing lead universities and related principal investigator prospects," continued McDonald. "I came here with the idea that you were still looking for university teams or panels."⁷¹

McDonald then offered to spend his own time to talk with prospects for "lead investigator" which Ratchford and Price might come up with, to try to "sell him." "If you line up any lukewarm prospects, meeting your own specs, I could help by being a kind of traveling salesman," suggested McDonald, his sense of humor bubbling up. "I really do think that, given a day or two of full-time conversation with a prospect, I could go a long way toward selling him on the scientific importance of taking on the job."⁷²

"That's a very generous offer," said Price, cutting off his suggestion rather abruptly. "I'm afraid groups like NICAP and APRO wouldn't shut up, no matter how impartial a lead scientist the Air Force got, unless the answer was that UFOs were extraterrestrial," commented Ratchford out of the blue. McDonald disagreed.

"Both those groups are composed of reasonable people who'd be ready to be convinced if they could see that the problem was truly getting a square deal," he countered. "What you aren't aware of is, that to anyone who takes a close look at what Blue Book has done, the thing looks like a whitewash." Ratchford and Price said nothing, waiting for him to go on.

"One reason I feel especially sure that NICAP would back off in the face of a well-documented scientific negation of the reality of the UFO problem is that I, myself, would be quick to help them back off," McDonald emphasized. "NICAP would know that I wasn't selling out to the U.S. Air Force."

71. *Ibid.*

72. *Ibid.*

"But the main criticism of the Air Force, regarding UFOs, comes from kooks and cultists who never shut up," said Ratchford. Hiding his astonishment, McDonald tried to interpret what was really going on, quietly insisting that criticism of the Air Force did not come from kooks, but from reasonable people. He stated his considered opinion that NICAP's study, especially, was far superior to that of the USAF.⁷³

By now, the meeting, which had begun at 8:00 A.M., was continuing through lunch. Ratchford especially seemed genuinely interested in ways to properly study the UFO question. He told McDonald that, in the course of seeking the lead investigator, that he'd had a private meeting at Woods Hole Oceanographic Institute on Cape Cod, with Brian O'Brien, John Coleman of NAS, and Aden Meinel, a prominent astronomer who was one of McDonald's colleagues at the U. of A. McDonald might have wondered privately why his colleague in astronomy had been invited to this top-level meeting while he, himself, who knew immeasurably more about the UFO question, had not been. However, he kept any doubts to himself.

This was McDonald's last face-to-face meeting with Ratchford. His offer to talk personally with any good, "lukewarm" prospect Ratchford might come up with was never acted on. Edward U. Condon was eventually chosen by Ratchford; no one in the UFO research field could have guessed how negative a tone the Condon Committee would foist upon the UFO subject. But in 1966 the Condon fiasco was still three years into the future. In the 20/20 light of hindsight, it seems as if Ratchford and Price were meeting with McDonald to drain his brain about what he thought was needed to put together an objective, scientific UFO study and then turned around and did exactly the opposite.

An airline strike had wiped out McDonald's plans to go back to Blue Book. DeGoes and Cacioppo continued to talk, but the consultancy they'd promised wasn't materializing. McDonald waited until late August 1966 and then, tired of the delay, called DeGoes at Blue Book. DeGoes was unavailable; McDonald was told he was in the middle of a meeting with Tom Ratchford. McDonald never learned the contents of that meeting, but shortly afterwards DeGoes went on a trip to the RAND Corporation in Santa Monica, Calif., and never returned to Blue Book. Neither did his two associates. Project Blue Book went back to a major, a sergeant, and a secretary! Was Ratchford's visit to DeGoes at Blue Book somehow linked with this and to the fact that McDonald's Blue Book consultancy never materialized?

There were other instances where Ratchford appeared to be blocking James McDonald's efforts. In August 1966 Ratchford talked to Tom Mal-

73. *Ibid.*

one, telling him that Will Kellogg of NCAR in Boulder had said he would consider helping Condon with the new UFO study and that he would like to get McDonald in on it.⁷⁴ Yet McDonald never heard anything more about this. More false information, more false hopes. These attitudes of negative officials like Ratchford might have been simply normal antagonism, a clash of personalities among individuals, so to speak. Jacques Vallée offers this advice: "In science many decisions are made on a competitive, even adversarial basis without implying conspiracies.... Just look at global warming, or AIDS. A distinction needs to be made between 'normal' antagonism towards someone's ideas and outright interference and harassment."⁷⁵

About two years later, while McDonald was helping Ed Roush plan the Congressional hearing, he talked with Phyllis O'Callaghan about the "trick memo" and the then-imminent *Look* article which would essentially "blow the whistle" on Condon and Low. O'Callaghan had just talked at length with Col. Ratchford, who told her that Fuller had been fired from his last job for "irresponsible reporting." This was, in fact, not true. Had Ratchford been given wrong information, or was he trying to destroy Fuller's reputation in Roush's eyes? Fuller was a trustworthy author, whose two books on UFOs were competently and thoroughly investigated. McDonald and NICAP had the highest regard for him not only as a person but as a scientifically oriented researcher.

Ratchford also told O'Callaghan that "there are some suspicions that 'believers' were planted on the Colorado Project by NICAP," and that "Keyhoe himself was an ex-contactee!"⁷⁶ It was Ratchford who selected Condon to head the new Air Force Study, instead of university teams or a scientific panel as originally proposed. All this might possibly indicate that Ratchford—or someone deliberately influencing Ratchford—was attempting to sabotage not only NICAP but also McDonald's attempts to bring proper scientific attention to the UFO question. The "facts" which Ratchford fed O'Callaghan on this occasion were all false, while saying nothing about widespread suspicions that the forthcoming Condon Report would turn out essentially negative. McDonald set her straight on all points. Was Ratchford trying to torpedo both NICAP and the planned Congressional hearing?

In a 1968 phone call to Tom Malone, Ratchford curtly criticized James McDonald, saying he considered him "too emotional about the [UFO] problem, too much inclined to accept merely visual observations" and that his

74. McDonald, second journal, reverse p. 30.

75. Written communication from Jacques Vallée to author.

76. McDonald, fourth journal, p. 1.

charges against Hynek, Menzel, and Condon in the *Look* article were serious charges against other scientists.⁷⁷ Ratchford's criticism apparently disturbed Malone greatly, for he also had disapproved of McDonald's criticisms of other scientists. He urged McDonald "to omit all references to such implications here on out and to get on with a [UFO] paper for *Science*."

In fairness to Ratchford, it is possible that the colonel simply did not understand McDonald's basic makeup, or that there was a conflict of personalities here. McDonald typically showed little or no emotion in public, except in rare occasions such as the time he pounded on Hynek's desk. His intense persistence when pursuing a scientific problem might be interpreted as "emotional" by persons who did not know him well. Unlike his IAP colleagues, NICAP's personnel and other researchers who worked closely with him, there were others in the UFO community who did not appreciate his personality. "Jim did project the image of a zealot, of a crusader, and he was the one launching personal attacks against Hynek," states Jacques Vallée. "To other scientists who believed that Hynek had earnestly argued for a scientific study of UFOs within Blue Book, Jim appeared (rightly or wrongly) as an extremist, who wouldn't work with others."⁷⁸

It is well known that before Condon and the University of Colorado were chosen, the USAF had tried to get MIT, Cal Tech, Harvard and other prestigious universities to take on the UFO study. All had refused. Ratchford might have been in a Catch-22 position. As critical as he was of McDonald's work, and the stumbling blocks he set before him, Ratchford seemed to be available to NICAP people who wished to speak with him. For example, William Weitzel, who had done such a thorough investigation on the Ravenna case (see Chapter 7) came to Washington to see Dick Hall. Before leaving, Weitzel also spoke to Ratchford and to House Speaker McCormack.⁷⁹ Besides all of the above, we have another unexplained excerpt from McDonald's journal:

7/26/68 Dave Saunders home in Colorado. Mary Lou Armstrong & I went over Cover-up consideration. To both she & DRS, the most suspicious factor was Bob [Low]'s repeated blockage or foot-dragging re USAF cases.... On pursuing MLA views, her Cover-up notions continue chiefly around covert agreements with Ratchford, so not true Cover-up thesis.⁸⁰

77. McDonald, second journal, p. 30.

78. Written communication, Vallée to author.

79. McDonald, *op. cit.*, p. 32.

80. McDonald, fourth journal, p. 19.

Mary Lou Armstrong at the time was Condon's secretary and one of the staff members who appreciated McDonald's input. For Armstrong to mention "covert agreements with Ratchford" to McDonald is intriguing. She seems to imply that covert agreements were made by Ratchford with Robert Low. Why would a middle man for the Air Force need to make covert agreements with Condon's Assistant Project Director? Even after the Condon Report came out, Ratchford was still very much in evidence, as McDonald noted on June 19, 1968, in his journal:

Called Lynn Catoe at the Library of Congress.⁸¹ Keyhoe's news conference, along with Klass' efforts, has turned USAF to support of Condon. Saunders is made out a blackguard for giving Keyhoe memo way back in November.... Before Keyhoe's press conference (re LOOK) Ratchford inclined to let Condon fight it out. But Keyhoe's having the memo turned them negative.⁸²

When Keyhoe handed out copies of the trick memo freely to the press at his April 30 news conference, Ratchford was angered; he considered the memo a private paper from Low's files. From that point on, the USAF defended the Condon study, no holds barred. Secretary of the Army Harold Brown had appointed Ratchford.⁸³ Was Ratchford, perhaps, carrying out orders from a "replacement" in MJ-12, or an equivalent silence group?

Secrets upon secrets, mysteries upon mysteries. These are what faced McDonald during those five stormy years. They still face UFO researchers today. We know much more now, through the thousands of pages released through the FOIA, about UFO studies that were being secretly conducted by all branches of the military and governmental intelligence services. Where is the deep, dark hole into which the best UFO data has been tucked by anonymous officials? What prevents them from sharing this knowledge with the American public?

81. Lynn Catoe produced the first comprehensive bibliography on UFO literature for the Library of Congress.

82. McDonald, fourth journal, p. 4.

83. Secretary of the Army Harold Brown is mentioned as the top official who probably appointed O'Brien and Ratchford to their respective positions of authority in determining the way in which the half-million dollars in government money would be spent for "UFO studies," as specified in McDonald's second journal, reverse p. 2, reverse p. 25, and p. 26.

A Low Whistling Sound...

*Tell me who, tell me who, oh, my bold chevaliers,
With your long-barreled guns from the sea.
Say what wind from the south brings a messenger here,
With a hymn of the dawn for the free.*

—from “Kelly, the Boy from Killan”

*All this has been said before—but since nobody listened
it must be said again.*

Words used to open a lecture
by French philosopher Anore Gide

From 1969 on, McDonald's incessant UFO work began to affect his professional career, and his university colleagues became concerned. He still gave a full 40-hour week to his professional responsibilities, but his prodigious publication on atmospheric subjects slacked off. He continued to research cloud physics and meteorological questions with the same vigor as before, but now rarely took the time necessary to polish his writings for publication. Numerous unfinished papers piled up in his files.

He produced 17 papers and articles during 1969, four on atmospheric subjects and 13 on UFOs. The audiences before which he delivered these 13 UFO papers were as prestigious as ever, ranging from the AMS to the AAAS. These papers represented methodical and complex research. McDonald would have taken time to polish them for publication, but scientific journals simply refused to consider the subject. With the sole exception of his *Icarus* review (actually a full article) on the Condon Report, and a reprint of an 85-page paper published by a French UFO journal, *Phenomenes Spatiaux*, his UFO work went uncelebrated in print, and they remain “self-published” in his official bibliography. Later, in 1970 and 1971, some of his UFO papers were published in scientifically oriented UFO journals.¹

The four papers he produced on aspects of atmospheric physics during 1969 were delivered before scientific audiences, also. They no doubt would have been accepted for publication in scientific journals, but he did not take time to hone and refine them to his satisfaction. Then, in September he sent a 15-page paper to the NSF, which discussed intentional climate modifications such as cloud-seeding and inadvertent climate modification caused by the growing problem of atmospheric pollution. He proposed research on the role that lead and sulphur dioxide contaminants were playing in worldwide pollution. The NSF rejected the proposal.

McDonald's interest in the growing problem of atmospheric pollution continued unabated, however, along with his interest in UFOs. He was one of the first scientists to speak out about the problem of worldwide pollution by lead contaminants. He developed his NSF proposal into a 42-page paper titled "Airborne Lead: An Example of Technological Contamination of the Atmosphere," but it, too, was never published. He also addressed the Environmental Chemistry Seminar at the U. of A. Chemistry Department regarding pollution by Tucson smelting plants; this paper, too, went unpublished.

His colleagues at the IAP were concerned about the fall-off in his formerly prodigious output. The old academic adage, "Publish or perish," haunted them, and they began to fear for his scientific status. None of them suggested outright that he knock off UFOs but many felt that he was wasting his time rebutting the Condon Report. Dr. A. Richard Kassander, the Director of IAP and McDonald's fast friend, explains:

He certainly never neglected his duties at the IAP, but I think most of us seniors in the Institute felt the same way.... His insights were so inventive and so important that we all felt that he was capable of some really great things in the advances and in the knowledge of cloud physics and other areas of meteorology. That in some respects it was a shame that he spent the time he did on UFOs, because much of that was the sort of thing that lots of others could do quite well. It was his privilege to decide where he could best use his talents...but the amount of time, and the heat he was taking...had to take its toll in other ways on his science."

In spite of repeated efforts, McDonald had never been able to convince Kassander and other IAP colleagues that UFOs were a serious scientific question. "I believed that many of the phenomena he was trying to explain were based on real observations," continues Kassander. "However, I wasn't sure

1. Copies of this 100-page bibliography of all known writings by McDonald can be ordered from Valerie Vaughan, 51 Longmeadow Drive, Amherst, MA 01002-3225.

then, and I'm not sure now, that they could not be explained by known scientific principles if he had had all of the data and that it was reliable. However, I felt that with his abilities, the possibilities of doing things in the areas that would gain great scientific recognition were being neglected as a result of the UFO work."

Disregarding the controversies that swirled around him, McDonald was in his usual good humor when he went to St. Paul, Minn., for an Edison conference talk at the end of May, 1969. A participant, Joseph Cook, told a story which struck McDonald as funny, and he wrote it down for future use:

*Joseph Cook told good story re novelty of approach of gifted student: how to determine the height of the school building using a barometer: (1) Drop it off roof & time it; (2) Measure its shadow & eccllc brgs; (3) Use it directly as yardstick; (4) Go to basement, knock on custodian's door & say 'Mr. Johnson, if you'll tell me the height of the school building I'll give you this lovely barometer.'*²

A recent unexplained and widespread power outage at St. Paul, seemingly connected with UFO incidents, took McDonald's interest. Ever since he had assiduously studied the 1965 Great Northeast Blackout, he had been intrigued by such events. Herb Sherman and another local UFO investigator, who were chaperoning him around St. Paul for the Edison UFO conference, had not checked up on a sighting which seemed connected with the blackout, so McDonald pursued the issue. He tried to track down Mrs. Terry Walters, who had seen an unidentified object near power lines, but she had recently moved to Ohio. McDonald made plans to contact her whenever his professional work took him into the Ohio area; no promising case escaped his attention.

At St. Paul, he had long conversations with scientific colleagues Al Cameron and Henry Eyring. Eyring told McDonald that he thought he was on the right track but that he personally doubted the extraterrestrial hypothesis. "Why no contact?" asked Eyring.

*Al [Cameron] used a somewhat new & very relevant argument: He asked Eyring if he could conceive of anthropologists going to some still untouched South Sea island & using...electronic bugging, tape-recording conversations, use of closed-circuit TV, concealed cameras, etc., to gather data discreetly & clandestinely, as means of avoiding disturbance of the primitive culture...so maybe really advanced civilizations are far more enlightened.*³

2. McDonald, fourth journal, reverse p. 41. The meaning of "eccllc brgs" is unknown.

3. *Ibid.*, p. 42

No handout exists for his May 26, 1969, St. Paul talk, but it was probably similar to his talk at the Sacramento Section of the AIAA two days later, which was titled "A Very Creditable Effort?" It was a rather winsome response to the NAS panel's assessment of the Condon Report as "a very creditable effort," an assessment with which McDonald intensely disagreed. (See page 332.) At the St. Paul talk, where he was introduced by Al Cameron, McDonald noticed two of his colleagues in the audience, Drs. Strail and Van de Graef, "grinning negatively at one introductory comment of Cameron's, suggesting their skepticism regarding UFO reports. McDonald later philosophically wrote in his journal: "What is the origin of this inclination to scorn & scoff? Isabel Davis is paragon of critical non-scoffing, a good touchstone."⁴

His own scientific attitude was so honest that it never occurred to him to scoff at anyone, even those whose scientific attitudes differed from his own. He typically used logic, humor and impeccable data to back up his side of any debate. His St. Paul talk was generally well received, however, and later McDonald and Cameron walked to a nearby pizza place for coffee. McDonald shared some ideas he'd picked up on the history of science. *One should never set out to prove anything, but work from a multi-hypothesis viewpoint, choosing the most logical as a working hypothesis until undeniable proof surfaced one way or the other.* "It is very dangerous to get too enamored of any theory," McDonald said. "One ought not be setting out to prove UFOs are anything, but to accept what the data indicated. The bearing on UFOs is clear."⁵

McDonald asked Cameron about Gen. Clemence of NASA, whom he apparently wanted to see regarding his own feeling that UFOs belonged in NASA's province. Cameron replied that Clemence was a very conservative, unimaginative fellow, "evincing zero imagination regarding what was going on."⁶ The news didn't encourage McDonald, but it didn't discourage him, either!

After the St. Paul activities, McDonald flew on to Los Angeles. He was scheduled to give a talk that night at the Naval Weapons Center (NWC) at China Lake, Calif., but first spent a few hours with Los Angeles NICAP Subcommittee (LANS) officials. He'd first learned of a China Lake "flap" from a civilian employee, whose name must remain confidential, who worked for a large private company which performed certain work at Naval Ordnance Training Station (NOTS) and NWC. "He worked for a big company...that does a lot of work for the military," relates Marilyn Epperson. "He was the one who first got the information. He was directed by some-

4. *Ibid.*

5. *Ibid.*

6. *Ibid.*

body to [contact] Mother [Idabel].... He sat and interviewed us for a while, to see if he trusted us, before he even told us. Then he started telling us about it. When Mother got this information, she thought, 'Wow! We've got something!' She called McDonald and put the two in touch. They arranged for McDonald to come and make a speech up there, a reason for him to come on the base."

McDonald was flown to China Lake in a Navy-leased Cessna 210.⁷ His "China Lake" file mentions, "Dan Butler of Carlisle's group with us."⁸ The China Lake RESA section, connected with the AMS, was pulling out all stops to treat him "first cabin." Many of the base personnel were eager to talk with him regarding sightings they'd experienced; several of them had talked with him in advance over the phone. McDonald had in his briefcase a reel-to-reel hand recorder, intending to record particularly significant sightings which would be shared with him on a confidential basis.

It was a swift but fruitful visit. He met for lunch with Lyman van Buskirk, with whom he had gotten in touch through Epperson's initial China Lake source and with whom he'd already corresponded at length. Van Buskirk told him about a UFO photo which had been taken around 1952 by a reliable witness. McDonald took succinct notes, intending to follow up later:

Ray Hembree, a photographer (not sure if USN), was on range getting ready for test. Photographed object; turned it in. Movie camera of some type. Van did not see film, nor does he think Hembree saw film after developed. Van [Buskirk] got here 1952, after incident above. Van not sure of date. Maybe early 1950s, possibly late 1940s. [Hembree] Now at Huntsville, Marshall Space Flite.⁹

Another confiscated UFO movie film down that deep, dark hole along with Drury, Newhouse, and Heflin! It is not known if McDonald was able to follow up the leads on the Hembree case.

McDonald had first learned of Van Buskirk's interest in UFOs while investigating Case #35 of the Condon Report, which occurred on October 6, 1967. It began when Vandenberg AFB radar detected a very large stationary object some miles over the Pacific off the Northern California coast. Later, radar detected numerous small, but strong, targets traveling eastward in irregular flight. The location and time of Case #35 was listed in the Condon Report as "South Pacific, Fall 1967."¹⁰ No one but researchers as thorough as McDonald

7. *Ibid.*

8. McDonald, "China Lake" file, handwritten notes.

9. *Ibid.*

could have identified this "Case 35" as the Vandenberg AFB sighting, especially since it was mentioned elsewhere in the report under the heading "Case 53." Whether the transposition of numbers was done deliberately to throw future investigators off the track is moot. (Most of the other cases detailed in the Condon Report were obscured in other ways; only extremely knowledgeable researchers like McDonald had the background to make sense of them.)

McDonald had spoken before the AIAA section at Vandenberg AFB in April and while there studied on-site the details of Case 35. As mentioned above, these radar-visual sightings occurred on the evening of October 6, 1967. An original, large object had been viewed for 45 minutes by a missile-range official at elevation 10-15° in the west-northwest. Unable to identify it, the official called another range official, who viewed it through binoculars. The large object was elliptical and the apparent size of "a large thumbtack." Although it had red and green lights similar to aircraft, it was stationary for 45 minutes and was "fuzzy, like a spinning top."

Range Control Operations at Vandenberg AFB was alerted; they confirmed that the object was several miles out over the ocean at about 10,000' altitude. When missile radars were asked to look for it on a search mode, they detected numerous smaller objects in that area. They traveled at varying speeds, up to 80 knots. Several additional visual sightings were detected to the east and north, over land. The Condon Report had "identified" the smaller objects as birds, AP (anomalous radar propagation) and perhaps a meteor or two, and the large object as a mirage of a ship at sea. According to the Condon Report, all the "misidentifications" had been caused by a "remarkable inversion layer" which permitted optical mirages, scintillation, and AP, in spite of the fact that many of the radar lock-ons indicated objects much larger than birds. McDonald knew that an inversion layer would have limited optical mirages to a few degrees above the horizon. Both the large and smaller objects were seen at much higher elevations. McDonald's investigation revealed that the details of the Vandenberg sightings were very different from that which was written in the Condon Report. He was finding that same pattern repeatedly in his systematic checks on other Condon cases.

McDonald had earlier been informed by a Vandenberg official that his unit had been queried by radio from the NWC at China Lake. NWC wished to ascertain whether or not, at midday on October 6, 1967, any aircraft from Vandenberg might have been flying in the NWC area at China Lake. VAFB responded "negative." This inquiry was not mentioned in Condon's "Case 35."

10. Condon, Dr. Edward U., Project Director, *Scientific Study of Unidentified Flying Objects*, New York, Toronto, London, Bantam Books, January 1969, pp. 353-65, also p. 171. Case 35.

When he learned of the UFO incident at China Lake, which lies inland directly east of Vandenberg AFB, McDonald had established contact with Lyman van Buskirk of the NWC. He asked if van Buskirk could inquire about the naval aviator's sighting, which had occurred a few hours before the Vandenberg radar-visual incident. The fact that the China Lake sighting occurred some hours before the Vandenberg sightings did not trouble him particularly because he was aware of the "carrier craft" concept in the UFO literature from Jacques Vallée and other reliable researchers and considered such sightings, when reported by credible observers, as valid. "Carrier craft" were large UFOs from which smaller UFOs departed and returned over a period of hours.

Vallée was well acquainted with Aimé Michel of France, a renowned UFO researcher who had described cases of this type in France and surrounding countries, particularly during the 1954 European flap. Michel, who called this particular UFO phenomenon by the alternate name, "cloud cigars," wrote about these cases in his book *UFOs and the Straight Line Mystery*.¹¹ Vallée, who studied similar cases, called these observations "Type II events."

The Vandenberg incidents, therefore, possibly represented a "carrier craft" releasing numbers of smaller UFOs. Large UFOs like this had appeared off the California coast from time to time, reportedly hovering for hours some miles at sea.¹² If the Vandenberg main object was a "carrier craft," the Vandenberg reports and the China Lake aviator sighting could possibly be linked. In McDonald's files, no indication had been found that he managed to track down the NWC aviator sighting.

McDonald's contact with China Lake personnel had begun almost a year earlier, in December 1968. John H. Lyons of NWC had approached him after a Miami Stormfury session and told him of an incident which had occurred when Lyons was out on the NWC range, in radio communication with an aircraft. Abruptly, electrical malfunctions occurred in his radio transmitter, and his tracking gear went out. A range person at another camera station saw an unidentified ellipsoid passing over. Lyons reported the incident, but there was no official follow-up, so far as he knew.

McDonald had encouraged Lyons to talk to the two witnesses. He did so and elicited some response, but many of the witnesses were reluctant to discuss their sightings because of an attitude of ridicule among the base's top echelon. It was during this period that McDonald established contact with Lyman van

11. Michel, Aimé, *Flying Saucers and the Straight Line Mystery*, New York, Criterion Books, 1958.

12. Druffel, Ann, "Southern California's 'Cloud-Cigars,'" *Proceedings*, Center for UFO Studies 1975 Conference, Evanston, Ill.

Buskirk, who also knew several NWC personnel who'd seen UFOs. Some of these were also reluctant to talk, but van Buskirk knew of an individual who had photographed a UFO on the range. Those pictures had been immediately confiscated through "official channels."

In 1955 or 1956 another set of UFO photos were taken by range personnel, Lyons told McDonald. An aircraft was flying over the range in broad daylight, with a shining object following at wing tip. Witnesses on the ground photographed the object, but the pictures did not turn out clearly. The witnesses were ridiculed when they tried to show the photos, deterring others from reporting UFOs.

Van Buskirk, however, had referred McDonald to Juanita Evans, who in 1960-62 had been a draftsman at NOTS. She had seen a UFO from Ridgecrest, a town outside the NWC/NOTS area at China Lake. She and her husband were sitting on their porch on Labor Day weekend, September 1960, in the early evening. An object came scooting across the eastern sky, under a heavy layer of rain clouds, the estimated altitude of which was 5000'. It was of immense apparent size, about 30° of arc; both witnesses confirmed this estimate. The object was dull gray, with a translucent glow and little spots of lights around the edge. It reflected light from street lamps situated near the Evans' home. The witnesses heard a whirring sound "like a glider," and Mr. Evans at first thought the object was an aircraft in trouble.¹³

The huge object was round, flat on top and bottom, with five bumps on the front end. During the next two hours, from about 9:00 to 11:00 P.M., it made several passes on differing courses—north to south, south to north and later eastward. At the last pass, headed west, it pulled up at a steep angle. That same night a man in a truck parked off the highway saw the object twice and reported it to the local Ridgecrest newspaper, which ran a story about it.

The object was also viewed by the Evanses' eighth-grade son and their older daughter. Juanita Evans made a model out of plastic material the next day. At van Buskirk's urging, Evans reported the occurrence to the Air Force.¹⁴ Five days after the Evanses' sighting, Mel Morrison, a security guard at NWC, saw a red, pulsating UFO circling over Inyokern Airport, about six miles away. As it came toward him, he saw that it was an inverted "V." He could not see any solid body, even as it flew over him, only "red lights, feathered out at the bottom." Morrison had a lot of range experience and was well acquainted with aircraft and missiles, but could not identify it.

13. McDonald, "China Lake" file.

14. *Ibid.*

In February 1969, Marie McArtor, a NWC employee, had also contacted McDonald at van Buskirk's urging, regarding a plane chase and abrupt disappearance of a UFO she'd witnessed. She sent him a batch of useful unclassified maps which detailed the weapons range. After lunch with van Buskirk at China Lake, McDonald set about investigating the McArtor sighting on-site. It had occurred on G1-G2 range, north of Armitage Field. In November or December of 1955, McArtor was watching a pilotless drone aircraft which was flying above 10,000'. The drone was part of a guided-missile experiment. The drone was two to three miles ahead of the firing aircraft. The control planes which were watching over the drone broke off as the attack plane came in. The drone was 2.5 miles west of McArtor's station, when she spotted a very bright object against the dull, overcast sky.

She'd seen bright UFOs like this before and had even viewed them in her cine-theodolite, but this time she was not using it. Three other range personnel—aerology personnel and a timing man—also saw the object. They watched it come down in a smooth, scooping curve and follow the attack plane. It overtook the F-9 in 3-5 seconds and then abruptly vanished. All four witnesses agreed that it "disappeared"; they simply saw no more of it. The UFO had an angular size of about a third of the F-9 and was more oval than round. Its edges were well defined, and it had a peculiar luminous look, "as if glowing from within." It was orange-red and left no wake or exhaust. The color was not uniform, being darker on the edges.¹⁵ McArtor agreed to try to track down the three other witnesses. She had not reported it to NWC officials, because she had been ridiculed when she reported a similar object prior to that time. She later checked at the Record Office, but couldn't find records of this particular period; she assumed that they had been routinely destroyed.

McDonald was interested in the object's abrupt disappearance, for such cases almost seemed, to many researchers, to indicate "de-materialization." He had referenced two dozen similar cases from the UFO literature and jotted down brief details on many of them in his "miscellaneous" notebook, where he was gathering preliminary data to write his book.¹⁶

McDonald asked McArtor about the earlier sighting she'd reported. She stated its appearance was very similar to the 1955 object. Also in the last half of 1955, she'd seen several objects of this type, which had flown at varying angles to the path of drones and firing aircraft. The UFOs were always orange and oval. She wanted to track them, but range regulations required that ground personnel

15. *Ibid.*

16. McDonald's "Miscellaneous" notebook is archived with his Personal Collection at the University of Arizona Library in Tucson.

stay with the drones and firing aircraft in the particular experiments which were underway. Marie McArtor found no officials who were interested in these peculiar objects which she and other witnesses repeatedly sighted. Her curiosity about them never went away; reporting the incidents 14 years later to McDonald, she still had no idea what they could have been. In his "China Lake" handwritten notes, McDonald remarked that Marie McArtor was a very good witness and that her sighting(s) held potential importance.

[McArtor] Very articulate & precise. Seemed almost relieved to talk to someone who takes the problem seriously. Will be on lookout for other UFO-NWC cases.... This is an Abrupt Disappearance case (4 witnesses.) Good example of Ridicule Lid.¹⁷

McDonald was also interested in the sighting during which radio interference in the witnesses' truck had occurred, for EM effects were physical effects which might provide hard data. The case had occurred on January 18, 1966; the two witnesses were J.E. (Butch) Lamson and Gale V. Pingel. During his busy afternoon at China Lake, McDonald went out with them to Range B-1C of the NWC/NOTS facility where this incident had taken place, and they made precise calculations and sketches depicting the event.

During the Lamson-Pingel sighting, the sky had been clear and blue, the weather cool. No other range personnel were within ten miles of the site. The two witnesses were sighting on a six-volt blinding flasher five or six miles away when they heard a hum "like a cruising aircraft about three to five miles high." Lamson looked up, and saw an odd, dark gray "craft" headed straight toward them. When first seen, it was about 1,000' away.

"This thing was coming down my neck!" exclaimed Lamson, who had six years' experience at NOTS. "When it went over my head I could have thrown a rock at it and hit it. It was diving at a pretty good angle as it passed overhead."¹⁸

After its overhead dive, the object followed the contours of the ground, at a height of about 10-15', with a uniform motion. Lamson quickly focused his 40X scope on it and got a good look at it; it filled about 75% of the scope's field at first. At this point it was below them, because they were on a low hill. The object was about 12' long, about 8' wide and one foot thick, excluding two or three "fins" which stuck up from the back. Lamson saw three fins, and Pingel, who was not using a scope, saw two. At the back, near the fins, was what Lamson described as "a hazy feature," seen before the object passed overhead; this was not visible when the object traveled off to the south. McDonald ques-

17. McDonald, "China Lake" *op. cit.*, reverse p. 5.

18. *Ibid.*, reverse p. 5 & p. 6.

tioned Lamson closely about "the hazy feature," for many UFOs reportedly were surrounded by "haze:"

The "hazy" region began 1/4 way from back & aft for 1 ft or so. "Real thick. If you could see it off in distance you'd have thought it was part of the object." Not glowing, not smoke.... After it went past, tail sharp then... Doesn't think you could see through it. No impression of spoiled image as looked at it from rear, he stressed.¹⁹

It was apparent that Lamson had trouble describing the "haze"; it was like nothing he had ever seen before and completely outside his experience. Lamson was clearly puzzled and deeply impressed by the event. "What a feeling!" he told McDonald. "It was really different." Gale Pingel, who was seated in the truck when Lamson first caught sight of the UFO, didn't see the "hazy feature" because he didn't see the object until it was passing overhead and started following the contours of the land. After traveling a mile or so away from them, it dropped down over a flat lava bed, then dropped down again 450'-500', still following the contours of the earth. After that it was lost from sight. Lamson tried to start the truck. The starter turned over, but the spark plugs wouldn't ignite. The truck's radio didn't work well; Lamson estimated it was at about 20% transmission capacity and about 80% reception. Pingel tried to use the truck radio to report the occurrence, but couldn't get through for about 20 minutes. It worked well before and after the sighting.

Lyman van Buskirk had learned of this sighting soon after it happened and had talked at length to the witnesses only two days later, while the details were still fresh in their minds. Now, during James McDonald's re-investigation on-site, Lamson was still exhilarated by the sighting. "It was beautiful," he told McDonald. "It was as slick and as nice as it could be. I know it was nothing we put together. It was too small for a person, and too quiet."²⁰

Gale Pingel, the second witness, had been employed at NOTS since 1946 as a range surveyor. Except for the "hazy" feature, his description of the event matched Lamson's in all respects. McDonald was impressed with the quality of the two witnesses. He noted that Lamson, particularly, was very articulate, with no hint of exaggeration in his description. He'd spoken to very few people about it "because of the attitude people have."

McDonald was curious to know whether anyone else at China Lake had seen anything like this object. Van Buskirk located a security guard who saw something similar a week earlier, within 3-4 miles of the spot where Lamson

19. *Ibid.*

20. *Ibid.*

and Pingel had their sighting, but he didn't want to talk even to Lamson (whom he knew well) out of fear of jeopardizing his job.

The third sighting McDonald investigated on-site on G-range at NOTS during that busy May 1969 afternoon was a strangely shaped, silvery UFO witnessed by Jack H. Kirkpatrick and Warren E. Specht. Kirkpatrick had been employed at NWC for 11 years. At approximately 2:00 P.M. in the afternoon of September 4, 1960, the two men were part of a group watching a drone target which was flying at about 10,000' or more. They spotted an object flying a few thousand feet above the drone, "as if watching it."²¹ The sky was clear and blue; the drone target was a bright red, easily seen. The UFO was bright, like shiny metal, and reflected the sun. The UFO appeared about 35' long, about the same size as the drone.

The UFO's unusual shape impressed Kirkpatrick. "It looked like a dumbbell, two spheres connected by a tube or tunnel," he stated. James McDonald also interviewed Specht about this sighting, who confirmed the unusual dumbbell-shape of the object and recalled that it was "light-colored." The object was very high, and Kirkpatrick and Specht could not see any ports, fins, or antenna or get any clues to the object's propulsion system. The sun was at their backs, which made the target drone and the object stand out very distinctly against the sky. The witnesses called the object to the attention of several other range personnel, one of whom had binoculars. This witness agreed on the object's shape and sharp outline; even with binoculars he could see no details on the UFO's silvery surface. While Kirkpatrick remembered watching the object for about two minutes, Specht recalled seeing it for 15-20 minutes while it paced the target plane. Then it shot up abruptly, disappearing in a few seconds, leaving no trail of any kind.

Kirkpatrick's and Specht's descriptions agreed with several corollary witnesses, including a Navy man who viewed the object with binoculars. They all confirmed the dumbbell shape of the object. When Kirkpatrick first informed McDonald about this sighting, he wrote: "I have done a lot of research and reading on UFOs and aerial phenomena and at the time of this sighting I had never heard of this particular shape, but since then I have read of similar objects being sighted somewhere over England and France."²²

Kirkpatrick did not have to go to England and France to find dumbbell-shaped UFOs; one had been reported just a few hundred miles south of China Lake, in Los Angeles, on October 16, 1968. The initial call came over SKY-

21. Letter from Kirkpatrick to McDonald, dated 16 May 1969, accompanied by sketch of the UFO.

22. *Ibid.*

NET, a tracking-system and filter center for public UFO reports which was an adjunct of LANS. Harriet and Rochelle Dzik, ages 14 and 13, had viewed a dumbbell-shaped object while walking to school at 7:50 A.M. The object was seen clearly in a cloudless sky. Northeasterly winds, termed "Santa Ana" winds in that region, had blown smog and other pollutants out to sea, and the visibility was excellent. The object's apparent size was large, estimated on-site at about two lunar diameters for each sphere. It was composed of two solid round circles, dull steel in color, connected by a bar of the same color. On the bar was a large, red light; the Dzik girls' sketches were eerily reminiscent of Kirkpatrick's and Specht's. The object was traveling cross-wind and was in sight for three minutes, emitting a whistling sound. In spite of their youth, both witnesses were credible and reliable individuals. LANS thoroughly investigated and documented this sighting.²³

Later it was learned that on February 28, 1971, a similar dumbbell-shape was seen in broad daylight by Michael Jaffe, a well-regarded UFO investigator in Northern California. Jaffe's dumbbell-shaped UFO was apparently being pursued by a small plane, and was diving at a 45° angle. Its leading sphere was red, while the trailing sphere was blue or green.²⁴ This aspect of the sighting is not unusual; UFOs are reported to change colors while varying speed and angles of flight. The dumbbell-shape still continues to turn up on occasion in the UFO literature.

During McDonald's 1969 China Lake visit, he investigated other promising cases. One in particular had occurred near sunset on January 19, 1966, the day after Lamson and Pingel's sighting. The incident involved several witnesses, most of whom McDonald interviewed. Two pilots flying on B range, plus an Echo radar, were tracking a target drone, approaching Airport Lake. The pilot in one of the planes made a turn at Airport Lake and then abruptly called in to report that his gyroscope and all the needles on his dials were acting erratically. At the same time, an Echo radar operator, Bob McClary, watching the drone through an optical periscope, lost track of the drone. Instead, he saw a dark unidentified "ball" in the scope for about 40 seconds.

This dark object was also seen from another site nearby by Frank Schaefer and a second witness. Schaefer described the dull black, ball-shaped UFO as about 20' in diameter, coming straight down from an estimated altitude of 5,000'. It dropped fairly close to the ground, then pulled out hard and took off to the east. Schaefer guessed its speed at about 500 knots, but admitted that it

23. Druffel, Ann, *FSR Case Histories*, Supplement 9, February 1972, London WC2, England, Published by FSR Publications Ltd., pp. 11-12.

24. Jaffe, Michael, *FSR Case Histories*, Supplement 5, June 1971.

was hard to judge. He stated that it went "down to the mountains and seemed to hit the ground" before disappearing.²⁵ Schaefer and the other witness reported the incident to the office, but no one interviewed them about it.

One of the most interesting aspects to the China Lake sightings was that the witnesses to one event had little or no contact with witnesses to other sightings. Kirkpatrick had described this in his preliminary letter to McDonald,²⁶ who confirmed this aspect on-site. As McDonald spent the entire afternoon investigating case after case, it became apparent that, during many China Lake UFO sightings, sophisticated instruments had been affected, important military tests interrupted, and expert observers completely puzzled by unconventional aerial objects. If the various tracking stations and other facilities at China Lake had had the support of their superiors, a sophisticated monitoring and tracking system easily could have been set up with the technology already at hand to track these unidentified objects that NWC/NOTS personnel had been seeing for over ten years. If a general air of "cover-up" had not surrounded the UFO subject, they would have been able to present McDonald with undeniable, instrumented and photographic proof that the UFOs were, indeed, flying over the Naval facilities at China Lake and interfering with scientific experiments.

These were the type of empirical data that McDonald and a few other scientists like Vallée and Hynek were seeking. The McArtor case, itself, demonstrates that the Navy could have set up a scientific study at China Lake as early as 1955, since UFOs were seen that year repeatedly during a six-month period. Sightings were also being reported by civilians at the nearby towns of Ridgecrest and Inyokern; therefore the tracking system could have included government, military and public witnesses. Instead, McDonald found at these naval facilities the same official disinterest and ridicule toward witnesses that the Air Force displayed.

He also queried Lyman van Buskirk about the October 6, 1967, sighting at NWC, when a Navy aviator was buzzed twice by a UFO over China Lake. This was the sighting which was possibly connected with the Vandenberg radar-visual sighting of the same date about which he was particularly curious—Case #35 in the Condon Report. However, his "China Lake" notes reveal no details about this. He had also queried "Ralston ROCC" at Vandenberg about it, but again, no details have been found. Case #35 was of prime importance to him, as it could be another significant case demonstrating that the Condon Report had merely followed Blue Book's lead, and that a definitive UFO study had still to be accomplished.

25. McDonald, "China Lake" *op. cit.*, pp. 3-4.

26. Kirkpatrick's letter to McDonald, dated 16 May 1969.

He ran into even stranger reports at China Lake. They were not the type of cases where he could interview the witnesses merely by picking up the base phone and dialing an extension, yet he could not ignore them as they might reveal extraordinary data. The first of these came from Duane Mack, an NWC employee well acquainted with Lamson and Pingel, who vouched for his veracity. Mack told McDonald about an engineer friend, Arthur Richards, who had had a ranch near a town named Brown, which no longer existed but had been near Inyokern. About 12 years prior, Richards had told Mack he had seen a "UFO landing" out on the lava beds near his ranch. The incident had occurred "during the war" (apparently World War II). Richards' landing report had been "a NOTS incident."²⁷

Mack told McDonald, "He told me he saw something awfully strange, and he added, 'you wouldn't believe it!'" If a UFO landing had indeed occurred at China Lake, it would be one of the earliest landing cases known. McDonald did not speak openly of "UFO landings" in his talks before scientific groups, but he was greatly interested in such reports, as were prominent researchers like Jacques Vallée, J. Allen Hynek, Aimé Michel and NICAP personnel. McDonald expressed an interest in trying to track down this potentially important case. The primary witness, Arthur Richards, had been killed in an auto accident, but his wife, Jennifer Richards, was living in St. Petersburg, Fla. Mack thought she might be able to tell McDonald more about what Richards had seen.

Mack also confided another strange, potentially valuable 1945 case which possibly correlated with the 1945 émigré scientists' sighting as well as the 1945 Long Beach sighting (see Chapter 13). He had learned about this early NOTS sighting from Lamson and Pingel. Pingel had been reluctant to discuss it with Mack, but Lamson had spoken more freely about it. It was the earliest sighting Mack had come across. Sometime in 1945, during a test rocket firing at the range, several unidentified objects were seen reflecting the sun in the clear blue sky. World War II was still raging in the Pacific. Mack and numerous other witnesses saw the objects fairly close at first, moving in a group from the south toward the north at a fairly high altitude. They were nevertheless distinct and reflected the sun brightly as if made of metal. However, no details could be discerned, nor their exact shape.

A crash photographer was called to the scene, but by the time he arrived the objects had moved farther away. The group of eight to ten objects was maneuvering in ways that were impossible for any known aircraft: They would drop down abruptly, then climb steeply, drop down in a shallow dive, then rise again, basically keeping their same positions within the group. Af-

27. McDonald, "China Lake" *op. cit.*

ter several minutes, they flew off at high speed. The sighting caused a flurry on the base because of the number of witnesses. A "Dr. Plum" was on the range that day. He was intrigued by the sighting and especially the fact that the objects had been filmed, even at considerable distance. Mack gave him the film, but never heard what Plum did with it. Mack gave McDonald tips on Dr. Plum's possible location.

Also on the range that day was a Dr. Dost, whom Mack described as an "OEG Rep assigned to PX-5 experimental squadron." Mack and Dost had many conversations afterward about UFOs, and Dost, "who had access to a lot of Washington, D.C., information," told him that UFOs "definitely exist."²⁸ In 1969 Dr. Dost, a brilliant German-born physicist, was still with the U.S. Navy. Mack succeeded in obtaining Dr. Dost's address in Maryland and gave it to McDonald. Nothing has been found in McDonald's files to indicate that he was ever able to follow up on Dr. Dost.

Another type of "UFO" case at China Lake intrigued McDonald. It was very different from the reports of metallic-appearing craft which were so plentiful from the NWC/NOTS personnel. Through LANS, McDonald had heard that a civilian, Walt Bickel, who lived in the nearby mountains, was reporting many strange sky objects. His observations were frequently corroborated by other reliable witnesses. He lived near Inyokern, in a cabin overlooking the Naval facilities which, although in the mountains, was nevertheless in a small valley, "a pocket of sorts." He had lived there for 20 years, mining a placer claim. A few people who heard of his sightings would drive up on weekends to join him on "skywatches." Bickel provided a primitive camp for his visitors, who were careful not to spread the word too much, for Bickel did not wish to be overwhelmed. Alice Perkins, a reporter on the *Santa Ana Register* wrote:

*I trust [Walt's] word more than I do most people's; he's an American original, out of a pioneer mold...he has a fine and active mind with a self-gained, practical education crammed into it.*²⁹

Dr. Neil Davis, a scientist who often attended LANS meetings, went up a few times to Bickel's camp, as did Alice Perkins. Davis suggested that Bickel keep a diary, listing each sighting by number and description, which he did. Bickel did not embellish in his diary, but listed any witnesses present. Most of the sightings were what he termed "erratic lights," but a few times he had seen craftlike shapes.

28. *Ibid.*, pp. 5-6. The meaning of "OEG Rep[resentative]" is not known.

29. Letter from Alice Perkins to Ann Druffel, September 17, 1968.

Sometime in the 1950s, Bickel said he snapped a photo of one of the first objects which came close to his cabin. His outdoor shower was framed to one side, the UFO on the other. He sent the entire roll to the Air Force for analysis, but the roll was returned with the emulsion scraped off that one frame. All the other photos on the roll were clear and sharp. Another time he'd taken two photos of a different daytime sighting "many years ago"—he could not estimate the date—and had the roll developed in Mojave, one of the larger towns in the area. When he picked them up, two frames which he expected to show the object were missing. He was told that they were "lost." Finally, the clerk admitted that "the Air Force has told them to cut out any pictures of UFOs or 'flying saucers' and send them to them."³⁰

By 1969, Bickel had listed 69 sightings in his diary, beginning in 1952. Most of them were "night lights" (NLs), but still were strange enough to defy any type of conventional explanation such as planes, missile firings, meteors, satellites, etc. LANS realized there was little that could be done with these, in spite of multiple witnesses. The NLs did not interest McDonald either. LANS sent inquiries to the commanding officers of other nearby military facilities inquiring about Bickel's sightings. Those facilities that bothered to answer offered no explanations; the other facilities ignored the queries entirely.

Even though Bickel's camp was essentially surrounded by government research facilities, that fact alone could not identify the objects as experimental technology. The more interesting sightings which took the attention of LANS, NICAP, Alice Perkins, Dr. Neil Davis and other researchers, including McDonald, were seen low over Bickel's camp or against the background of nearby hills, which were about two miles away. According to the witnesses, some of the objects were seen apparently "landing" behind these low hills, but in front of hills farther away in the distance. It was not logical to suppose that objects coming from nearby military installations would descend into small valleys.

LANS tried to find sources that could set up an all-sky camera or a meteor-tracking camera at Bickel's camp, but these efforts came to naught.

Even a referral from Dr. John A. Russell, Chairman of the Astronomy Department of the University of Southern California to Lee F. Humiston, a scientist based at NOTS, failed to interest them. McDonald remained skeptical of the majority of Bickel's sightings; Bickel saw so many! He realized, however, that a

30. From my interview with a reliable source, who has requested anonymity. This woman went with a group of Southern California researchers, including Neil Davis, to Bickel's camp, on Sept. 22, 1968, and reported back what Walt Bickel had told her about his experiences with UFO photos. Documentation in my files.

witness living in a dark, isolated area, who took time to look at the sky, would logically have a better chance of seeing UFOs than an ordinary citizen who rarely looked up. His main interest in Bickel was that he lived close to China Lake, where unidentified objects were reported by technically trained Navy personnel. He was also impressed with the reliable, corollary witnesses, especially Dr. Neil Davis. Davis kept in touch with McDonald, particularly in regard to Bickel's sketches of close, craftlike objects seen in the daytime.

Bickel's Case #67 caught McDonald's interest because it involved E-M effects, animal reaction, an unusual odor (often associated with UFOs) and a possible element of "missing time."³¹ Although McDonald did not publicly discuss cases of missing time in his talks and papers, such as the case of Barney and Betty Hill, or sightings in which apparent UFO occupants were reported, he was curious about them. Many of the witnesses were solid, reliable people and other UFO researchers, such as Aimé Michel, J. Allen Hynek, and Jacques Vallée, gave them credence. McDonald's open-minded attitude would not permit him to exclude such cases, and when well-investigated data on occupant cases and "missing time" came to his attention he would take careful notes and gather other information on them in his files.

Missing-time cases—involving witnesses who experienced memory lapses after being close to a UFO-type object—were rare in 1969. The Hill case was the best known of this type (see Chapter 10), but a few others had begun to surface, particularly in the U.S. McDonald had received initial reports on Bickel's "missing time" experience from LANS and at his request Dr. Davis interviewed Bickel on-site about it.

The facts of Bickel's "Case #67" were bizarre: He was asleep one night in his cabin when a warning buzzer sounded, part of a security system he'd set up in his camp. He heard several of his pet cats screaming frantically. He sat up and listened about ten seconds. Abruptly, a time lapse occurred, and he inexplicably found himself hurrying toward the door. He held a flashlight which was not turned on; his finger was nowhere near the switch. Another time lapse occurred, and then the flashlight was lit; he had no memory of turning it on. The security buzzer was now silent. All of his cats were still screaming, and he smelled a strong odor.

Usually when one of his cats screamed, it was because a bobcat had come near the camp. Bickel had, on occasion, shot a marauding animal that was threatening his pets. This evening, there was no bobcat to be seen and no other apparent cause of the cats' behavior. He thought the strong odor might be

31. Dr. Neil Davis gave me a tape recording which he made while reading Bickel's diary, plus an interview with Bickel, a copy of which is in my files.

ozone, because lightning sometimes struck near his camp during thunderstorms. Yet he had never smelled ozone that strong before. It seemed to have a bit of methane mixed in it. "It had an awfully funny smell," Bickel told Davis, "and the more I smelled of it, the more I thought about it. No! It had to be a heavy ozone there." He went outside.

"Everything is peculiar about the way it happened," Bickel related, "the cats screaming so much, their hair standing up, their tails as big as a baseball bat.... When I yelled at them they slinked away...."³² He was doubly alarmed to see his cabin surrounded by some type of smoke or fog, the like of which he had never seen before. "There was some kind of smoke with it. Must have been, 'cause ozone doesn't have smoke," Bickel related. "It's just in the atmosphere and it's clear. So this is why I couldn't decide if it had ozone or methane mixed with it."

Bickel had never before experienced a fog like that at his cabin site. "Fog, when it lays in here in the wintertime, is after a snow, and it's warming up, or after a rain and early in the morning it will come up," he explained. "But it's usually over in the valley on the mesa south of here. The valley's all clear, just a little bit scattered here and there. And it usually hangs about 20 feet above the valley." Yet there was no rain or snow that evening, only clear skies, except for the whitish "smoke" or "fog." He described it precisely to Davis, including the thickness of the layer and the way it encapsulated his camp to the exclusion of everything else.

*When I first seen it down there in the driveway, looking back in it, it didn't look like it was any higher than those hills right here by the house. And it wasn't east of here more than a hundred feet and down there fifty or sixty feet in front of the house and over around the garage.... That's the only place it was.*³³

He shone his flashlight up and down the canyon. Everything was clear; he could see a long way with the powerful beam. Bickel was shaken. He went back into the house. Although the ozone odor was also in the house, there was no hint of the "fog" inside. He began to wonder if a "flying saucer" had possibly come through the canyon; it was the only thing he could think of that would explain his cats' reaction and leave an ozone-like odor. After a few minutes, he again went into the yard. The foglike haze had risen to about head high and was thinning out. After another few minutes, he checked outside around the cabin and could see everything about ten feet high; the fog

32. From transcript of taped interview with Walt Bickel by Dr. Neil Davis.

33. *Ibid.*

was thinning out and dispersing straight up into the sky. Within a half hour, the fog and the odor were gone."³⁴

McDonald was intrigued by Bickel's report. Time did not permit him to visit Bickel's camp during his China Lake visit, but he retained a vivid interest in the occurrence and welcomed reports on happenings at the Bickel campsite from LANS and Davis for months afterwards.³⁵

During McDonald's May 27, 1969, visit to China Lake, after investigating on-site the Kirkpatrick, McArtor, and Lamson-Pingel sightings and collecting information on several others—the afternoon was gone. That night he gave a talk at the NWC Community Center. Speaking before a large, energetic RESA/AMS audience, he stressed U.S. Navy and NOTS/NWC cases but did not give details of the sightings he'd collected that afternoon because of the need for confidentiality and follow-up investigations. Plenty of other published cases had occurred in the vicinity, of which the NWC/NOTS audience was not aware.

The subsequent Q & A session finished late. Lyman van Buskirk then took him home; they talked until midnight over a glass or two of beer, discussing an electrostatic propulsion concept. The next day, McDonald flew to Sacramento to give a talk to the AIAA section and to consult with Paul Cerny and Gary Lee of the local NICAP Affiliate. He also discussed nuclear rockets with Paul Rowe. Later, he boarded a flight in early evening, which stopped first at LAX. He then changed planes to RW917, with continued service to Tucson.

Flight 917 had a half-hour stopover. McDonald never liked to waste time; he decided to call Idabel Epperson at LANS. He did not take his briefcase with him; instead, he put a paperback book he'd been reading in the side pocket and tucked the briefcase well back under the seat. It was heavy and cumbersome, and was, as usual, loaded with sensitive materials. It was not a squarish briefcase in common use today, but an older type, the size of a piece of luggage, with a fold-over top and straps which buckled to keep the contents in place. He got off the plane and went into the airport to chat about current UFO happenings with Epperson.

"If he was working a particular case, he'd call up and ask her if she had any information on it," relates Idabel's daughter, Marilyn Epperson, who was also a LANS member. "Or they'd discuss UFOs in general, or he'd call to find out if anything new was happening."³⁶

34. *Ibid.*

35. Letter from McDonald to author, dated April 15, 1969.

36. Interview with Marilyn Epperson and David Branch, 11 February 1994. Also personal knowledge of author.

McDonald spent 15 minutes filling Epperson in on what had happened during his China Lake trip and receiving an update of on-going Los Angeles cases. When he returned to the aircraft, his briefcase was missing.³⁷ The flight attendants tried to find it, unsuccessfully. There was nothing he could do but get off Flight 917 and hunt in the airport, in case his briefcase had been mistakenly removed for some reason. He inquired of all possible airline personnel who could help him find his briefcase, with no results. He called Idabel Epperson and both she and Marilyn offered to come down to LAX to help him search or, at the very least, keep him company while he looked. He did not want to inconvenience them; the only resource left was to contact the airline desk, inquire about luggage which might have been turned in and ask at the "check-in" desk, although he had not checked it; it was a carry-on which did not require a luggage tag. The airline had no record of it anywhere.

McDonald was troubled. The briefcase contained several tapes of interviews he'd conducted on the three China Lake cases, as well as sketches, notes and calculations which had been made on-site. It also contained taped interviews from his Pt. Mugu and Vandenberg AFB trips, for he had been trying to find a link between the October 6, 1967, Vandenberg "carrier craft" sighting and the China Lake naval aviator sighting of the same date (see above). In addition to these priceless papers and tapes, he had confidential notes concerning radar-visual cases at NWC and NOTS that he did not write up in his "China Lake" file, possibly including information about that very elusive NWC naval aviator sighting!

McDonald was aware that his confidential sources might be compromised if the briefcase fell into the wrong hands. The China Lake cases he'd investigated and written about in his "China Lake Notes" file apparently did not go against governmental regulations regarding the release of UFO information, for he wrote many pages of notes on these, accompanied by sketches and other documentation, which have been found in his "China Lake file." The confidential cases, however, were another matter.

He had no evidence that someone stole the briefcase deliberately in order to compromise his confidential witnesses, and he was not convinced that a government cover-up existed. Idabel and Marilyn Epperson and other LANS personnel were more inclined to accept the government cover-up theory. Idabel suggested to McDonald that the briefcase might have been taken deliberately, so that "someone" could check up on data he was uncovering, especially any sensitive material from China Lake, Pt. Mugu and Vandenberg AFB. McDonald did not agree it had been taken intentionally, but he remained very concerned.

37. *Ibid.*

About 9:30 that evening, failing to find his luggage in spite of the efforts of airport personnel, he boarded another plane to Tucson, arriving home at 11:00. About midnight, a messenger abruptly delivered his briefcase to his door, leaving immediately before McDonald had a chance to ask him any questions.³⁸ Opening it, McDonald realized the contents had been rifled through. Although nothing seemed to be missing, one side pocket zipper was pulled apart. Also, the contents were not in the precise order he had placed them.

Strangest of all, the briefcase had a valid LAX luggage tag on it, indicating that it had come through on Flight 917, the very flight he'd gotten off temporarily to call Epperson and to which he'd returned to find the luggage missing. McDonald could not understand this. He had not checked the briefcase because he had carried it on the plane; therefore, it could not have a luggage tag on it by his own action. Who had taken it from its place under his seat? And why hadn't the perpetrators, whoever they were, simply returned it under his seat? It seemed apparent that they wanted to keep the briefcase longer than the half hour he was gone talking with Idabel Epperson on the airport phone. What had they done with it during the four hours it was missing? Why did it have a Flight 917 tag on it, instead of a later flight tag? Had the unknown thieves, after rifling through the contents, somehow had an ersatz Flight 917 tag put on it?

The lack of logic disturbed him. He inquired at several official sources at Tucson Airport and LAX, asking them if they could explain the discrepancies. None could give him a satisfactory answer although he spent several hours on the phone with airline officials. He was finally told that there was no way they knew of, that his briefcase could have been taken from the plane and then later checked on Flight 917, after it departed. The fact that McDonald could not solve the mystery irritated him so much that he wrote to a couple of trusted colleagues, including Epperson and Jim Hughes, describing the event in detail.³⁹ To Idabel Epperson, and to other colleagues in the UFO field, the event was not so mysterious. She agreed that the manner in which the briefcase had been taken and returned was as mysterious as McDonald thought, but she was able to hypothesize why it had happened (see Appendix Item 15-A, page 572).

The cases from the naval facilities at China Lake had never before been investigated by an outside researcher, much less a prominent scientist. There was the possibility, too, that McDonald had also investigated an extremely sen-

38. Interview with Mrs. Betsy McDonald.

39. Letter from McDonald to Idabel Epperson, dated June 4, 1969. In this letter McDonald stated that the "luggage was at the Tucson terminal when I reached there." Perhaps he was merely condensing the events which led to his receiving the luggage at his home from an airport messenger, as Betsy McDonald recalls.

sitive radar-visual case at one of the China Lake Navy facilities on the 27th but did not make handwritten notes on this for his open "China Lake" folder. A logical candidate for such a case would be the naval aviator's sighting with its possible correlation with the Vandenberg AFB sighting of October 6, 1967. Marilyn Epperson remembers that, on the occasion of the missing briefcase, McDonald had very sensitive interview tapes and other private papers concerning such an important radar-visual case. None of the China Lake cases—Kirkpatrick, McArtor, Lamson-Pingel—were of this type. However, Marilyn Epperson states emphatically:

"He interviewed some of the military, plus the civilians, the radar operators.... It was a humdinger! They all trusted him. They spilled their guts to him! That's what scared the heck out of us. Plus it was a case where he was going to have to keep the source a secret. He probably would have sat on that case for years." Asked if it was a Blue Book case, Epperson replied, "No, they didn't know anything about it."

But an even more ominous aspect of the mystery was that McDonald realized the briefcase had been rifled through. Marilyn Epperson describes what McDonald told them later: "He opened it and looked inside.... He knew exactly how he had placed everything. And whoever had gone through it hadn't put it back that way, some things were not in the same places. So he figured they had been looked over. He said it was all there, but there were interview tapes and notes. They could copy the whole thing! Somebody had to send it back."

After his initial puzzlement, during which he shared the event in detail with several UFO colleagues, McDonald gave no further sign that the incident worried him excessively. His description of the event in his journal is typically straightforward and brief:

Lost luggage at LAX from RW 917 when stopped off to phone Idabel for 15 min. Had been under seat & was gone. Elected get off & hunt. Got to TUS c. 2300 & bag there [delivered to home], valid baggage check on it & came on 917. Several inquiries to [airlines] led to no clarification.⁴⁰

The answer to this mystery might be simply that someone on the airliner found the briefcase and took it off the plane to the luggage counter. But why? And if so, why was McDonald not told it was there when he inquired at LAX? During the time he searched for the briefcase, both on and off Flight 917, he alerted the airline's personnel to be on the lookout for the briefcase and at their suggestion even inquired at the luggage check-in counter. To the UFO colleagues he told about it, there was a simple answer: Someone stole the briefcase

40. McDonald, fourth journal, reverse p. 42.

to check up on what he had learned at China Lake and, perhaps, at Vandenberg AFB or Pt. Mugu.

McDonald found it difficult to accept this explanation, at least openly. If he ever had any suspicions that someone was monitoring his activities, he seems to have kept them strictly to himself, for he realized that, in order to maintain credibility within the scientific community, he must avoid all suspicion of paranoid thinking. To his scientific peers he must present a straightforward scientific approach.

The briefcase was missing for four hours, enough time for the perpetrator to copy at least some of the contents— interview tapes, sketches and other materials. Was the perpetrator interested in everything, or something particularly sensitive? The NWC aviator's sighting which (possibly) correlated with the Vandenberg AFB event? Mack's photo case which possibly correlated with the puzzling 1945 sighting by the émigré scientists? The reported "landing" on China Lake? The addresses of Dr. Plum and Dr. Dost? Or perhaps, data on some other sensitive cases not mentioned in McDonald's files, notes or journals and about which the research field knows nothing?

Incidents of lost luggage and of luggage rifled through continued to plague McDonald. Occasionally in his journal he had written the cryptic note, "Luggage lost" even before the Los Angeles briefcase incident, but it was always returned by the airlines soon afterwards. Perhaps these other incidents were no different from those experienced by frequent flyers. But they seemed to happen more often, and his luggage would sometimes be returned to him rifled through. He did not speak often about these events, but every once in a while he confided to a UFO colleague that unexplained things were happening, apparently choosing to tell one colleague about one event and describing another event to someone else. To his colleagues at the university he said nothing, possibly because it would intensify their aversion to the UFO subject. The only exception seems to be the incident of the missing briefcase. He spoke of this to some IAP colleagues while he was trying to figure it out, probably because the luggage tag was physical evidence of a curious happening which even the airline could not explain.

"I was worried about him...I thought he was getting into something that might re-bound on him," relates Marty Lore. "I had asked him how he felt about it, especially that time with the briefcase disappearing, and other things, but he said, 'I'm just getting used to it. That's the way it is.' And 'It's normal, it happens all the time.' He didn't like it.... He didn't lose anything, essentially, but he knew that something was going on. But he didn't seem to be particularly worried about it, at least when he was around me. It was going on up to the last time I saw him. I guess it had been going on for...more than a year."⁴¹

It was not only his luggage and briefcase that were disappearing. Some unknown person stole his UFO slides from the projector carousel after one of his talks to the AMS. This was before the briefcase incident; he merely noted the event in his journal as, "Lost slides," even though he had been inconvenienced in a rather major way.⁴²

Shortly after McDonald returned to Tucson from his 1969 China Lake trip, he began to notice that unusual cars were following him around town. He still rode his bike to and from the campus whenever possible, but he used the family car for other errands, including UFO-related work. The cars which followed him were of the plain Jane variety, the type often associated with undercover or surveillance activity. The strangest thing about these cars, as far as McDonald was concerned, was that they had no license plates back or front. He considered this strange because ordinarily a car without any plates would be stopped by police at some point in its journey.

From time to time, the McDonalds, especially Betsy, had been followed by police or sheriff's cars, particularly when she was engaged in activist causes, such as the visit of the Black Panthers (see Chapter 13). She and James were well acquainted with law-enforcement surveillance automobiles, however, and took them in stride. Betsy McDonald laughs as she describes two surveillance cars which waited outside the home, parked near the driveway when the two Black Panthers were in Tucson in 1969 and stayed overnight at the McDonald home. The law enforcement surveillance cars were apparently trailing the Panthers and Tucsonans who assisted them. Betsy left early that evening to set up the audio equipment, flyers, and other material for the Panthers' public talk. As she pulled her car out of the driveway, one of the cars followed, not even trying to hide the fact that it was tailing her. Later, when the Panthers left to give their speech in their own car, the second law enforcement car followed them. McDonald did not attend the talk. He had learned all he wished about the Panther movement chatting with them for hours!

Betsy has a sense of humor about it all. "The surveillance car was so open, just so blatant," says Betsy. "At our driveway, there would be our car, and there would be a car up here and a car right here. This was part of two days and a night."

These official surveillance cars, however, had license plates with particular symbols or markings, which were readily visible. The cars which followed McDonald around Tucson had no license plates at all. Puzzling about it, he sought Idabel Epperson's input, asking if she had ever heard of any incident of

41. Interview with Marty and Gordon Lore, 11 September 1993.

42. McDonald, fourth journal, p. 3.

a person involved in UFO research being followed around by cars without license plates or other identifiable symbols.⁴³ The question troubled her; she had heard of similar events happening to a couple of other researchers in the field, but knew of none first-hand. McDonald seemed to accept her answer but gave no sign that he was troubled or worried about the situation. Marilyn Epperson and researcher David Branch, a member of LANS, recalled the incident:

"They didn't have license plates, and some friend he told it to told him he'd better get himself a gun." Branch confirmed, "I remember that. A friend told him to get a gun. The briefcase incident was around the same time as the thing about the cars. That's all I know."

Marilyn Epperson does not know about any occupants McDonald might have seen in the cars. "Just a car," she relates. "And obviously it was more than one time." She has a ready answer for those who deny that cars, official or not, can drive around town without license plates. "Even people who rob banks cover up their license or take it off and then when they get someplace [safe] they put it back on. This is an old gag...to remove the license plates."⁴⁴

So far as McDonald himself was concerned, there was nothing he could do about the situation. He accepted the strange cars into his life and continued on.

43. Communication from Idabel Epperson to author, June 1969.

44. Interview with David Branch and Marilyn Epperson, 11 Feb. 1994.

Strange Happenings

*And from the plains of royal Meath
Strong men came hurrying through,
While Britannia's sons, with their long-range guns
Sailed in from the foggy dew....*

—from “The Foggy Dew”

If you take the king's shilling, you must fight the king's battles.

—Author unknown

Some scientists who had begun to re-think the UFO problem took the Condon Report at face value, and their interest fell off sharply, giving McDonald added impetus to rebut it. Project Blue Book also folded at the same time, citing Condon's findings. Its closure dismayed McDonald, who'd hoped that it would be upgraded into a full scientific study. Instead, the only official place where the public could report sightings no longer existed.

He kept up his talks all over the country, often speaking two or three times a week, and juggling these with his ONR, Navy Stormfury and NAS-POWACM responsibilities. All this was in addition to his 40-hour work week at the IAP. His fourth journal details his schedules and contacts, both with professional colleagues and UFO researchers. He realized he was not succeeding as fast as he'd expected, yet he kept his sense of humor. He collected cartoons which showed the amusing side of the UFO puzzle, and had some made into slides to add a little merriment to his talks. Still, troubling events continued to plague him.

In August 1969 he traveled to Denver, Colo., to participate in an NAA symposium on “Science & UFOs.” Six speakers were on the agenda, including J. Allen Hynek. At an evening press conference, McDonald was asked what he thought was responsible for the widespread neglect of the UFO question. “The scientific community is basically responsible for the neglect this problem has suffered during the past 20 years,” he replied.

"They are the ones who should have been paying attention and studying it seriously all this time...." It was at this conference that J. Allen Hynek made the mistake of remarking to the reporters present that McDonald "was finally coming around to my point of view!" (see Chapter 5.)

McDonald's talks were still received with wide interest by his scientific colleagues, and his persuasive data on Condon's cases slowly began to win many of them over. His university colleagues still listened with interest to his descriptions of intriguing UFO cases he was working on, but none of them, with the exception of Dr. Ben Herman, had ever participated actively in the research. They maintained simply a willingness to listen, acknowledging that he was the best judge of what to do with his time. The UFO community, by contrast, valued his contributions keenly. There was an unspoken hope that his unique combination of talents, contacts, and persistence would bring about a breakthrough. This appreciation is not what kept him going; his own conviction that UFOs were a serious scientific question drove him. The camaraderie of his numerous UFO associates provided a certain buoyancy, however, which he appreciated, while he hid his deepening troubles from them.

He slowly accepted the fact that scientists like Robert M. Wood of McDonnell-Douglas were not free to speak out publicly. Their corporations depended largely on military contracts, and the military (Air Force) had announced that UFOs were nonsense. McDonald heard from other academics who were experiencing repercussions. One of these was Stan Seers of the physics department at the University at Brisbane. Seers, whom McDonald had met during his 1967 trip "down under," had been particularly helpful in the cases involving the "Tully nests," those circular matted patches of lagoon reeds apparently caused by UFOs (see page 186).

In a long letter, Seers informed him about a color UFO photo that had been stolen from his Queensland UFO group by a Kodak employee and ended up in the Australian Department of the Interior.¹ Seers had urged UFO investigator Vince Mele to hand the matter over to the State Police as a clear-cut case of theft. Many weeks passed; eventually the detective assigned to the case met with Mele and, in strict confidence, told him that the film was in government hands and that there was not the slightest chance of getting it back. He advised Mele to forget the whole thing. Mele, a volatile Italian, broke the detective's confidence and told Seers what had happened. Seers elicited the help of a local member of the Commonwealth Government, Colin Bennett, who was somewhat of a political rebel, and he took up the cudgel on Seers' behalf.

1. Letter from Stan Seers to McDonald, dated 28 February 1969.

*The net result of all this was a blank denial from the Minister for Air (which was no more than we expected), the demotion of one poor unfortunate detective, now pounding a beat in uniform and avoiding Vince Mele like the bubonic plague; and of course, NO FILM!*²

Seers and his wife had motored up to Tully in September, 1968, and spent ten days interviewing all available witnesses and documenting the events at the UFO landing sites—the “Tully nests.” Albert Pennesi, the owner of the property, was a wealthy sugarcane farmer, with several hundred acres of land. The uncultivated portion of his property was dense jungle which included a two-acre wide, five-foot deep lagoon about a mile from Pennesi’s house. In the lagoon, Seers viewed the still-existent marks of the “UFO landing”—perfectly circular masses of rotted vegetation just below the water’s surface.

Pennesi himself was so mystified by the goings-on that he was inspecting the site almost daily in the hopes of seeing one of the UFOs himself. With Seers’s encouragement, he’d set up a “UFO detector,” a device which emitted a signal when activated by any unusual electromagnetic disturbance at the lagoon.³ During these frequent trips, the lagoon was always devoid of bird life, most unusual for that area. On Saturday, February 8, 1969, the UFO detector went off, and Pennesi, hurrying down to the lagoon, found a brand-new “nest” among the reeds, which measured 29’ in diameter. Seers flew down and examined the site:

*About 15' above the ground, the limb of a tree which protruded out from the main mass of jungle had unmistakable signs of what I can only describe as severe scorching, the leaves being curled and crisp when first examined, at 10:00 A.M. on the Monday, and quite brown and dead on my last inspection early Tuesday morning. The grass, quite thick and about 12 inches or more tall, below the limb was, and remained, quite green.*⁴

Seers went into the water of the lagoon to investigate the new nest, the nearer edge of which was about 15'-20' from the bank. The water at the nest’s edge just lapped his nose, standing on flat feet. Directly below the nest, the floor of the lagoon was quite flat, smooth and firm to the touch, “as if it had been swept with a giant broom.” The nest itself was a two-feet thick mattress of reeds which were floating on the surface.⁵

2. *Ibid.*, p. 2.

3. Various types of UFO detectors, based on this same general concept, were widely used in the UFO community, starting about 40 years ago.

4. Seers, *op. cit.*

5. *Ibid.*, p. 4-5.

Stan Seers and Albert Pennesi took samples of the reeds from inside the new nest, labeling these Sample A. Control samples of undisturbed vegetation some distance away were labeled Sample B. Although it included some debris which naturally collected in the lagoon, the landing trace-sample was at least 95% green and alive when collected. Seers delivered the samples the next day to Dr. R.N. Langdon of the Department of Botany at the University of Queensland in Brisbane. He gave identical samples to Geb Taylor of the Physics Department, who tested them for residual radiation with negative results.⁶

Dr. Langdon analyzed the landing-trace vegetation during a two-week period, and sent Seers a full report. In Sample A, all the material was dead and in early states of decomposition except for one living stem. The reeds showed no evidence of heat damage, nor signs of compression by any heavy object. Some diffuse brown damage was due to lesions such as *Helminthosporium*, and there were well-defined black spots caused by *Phyllachora*. By contrast, the control Sample B was still quite green, with roots, stems and leaves intact, although some leaves bore brown lesions similar to those in Sample A, though no black lesions typical of *Phyllachora*.

"Neither *Helminthosporium* or *Phyllachora* have been known to kill plants, and their effects are restricted to small areas adjacent to their points of penetration," reported Dr. Langdon. "The condition of Specimen A could not be attributed to disease caused by the micro-organisms seen on the leaves."

These results were intriguing enough, but Dr. Langdon went on to state: "Specimen B showed that submerged stems tend to root readily and freely at nodes. Grasses which have this capacity can usually exist for some time, or even indefinitely, without being rooted in soil or mud. If Specimen A had been uprooted within a few days of its collection, it would be expected that it would still be green and alive. However, nearly all of Specimen A is dead grass which is starting to decompose. There is no botanical evidence to suggest why the grass of Specimen A died or how long ago it died."⁷

Discussing the findings with Seers by phone, Langdon emphasized that, in order to reach the degree of decomposition Sample A displayed, the reeds would have had to be uprooted, at the very least, 10 days before Sample B. Yet the reeds were still green when Seers gathered Sample A, and he had gathered Sample B the same day. Seers made further efforts to persuade University personnel that the situation at Tully was something that required scientific atten-

6. The negative radiation results are not unusual. It is rare for any residual radiation, beyond normal background readings, to be detected at UFO landing sites.

7. Dr. R. N. Langdon's report to Stan Seers on grasses taken from Tully nest (see Appendix Item 16-A, page 573).

tion, but everyone he approached showed no interest. This in spite of the fact that Pennesi's constant vigilance, plus the "UFO detection" equipment in place, made it possible for scientists to investigate new traces almost immediately after they appeared.

In order to investigate the new "Tully nest," Seers had had to request permission from his physics lab manager, Dr. McNicol, and had been obliged to fill out a form requesting the two days off. When he returned to work on Wednesday, he was ordered to McNicol's office and threatened with dismissal "if it happened again." He was not asked why he had requested the two days' off, nor where he had gone! His letter to McDonald continues:

*I was also informed afterwards by McNicol that my interest in UFOs had better cease, or else!!! I am afraid I was somewhat rude to him. I do not expect to be here much longer.*⁸

Seers told McDonald that "nests" were still appearing in Pennesi's lagoon and enclosed clippings from a Tully paper, as well as one from Brisbane. Even if local academics and scientists were not interested in "UFO landing sites," the media certainly was. Seers's letter did not help McDonald's hidden disquiet; he might have wondered if something like this could ever possibly happen to him. It was apparent from his persistence in the face of uncertainty that he could not give up.

"That was the unfortunate thing, that he had this tremendous curiosity," states his good friend, Dr. Al Mead. "But he matched it with a tremendous capacity to find answers, and he'd stay at it until he did find the answers. He didn't want to quit on things that he felt, if he stayed with them, he would find the answer."

Some of his colleagues who were very perceptive, like Mead, probably understood McDonald's personality better than he understood himself, but he did not discuss his growing disquiet with any of them. Betsy McDonald states that, on the rare occasions McDonald felt depressed when he was unable to solve a problem, he would read books on psychology, trying to understand his own mental reactions, rather than seek any sort of professional help. He still could not totally accept that his UFO studies could impact negatively on his good name, his livelihood, and his family.

He did not write in his journal for a full two months after the Denver UFO Symposium, where he had tangled with Hynek over the "swamp gas" fiasco. From September to November he was totally absorbed with atmospheric physics. Around this time, he also researched the U.S.'s use of napalm in Vietnam and

8. Seers, *op. cit.*, p. 6.

the use of mace by the Tucson police in confrontations with civil activists. The use of both chemical compounds troubled him deeply. Napalm was killing and maiming Vietnamese civilians, and mace was jeopardizing the health of U.S. citizens who were exercising their right of free speech, including Betsy and some of their children. Although he shared his wife's deep feelings about Vietnam and other causes, his contributions usually took the form of scientific research into related problems. McDonald's penchant for researching issues on the edge of science prompts his friend Dr. Richard Kassander to relate:

He was capable of some really important things in the advancement of the knowledge of cloud physics and other areas of meteorology.... Nevertheless, the criticism about "little green men" and using public funds for "this sort of thing," including comments from respected colleagues, combined with the tremendous effort he was expending to keep up with his regular duties, had to take its toll....

Early in November, McDonald received a phone call from Marty and Dick Hall, Ted Bloecher and Isabel Davis. "We haven't heard from you since June 30th," they told him. "We wondered if you were dead."⁹ It was meant as a joke, of course, but McDonald was not up to exchanging quips with these good friends. Unknown to them, he was wrestling with yet another problem which refused to yield to the strength of his will. On September 2, the McDonalds' oldest daughter Ronilyn had been raped and almost murdered in the Shady Hill section of the Harvard campus, where she was working toward a Ph.D. in psychology. She was severely injured and spent a couple of days in intensive care. As soon as she was able to travel, she came home to recover. The young felon had taken her keys and identification and she was fearful that he would be able to enter her campus housing or office, and "finish the job." Yet Harvard officials refused to change the locks.

McDonald also began to investigate the incident, because the Harvard officials showed no concern, and the Cambridge police made little effort to catch the rapist. There had been four rapes at Harvard within the prior six weeks, three of them at Shady Hill. Harvard had not alerted its students nor attempted to secure the Shady Hill area.

"In those days they didn't publish it because they 'didn't want people to worry,'" relates Betsy McDonald. "But that was Mac's contention, that if Ronnie had known about that location, she wouldn't have gone there. He was very upset when he found that out. He called the President of Harvard, Dr. Nathan M. Pusey. He was really outraged."

9. McDonald, 4th journal, reverse p. 44.

On September 12, 1969, McDonald wrote a three-page letter to Pusey. It read in part:

*The safety of women on the campuses of Harvard and Radcliffe is imperiled by failure to publicize the high risks of sexual assault there..... To be quite candid, I am shocked at what I found last week to be Harvard's minimal response to all this..... No one at Harvard has even inquired at the hospital about [Ronilyn's] survival, nor contacted the parents, nor even notified the department head....*¹⁰

Besides his understandable outrage about the assault on his daughter, he was also extremely concerned over what he construed as Harvard's attempt to slough off the problem. He met the same attitude when he contacted the Cambridge Police Department; the police did not seem to be taking appropriate measures to solve the crime or to be making any attempts to prevent similar assaults on other women. McDonald's frustration turned into depression, but he hid it so well that only Betsy recognized the signs.

For four months he confronted the problem. He loved all his children equally, but Ronnie had done something only a few months before which had touched him deeply. She'd written a scholarly thesis as part of her undergraduate studies in psychology at the University of Arizona, titled "Psychological Aspects of Unidentified Flying Objects." This paper unfortunately remains unpublished, but it is a valuable piece of work. Without mentioning her father's contributions to the UFO field, she referenced books by NICAP, Richard Hall, Jacques Vallée, Aimé Michel, and Carl Jung, as well as research from clinical psychologists who held varying views. The paper's main theme was that the UFO subject should be of special importance to psychologists. It reads in part:

*For the psychologist, contrary to the case of most scientists and the general public, exposure of the reports as arising from some cause other than the sighting of actual objects would make the subject of almost greater interest and importance.... Certainly the tales of trips to Venus for the benefit of mankind are in the realm of clinical psychology.... Should the UFOs prove to be...extraterrestrial, intelligently controlled vehicles, psychologists would confront the problem of analyzing and perhaps helping to shape public reaction to such an unprecedented revelation....*¹¹

10. Letter from McDonald to Dr. Pusey, September 12, 1969.

11. McDonald, Ronilyn L., "Psychological Aspects of Unidentified Flying Objects," submitted to Dr. Dorothy Marquart, Psychology Department, U. of A., May 15, 1969, unpublished manuscript, 103 pp.

Upset as he was over Ronnie's assault, McDonald was doubly upset that he was never able to solve the crime. He realized that it was really Harvard's and the Cambridge Police Department's responsibility, but the crime was never solved. He mentioned it to a few close colleagues at the university, and to one or two people in the UFO field, including Idabel Epperson. He always stated his concern unemotionally, but his inability to help find the attacker, or to get Harvard to admit they were wrong, hit him hard. It was a type of emotional stress to which he was not accustomed.

He received one short letter from Harvard President Pusey which expressed the hope "that the authorities could get to the bottom of this distressing affair."¹² Pusey also arranged a medical leave of absence which would permit Ronnie to continue her doctoral work. Within a few weeks, she journeyed out to California, where she would be near her brother Kirk and where she planned to continue doctoral studies at UCLA.

McDonald worked on the case until January 1970. The final mystery came when Ronnie's three-day hospital bill, which the McDonalds had sent to Blue Cross to pay, was not paid. Blue Cross claimed they'd never received the bill, yet they also claimed that they had sent McDonald a letter refusing payment! Suddenly, in January, the hospital bill was paid by an unknown source. McDonald, in spite of concerted effort, was unable to find out who paid it. This left him more puzzled than ever.¹³

Shortly thereafter, McDonald unexpectedly displayed open anxiety that the CIA might be monitoring him. Agents monitored the anti-war movements on university campuses around the country. The name of the CIA agent on the U. of A. campus was well known to activists and was a subject of subtle jokes. McDonald and Betsy were aware of this, but he'd never given any sign to anyone that he felt his own activities were under surveillance. Margaret Sander-son-Rae, who was now IAP's assistant editor and head secretary, states:

He had some fears about the CIA. This was at a time when he was super-sensitive. At one point he had lost an address he wanted to send a letter to, and he was frustrated about it.

"Do you by chance have this address?" he asked Margaret, stopping at her desk. "I'm sure I do, because I keep a card file on all the people that you write to," she replied.

"You keep a card file on the people that I write to?" asked McDonald.

12. Letter from Nathan M. Pusey to McDonald, September 22, 1969.

13. Letter from JEM to Russell Tomas, Blue Cross/Blue Shield, Tucson.

"Yes, I do," she replied, "So many times when you hand me correspondence you don't have the address on it, and I can get things out for you faster if I have a card file."

McDonald picked up the card file and flipped through it. "Who are you working for?" he asked grimly. "Me or the CIA?"

She was taken aback. "I don't work for anyone but you," she assured him.

"And he seemed to relax, then," she relates. "But he was concerned about the CIA. I think it had crossed his mind, 'Could I *not* be working for him accidentally? Could I have been placed there?'"

At that point in American history, the CIA agents on college campuses monitored all "subversive activities." One of the recommendations in the 1953 Robertson Report, which McDonald had studied in its original form, was that UFO research organizations might possibly be used for "subversive activities" (See Chapter 3). It recommended that groups like CSI and APRO be infiltrated and their activities monitored.¹⁴ McDonald's discovery in 1966 that the Robertson Panel had made that recommendation out of fear that the military's communication channels could be clogged by a massive, hoaxed flood of "UFO reports" clarified the situation somewhat (see page 362). Generally UFO researchers around the country treated the situation lightly.

Betsy McDonald, however, was very aware of CIA monitoring on campus. "Agents do monitor strange groups and cultures," she relates. "They don't want the *status quo* to change. But that was a big surprise to me, when we were beginning to learn of all the different levels of surveillance in many branches of the government. I began to learn that you risked being monitored during the fifties, and that is when [UFO witnesses] began to bring these stories to Mac."

CIA agents may have been monitoring McDonald's UFO activities as early as 1958 when he first began investigating reports around Tucson (See Chapter 2), but he never gave a thought to this through those eight years. The stress that was building up in 1969, however, must have touched a chord deep inside, which made him confront Sanderson-Rae. It is probably no coincidence that this happened at the same time he was so upset over Harvard's indifference over the attack on his daughter. This emotional chord was soon struck again. For years, Sanderson-Rae had sorted and organized his mail during his frequent trips. "I

14. In 1953, NICAP had not yet been formed, therefore was not mentioned in the original Robertson Report. The recommendations of the Panel were still in effect for years afterwards, however, and NICAP and other UFO research organizations which sprang up about this time were doubtless also monitored.

knew who was important and who wasn't," she explains. "I stacked the important things in one box and the next level in another box, all the way down to the ads. When he'd come back from a trip, it was all organized."

Throughout the years, McDonald always expressed appreciation for her organizational ability. In late summer of 1969, however, Sanderson-Rae noticed a change. The handouts which she prepared for his talks around the country were not getting done. Always before he'd write a paper and give it to her to type and duplicate; now he would finish only a section at a time, the handouts would not get finished, and he was forced to go off without them.

"Also, his office became extremely chaotic," she continues. "He always had a lot of things in there that he was working on, but now it was different." Betsy McDonald also noticed this change in his organizational behavior, but she realized that it was due to his four-month preoccupation with the situation at Harvard.

During those four months, Sanderson-Rae was given an urgent assignment by the Institute's Director which took her away from the secretarial office for two months. "I had to put Mac's things aside," she explains. "We had an assistant secretary who had misrepresented herself when she came to me. I was too busy and checked none of [her] references.... Dr. McDonald had to accept her as his helper for this period of time... During this period, he went on several trips. I told her what to do about organizing his mail. Dr. McDonald was very busy at this time, taking trips one after the other in the course of his work. His new secretary left the Institute after working only a short period, and, since he was due to return, I went to his office to straighten things up. I have never seen anything like it in my life....mail unopened underneath his desk, underneath his chair, unopened mail between his file cabinet and his desk. It was a total disaster, and I blamed myself because he'd had an inexperienced assistant. I spent a full day in there getting things together.... I was blaming myself for it, because she hadn't done the job for him, which probably made it impossible for him to open the mail. He got back from his trip...went to his office, came out to the secretarial office and in front of everyone, he said to me, 'What were you trying to find in my office?'"

She looked at him. "I wasn't trying to find anything."

"You were snooping all over my office while I was gone," he said.

"No, sir," she answered. "I was organizing your mail as I always do. I didn't open anything."

"You are never, under any circumstances, to set foot in my office again," he said.

They went through a two-year strained period where he would bring things out for her to do, and when she was through, she put them in his office mailbox, with very little discussion between them. This lasted until the beginning of 1971. Sanderson-Rae didn't have a clue why the situation had changed, but Betsy McDonald realized that it was the beginning of a depression. She'd seen the same thing during the Titan controversy; he was working too hard and experiencing inability to solve problems he tackled.

The November call from his NICAP colleagues helped revive McDonald's spirits, and he returned to the UFO field with full strength. The UFO Symposium of the AAAS was coming up at the end of December. It was the symposium that Condon had succeeded in postponing in 1968, on the excuse that his work should not be the subject of criticism before the Final Report was out. "Not that that was the real reason, of course," Hynek had remarked at the time to McDonald.¹⁵

The Condon Report had been out for almost a year and had damaged chances for broad, interdisciplinary study of the problem. Scientists in the field who continued actively to study the UFO problem were determined that the symposium be held. Condon, who thought he'd killed it entirely, was outraged and tried to stop it again. He wrote to Vice President Spiro Agnew, complaining that discussion of UFOs in a scientific meeting was nonsense. Agnew, to his credit, didn't interfere, and plans for the symposium went ahead. Hynek and McDonald, among others, were invited to speak.

Condon's outrage increased. In September, he wrote to the Chairman of the AAAS, Dr. Walter Orr Roberts, bitterly expressing his objections:

*Some will argue that the AAAS ought to provide a forum for fair and unbiased discussion of controversial scientific topics. I would agree if such a fair discussion could be arranged. But from personal knowledge of the UFO buffs, I know that it cannot. These people in varying degrees insist that visitors are coming to Earth from other civilizations. Some insist that this is known to our government and that the truth is being deliberately held back from the public. After careful study I conclude that there is no scientifically valid evidence in support of either proposition.... Nor do I think the UFO buffs will ever find it.*¹⁶

Condon's letter did not mention any UFO researchers, scientist or non-scientist, by name, but he plainly included McDonald among the "UFO buffs." It was, and still is, true that many "investigators" in the UFO field lack critical thought-patterns, and some "UFO study groups" are truly bi-

15. McDonald, fourth journal, p. 26.

16. Letter from Condon to Dr. Roberts, AAAS, 4 September 1969.

zarre. This did not apply, however, to competent investigators who had spent years researching UFO reports. Condon was not only criticizing "UFO buffs"; he was also ignoring the academic credentials and scientific accomplishments of established scientists such as McDonald, Hynek, Vallée, Saunders and Wood. Condon's letter to Dr. Roberts continued:

I am puzzled by the new development of UFO interest in the AAAS. For nearly twenty years, Science printed essentially nothing on this subject: a correct policy. But...it has not reviewed our report, and now it is planning to stage a major two-day symposium on the subject. Why this foolish behavior?.... Include me out.¹⁷

Months before the 1969 AAAS symposium took place, McDonald had diligently tracked down witnesses on several radar-visual cases which had been tucked deep in the text of the Condon Report, some of which were previously unknown to the UFO field. As early as April 1969, McDonald, under the impression that all of the Condon Committee files were to be kept in the University of Colorado library, called Dave Saunders in Boulder and inquired about them. Saunders, on the other hand, had heard that Condon had taken all the files to his own home. He told McDonald he'd check. McDonald made it clear that he wasn't interested in the personal correspondence or (with a touch of humor) memos. He only needed the Project Blue Book reports that had been given to the Condon staff.

McDonald had also tried to inquire directly about these files from Blue Book, but got no answer, since Project Blue book was closed up tight. He asked his Congressman "Mo" Udall to help, who followed through. The Air Force informed Udall that McDonald could come down to Maxwell AFB in Alabama, where the Blue Book files were archived, but that he would be charged 25¢ per page for photocopy fees. It would cost McDonald \$75 to copy the 17 reports which were vital to continue his rebuttal of the Condon Report, plus personal travel expenses, which he simply didn't have. Since none of his professional trips would bring him near Alabama in the near future, the Blue Book files seemed inaccessible.

In fact, Condon had quietly released the files to the library, but clearly wanted to restrict access to them. No one was aware of this who was available to help McDonald gain access to them directly. Dave Saunders tried on his behalf, but he wasn't able to shake the Condon files loose, either. So McDonald called the Librarian directly:

17. *Ibid.*

4/14/69 Called Dr. Ralph Ellsworth, Librarian, C U. Case files are now in Western History Collection, Jack Brennan, Curator.... Said one has to get Ed Condon's permission to get at some of it.... Said Condon promised to send him a letter stating conditions for access to it, but hasn't done it. Said he'd get after Condon....¹⁸

McDonald tried to contact Condon directly but got no satisfaction. A series of letters passed between them, each letter irritating McDonald more, as he slowly realized that nothing he could say or do would make Condon change his mind. Finally, on June 6, 1969, McDonald received a letter from Condon enclosing a draft of an article which Condon had written for a prominent scientific journal. The article criticized a certain "atmospheric physicist" for his views about UFOs; apparently Condon was finding a strange sort of delight in "sticking it to him." McDonald responded:

Thank you for the copy of your APS draft.... If, as seems almost certain, that I am the "atmospheric physicist" you cite, you misrepresent my position.... If you wish clarification, let me know.... Enclosed are copies of a number of summaries of recent talks in which I have criticized your Report. Your conclusion does not at all seem to be supported by the Report's contents.... I am unable to understand how you approached the task as you did.... In giving the Academy such a Report, I believe you did science a direct disservice. That the Academy processes could lead to endorsement is disturbing. (See Appendix Item 16-B, page 574.)

This letter infuriated Condon. He fired back a two-sentence note:

Sir: I have received your letter of 6 June with enclosures. Be advised that this terminates correspondence between us.

Sincerely, (s) E. U. Condon

While these exchanges were sizzling through the mails, McDonald waited to hear from the U. of Colorado library; many months passed without any answer. Finally, he phoned Prof. John A. Brennan, the curator of the Western Historical Collections, explaining that he just needed to take notes on the files which the Air Force had sent the Condon Committee.

"All that material is still in boxes, just as it came from the Condon Project," Brennan told him. "I've not touched them."

"That's valuable historical material," said McDonald. "If it's in your Western Collection, isn't it available to researchers?"

18. McDonald, fourth journal, reverse p. 37.

"Well," said Brennan, a little hesitantly. "Dr. Condon extracted a solemn promise that no one would be permitted to touch anything in the files without his okay. So we've just kept 'hands off.'"

In spite of all the difficulties and setbacks, McDonald succeeded in investigating in depth four of the most intriguing radar-visual cases he had found deep in the Condon Report. They included the Haneda, Japan, sighting (see Chapter 15) and the Lakenheath case of August 13-14, 1956, in England. The title of his talk gave no quarter: "Science in Default: 22 Years of Inadequate UFO Investigation." He finished his AAAS paper and handout on time for his talk in Boston. Margaret Sanderson-Rae typed them, flawlessly as usual, and had the handout duplicated in the university printing office. A furious snowstorm was sweeping over the entire northeastern section of the country. McDonald set off for the Boston Symposium nevertheless, determined that nothing was going to keep him away.

McDonald's journey from Tucson to Boston was fraught with appalling difficulties which we would never know about from his journal. He merely wrote: "12/26/69 AAAS UFO Symp. Boston. Arrived 13 hrs late by bus, missed first session."¹⁹ It was one of his typical understatements. Actually, we are indebted to J. Allen Hynek for vivid details of the obstacles McDonald encountered. The snowstorm was the heaviest on record for parts of New England. Airports were closed all over the Northeast, including O'Hare in Chicago²⁰, which was a short stopover on McDonald's itinerary. Unable to fly to Boston by way of Chicago, or even directly to Boston because that airport, too, was closed, he traveled on to Washington, D.C., and made his way up slowly to Beantown by train. Arriving in Boston in the middle of the snowstorm, he completed the trip to the symposium by bus!

He was not the only one hampered by the weather. On the opening day of the Symposium there was serious consideration of canceling it because of the slight attendance. The next day, the opening papers were given to very small audiences. When McDonald arrived in time to give his paper, the audiences were still not large, but the attendees were fascinated by the talks given by Hynek, McDonald, Hartmann, Sagan, Robert Hall and others. Donald Menzel was also slated to speak but was too ill to attend. He gave his paper to Dr. Walter Orr Roberts, who read it as objectively as he could—a difficult task, since Menzel had written into it many personal slurs against McDonald, as well as lesser criticisms of Hynek. When the time came to respond to Menzel's paper, Hynek declined, but McDonald, taking advantage

19. *Ibid.*, p. 45

20. Hynek, J. Allen, "Commentary on the AAAS Symposium," *Flying Saucer Review*, London, Vol. 16, No. 2, March/April 1970.

of the opportunity, answered each of the personal attacks from Menzel, all in strictly scientific terms.

McDonald had prepared his own paper with great care. A large part of it concerned the Lakenheath-Bentwaters case, which was a remarkable example of the type of solid radar-visual sightings he'd been seeking. The UFO field would never have known about it if retired USAF Sgt. Forrest D. Perkins, who had been based at the time at a USAF facility in England, hadn't written a letter to Condon, describing the incident.²¹ Condon had shuffled through the Sergeant's four-page letter but, tiring of it, brought it out to his staff, threw it down one of the desks and said, "Let's put it in the report as an example of the kind of crap we get!"²²

It quickly became evident to objective staff members that the Lakenheath Blue Book file was a solid report. When Gordon Thayer was writing his section on radar-visual UFO cases for the Condon Report, he had the foresight to include it, in abbreviated form.²³ McDonald regarded the Lakenheath case as a good illustration of serious shortcomings of Condon Committee investigations. He also recognized it as an intriguing UFO report that had lain in Blue Book files for years without the knowledge of the scientific community. He was eager to share it with the AAAS Symposium attendees.

He had written Lt. Marano at the Maxwell AFB Blue Book archives and requested a copy for 25¢ a page. When he finally received it, all names of military personnel involved were neatly cut out, rendering it impossible for him to interview the witnesses. There was no indication that anyone on the Condon Project had interviewed them, either, even though some of their names might have been left in the copy the Committee's staff had received. Some of the names of localities were also deleted in the Condon Report, which created more confusion, since three distinct RAF stations figured in the incident and Sgt. Perkins had inadvertently confused the names of two of those stations in his letter to Condon. McDonald was able to straighten matters out, but remarked that "other reportorial deficiencies in [Condon's] presentation of the Lakenheath case...will almost certainly have concealed its real significance from most readers..."²⁴

21. McDonald, "Some Illustrative UFO Cases," AAAS Symposium 24-page summary/hand-out, Boston, Dec. 27, 1969.

22. McDonald's fourth journal, p. 45.

23. Thayer, Gordon D., "Optical and Radar Analyses of Field Cases," *Scientific Study of Unidentified Flying Objects*, New York, Toronto, London, Bantam Books, 1969, pp. 163-64.

24. McDonald, James E., "UFOs Over Lakenheath in 1956," *Flying Saucer Review*, London, Vol. 16, No. 2, March/April 1970, pp. 9-17, 29.

The Lakenheath case comprised seven pages of McDonald's 24-page AAAS handout. His copy arrived from Lt. Marano early in December, giving him only three weeks to launch a limited investigation. Some of the pages had so many cut-outs that the effect was like Swiss cheese, but he did not let his mutilated copy hinder him. The first thing he did was to verify that all the information contained in the Condon Report was in his copy. It was, and much more! He began to study the thirty pages, but immediately ran into another stumbling block—all the pages in his copy were out of order. Methodically, he corrected this, and after doing so, wrote a note on the first page: "On December 7, 1969, I disassembled this, reorganized it into chronological order, & re-stapled. Thus, the sheet numbers that Lt. Marano must have entered in the file sheets don't now read in order."²⁵ His summary of the Lakenheath case, prepared for his AAAS talk, read:

*Lakenheath and Bentwater RAF-USAF units; England, August 13-14, 1956. Brief summary: Observations of unidentified object by USAF and RAF personnel, extending over 5 hours, and involving ground-radar, airborne-radar, ground-visual and airborne-visual sightings of high-speed unconventionally maneuvering objects in the vicinity of two RAF stations at night. It is Case 2 in the Condon Report and is there conceded to be unexplained.*²⁶

He listed four reasons why the Lakenheath case was important:

1. It illustrated the fact that many scientifically intriguing UFO reports lay in USAF/Blue Book files for years without the knowledge of scientists;
2. It represented a large subset of cases in which all of the observations stemmed from military sources and which could have been very thoroughly investigated while the information was fresh, had there been competent scientific interest operating in Project Blue Book;
3. When comparing the original Blue Book file to the discussion in the Condon Report, it illustrated that report's shortcomings in the presentation of many cases;
4. It was an example of those cases, conceded to be unexplainable by the Condon Report, which argued the need for extensive scientific investigation of the UFO problem.²⁷

The Lakenheath sightings occurred in east-central England, chiefly in Suffolk. The first reports centered around Bentwaters RAF Station, near the coast,

25. Handwritten note by JEM on cover page of Lakenheath-Bentwaters Blue Book Xerox. In McDonald Personal Collection, Library, U. of Arizona, Tucson.

26. McDonald, "Some Illustrative UFO Cases," AAAS UFO Symposium summary/handout for JEM talk, Boston, Dec. 27, 1969, 24 pp.

27. McDonald, "UFOs Over Lakenheath in 1956," FSR, *op. cit.*, p. 10.

while much of the subsequent action centered around Lakenheath RAF Station, located about 20 miles northeast of Cambridge. To a minor extent, Sculthorpe RAF Station also was involved. Figure 31 shows the three RAF stations involved, as taken from a sketch from McDonald's article in *FSR*.

Sgt. Perkins, who first alerted Condon to the 1956 Lakenheath events, was the watch supervisor on duty at Lakenheath Radar Air Traffic Control Center (RTCC) unit that evening. The Condon Report commented on the accuracy of the account of the witness, apparently written from memory 12 years after the incident. This did not surprise McDonald; many witnesses in UFO cases have vivid and accurate recollections, in multi-witness sightings particularly; the more inexplicable the events, the better witnesses remember them.

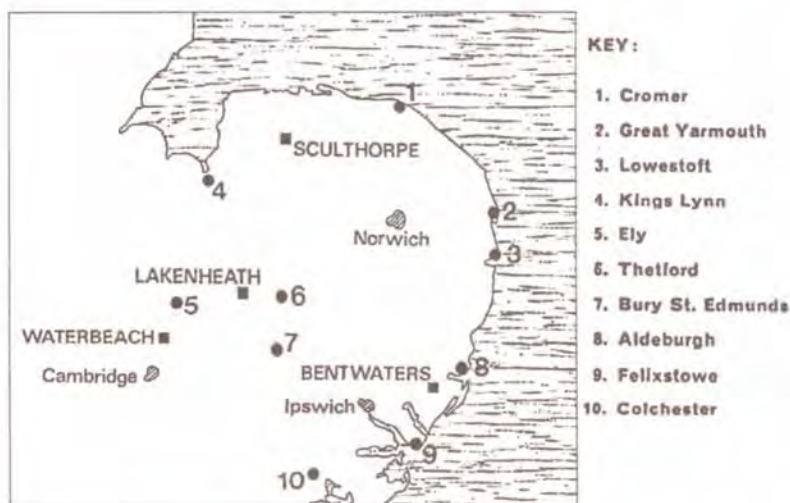


FIGURE 31. Three RAF stations involved in the Lakenheath sightings.

In spite of the roadblocks put in his way by Condon and Blue Book, James McDonald uncovered much more about the Lakenheath events than Condon's investigators had. While researching another radar case at Kincheloe AFB, he'd discovered that a radar operator there had previously been stationed with the USAF detachment at Lakenheath. This airman knew of the 1956 Lakenheath events second-hand, because they were still being discussed when he arrived there many months later, yet civilian researchers had no hint of them. The following description is taken from McDonald's account that was printed in the English research journal *FSR*. His original de-

scription of the Lakenheath case, delivered at the AAAS Symposium, was incomplete; he later obtained more bits of information about it.²⁸

The sightings commenced when three significant radar-sightings were made by Bentwaters ground-controlled radar prior to their alerting the Lakenheath station. These three sightings were not even mentioned in the Condon Report—an omission that annoyed McDonald. At 9:30 P.M. Bentwaters had picked up a target 25-30 miles ESE, traveling at least 4,000 m.p.h., as estimated by the sweep time of the GCA radar. It gave a strong radar echo, comparable to typical aircraft. The speed, however, was not compatible with any conventional aircraft.

A few minutes later, a group of 12-15 objects were picked up on the same radar, about eight miles SW of the station. They appeared as normal targets. Checks were made to determine possible malfunctions of the radar, but nothing was found wrong. The objects moved at speeds ranging from 80 to 125 m.p.h., and were preceded by three other objects in a triangular formation.

These two groups of objects gave consistent returns on Bentwaters radar for 25 minutes. After traveling into the NE, they converged into a single radar echo, the intensity of which Air Force personnel described as several times larger than a B-36. The large object stopped and remained stationary for 10-15 minutes. It resumed motion, stopped again for 3-5 minutes, and then moved northward and disappeared off the scope. Five minutes later, another unidentified target appeared on the Bentwaters GCA radar, moving rapidly westward. There, it disappeared off the scope "at speeds in excess of 4,000 m.p.h." McDonald made his own calculations from the instrumented data and estimated that object was going about 12,000 m.p.h.!

A T-33 jet fighter was vectored in at 9:30 P.M. to search for the group of objects being tracked. It had no airborne radar, but searched the area for 45 minutes. No sightings, visual or otherwise, were obtained by this aircraft, other than a bright star in the east and a coastal beacon. The Blue Book report stated that the objects could not be sighted visually, except in the form of "bright stars." It also virtually ignored the three puzzling Bentwaters radar detections, except to stress they went in divergent directions, intimating that this somehow put them in the category of anomalous propagation (AP).

Through his knowledge of meteorology and precise data on the winds in the areas involved, McDonald was able to demonstrate that none of these three radar sightings exhibited any feature typical of AP echoes. Furthermore, he pointed out, the strength of the individual echoes, the merging of the group into

28. *Ibid.* pp. 9-17.

a single echo, the long intervals during which this huge blip remained stationary, and its final motion off-scope at a direction about 45° from its initial motion, could not be explained in terms of AP. The high-speed westward motion of single targets detected that evening was even further from any known radar-anomaly associated with AP. Neither could they be explained by internal electronic or interference phenomena of any kind. Unstated by McDonald, but undoubtedly present in his mind, was the knowledge that the converging targets were typical of the behavior of the type of UFO which French researcher Aimé Michel and other competent investigators worldwide termed “cloud-cigars” or “carrier-craft” (see Chapter 15).

These three unexplained radar sightings were only a prelude to subsequent events. They had, however, been communicated to Blue Book by Capt. Edward L. Holt of the Bentwaters 81st Fighter-Bomber Wing, in a Report dated 31 August 1956. All subsequent events, now known in UFO literature as “the Lakenheath sightings” (or “the Lakenheath-Bentwaters sightings”), were communicated in an earlier, lengthy teletype transmission. This was the basic data that the Condon Report used.

It irritated McDonald that the Lakenheath sightings were described by the Condon Report in such a confused manner that most readers would be unable to derive even basic information about this startling set of English UFO incidents by reading the report! This might sound impossible, but McDonald, through close association with NICAP, had studied the various reporting forms that military personnel were obliged to use in submitting UFO sightings. The regular Blue Book UFO reporting form, AFR 200-2—a copy of which was included in the Condon Report’s Appendix in an updated form, AFR 80-17—was the key to enabling the reader to understand the confusing array of answers without questions that comprised an integral part of the Lakenheath text. The average reader would not know this, for the Condon Report did not explain which questions from which version of the reporting form were being answered in the Lakenheath text! McDonald described the conundrum:

That confusion, unfortunately, does not wholly disappear upon laboriously matching questions with answers, for it has long been one of the salient deficiencies of the USAF program of UFO report-collection that the format of AFR 200-2 (or its sequel AFR 80-17) is usually only barely adequate and...often entirely incapable of affording the reporting office enough scope to set out clearly and in proper chronological order all of the events that may be of potential scientific significance.²⁹

29. *Ibid.*, p. 11.

We can be thankful that McDonald took the time to straighten out the text of the Lakenheath sightings, for it remains an important classic case. His description of the bizarre events continues:

At 10:55 P.M., about 15 minutes after the large object (into which the 10-15 objects had converged) moved off the radar scope, another fast-moving object was picked up going East to West directly over the Bentwaters station, at estimated speed of 2,000-4,000 m.p.h. The radar-tracking of this latest object was matched by concurrent visual observations of an anomalous light that was blurred, apparently, by its high velocity. Significantly, the light was witnessed by personnel on the ground looking up and simultaneously by personnel in an airborne C-47 looking down. As the C-47 was flying at only 4,000', the altitude of the unknown object was bracketed within rather narrow bounds.³⁰

The object produced no sonic boom, but as McDonald described in his paper, "The total number of seemingly quite credible reports of UFOs moving at speeds far above sonic values and yet not emitting booms is so large that it is counted as just one more instance of many currently inexplicable phenomena associated with the UFO problem."³¹ The object could not be a meteor, McDonald demonstrated, due to its slower speed, its flat low-altitude trajectory, and the absence of shock wave.

Immediately afterwards, Bentwaters alerted GCA Lakenheath that another luminous object was coming in, at an estimated altitude of 2,000'-2,500' on a SW heading. Lakenheath personnel saw a luminous object come out of the NE at low altitude, stop, and take off again at a high speed, disappearing into the east. Two RAF bases were now involved, and a "tracking-system," using both sophisticated technology and eyewitnesses, was in full play. What happened subsequently was a striking example of the scientific data which could be gathered if the U.S. and other nations would admit to the reality of UFOs.

Soon afterwards, the Lakenheath station saw two moving white lights. According to the Blue Book intelligence report, "ground observers stated one white light joined up with another and both disappeared together."³² These luminous objects, like the others, had no discernible features. Both ground observers and radar operators concurred that they traveled at terrific speeds, then stopped and changed course instantly.³³ The Condon Report deleted this im-

30. McDonald, "UFOs Over Lakenheath in 1956," *op. cit.*

31. *Ibid.*

32. Project 10073 Record Card, 4602nd AISS, Blue Book's 31-page intelligence report re the Bentwaters-Lakenheath sightings 13-14 Aug., 1956.

33. *Ibid.*

portant bit of information, just as it chose to delete the three preliminary radar sightings at Bentwaters.³⁴

McDonald noted all the ways the Condon Report tried to hide or confuse Lakenheath data and was so irritated that he pointed out the problem twice in his *FSR* article.

In spite of the Condon Report's shoddy job of reporting the Lakenheath sightings, their value was clear to McDonald, who took enough time to push past the confusion and reach the heart of the data. He was eager to share with the worldwide UFO field the significance of the Lakenheath sightings—the fact that here were a multitude of expert observations, backed by state-of-the-art technology, which described many anomalous objects maneuvering in inexplicable ways.

Because the date of the Lakenheath sightings coincided with the annual Perseid meteor shower, it was logical to ask: Were any part of the visual observations due to Perseids? The ground observers stated there was an “unusual amount of shooting stars in sky” but that the objects described in the Air Force report were definitely not shooting stars, as there were no trails, as are usual with such meteors. Besides, the stopping and course reversals were entirely incompatible with meteoric activity.

The objects, as seen over Lakenheath and Bentwaters, were of an unusually large apparent size and brightness. One observer likened one object, initially, to “the size of a golf ball.”³⁵ “Even allowing for the usual inaccuracies in such estimates, this further rules out Perseids,” wrote McDonald, “since that shower yields only meteors of quite low luminosity.”³⁶ Summarizing this English case for his *FSR* readers, McDonald wrote:

*It appears that three ground observers at Lakenheath saw at least two luminous objects, saw these over an extended time period, saw them execute sharp course-changes, saw them remain motionless at least once, saw two objects merge into a single luminous object at one juncture, and reported motions in general accord with concurrent radar observations.... Neither astronomical nor aeronautical explanations, nor any meteorological-optical explanations, match well those reported phenomena.*³⁷

These UFO events continued into the early morning hours of August 14. At 3:30 A.M., the Lakenheath radar observed an object 17 miles east of the sta-

34. *Ibid.*

35. *Ibid.*

36. McDonald, *FSR*, *op. cit.*

37. *Ibid.*

tion making a rectangular pattern in the sky. "This manoeuvre"³⁸ [consisted of] right angles at speeds of 600-800 m.p.h. Object would stop and start with amazing rapidity.... [T]he controllers are experienced and technical skills were used in attempts to determine just what the objects were. When the target would stop on the scope, the MTI was used; however, the target still appeared on the scope."³⁹

Moving Target Indication (MTI) is a standard feature on search or surveillance radars that eliminates ground returns from large buildings and other motionless objects. McDonald was intrigued by the MTI results. They added strong argument against the Blue Book explanation of "anomalous propagation." By this time, he had done a thorough study of radar and was an expert on the subject. He seized upon the MTI data and wrote: "It was as if the unidentified target, while seeming to hover motionless, was actually undergoing small-amplitude but high-speed jittering motion to yield a scope-displayed return despite the MTI. Since such "jittery" motion has been reported in many visual UFO sightings on many occasions, and since the coarse resolution of [the radar equipment] would not permit radar-detection of such motion if its amplitude were below, say, one or two hundred metres, this could conceivably account for the persistence of the displayed return during the episodes of 'stationary' hovering."⁴⁰

The MTI effects so intrigued Sgt. Perkins that he had his radar crew scan the area with all available radar scopes, set at various ranges.⁴¹ Some of Sgt. Perkins's letter to Condon was printed in the body of the Condon Report, but was not listed in the index. The only index reference to Lakenheath was listed under the misspelling, "Lackenheath," and referred to a short reference on a couple of pages, not to Thayer's more lengthy description. No reference at all to "Bentwaters" was in the Index. This was not the only case so obscured; it was by means of such "mistakes" and "omissions" that much valuable material contained in the report was effectively hidden or presented in an incomplete, confused state.

Sgt. Perkins' letter to Condon was incomplete. However, McDonald obtained a full copy of this four-page letter from an unidentified source (see Appendix Item 16-C, page 575). It describes in detail the most startling event of

38. *Ibid.* (Because McDonald's paper was published in an English journal, the spelling of some words is somewhat different from the American spelling, but are reproduced as the *FSR* text contained them.)

39. *Ibid.*

40. *Ibid.*

41. "Project 10073 Record Card, 4602nd AISS," *op. cit.*

August 13-14—a British pilot's airborne encounter with one of the UFOs.⁴² This amazing event began when an English radar station noticed a stationary target about 20-25 miles to the station's SW and informed Watch Supervisor Perkins at Lakenheath RTCC. It was watched on all Lakenheath scopes for several minutes and the target was confirmed at the same geographical location. The Sergeant's letter continues:

*As we watched, the stationary target started moving at a speed of 400 to 600 m.p.h. in a north-northeast direction until it reached a point of about 20 miles north-northwest of Lakenheath. There was no slow start or build-up to this speed—it was constant from the second it started to move until it stopped.*⁴³

Sgt. Perkins and his crew were mystified. He reported the facts to a command post, the identity of which remains censored. He also hooked in, by switchboard, to his local commanding officer, his unit commander (AFCS Communications Squadron), the 7th Air Division, and the 3rd Air Force. "There could have been others hooked in that I was not aware of," he stated.⁴⁴

He continued to give a detailed report on the object's movements and location. It made several changes in location, always on a straight line, always at 600 m.p.h., always from a stationary point to the next stop at constant speed. The changes in location varied from 8-12 miles with no set pattern and the stationary stops were estimated from 3-6 minutes. The time periods were "possibly even longer," as Perkins "was busy answering questions, listening to theories, guesses, etc., that the conference line people were saying."⁴⁵

After about 45 minutes, an unidentified source (name censored but probably the 3rd Air Force) decided to scramble two interceptors. The RAF was called, which decided to scramble one fighter; this interceptor took off from an RAF station near London. Radio and radar contact was established by Lakenheath when the jet was about 30-35 miles away. The pilot was briefed in flight regarding the object toward which he was being vectored.

The Lakenheath GCA could not determine the exact altitude of the UFO, but it was judged to be above 15,000' according to the operational characteristics of the radar in use. The object was stationary at the time, and its precise geographical location was ascertained in relationship to earth terrain. It is im-

42. *Scientific Study of Unidentified Flying Objects*, p. 249.

43. This ability of UFOs to start and stop abruptly, of course, is contrary to known laws of physics, and comprises one of the scientific puzzles of their behavior which intrigued scientists like McDonald, as well as the witnesses.

44. Perkins's letter to E.U. Condon (see Appendix Item 16-C, page 575).

45. *Ibid.*

portant to realize here that both the UFO and the interceptor gave off solid blips on the radar. Shortly afterward, the following dialogue took place between the radarmen and the pilot:

"You are now one-half mile from the UFO, and it is 12:00 from your position." Lakenheath stated.

"Roger," the pilot replied. "I've got my guns (radar) locked on him." A pause. "Where did he go? Do you still have him?" inquired the pilot in a puzzled voice.

"Roger. It appears he got behind you, and he's still there," Bentwaters replied, equally puzzled.

There were now two moving targets on the radar, one behind the other. They were progressing at the speed of the RAF jet. Although very close together, the two blips were unmistakably separate. The change of position of the UFO was accomplished at a remarkably swift speed but was detected by the radar operators. The pilot confirmed that the UFO was now behind him.

"I'll try to shake the UFO and try it again," said the pilot. Perkins's letter continues:

He tried everything—he climbed, dived, circled, etc., but the UFO acted like it was glued right behind him, always the same distance, very close, but we always had two distinct targets.⁴⁶

Perkins indicated that the UFO and the interceptor were 200'-600' apart. For about ten minutes the pilot tried to shake the UFO, transmitting comments occasionally over his radio. "We could tell...that he was getting worried, excited, and also pretty scared."

"I'm returning to Lakenheath," the pilot finally reported. "Let me know if he follows me. I'm getting low on petrol." The UFO followed him a short distance, then stopped and remained stationary. Bentwaters told the pilot the UFO had stopped following him. Almost immediately, a second RAF interceptor, who had been sent up in the meanwhile, radioed in on the same frequency. He was some distance from Lakenheath and didn't yet show on their scopes. The following dialogue between the two jet pilots was heard over the radio.

"Did you see anything?" Number Two pilot asked. "I saw something, but I'll be damned if I know what it was," the first pilot replied.

"What happened?" asked Number Two.

46. *Ibid.*

"He got behind me and I did everything I could to get behind him, and I couldn't," replied Number One. "It's the damndest thing I've ever seen. I had my radar locked on whatever it was for just a few seconds, so there was something there that was solid." He then switched radio frequency to return to his home base.

"We expect to have you on the scope shortly," the second pilot was assured. "Then we can vector you in toward the target." The second pilot delayed answering for some seconds, then stated that he was returning to his base. "My engine is malfunctioning," he said. Abruptly, he changed frequencies to his home station, and Bentwaters lost contact with him.

Throughout all of this, Perkins kept all the agencies on line informed of everything that happened. "Every aspect, every word that was said, everything," his letter to Condon stated.

"What action do you want us to take?" Bentwaters asked on the conference line. There was no reply for some time.

Finally they told us to just keep watching the target and let them know if anything else happened. The target made a couple more short moves and then left our radar coverage—speed still about 600 m.p.h. We lost target outbound to the north about 50 or 60 miles which is normal if aircraft or target is at an altitude below 5,000' (because of the radiation lobe of that type radar.) We notified 7th Air Division Command Post and they said they'd tell everybody for us.⁴⁷

Perkins made out a detailed report for the commissioned officers at the Bentwaters USAF facility. He was told that he would be contacted later if there was any need, but he heard no more. His lengthy report was not part of the packet received by McDonald, nor were additional details of the thwarted interceptions by the two RAF pilots. The only mention in the Blue Book report of jets being sent aloft during the five-hour period of the multiple radar-visual sightings was the following:

Visual Airborne: The two AF pilots who were vectored to search the area, remained aloft for 45 minutes. Both stated that a very bright star was observed near the horizon to the East, which, quoting these pilots, "could be mistaken for a UFO by visual observers."⁴⁸

Project Blue Book made additional references to witnesses who had seen the planet Mars; an early report that evening concerned a stationary "amber"

47. *Ibid.*

48. "Project 10073 Record Card, 4602nd AISS," *op. cit.*

object near the eastern horizon, which could have been Mars. However, the rest of the sightings during that five-hour period concerned round, white, "blurry" objects which maneuvered in extraordinary ways. Even Blue Book personnel could not relate these to meteors, Mars, aircraft or other conventional phenomena. The official Blue Book "explanation" was anomalous propagation. McDonald circled this "explanation" and wrote "AP!" in red ink.

He noted, also, that J. Allen Hynek, who was Blue Book consultant in astronomy, had been requested to examine, evaluate and comment on the incidents. Hynek regretted that the Blue Book report "did not contain more factual material on which to base an evaluation." This remark, in itself, seems to indicate that Hynek was not aware that Project Blue Book was simply a public relations scheme and not a truly scientific unit receiving the best of the UFO data. Air Force investigator Capt. George T. Gregory, performed the actual field work on-site.

According to FOIA documents which UFO researchers have since obtained, the 1125th and the 1126th Field Activities Groups had been incorporated into the 1127th. Among its responsibilities was investigation of UFO reports and the recovery of space objects. The 1127th was inextricably linked with Ft. Belvoir (see Chapter 12). It is not known how much Hynek knew about UFO data that was being investigated secretly within the 1127th. Hynek's official report on the Lakenheath sightings was fairly objective for the most part, considering the fact that Blue Book only received part of the data. He indicated that it would be of "extreme value to have independent statements from the various observers both at Bentwaters and Lakenheath." He also pointed out the lack of data regarding stellar magnitude of the visual sightings and the angular rate of motion of the various objects. He also wrote that it was unlikely that the objects were meteors.

Hynek had discussed the Lakenheath incidents at length with Dr. Fred Whipple, a prominent scientist noted for his expertise in radar and anomalous propagation. Whipple stated that, as far as the (incomplete) Blue Book report at hand was concerned, no obvious physical solution was suggested. He and Hynek talked at length about the advisability of setting up a tracking network for a limited time, which would be an actual sky patrol by photographic and visual means of precisely those areas from which the maximum UFO reports originate. In fact, in Whipple's opinion, the Air Force should do more than continue its passive investigations.⁴⁹

49. *Ibid.*, "Evaluation of Lakenheath Reports," by J. Allen Hynek, 17 October 1956, p. 21 (as re-paginated by McDonald).

Hynek had concurred with Whipple's suggestion of the value of a limited tracking system, stating in his "Evaluation" that "it might be of considerable potential use to the Air Force to be able to state, at some future time, that a careful patrol of an area 'rich in UFO reports' had been patrolled and nothing of a mysterious character photographed. This would be especially true if, during the time of patrol, UFO reports from untrained observers continued to come in from that area," Hynek specified. His Lakenheath report ended with a curious statement which renewed McDonald's irritation with him:

*The Lakenheath report could constitute a source of embarrassment to the Air Force, and should the facts, as so far reported, get into the public domain, it is not necessary to point out what excellent use the several dozen UFO societies and other 'publicity artists' would make of such an incident. It is, therefore, of great importance that further information on the technical aspects of the original observations be obtained, without loss of time from the original observers.*⁵⁰

Apparently Hynek had not been informed about the encounter of the British interceptor with one of the Lakenheath UFOs. However, one of the telexes which flashed between England and the United States during the time of the investigation, gave a vivid account. A poor copy of that particular telex was included in the Blue Book file which McDonald received. This telex disguised the identities of the receivers and senders in coded sets of letters and numbers. However, the acronym ADC [Air Defense Command] and the location, Colorado Springs, Colo., is plainly seen, and showed without a doubt that Blue Book was not the only agency investigating UFOs, as the American public and UFO researchers, including McDonald, were led to believe. This telex is barely readable from McDonald's copy and would not reproduce satisfactorily for purposes of this book. Therefore, a two-page typed duplicate is included as Appendix Item 16-D, page 576.

The fact that a telex from a USAF base in England to the ADC in Colorado was included in McDonald's copy is doubly surprising, because the official Blue Book version of the Lakenheath report gives no mention of any interception. The telex also discounted the possibility of Mars, bright stars, meteors or anomalous propagation being responsible for the sightings. The telex gives no clue as to what happened to the briefing data obtained from ground observations (both radar and visual) and from the two RAF jet interceptor pilots.⁵¹

Returning to the Condon Report's Lakenheath coverage, we know from McDonald's files that Robert Low sent Sgt. Perkins's letter to Dr. Donald

50. *Ibid.*

51. "Project 10073 Record Card, 4602nd AISS," *op. cit.*, p. 4 (as repaginated by McDonald).

Menzel, asking for his input. Menzel dismissed the case with vague references to "reflections," "turbulence," "after-image effects" and "ground returns." It is to Gordon Thayer's credit that he specifically disagreed with Blue Book's "AP" explanation, which seems to have been spawned by Capt. Gregory. Thayer took open issue with Gregory, and stated in his "Radar Section":

*The probability that anomalous propagation of radar signals may have been involved...seems to be small.... [T]here was "little or no traffic or targets on scope," which is not at all suggestive of AP conditions. The "tailing" of the RAF fighter, taken alone, seems to indicate a possible ghost image, but this does not jibe with the report that the UFO stopped following the fighter...and went off in a different direction.... Visual mirage at Bentwaters seems to be out of the question because of the combined ground and airborne observations; the C-47 pilot apparently saw the UFO below him....*⁵²

In his "Conclusions" Thayer added a sentence or two which made the Lakenheath case one of the hidden "treasures" in the Condon Report:

*In summary, this is the most puzzling and unusual case in the [Condon Committee] radar-visual files. The apparently rational, intelligent behavior of the UFO suggests a mechanical device of unknown origin as the most probable explanation....*⁵³

Of extreme historical interest is that the Lakenheath Blue Book Report was issued from the 4602nd AISS (See Appendix Item 16-E, page 577). In 1953, the 4602nd was given the responsibility of investigating UFO reports secretly, aside from the more public Project Blue Book, and was the forerunner of the 1127th, which was based at Ft. Belvoir, Va. (see Chapter 12). Where are Perkins's detailed report and RAF pilots' debriefing transcripts now? Are they stuffed in that deep, dark hole in which the best of the UFO data is imprisoned, guarded by a "silence group," far from the inquiring eyes of American science?

McDonald did his best with the Lakenheath-Bentwaters data available to him, and made order out of the jumbled state it was in when the Air Force and the Condon Report presented it. He was never able to obtain all the facts, but he was able to clarify the case and point up its importance. Even though he did not have all the data, his version of the Lakenheath-Bentwater events was detailed enough to convince any objective reader that something very strange had happened over English skies.

52. Thayer, Gordon D., *op. cit.*, pp. 163-64.

53. *Ibid.*, p. 164.

Predators in the Shadows

*And you to whom adversity has dealt the final blow,
With smiling bastards lying to you everywhere you go.
Turn to, and put out all your strength of charm, and heart, and brain
And, like the Mary Ellen Carter, rise again!"*

—from "The Mary Ellen Carter"

*Ill fares the land, to galloping fears a prey,
Where gobbledeygook accumulates, and words decay.*

—Thurber

While McDonald was putting continuous effort into rebutting the Condon Report, NICAP was working on its own separate rebuttal. The Report had set the entire UFO field on its ear. Condon's duplicity was diminishing the flow of inquiries from the public as well as from some scientists. However, both NICAP and McDonald fully expected that they would have enough rebuttal data in a year or two so that complete books could be written, pointing out the Air Force's (and Condon's) failure.

In McDonald's file is a handwritten note which sums up his private thoughts about Condon. Apparently a rough draft, the writing is much larger than his usually precise handwriting, and the content is more emotional; it gives us a private peek into his mind.

Dr. Condon's actions are scientifically shocking and unprecedented. Who ever heard of a scientist going to the Vice President of the U.S. in an attempt to block scientific discussion of a controversial subject? ... He [Condon] deserves the strongest of scientific censure for this attempt to stop that Symposium, and I shall definitely protest in AAAS channels.¹

1. Handwritten note in McDonald's copy of "AAAS UFO Symposium, 27-28 Dec. 1969" file.

His outrage sprang mainly from Condon's "transparent effort to suppress scientific criticism of the content and conclusions of his own Air Force-sponsored UFO study." Condon was unwilling to defend those conclusions himself in an open exchange, and McDonald could not tolerate such an attitude. The NICAP staff, including Keyhoe, the Halls, Lore, Isabel Davis, and Ted Bloecher shared McDonald's outrage over Condon's actions. NICAP members had worked for 12 years side by side toward a common goal, but now the headquarters staff was slowly changing and being rent apart by internal controversies and disagreements. At least one government intelligence agent was secretly working on the NICAP's Board of Directors, and a brand-new staff member was subtly at work causing dissension.

Donald Keyhoe had been secretly monitored by government intelligence agencies before. According to a *Confidential* memorandum obtained by researcher William L. Moore through the FOIA, Capt. William H. Sullivan of the Office of Special Investigations of the Air Force investigated a charge against Keyhoe in June 1960 (see Appendix Item 17-A, page 578). This memo stated that Pentagon *Secret* and *Top Secret* documents were being surreptitiously removed and reproduced, before being returned, and that "Major Donald E. Keyhoe, USMC, Ret." was alleged to have been present when such documents were displayed.

The *Confidential* memorandum is heavily censored; however, enigmatic information about Keyhoe's alleged involvement with an enterprise termed "Mercury, Inc." was not blacked out. The memo states that several persons connected with AFIN denied that any *Top Secret* UFO documents were at the Pentagon, but that the charges should be brought to the attention of "the Bureau." The FBI was the government agency to which Sullivan's memorandum was sent. The name of the generating agency (FBI) is blacked out, but J. Edgar Hoover's signature was not! It is now common knowledge that the FBI was involved in UFO investigation, as demonstrated by its involvement in the Socorro case in New Mexico, among others (see Chapter 9).

Just why government agencies should feel obliged to monitor Don Keyhoe, who was a patriotic citizen whose NICAP files were open to anyone, is disturbing, but the 1960 covert investigation seems to prove that Keyhoe was right—that there was an official government cover-up.

"In cases such as this, it seems to me the FBI was doing exactly the job they're paid to do," states Jacques Vallée. "The military regards UFOs within a much larger context than UFOlogists do. Over the years, nuclear blasts, Russian submarines, Soviet prototypes and even our own classified planes, e.g., U-2s, were reported by witnesses who thought they were seeing UFOs. The military had a need to filter such observations and keep control of them. They still do."²

The memo states that on June 10, 1960, Maj. Lawrence J. Tacker, identified as "Chief of the Magazine and Book Branch, Secretary of the Air Force, Office of Information (SAFOI 3-D)," advised that allegations against Keyhoe had been made to him. The name of the person accusing Keyhoe is blacked out, but he presented himself as "an American citizen in industrial relations" with an office next to Mercury, Inc., at 1725 Connecticut Ave., N.W., Washington, D.C. (the second digit of the address being obscured.) NICAP's address was 1536 Connecticut Avenue. Keyhoe's accuser claimed to be a former colonel in the British Army, serving with the Australian Government as an Assistant Liaison Officer for North America. He also claimed to have served with British Internal Security. Capt. Sullivan checked out the accuser's name with Capt. Leavitt Shertzer of AFCIN and was told that he was thoroughly reliable.³ The unknown accuser told Tacker that he was shown photostats of documents marked *Secret* and *Top Secret* which "they gloated over and which they said they had obtained from sources in the Pentagon," and that on several of these occasions Donald E. Keyhoe was present at these meetings.

According to the accuser, the documents were taken to an unidentified location he referred to as "the listening post," reproduced there and delivered to Mercury, Inc., while the originals were presumably returned to the Pentagon. He did not know who took the documents from the Pentagon in the first place.

Even though Tacker had just retired as head of Blue Book, that agency was apparently not informed of the alleged thefts. This seems curious, since the charge referred to theft of UFO documents, and Blue Book was widely touted by the Air Force as being the only agency investigating UFOs.

The document also revealed that, two weeks before Tacker's meeting with the prattling informer, two writers presented themselves to Maj. Ben Fern, Chief of the Magazine and Book Branch, in the Office of the Secretary of Defense (OSD). They claimed they had just written an article for the June 1960 issue of *Argosy Magazine*, which gave NICAP's viewpoint, and wished to write another from the Air Force point of view.⁴ Tacker arranged for these two writers to make a trip to Blue Book. He is then quoted as saying that (censored)

2. Letter from Jacques Vallée to author, 25 January 1996.

3. One cannot help but wonder about an unidentified Scottish colonel, spreading allegations about UFO data. See Chp. 14 regarding "Col. Robert Crawford" and alleged UFO photos.

4. Actually, this itself is an inaccuracy. The only UFO article in the June 1960 *Argosy* is credited to Maj. Donald E. Keyhoe as told to Harold Salkin. Our thanks to John C. Anderson of Franconia, Va., for tracking down a copy of this article in his voluminous files. Curiously, the number of letters in the writers' two last names, as blacked out in the FOIA-secured document, do not match Salkin's.

described Mercury Inc. as a promotional organization set up to sell stories, scripts, and articles based about space exploration and technology.

If we read accurately between the cut-out portions of the document, one of the two UFO writers falsely represented himself as a USAF Reserve officer. This matter was also referred to the FBI, which investigated. Apparently things transpired which the FBI didn't wish to disclose, for at this point a large section of text is neatly cut from the document!

Tacker investigated the claim that the Pentagon had UFO documents, but no one in the five-sided monolith admitted that *Top Secret* documents were housed there, but some *Secret* documents had been seen there. Pentagon officials continued to insist that all UFO files were maintained at ATIC Headquarters at Wright-Patterson AFB (Project Blue Book) and at the 1127th F.A.G. at Ft. Belvoir. Here, unexpectedly, in unrazored print, is further confirmation that UFO investigations were being conducted at Ft. Belvoir (See Chapter 12).

Pentagon officials admitted they often received cabled reports of UFO sightings by "AFCIN-2, AFCIN-3, and AFCIN-4," but these were usually unclassified or in rare instances *Confidential*. Tacker ostensibly made a concerted effort to comb "the Files" to verify the existence of Mercury Enterprises, but came up empty. "The Files," however, revealed something sensitive, for another large section is blacked out at this point. Enough was left, however, to indicate that both of the writers were associated with NICAP, and that one claimed to be a former major in Army Combat Intelligence.

A mention was made, also, of a UFO newsletter called *The Little Listening Post*, which was printed on an irregular schedule "whenever the news boiled over," by a woman in the Washington area who corresponded with people in the UFO community. Tacker disclosed that the April-May-June 1960 issue of "The Little Listening Post" referred to Keyhoe's book *Flying Saucers: Top Secret* and also to Mercury Enterprises, but Tacker didn't state if one had anything to do with the other. Other sections of Tacker's search of "the Files" were similarly blacked out.

The last two pages of this strange document leave no doubt that it was the FBI who generated it, for "John Edgar Hoover, Director" sent it to the O/SI, "Attention Chief, Counterintelligence division." Its "subject" is partially blacked out, but the name "Donald E. Keyhoe" and the phrase "alleged unauthorized disclosure of Classified Information: Espionage I" are visible. Hoover concluded, "This Bureau is taking no action in this matter in the absence of information indicating a violation of a federal statute within our jurisdiction."

To return to 1969, McDonald was being kept informed by members of NICAP's staff about the controversies and disagreements; he was fully aware

that the vital research organization was slowly being torn apart. Besides being overextended financially and bogged down in paperwork, its membership had plunged from its previous high of 15,000, partially because of the negative "findings" of the Condon Committee. NICAP subcommittee and affiliate members in various states remained loyal, although they knew something disturbing was going on. Some of them, such as Idabel Epperson of LANS, confided their concerns to McDonald. Privy to information from all sides, he was bombarded with differing opinions throughout 1969. He listened carefully to all concerns but wisely gave no direct advice.

In June 1968, he had learned just how deep NICAP's financial troubles were. Ever since 1957, when Keyhoe had taken over the directorship, the research organization had forged ahead more or less hand-to-mouth, keeping a small staff working long hours for minimum wages out of sheer devotion to the cause. NICAP had limped along, with the assistance of its members, who from time to time gave extra contributions whenever Don Keyhoe would explain the need for added funds in special Bulletins or in NICAP's newsletter, *The UFO Investigator*. However, by June 1968, the recurrent financial difficulties were disturbing members of the staff.

On the evening of June 20, 1968, McDonald had gone over to NICAP headquarters, after spending most of the day on professional work which had brought him to Washington. He had also spent part of the day contacting Congressional officials, who would later be instrumental in bringing about the long-sought Congressional open UFO hearing. Ted Bloecher, Isabel Davis, and Stuart Nixon, the newest staff member, took him to dinner.

Sometime in mid-1968 Stuart Nixon had joined the staff. He was a bright, young writer whom Isabel Davis took under her wing, being fond not only of cats but of young people just starting out. At first, Nixon blended in well. He seemed to be an agreeable, energetic assistant in the voluminous tasks of research and writing. His name first appears in McDonald's journal on the occasion of the UFO Congressional hearing when someone, whom Stuart Nixon identified as coming from the Center for Naval Analysis, queried McDonald afterwards. This unnamed person seemed interested in McDonald's contacts with the RAND Corporation, and asked him about the talks he had given there. Seemingly satisfied, the gentleman told McDonald that he wanted him to address his "Washington Science Group." He did not give him details at the time, and McDonald merely noted the encounter, together with Nixon's name, in his journal.

Stuart Nixon seemed at ease among the many governmental and scientific people who expressed an interest in the UFO question. He also agreed with Keyhoe and the others about Condon, the Air Force, and the importance of UFO research in general. At Isabel Davis's on June 20, 1968, the three NICAP

staff members and McDonald engaged in a lengthy discussion of the Heflin photos for Stuart's benefit, since he was still new to NICAP and still finding his way among the important cases. As usual, they also got into the coverup/grand foul-up controversy.

Ted Bloecher then told McDonald frankly that he was worried about NICAP's future, because of the recurrent financial straits it experienced. He laid the blame squarely at Keyhoe's feet, protesting the way Keyhoe was running the place, particularly the finances. He revealed that NICAP was recently on the very edge of being unable to pay its bills, but they had received an anonymous \$5,000 gift. "That had salvaged another month," McDonald wrote in his journal.⁵ But already, conflicts among its formerly compatible staff previewed NICAP's downfall, although none of the experienced staff recognized fully what was happening.

Slowly, as 1969 ground on, controversy began to build within NICAP about the importance of rebutting the Condon Report. A few days before McDonald came to Washington on June 10, 1969, for a special "NICAP evening," at which he would be the main speaker, Ted Bloecher phoned him. The latest *UFO Investigator* had just been put to bed, and Bloecher had a few spare minutes to talk with McDonald about the title for his talk, "UFOs Unsolved: A Scientific Challenge."

"I'd like the title to at least mention the Condon Report, and the necessity of rebutting it," McDonald told Bloecher.

"I agree with you that that's important," answered Bloecher. "But we're getting so many letters from members saying, 'Let's forget about Condon.' I think it's wise to omit that from the title. We'd get a better turnout for your talk. Then you could speak about Condon and specific cases in the report, anything, just as you wish."

"I didn't argue," wrote McDonald in his journal. "But it is unreasonable to think we will go right along without strong Condon rebuttal," In brackets, he added: "I trust NICAP Headquarters agrees."⁶

Gordon Lore also got on the phone that afternoon, to tell McDonald about the May 10 NICAP Board of Governors' meeting. Lore was pleased, for the meeting had seemed very successful. Its members were continuing to show renewed interest in NICAP affairs, in spite of the blow the field had received from Condon's negative conclusions and the Air Force closure of Blue Book. Lore's news for McDonald was not all positive however. He told him that some members of the NICAP staff were beginning to feel that Keyhoe was

5. McDonald, fourth journal, reverse p. 5.

6. *Ibid.*, p. 41.

"touchy," "suspicious," and feeling that some "staff members were possibly plotting against him."⁷

In the past, Keyhoe had asked McDonald if he would be willing to serve as a member of the Board of Governors, but McDonald had reluctantly declined. He felt he could best serve the UFO field without becoming too involved in the everyday affairs of NICAP, and preferred to continue his close, but informal, cooperation with the organization in any other way he could. He had recently suggested to Keyhoe, however, that he would serve as scientific advisor to the board if Keyhoe wished, but for reasons unknown, Keyhoe did not accept his offer.

"Keyhoe seems worried about your offer," Lore told McDonald. "He held up that issue by foot dragging."

McDonald was puzzled by his old friend's attitude. It is not known whether he talked with Keyhoe about this. He took some action however, for in his journal he wrote, "See note in pocket notebook."⁸

In the meantime, Stuart Nixon became more and more an essential part of NICAP's staff. On June 12, he drove over to the Halls' home, where McDonald was spending a couple of days after his talk at the June 10 NICAP evening. He was eager to show McDonald the result of the previous evening's photo-analysis session on a certain UFO photo.

"We were too shot to drive in from the Halls," wrote McDonald in colloquial terms. There were other people at the Halls that day, all discussing UFOs with McDonald, including a "D. Sheldon," "Jacobs from Raytheon," and an unidentified Naval official.⁹ By this time, the missing briefcase incident had occurred, and Dick Hall was also aware that the NICAP office phones, and the Halls' home phone, were apparently tapped. All this was discussed openly, with Stuart Nixon listening.

Nixon also shared in the conversations on other matters which were on McDonald's mind. Before his May 25 talk at the Edison conference, he'd had a deep discussion at lunch with Henry Eyring, who told him that he thought he "was on the right track," so far as the delving into the question in a purely scientific manner was concerned. However, he expressed open doubt regarding the extraterrestrial hypothesis.

"What's your main objection to the ETH?" inquired McDonald.

7. *Ibid.*

8. *Ibid.*

9. *Ibid.*, reverse p. 43.

"Well, mostly it's the question of 'Why no contact?'" responded Eyring. "Why would extraterrestrial space travelers bother to come all that distance, take all that time getting here, and then not contact us openly?"

Also present that afternoon was another colleague, Al Cameron, who joined McDonald in rebutting Eyring's objection.

"Look, Henry," said Cameron. "Can you conceive of anthropologists going to some still-untouched South Sea island and using the most advanced techniques available to gather data on the Stone Age natives there, without their realizing what was going on?"

Cameron did not develop this concept much more than that, but his statement struck McDonald as a relevant idea.

"Even in the past 100 years we've learned to be less disruptive in our anthropologizing," McDonald elaborated. "So maybe really advanced civilizations are far more enlightened." Following this discussion with his professional colleagues, he wrote later in his journal:

One could today visualize use of electronic bugging, tape-recording conversations, use of closed-circuit TV, concealed cameras, etc., to gather data discreetly & clandestinely, as means of avoiding disturbance of the primitive culture.¹⁰

It was ideas such as this that McDonald discussed freely in private conversation with trusted colleagues in meteorology and atmospheric physics, and he voiced them even more speculatively with trusted associates in the UFO field.¹¹ As a result, Stuart Nixon became aware of McDonald's most private thoughts regarding the UFO mystery. And all of McDonald's most sensitive materials, which he shared with his NICAP friends, became available to Nixon, as well.

Nothing should have cast a pall over NICAP's "special evening," but an event which Marty Lore recounts in an interview for this book continued to puzzle her for over 30 years. When she lived in Carderock Springs, Jim came to lecture at the Clubhouse. They were calling around, trying to see how many

10. *Ibid.*, p. 42.

11. In a letter (*op. cit.*) to me, Vallée counters, "Re. discussions about absence of contact possibly being caused by an advanced civilization being careful not to disrupt ours, this is an argument one keeps hearing from UFOlogists, and it makes no sense at all. It contradicts the fact that UFOs have been much more intrusive than a technical survey would need to be, teasing our radars and our jets, landing and leaving traces, terrorizing people needlessly.... This is not an unobtrusive operation, whatever it is!"

people would come, and Marty happened to get a fellow who told her he could not attend.

"Why not?" she asked.

"Because I used to be 'involved' before."

"Involved?" she queried.

"You know, government, UFOs. 'Involved.' You know what I mean," insisted the man. "I'm not involved anymore, but I used to be."

"But that was before," said Marty. "What's that got to do with now?"

"Well, if I even showed up at McDonald's talk, I would be in big trouble. I can't even show my face," the man replied. "Even though I'm no longer with 'those people,' I can't come."¹²

Marty knew better than to pursue the issue further. From his manner, she knew that by "involved" he meant that he had been part of some intelligence service—CIA, FBI, whatever. Marty's experience was not unique. When shown this passage, Dr. Robert M. Wood remarked cryptically, "One of many, no doubt!" Many other UFOlogists have encountered this reluctance on the part of ex-government agents to discuss UFOs. For example, a friend of mine, who must remain anonymous for obvious reasons, is prevented to this day from displaying any public interest in the UFO question because he was involved in the analysis of 55 UFO photos for the Air Force, the CIA and "one other agency" which he has never felt free to name. The only reason he felt free to tell me in the 1970s was because of the 1969 USAF declaration that *no* UFO data was classified.

By mid-December 1969, NICAP's financial troubles, as well as its internal conflicts, seemed unsolvable. McDonald called Dick Hall on December 14 and was given a complete update. Col. Joseph Bryan, III, and J.B. Hartranft, Jr., who were both on the Board of Governors, had "taken over," Hall told McDonald. In an unprecedented three-man Executive Committee action, both Keyhoe and Lore had been summarily fired from their respective positions as Director and Assistant Director. McDonald described the incident on page 45 of his fourth journal. This outrageous action took place during a clandestine three-hour meeting, which was held at the offices of Wald, Harkrader, and Rockefeller, in Washington, D.C. Present were the Chairman of the Board of Governors, Bryan, and Hartranft. Maj. D.J. Fournet, another high-profile member of NICAP Board, was present by proxy, with the written statement that the others could use his vote as they pleased. These three

12. Interview with Marty and Gordon Lore, 11 September 1993.

constituted all the members of the Executive Committee. Also present was Thomas C. Matthews, Jr., NICAP's counsel who acted as secretary—and Stuart Nixon.

The “Minutes of Meeting of Board of Governors’ Executive Committee, December 3, 1969” reveal that Col. Joseph Bryan, III, presided and reported on studies and investigations into the operational and fiscal affairs of NICAP (see Appendix Item 17-B, page 579). Among the 14 resolutions passed were:

1. The termination of Keyhoe’s presidency and his active participation in any capacity;
2. That Keyhoe would be paid his salary (\$7,500 per annum) through December 31. All 1969 arrears of salary, or a lump severance sum, would be paid if and when NICAP had the funds to do so;
3. The termination of Gordon Lore’s service as vice president and secretary-treasurer, and from any active participation in NICAP’s affairs. He was also placed on indefinite leave without pay, under the same conditions as above.

Pending the search for a new president, Bryan was temporarily named to that post. NICAP checks could only be co-signed by J. B. Hartranft, Jr., and/or Albert H. Baller (another board member), and Thomas C. Matthews.

Stuart Nixon was appointed acting secretary-treasurer and made custodian of all papers, records and property of NICAP. He promptly made the files inaccessible to any local NICAP personnel who might want to see them. NICAP’s checking account was closed, and all funds were deposited in a new account. Another bank account was opened to receive funds from the first account, to be drawn out in NICAP’s name by Stuart Nixon.

Hartranft was appointed chairman of the board and was given responsibility to “revise the membership rule of NICAP,” in accord with the general outline of a letter he’d written to Fournet in November. This meant that the Executive Committee’s action had been secretly planned without Keyhoe’s knowledge or that of any loyal member of his staff.

“Much of what you read about the breakup of NICAP may not have been directly attributable to Keyhoe,” states Gordon Lore. “It wasn’t until a couple of years later that I discovered, through Just Cause, that Joseph Bryan, who was the chairman of the board when I was ousted, was an active CIA agent at the time.”¹³

In order to unseat Don Keyhoe—using as an excuse his financial inexperience—the board had decided that they would have to fire Lore also, to “smooth

13. *Ibid.*

over” the Keyhoe firing. NICAP was experiencing severe financial straits, due to a fall-off of membership which was related to the Condon Report’s negative attitude toward the UFO problem. Major Dewey Fournet had been notified by telephone at his home in Baton Rouge and concurred in the board’s actions. He agreed to notify Keyhoe promptly, and Col. Hartranft agreed to notify Gordon Lore. Apparently Hartranft did not have the guts to call Lore personally. Instead, he chose to notify him by telegram!



FIGURE 32. James E. McDonald (right) and Gordon Lore (left) at an academic UFO panel sometime around 1969. Lore was Assistant Director of NICAP.

Strangely, 48 hours before Lore was given his “pink slip,” he had been summoned to Hartranft’s Aircraft Owners and Pilots Association office in Bethesda and wined and dined at a lunch. Hartranft told him that some “important changes were imminent,” but he led Lore to believe that his position was secure. Dewey Fournet had also assured Lore of this.

To add to the shock of the dismissals, both Lore and Keyhoe were locked out of their offices, the keys were changed on the doors, and various members of the Executive Committee went through the personal effects in their desks

McDonald was dismayed when he was informed about what had happened, for he appreciated Keyhoe’s research talent, his objectivity, and his numerous important contributions to the UFO research field and knew that Lore had devoted his life to NICAP for several years. He regarded Lore as a fine researcher-ed-

itor, who had worked effectively with the other loyal members of the staff and with McDonald himself (see Figures 32 and 33). Together with Keyhoe and Lore, McDonald trusted Dick and Marty Hall, Isabel Davis and Ted Bloecher implicitly. He had been aware that NICAP had financial difficulties in the past but had always managed to pull itself out. Don Keyhoe, Gordon Lore, and Richard Hall freely admitted that they were researchers, not financial geniuses. The majority of NICAP's loyal membership down through the years probably accepted these shortcomings, but Lore had talked with more than one member, including a gentleman who donated \$5,000 at one point to keep NICAP afloat, who said their own support, both financial and otherwise, was waning because of NICAP's inability to get on a sound financial basis.



FIGURE 33. Full view of photo from which the enlargement, Figure 32, was made. The other panel participants are unidentified.

This brings up the question as to whether or not NICAP would have floundered even if there had been no CIA involvement. Gordon Lore thinks this is probable, because of the problem in establishing firm financial footing. But this problem certainly made it much easier for an agency like the CIA to step in and take over. If NICAP had been on a sound financial footing all along, this may have been highly unlikely.

As for McDonald's reaction to the firing, he was dismayed at Keyhoe and Lore's sudden dismissal, but there was nothing he could do about it, not being a part of the official NICAP "family." He continued contact with NICAP, however, for it was still ostensibly the major research organization in the UFO field. He had no reason to distrust Stuart Nixon or any of the board members. McDonald maintained contact with Donald Keyhoe and Gordon Lore; even though they

were no longer associated with NICAP, they were still active in the UFO field. It was not in his nature to drop a good colleague, even though the individual colleagues had ceased working with each other.

McDonald also kept close contact with Dick Hall. On Sunday, April 26, 1970, he flew into Washington, D.C., for a professional meeting at the NSF. In his luggage he carried hiking clothes, for he needed some exercise, having been deprived of his regular excursions into the Tucson mountains with his IAP colleagues, due to pressure of work.

Feeling the need of a little tranquility, he'd written Hall a few days before, suggesting a short hiking trip. When he arrived at Washington National Airport, he found that his baggage had been "misshipped" to Dulles Airport. The resulting inconvenience and loss of precious time meant that he and the Halls were able to hike for only one hour in Rock Creek Park. With these good friends, he also exercised his mind, discussing rationalism vs. empiricism, as related to the theory of knowledge. That evening, they went over the outline for Gordon Lore's new book, which concerned the century-old mystery of repeated sightings of "airships" over the U.S. in 1896-97. McDonald valued contact with good friends like these, for he knew that they held keys to objective knowledge of the UFO phenomenon—in past cases which they had documented together, and in current cases where investigation was on-going.

Juggling his contacts between NICAP colleagues, now widely separated, McDonald also continued a heavy schedule of talks. He concentrated on the task of rebutting the Condon Report before academics and scientists. In mid-March 1970 he spoke at the University of North Carolina, Space Sciences Section; the talk was NASA-supported. McDonald wrote in his journal: "Largest turnout they'd had. They brought in chairs, but still there were people sitting on the floor. Shows interest is not all gone."¹⁴

Without Keyhoe at the helm, NICAP limped on. Stuart Nixon was now acting director, having been appointed by the board. Late in April 1970, McDonald was again in the Washington area on professional business. He met with Isabel Davis and Stuart at her walk-up apartment and took them to dinner. Nixon began to denounce Keyhoe, Hall and Lore. McDonald listened. Nixon continued, expounding his theory of how NICAP "should get new scientific advice and brainstorm its way out of the UFO quandary." McDonald said little. That night he wrote in his journal, "Nixon... Very naïve."¹⁵

14. McDonald, fourth journal, reverse p. 46.

15. *Ibid.*, p. 46.

He gave no sign to Nixon that he was thinking this, however. Back at Isabel's apartment, the conversation continued far into the night, with the three discussing cases on which NICAP and McDonald were working separately. McDonald was pursuing the Flora Evans case, involving a woman witness who had reportedly been burned during close proximity with a UFO in February 1958. The case was in NICAP's files and had taken McDonald's fancy, for it was in such cases that physical evidence might potentially be gathered. He had, in fact, interviewed Evans that prior week. Stuart Nixon obligingly agreed to send copies of the entire Evans case from NICAP files; with the same obliging manner he drove him to his hotel, the Park Central, at midnight. He was insinuating himself into McDonald's life, trying to take over the area that Keyhoe, Hall, and Lore had been forced to abandon.

Before Keyhoe and Lore were fired, and he was hearing from Lore of Keyhoe's suspicions about the loyalty of the NICAP staff, McDonald must have wondered why Keyhoe felt this way. Now, almost four decades after the fact, Gordon Lore offers some clarification:

"Concerning the CIA connection, I had begun to suspect as early as late 1968, or maybe early 1969," states Lore. "Stuart told us that [NICAP's] photographic adviser—his name was Bill McIntyre—had been shot down in Vietnam. He was on a secret mission...and had to be rescued in the middle of a river. Then Stuart quickly shut up about it."¹⁶

"Oh, Bill McIntyre was based there?" Lore had asked Nixon.

"Oh, Bill goes on these secret missions all over the world," Nixon replied.

"What was he doing in Vietnam?" Lore asked.

"I don't know. Maybe he was with the CIA," Nixon replied.

"And that was it," states Lore. In an interview for this book, he pointed out that Stuart Nixon left the matter of Bill McIntyre's possible connection with the CIA hanging in mid-air. Bill McIntyre supposedly had a photography studio. "I think it was all mixed in there with Jack Acuff," explains Lore. "I don't know in what way."¹⁷

John Acuff was a businessman who became head of NICAP in 1970, shortly after Keyhoe and Lore were ousted and was at the helm when Stuart Nixon began dismantling its investigative subcommittees and affiliates. As a result, NICAP lost the rest of its influence, its remarkable list of scientific consultants, its hard-working investigators and public relations arms. Although

16. Lore interview, *op. cit.*

17. *Ibid.*

Acuff took on the directorship on the pretense that his business expertise could save NICAP, he was later proven to be a covert FBI agent.¹⁸ In the late 1970s, when researchers began seeking out the truth about NICAP's downfall, Bill McIntyre also admitted he was a former covert CIA agent.¹⁹

But what of Maj. Dewey J. Fournet and J. B. Hartranft, Jr., who were also involved in the clandestine Executive Committee meeting which had ousted Keyhoe and Lore? Fournet knew about the secret meeting and approved of the action taken, for he sent a formal "Proxy vote" for J. B. Hartranft's use at that meeting. (See Appendix Item 17-C, page 580.) He also knew Hartranft was planning to "revise the membership rule of NICAP," because Hartranft had written him a letter about it November 24, 1969. Keyhoe had considered Fournet a good personal friend, but it was Fournet who helped persuade Keyhoe not to fire Stuart Nixon when Nixon was causing friction in office affairs. Nixon was attempting at every opportunity to block publication of the next (and last) book which would be put out by NICAP, titled *UFOs: A New look*²⁰ for which Gordon Lore was the chief researcher and writer. Lore describes how Nixon interfered with its publication:

"It had some occupant cases in it," states Gordon Lore. "This was the first time NICAP really published anything on the occupant cases. Stuart Nixon fought like hell to repress that. He didn't want that to be published at all. It finally was, but it was also cut down about half. Stuart said he didn't think NICAP should delve into such 'way out fringe areas.'"

By this time, even pristinely scientific McDonald was taking seriously "occupant" cases such as Fr. Gill's in Papua, New Guinea (see Chapter 8) which had multiple credible witnesses. Jacques Vallée, also, had compiled and written his seminal work, *Passport to Magonia*,²¹ which established the need to include "occupant cases" if an understanding of UFO phenomena was ever to come about. "I had more landing cases from the Air Force than from NICAP!" Vallée says. The books of French researcher Aimé Michel recognized occupant cases and were also making an impact.

As a result of changing scientific attitudes, Keyhoe had decided to give cautious credence to a few of the more thoroughly documented cases, such as the Zamora case in Socorro, N.M. Even Hynek and other Air Force investiga-

18. *UFO Research Newsletter*, Los Angeles, Calif., Gordon I. R. Lore, Jr., ed., Vol. VI, No. 6, June/July 1979.

19. *Ibid.*

20. *UFOs: A New Look*, Keyhoe, Donald, and Gordon I. Lore, eds., Washington, D.C., NICAP, 47 pp., 1969.

21. Vallée, Jacques, *Passport to Magonia*, Chicago, Ill.: Henry Regnery Co., 1969.

tors could not explain this case—occupants and all—and it is listed as “Unidentified” in the Blue Book archives to this day (see Chapters 9 and 12). With the help of his colleague, Professor Charles R. Moore of Socorro, McDonald had concluded that Zamora was reliably reporting that two small humanoid passengers were associated with the landing of a strange, unidentified oval-shaped object. As a result, a few sightings like Fr. Gill’s and Zamora’s were included in *UFOs: A New Look*.²² It also included a preliminary six-page rebuttal of the Condon Report, containing several cases which McDonald had investigated. The major points brought out by the scientific panel at the July 1968 Congressional hearing were also included.

“Stuart tried to do everything to really block certain areas we were trying to go into,” states Lore. “But you see, they’re clever. They’ll go only so far. And Stuart Nixon was the same way. He was the gadfly there in the office, about not touching occupant reports, not touching anything that wasn’t an airline pilot or something like that, that the Air Force could easily explain away.”

It slowly occurred to Lore that something was wrong. Early in 1969, he talked privately with Maj. Keyhoe.

“Don,” Lore said, “I don’t know about Stuart Nixon. I know he’s been talking with Philip Klass.”

“Why would he do that?” inquired Keyhoe.

“I don’t know,” replied Lore. “But we know he has.” I also know he’s been meeting on the sly with certain Board members, in particular, J. B. Hartranft.”

“Why?” inquired Keyhoe. “That’s not part of his job.”

When interviewed for this book, Philip Klass confirmed that he talked with Nixon several times during this period, but that their discussions did not constitute “covert meetings.” “I recall he phoned me to discuss a sighting of a ‘squadron’ of hydroplane-shaped UFOs near St. Louis on June 5, 1969,” Klass discloses. “Because of my position as a senior editor with *AW&ST* magazine, he assumed I would know if such aircraft had been developed... [Stuart Nixon] and I had a friendly relationship, as I had earlier with Dick Hall when he was running NICAP headquarters operation, and with Gordon Lore.”

Lore agrees, to a point. “I agree with Klass that he was friendly with us all, essentially, but I believe that we all, except Stuart, separated that from his anti-UFO stance.”

22. *UFOs: A New Look*, op. cit.

A few weeks later, Lore got thoroughly fed up with Nixon's continued interference about publishing *UFOs: A New Look* and went again to Keyhoe to discuss it.

"Look, Don, there's something funny here," Lore said. "I don't know what it is, but this guy's really trying to impede our progress."

"Well, Gordon, I've been thinking there's something funny going on," responded Keyhoe. He paused a moment, then decided to confide. "As a matter of fact, I'm going to get rid of him."

"Then weeks and some months passed and nothing more was said about it," states Lore. "I think it was Don Berliner and myself, we went to Keyhoe about Stuart. But there was something strong there that was preventing Keyhoe from acting, whether it was Dewey Fournet or whoever, who was saying to Keyhoe, 'No, let's keep Stuart on.'"

"Keyhoe wanted to get rid of him. He was that far from firing him, more than once," continues Lore, demonstrating a half-inch's width with his fingers. "Then all of a sudden, when we thought he was going to do it, it's, 'Oh, no, let's give him another chance' type of thing. Somebody got to him, for Keyhoe's not like that. I've seen him boot people out the door without thinking twice about it, if he really thought they needed to be ousted, for whatever reason. And I asked Keyhoe about it again later, and he said, 'Well I thought about it, and I almost fired him, but I decided to...give him another chance.'"²³

Donald Keyhoe, in spite of his brisk, sometimes explosive nature, was a good and fair man. McDonald recognized these traits in him from the beginning. His frequent references to Keyhoe's books and NICAP's work, in his public talks, and in his journals, were invariably in complimentary, positive terms. In fact, he had written to J. Allen Hynek:

*I think when the facts are all set forth, Don Keyhoe will appear, in the deeper sense of the term, a far better scientist than you, when your respective contributions to progress in the UFO area are finally toted up. Keyhoe will get praise and you'll get some of the criticisms you've felt free to aim in his general direction over the years of your Air Force consultancy.*²⁴

As the years went by, and NICAP slipped from prominence, Gordon Lore continued to wonder. In 1973, when Donald Keyhoe's last book, *Aliens From Space*, had been published, and Keyhoe was promoting it at a conference in

23. Interview with Gordon Lore, 4 December 1993.

24. Letter from McDonald to Hynek, dated July 1970. Polished draft with handwritten revisions, in McDonald's files (See Appendix Item 4-A, page 532).

Washington, D.C., Lore met with him. During their discussion, Lore asked him outright if he thought Stuart Nixon might have been some kind of a government plant.

Keyhoe thought it over a bit. "No," he answered. "Stuart just isn't the type to be a spy."

Before Keyhoe and Lore's ouster, however, various members of the original NICAP staff spoke rather openly to McDonald about their suspicions of possible monitoring by CIA moles. He always listened carefully to them but never took direct action. The main reason was due to the fact that he had a different "take" altogether on the CIA. He knew that anti-war and civil rights movements, which the government might possibly regard as "subversive" were closely monitored on all university campuses. At the same time, the day-to-day academic work of the university was involved with the CIA in an open, mutually beneficial manner.

"The CIA is a very misunderstood organization," says Dr. A. Richard Kassander. There are a lot of people who work for the CIA who would never have anything to do with covert activities. In fact, one of our IAP graduate students went to work every summer with the CIA, and so did others. It was a badly kept secret that all of Lou Battan's research into the status of Soviet cloud physics was supported by the CIA. A condition of his accepting the CIA support was that the unique and scientifically important insights that might be in his annual reports could be reported, uncensored, in the regular scientific literature. That condition was unhesitatingly and unconditionally given, [but] Lou made it clear that he wouldn't necessarily tell who was supporting it.... [M]ost people would judge this to be an acceptable and proper way of using taxpayers' funds. Unfortunately, the days of academic freedom like this seem to have vanished—the CIA is now able to slap a *Classified* stamp on the work of academics and private businessmen alike who have any involvement with this agency, however patriotic or scientific their motives and results."²⁵

Dr. Kassander agrees that Air Force military intelligence might have been giving McDonald trouble. He had personally seen the difficulty McDonald had in getting data from Davis-Monthan AFB in the early days of his UFO research

25. I have met this situation personally in attempting to invoke the FOIA for the release of 55 UFO photos, which were analyzed for the CIA and "other agencies" by a scientist of my acquaintance who requests anonymity. The agencies involved contend that the "UFO photos themselves are not classified, but that the circumstances under which they were taken involved national security" and use this excuse to withhold them from being released by FOIA action. In view of the practice of blacking out and razor-blading information in government documents, I do not believe that this "explanation" for non-release is truthful.
—Ann Druffel

(see Chapter 2). "The very fact that the Air Force made it so difficult to get information would indicate that certainly they had instructions from some level in which security was involved, not to discuss these matters with him," Kassander says. "There were certainly speculations at the time that what people were seeing were some sort of experimental aircraft of a type that the Air Force would not want revealed."

McDonald had studied the experimental-aircraft hypothesis carefully. It was his feeling that some UFO sightings might be explained in this way, but, because of the phenomenal speeds and seeming violations of the laws of physics—e.g., 90° turns, apparent materialization and de-materialization, immediate stops and starts, etc.—it seemed that some unexplained type of non-terrestrial technology was involved in the basic UFO phenomenon.

While all this was going on, a sizable scientific investigation of UFOs was in progress, financed by Douglas Aircraft Corporation and led by Dr. Robert M. Wood. The project was company confidential and involved sophisticated equipment. Both McDonald and J. Allen Hynek had been apprised of this, and both scientists had suggested equipment that might be incorporated into an instrumented van which ostensibly was searching for data on the ball-lightning phenomenon. Whether or not the CIA also had been "apprised" of the project is uncertain. Dr. Wood states that he does not think so, while Vallée is of the opinion that the Agency monitored the project very closely. Nuclear physicist Stanton Friedman also joined the team, the only one hired on the basis of his knowledge of the UFO subject; his role was focused on reading the UFO literature to get clues into areas the team might explore. (Friedman adhered for decades to the confidential agreement he made with the team.) Wood kept McDonald up-to-date on the progress of the project. As recounted in an earlier chapter, the "ball lightning" van failed to produce any definite results (See Chapter 10). Information on the project is slowly surfacing.²⁶

To return to the difficulties NICAP was experiencing, toward the end of March 1969, McDonald received a telephone call from Dick Hall, Ted Bloecher and Gordon Lore. They explained that the crisis at NICAP had grown so desperate that the Halls, Lore, Bloecher, and Davis had confronted Don Keyhoe. Some had threatened to resign unless Keyhoe could put the organization on a sound financial footing. McDonald made complete phone notes and tucked them in his "Hall" file, satisfied for the time that Keyhoe had made broad concessions and that the matter would be straightened out.

26. Wood, Robert M., "A Little Physics...A Little Friction: A Close Encounter with the Condon Committee," *International UFO Reporter*, July/August 1993, Chicago, Ill, J. Allen Hynek Center for UFO Studies. Also letter from Jacques Vallée to author, dated 25 January 1996 and communications with Robert M. Wood, same time period.

The unprecedented action by Keyhoe's long-time colleagues had been brought about by the fact that, although Keyhoe was an excellent investigator and writer, he was not a businessman and did not know how to run a financially successful organization. Nevertheless, he had brought the UFO question to public attention and was widely considered the "Dean of UFOlogy." He had gathered together scientific consultants and other influential persons to back the cause of scientifically oriented UFO research. At NICAP's height, it had about 15,000 members, many of whom voluntarily investigated UFO sightings in their own localities. NICAP's eight-page bulletin *UFO Investigator* and its other book-size publications were filled with the most objective data obtainable. Since 1957, Keyhoe had consistently informed the public about the serious nature of the UFO question in a vivid and understandable manner.

But NICAP's efforts were expensive. Frequent appeals went out to its membership over the years, asking for help with financial emergencies. NICAP headquarters were in a brownstone building in the heart of Washington, and only a couple of the staff were volunteers—comparatively high overhead. There were other problems, too, which lay strictly in the area of how organizations like NICAP should be run.

Keyhoe's "broad concessions" were basic to assure a smooth-running business. NICAP had never kept a set of books, had never had more than one person sign checks, and had never followed a fiscal year. Dick Hall had tried to improve this situation, and Gordon Lore continued trying to improve it after he succeeded Hall as assistant director. Lore also recognized the need for NICAP to attempt to secure tax-exempt status long before his dismissal, particularly in view of the many donations that had come in over the years. For months, Keyhoe resisted these changes. After his loyal staff threatened to resign, however, he allowed Lore to consult a lawyer.

NICAP was required to have a board meeting twice a year but hadn't had one for years. Gordon Lore insisted that the Board of Governors, which included about a dozen influential persons, such as Congressman Edward Roush, be brought together for a Board meeting. While he was setting things up, Lore again had to threaten to resign, when he met continued opposition from Keyhoe.

"I said, 'Look, Don, if NICAP is going to be saved at all, we've got to get on a good footing,'" Lore says, describing this frustrating period.²⁷ By June 1969 the tax-exempt status had been achieved. Even after some of the corporate problems were solved, however, strange things continued to happen. The phones were bugged. This was especially noticeable when the staff talked with Keyhoe about important cases. Keyhoe did a lot of his NICAP work from his

27. Interview with Gordon Lore, 4 Dec. 1993.

home in Luray, Virginia, where he could be close to his wife Helen, who was not in the best of health. Luray was some 100 miles from Washington, D.C., so Keyhoe was not regularly at his NICAP headquarters desk. Much of the daily work activity was therefore conducted by telephone. Lore's home phone in Bethesda, Md., was also tapped.

"I remember we were in the middle of talking with Maj. Keyhoe," recalls Gordon Lore, "when all of a sudden this loud electronic buzzing [occurred], and then the connection was broken. I had to call Keyhoe back, and we discussed the phone being tapped. Then there were a couple of other times—it was always when we were talking about UFOs to someone in the field, which is kind of weird, because even then they had more sophisticated bugging devices than that.

"Once at NICAP I was on the phone to Keyhoe and all of a sudden there was a voice in the background which said, 'Major Quintanilla, this is Don Keyhoe's outfit.' And then a click, and a buzz, and then the phone was disconnected."

The bugged phones were an inconvenience, but much more serious problems existed. Board members Hartranft, Bryan and Fournet, with the aid of Stuart Nixon, and possibly also attorney Matthews, must have been planning their clandestine meeting of the three-man Executive Committee, which led directly to NICAP's destruction. Who were these men, and what were their backgrounds that led to their becoming NICAP board members?

We start the revelation with a former board member, Rear Admiral Roscoe Hillenkoetter, who had been ostensibly devoted to NICAP but who had been instrumental in destroying the anticipated plans for a Congressional UFO hearing in 1962 by stating publicly that "the Air Force had done its best to solve the UFO problem," that "NICAP's investigation had gone as far as possible," and that he "believed neither NICAP nor the Congress should continue to criticize the Air Force investigations" (see Chapter 10). He resigned from the board right after that and ceased displaying public UFO interest. Hillenkoetter was listed as a member of that "silence group," the so-called "MJ-12" (see Chapter 14).

Donald Keyhoe, being a canny and intelligent man, privately wondered about Hillenkoetter's inexplicable turnaround and, in particular, suspected that some intelligence agency must have been in back of the furtive Executive Committee meeting which brought about his ouster. His suspicions—and those of numerous NICAP members—remained unconfirmed until an FOIA lawsuit, filed in September 1977 by Ground Saucer Watch (GSW), an Arizona-based research organization, succeeded in wresting loose approximately 900 pages of CIA files through a suit filed in U.S. District Court, Washington, D.C. Among these 900 pages was a document proving that Hillenkoetter had, in fact, been pressured by the CIA, at the behest of the Air

Force.²⁸ After the initial release of these CIA documents, Brad Sparks, director of Citizens Against UFO Secrecy (CAUS) determined that over 200 additional CIA documents were directly referenced in the material released. He attempted to pry these loose as well. The CIA denied their existence, stating that they "couldn't find" them. The CIA later informed CAUS that "the Agency had just located 1,000 additional pages of UFO material in the CIA's OSI files," but were not released because they were not described in the original court order! (This, of course, is standard procedure.)

"There are very serious questions remaining about the validity of the CIA's alleged search of files," stated a 1979 *Just Cause* newsletter. When GSW attempted to tap the CIA, and two other agencies, for additional documents, it was informed that the FOIA "did not apply to matters that are specifically exempted from disclosure by statute." This entangled wording means that UFO data which the government has obtained under conditions involving situations of "national security" can be held back and not released.

The CIA had been interested in NICAP activities from its inception. When scientist T. Townsend Brown founded NICAP in October 1956, at least two CIA agents worked themselves into important positions within the organization. One, "Count" Nicholas de Rochefort, was in the CIA's Psychological Warfare Staff.²⁹ The other was Bernard J.O. Carvalho, a Lisbon native and go-between for certain CIA-secretly-owned companies such as Fairway Corporation, a charter airline utilized by CIA executives. He managed to get appointed chairman of the membership subcommittee, a key position.³⁰

In 1965, following a flap of sightings in and around Washington, the CIA's O/SI asked the Domestic Contact Service office to contact NICAP. An agent by the name of Al Coleman phoned NICAP and, in Keyhoe's absence, saw Dick Hall by appointment. At his request, Hall lent him a few files on the 1964-65 Washington, D.C., flap, on which he expressed particular interest; he later returned them without comment. This meeting was reported in CIA documents released through the FOIA.³¹

FOIA documents also revealed facts about the three-man Executive Committee which so callously dismissed Keyhoe and Lore. Col. Joseph Bryan III, was founder and Chief of the CIA's Psychological Warfare Staff from 1947 through 1953. Until CAUS uncovered Bryan's covert employment with the

28. *Just Cause*, Official Newsletter of Citizens Against UFO Secrecy (CAUS), Inc., Larry Bryan, Administrator, Vol. 1, No. 7, January 1979.

29. *Ibid.*, p. 5.

30. *Ibid.*

31. *Ibid.*, p. 3.

CIA, during the course of interviews with former CIA employees, very few people were aware that Bryan had CIA connections. Dick Hall confirms Bryan's covert link. "Col. Bryan...was not an Air Force Colonel," he states. "He was a Naval officer, and the 'Air Force Reserve Colonelcy,' we learned belatedly, was a cover story for the CIA."³²

Bryan first approached Keyhoe in 1959 and expressed interest in seeing some of NICAP's "really hot cases." He presented himself as an Air Force officer, and Keyhoe was rightfully cautious, suspecting an attempt by the Air Force to infiltrate NICAP.³³ However, Bryan, like Hillenkoetter, allowed Keyhoe to quote him in the *UFO Investigator* in these words: "The UFOs are interplanetary devices systematically observing the Earth.... Information on UFOs has been officially withheld. This policy is dangerous." Bryan was subsequently invited to serve on NICAP's Board of Governors. In 1969 he showed his true colors by presiding at the Executive Committee which ousted Keyhoe and Lore, beginning NICAP's slide into oblivion.

In a 1979 interview with Brad Sparks of CAUS, Bryan confirmed his former covert employment with the CIA, but denied any association or communication with the CIA during the period he had served on the NICAP Board. When it was pointed out to Bryan that two CIA covert agents had penetrated NICAP in 1956, he remarked, "Penetrated! Good God! What do you want to penetrate NICAP for? There's nothing to penetrate—it was all overt, the whole thing!"³⁴

Yet it was not all overt. NICAP's publications and most of its case files were out in the open, but there was an integral part of NICAP which could not be overt. Certain cases had to be kept *confidential*, for many military men and other witnesses employed in classified government positions gave UFO reports on condition that their sightings be kept anonymous. Since McDonald seems to have been monitored also, and was receiving confidential sightings from military personnel and scientists, any covert agents who might be sniffing around would be curious to know just what McDonald was sharing with Keyhoe.

Another former briefing officer for the CIA, Karl Pflock, was chairman of NICAP's Washington, D.C., subcommittee in the late sixties and early seventies. He is also suspected by some researchers of helping to bring about NICAP's downfall. Like Bryan, he has denied this, giving the same reason Bryan did, that "NICAP did not have to be penetrated."³⁵ Pflock is still active in the UFO field,

32. *UFO Research Newsletter: A Report on Unidentified Flying Objects*, Los Angeles, Calif., Edited by Gordon I. R. Lore, Jr., Vol. VI, No. 6, June/July 1979.

33. *Just Cause*, *op. cit.*

34. *Ibid.*, pp. 7-8.

35. Lore, *UFO Research Newsletter*, *op. cit.*, p. 1.

particularly in the controversy about the "Roswell crash." He defends the Mogul-balloon theory for the debris field found near Roswell, N.M., in July 1947, which was initially regarded by local Air Force personnel as a crashed UFO.

And what about Stuart Nixon? Could he have been a covert agent also? Gordon Lore considers the prospect likely, but has no hard proof. "Early on, Nixon told me that he hoped 'nobody would be too upset' by what he intended 'to accomplish at NICAP,'" says Lore. "I pressed him [to explain], but he clammed up. Later, he began downgrading certain potentially excellent UFO reports, especially the photographic cases, for which he was responsible. He labeled as 'hoaxed' numerous reports that looked good to the rest of the staff,"³⁶ and he interfered persistently with NICAP's last major publication, *UFOs: A New Look* (see page 463).

In late 1973, long after Keyhoe and Lore were gone from NICAP, and Stuart Nixon was running the show with Acuff as a figurehead "president," Lore again asked Keyhoe, "Do you think Stuart Nixon was a CIA plant?"

"No," replied Keyhoe. "He's not smart enough." He paused, then added forcefully, "But you know, Gordon, the biggest mistake I ever made was not firing him!"³⁷

Complete notes of the Executive Committee meeting, and certain events which led up to it, have been found in NICAP files. They prove that Bryan had, after the executive meeting, written and distributed a memo in which he called Keyhoe "inept." A *Just Cause Newsletter* states: "Evidently, this memo, coming from the Chairman of the Board, helped convince an otherwise loyal-to-Keyhoe panel to approve his firing."³⁸

In the same NICAP file containing Bryan's critical memo is a note written by Stuart Nixon, in which he questions "the propriety of Bryan's remark in light of the plan to placate Keyhoe with some sort of Research Director's appointment." In other words, NICAP subcommittees would find it "incongruous," if Keyhoe was to remain in any capacity if the Chairman of the Board considered him "inept!"³⁹ NICAP records also reveal that, since mid-1968, Stuart Nixon

36. Including the Yorba Linda photo, which LANS had investigated for four years, this author being the primary investigator. Four photogrammetrists pronounced the photo "most probably genuine" and could not find any evidence it had been hoaxed, but Stuart Nixon, who was put in charge of UFO photo cases at NICAP Headquarters, promptly pronounced it fraudulent. Nixon was not even a photo analyst but most probably sought advice from Bill McIntyre, a NICAP photographic analyst. McIntyre, unknown to NICAP, was a CIA agent!

37. *UFO Research Newsletter: A Report on Unidentified Flying Objects*, *op. cit.*, p. 2.

38. *Just Cause*, *op. cit.*, p. 8.

39. *Ibid.*, pp. 8-9.

had been meeting with another player, Jack Acuff, who, after Keyhoe and Lore were fired, was appointed president of NICAP out of the blue. Acuff was head of the Society of Photographic Scientists and Engineers (SPSE), a Washington-based group which had been the target of many KGB spying attempts. Many of the SPSE's members were photoanalysts with DOD facilities, as well as the CIA. In his capacity as SPSE Head, Acuff had been approached by Soviet agents on several occasions, had reported this to the FBI and subsequently became a double agent for the FBI. Acuff was, indeed, a strange choice to replace Keyhoe as president of NICAP. After he took over the helm, NICAP went even more rapidly downhill. A *Just Cause Newsletter* states:

*Since taking over NICAP, Acuff has converted the organization from being a vocal and persistent critic of the government's UFO policies to being a rather "passive recipient" of civilian UFO reports. The group's investigating network, the subcommittees, was disbanded shortly after Acuff took the job....*⁴⁰

It was at this point that most Subcommittee members quit NICAP. Idabel Epperson, Chairman of LANS, was one of the first to do so, perceiving, perhaps instinctively, that NICAP had been taken over by persons whose actions would dismantle NICAP as an effective research organization. Acuff's appointment was passed off to the general NICAP membership as a "decision by the Board to put NICAP on solid financial footing." Acuff was a respected business man; his covert intelligence activities were not common knowledge. He achieved financial soundness by promptly firing all full-time NICAP employees, except for a secretary whose salary was spread between NICAP and several other non-profit groups which Acuff oversaw. About 3,000 NICAP members remained loyal for several years, even as the organization slid downhill. Under Acuff, NICAP was soon bringing in around \$50,000 a year but about \$35,000 of this amount was going to Acuff for "contracting services," which included Acuff's and the secretary's salary, plus office expenses. Only \$76.00 was spent on "general research" in one of the early Acuff years!

NICAP's newsletter, *UFO Investigator*, was not included in these monies other than the secretary's time for typing it. Instead of the vital information it previously contained, now the newsletter was a sorry recital of uninvestigated cases sent in by members. By 1976, Acuff took \$34,000 of NICAP's total \$41,690 revenue as salary; that same year, \$20 went to "general research!" Finally, in October 1978 Acuff resigned, claiming that NICAP owed him \$20,000. NICAP's coffers were completely empty, and Acuff kept its invaluable files "as ransom," according to a previous member's quip.⁴¹ After months

40. *Ibid.*

of quibbling, the board appointed Alan N. Hall, a retired CIA employee, as acting director (no relation to Dick Hall). The selection was made at the suggestion of Charles Lombard, a new board member. At the time, Lombard was Sen. Barry Goldwater's aide. Goldwater himself was now a new Board member; he had publicly expressed interest in UFOs for years. Lombard was a former CIA covert employee; it is not known whether Goldwater was aware of this. Alan N. Hall agreed to fill Acuff's shoes for a six-month trial period on a volunteer basis, without pay. Very soon after that NICAP was dissolved forever.

The above facts have led many in the UFO community to conclude that NICAP's effectiveness as a scientifically oriented research organization was deliberately destroyed by CIA and FBI agents, but documented proof still eludes them. Its slow destruction was not the only adverse effect, however. Confidential cases, and even classified UFO documents, which had come in to Keyhoe before his ouster, continued to come in from anonymous sources during Acuff's presidency and there is adequate reason to believe that sensitive information was still flowing in even while Alan Hall was acting as director. Perhaps even in NICAP's last days, trusting sources were handing over a classified government UFO document or two, hoping to help break open the UFO question. Regarding this possibility, the *Just Cause Newsletter* from which much of the above has been taken asks the question in black-humor: "Does [such] document ever see the light of day? Does the source ever again see the light of day?"⁴²

It is interesting to compare the amount of yearly salary paid to Jack Acuff, \$35,000, to the \$7,600 annual salary which Keyhoe was making. Lore was being paid the same moderate amount, and both men were owed back salary at the time of their dismissal. The rest of the loyal staff worked at even lower salaries, out of sheer devotion to the cause and even then had to forego paydays when the money simply wasn't there. Dick Hall, in particular, had so much back salary owed him that he engaged in bitter controversy with Hartranft and Bryan over their failure to reimburse him.

Most of NICAP's revenues during the 12 years Keyhoe was director went toward valuable research and distribution of documented UFO case material to Congressmen of their acquaintance in the hopes that extended Congressional UFO hearings would be held. Even though Keyhoe was not an expert in business finance, NICAP was kept running for 12 years on limited funds, exerting great influence over interested persons in government, the

41. *Ibid.*, p. 11.

42. *Ibid.*, p. 12.

military, and science. McDonald's close cooperation with NICAP for five full years was one of the best examples of its prestige.

Members of NICAP's staff who had personally experienced incidents of apparent phone-monitoring told McDonald, in confidence, that the NICAP phones were bugged. Some also attempted to tell him of their suspicions about Stuart Nixon. But McDonald needed proof, and the UFO community had no proof of government interference until the late 1970s, years after McDonald's death. He continued meeting with Dick Hall, Gordon Lore, Isabel Davis and Stuart Nixon, but more or less on an individual basis.

McDonald could not make NICAP's problems his own, because he had enough problems of his own. Besides the annoying inconveniences, and tragic occurrences, which occurred in his life since early 1969, he continued to experience great irritation over what he considered J. Allen Hynek's tendency to "re-write UFO history." He also was irritated by Hynek's review of the AAAS Boston Symposium, which had appeared in the English journal, *FSR*. He took umbrage particularly to the following passage: "Now that Blue Book has been terminated, I will be free to discuss some of their 'scientific' methods, and indeed a part of the book I am now writing will be devoted to that."⁴³

"Do I understand that you really are going to try to write a book that makes out Quintanilla, his predecessors, and the 'Establishment' as the malefactors in this drama?" wrote McDonald, in his July 1970 (unmailed) letter. "You can make a greater scientific contribution by... opening your own eyes about what you've done to the UFO problem, rather than [coming] out with a book that rewrites history...."⁴⁴

Some researchers in the UFO field feel that by his on-going conflict with Hynek, McDonald was losing any chance he might have had to act as an integrator for all those who wanted to work on the problem scientifically.⁴⁵ But McDonald's intense personality, and his demand for unmitigated honesty in science, prevented this, so far as his working amicably with Hynek was concerned.

In spite of the growing pressures, McDonald continued his constant search for promising cases. In early December he attended a conference at the NCAR in Boulder, Colo., where several associates privately expressed interest in his UFO research. He wrote in his journal that, at the office of Dan Rix, Charlie

43. Hynek, J. Allen, "Commentary on the AAAS Symposium," *FSR*, Vol. 16, No. 2, March/April 1970, p. 5.

44. McDonald's unposted letter to Hynek, dated July 1970.

45. Communications from Drs. Jacques Vallée and Robert M. Wood to me.

Palmer told him that he had been asked to relay the information that Dr. Edward J. Zipser knew of an early multi-witness sighting which had occurred at Line Islands. Zipser had knowledge of the sighting, although he was not a first-hand witness. McDonald wrote down Zipser's address and phone number, and also noted that Charlie Palmer promised to send "three pages" of information about the sighting. He also learned that Dan Rix knew of another event that had occurred in San Diego, Calif., in 1947, although Rix himself had not witnessed it personally. Rix had written up the San Diego sighting in his diary, accompanied with a sketch of the object.⁴⁶

McDonald also talked with Dr. Gerald P. Anderson, at the NIF Astronomy Section. Anderson was a professor at Colorado University but had also worked several years as Donald Menzel's assistant at Harvard. He agreed that Menzel "could be very careless and that he easily jumped to conclusions."⁴⁷ Anderson had interest in UFOs while at Lockheed and told McDonald that, around 1960, "he got access to some punch-card UFO cases data at Scott AFB." He came over to McDonald a bit later and took him aside.

"I'm a little bit afraid I might have violated security considerations in telling you about the UFO punch-card data," said Anderson quietly.

"I don't want you to violate security," said McDonald. "That's not what I'm looking for."

"Maybe sometime later I could tell you how it happened that Scott Air Force Base had UFO data," replied Anderson. "All I can say now is that AWS had it, and it was related to something that the Eighth Air Force was doing."

"I'd be glad to hear about it when you feel free," said McDonald. He later received the name of an officer at Scott AFB to contact, Col. R.G. Suggs. He followed this up quickly, making contact with Col. Suggs, sending him past papers he'd delivered on UFOs. This resulted in an invitation to speak on the UFO subject at Scott AFB. Only the bare facts can be gleaned from his diary, and we are left to wonder whether he was able to receive more information about the classified punch-card UFO cases data that was related to "something the Eighth Air Force was doing." Knowing his tenacity, however, it is possible that he had stumbled onto something too sensitive, and made contacts too knowledgeable. We do know from his journal that Col. Suggs expressed great interest in McDonald's contention that the Air Force had done great harm by telling the public and the scientific community that the

46. McDonald, fourth journal, p. 48 and reverse p. 48. By "Line Islands" McDonald apparently is referring to Line Islands, Kiribati, in the Pacific which became independent of the UK in 1979.

47. *Ibid.*, reverse p.48

best scientific talents were available (and ostensibly being used) by the Air Force to study the UFO problem. Suggs, to McDonald's surprise, had interpreted McDonald's phrase to imply that various civilian scientific bodies were being consulted, not in-house scientists. McDonald told Col. Suggs that the thought had never occurred to him—i.e., that the Air Force was (secretly) tapping scientific talent in the open scientific community.⁴⁸

Information like the classified punch-card UFO data at Scott AFB must have alerted McDonald that the government was holding back much more classified UFO data than he'd previously been willing to accept. By now, he had four years' experience behind him in which he'd bucked up against the establishment and the system. He recognized witnesses' necessity to keep certain information confidential, since it was classified at the time the witness had encountered it. However, McDonald saw no logical reason why the U.S. Government should have to keep UFO data "beyond the pale." In June 1970 he wrote about this quandary in his journal, carefully noting sources he felt could clarify it:

6/20/70...statement on [Bray's] "Science Policy"... good quote on p. 88 re difficulties of fighting the establishment, by D. David Green of U. Wisconsin re. enzyme research. "It is amazing how difficult it is to reach the establishment. After all, I, too, have position and authority—still it is impossible." From "Scientific Research" 5/13/68 p. 33.⁴⁹

McDonald had position and authority, too, and this quote about the vagaries of "the establishment" must have impressed him in more ways than one. Although he was making extraordinary efforts to bring the UFO question to the attention of scientists, he knew he was not being as successful as he needed to be. His November 1969 *Icarus* paper had boosted his hopes, but after that his polished UFO papers were simply not accepted by scientific journals. He continued his professional atmospheric projects and presented the data before prestigious scientific groups. But, in general, he lacked the time to hone and polish these papers to his satisfaction, and subsequently many of them went unpublished.

These papers constituted important data for science. They included such titles as "Some Subtleties and Misconceptions Concerning Southern Arizona Air Pollution",⁵⁰ "Some Arguments Against Operational Seeding of Hurricanes",⁵¹ "Revised Draft for the Panel on Weather and Climate Modification (POWACM)."⁵² Although they remained in a "self-published" state, they were

48. *Ibid.*

49. In McDonald's "Controversies and Unorthodoxies" file.

50. An eight-page paper McDonald presented to the Conference of Mining and Ecology in the Arid Environment in Tucson on March 26, 1970.

presented in Navy Stormfury sessions, NAS POWACM meetings, and other scientific conferences. They were as carefully prepared, so far as research went, as the dozens and dozens of papers he had published in professional journals since 1947⁵³ and discussed serious topics in meteorology and atmospheric physics. Because he did not take time to publish them, he began to experience subtle adverse reaction from his IAP colleagues. The old axiom, "Publish or perish," continued to trouble him.

McDonald also worried about his frequent, prolonged absences from home because of UFO-speaking engagements, realizing that he was neglecting Betsy and the family. Richard Hall describes his state of mind in 1970:

"Often he would say, 'I've got to draw back and patch up things at home and at the office.' He was worried about how he was neglecting his family," states Hall. "Often, when he was writing letters late at night to me, he'd end them up with the phrase, 'Now I have to go and pay some attention to Betsy and the kids.' The short vacations he took were for the same reason, trying to smooth things over at home. 'Patching things up,' he called it."⁵⁴

In spite of all his professional and personal pressures, the archived Blue Book files still called out to him. The two radar-visual files which he'd persuaded the recalcitrant Lt. Marano to send him had simply whetted his appetite. When at last his professional schedule permitted an Alabama visit, he called Dick Olsen, aide to Arizona Rep. "Mo" Udall, and urged him to "nudge" a "Col. Coleman" (otherwise unidentified in his journal). Olsen obligingly agreed to call.⁵⁵ McDonald had a Navy Stormfury session on file for May 15, and hoped to get to Maxwell AFB afterwards.

He'd heard rumors that the Air Force planned to destroy all the Blue Book files; McDonald had hopes of preserving them and getting them into the National Archives. If the Air Force could not be persuaded, he wanted to have one more good look at the files before they were gone forever. His carefully laid plans succeeded, and on May 18, he was hard at work in the Historical Divi-

51. A 43-page paper McDonald presented to the Project Stormfury Advisory Panel in Washington, D.C., on May 15, 1970.

52. An 85-page, 5-part paper dated August 1, 1970. It examined such crucial atmospheric problems as the climatic effects of supersonic transports in the stratosphere, the persistence and unwanted spread of cloud-seeding effects; the difficulties in targeting and delivery of cloud-seeding agents; adverse downwind effects of cloud modification. The 29-page reference section is a comprehensive bibliography of weather modification in the late 1960s.

53. Vaughan, Valerie, "Science and Conscience—An Annotated Bibliography of the Writings of Dr. James E. McDonald," April 30, 1990. See also note 22, page 396.

54. From interview with Richard Hall, 7 May 1994.

55. McDonald, fourth journal, p. 46.

sion, Aerospace Science Institute at Maxwell AFB in Montgomery, Alabama. McDonald chose not to write many details of this trip in his journal but instead jotted the cryptic phrase, "See small notebook for more details" in his fourth journal.⁵⁶ But once he started studying the R-V files, McDonald realized he'd struck a bonanza.

He spent an extra week there, copying literally hundreds of them. The cost, for him, was a large sum, \$300, but the value of such data was priceless. Greatly stimulated, he brought the files home and spent the next two weeks studying each case, placing each in a neatly labeled folder and anticipating which ones he should include in the book he planned to write. Two weeks later, he gave a briefing to a select group of Santa Monica IEEE engineers and scientists, expressing his delight over what he'd found:

*The records that some of us were concerned about are still alive and well and nestled deep in the archives at the Historical Division at Maxwell Air Force Base.... I looked at about 400 cases...really significant cases that to my knowledge, nobody else who had ever followed the UFO problem has ever heard of before..., structured, solid-looking objects of configuration that just is hard to tag with anything except some word like "craft" ...dozens of hypersonic radar tracks with sharp-angle turns and sudden climb-outs....*⁵⁷

The ETH was still his favored hypothesis, as he carefully explained:

*As one who has interviewed 500 or 600 witnesses, I don't see any alternative.... We're dealing...with phenomenology that suggests a technology.... It doesn't at all suggest amorphous plasmoids or atmospheric optical effects. It doesn't look like any geoastronomical phenomenon...[but] cases of close-range sightings of structured objects.... These are not Russian...or American devices, because the same things were happening back in 1947.*⁵⁸

After the IEEE briefing, he met with Idabel Epperson and a couple of dozen Southern California researchers who shared his eagerness over what he had found—the former LANS, who were continuing their investigative efforts in spite of NICAP's upheaval. At the Santa Monica IEEE briefing, McDonald had made a statement which hints that he was re-considering the logic of an Air

56. *Ibid.*, p. 47.

57. Klinn, Robert B. and Branch, David, "Physicist Cites Startling UFO Reports Buried in Maxwell AFB Files," *The Register* (Santa Ana, Calif.), December 6, 1972. From a UFO briefing held by McDonald before a group of IEEE, Santa Monica, Calif., Miramar Hotel, June 9, 1970.

58. *Ibid.*, tape recorded briefing, June 9, 1970.

Force "cover-up," and he reiterated it to the LANS group: "Maybe the Air Force felt, 'Maybe we can get a hunk of the technology ourselves and use it to military advantage,'" he said.⁵⁹ This brought his thinking closer to most of his UFO colleagues, who theorized that one of the reasons for a "cover-up" was that the government hoped to unlock the secret of UFO propulsion before any potential enemy could figure it out.

Around mid-1970, even though McDonald had been heartened and spurred on by his discoveries at Maxwell AFB, some of his colleagues began to notice subtle changes in his personality. Dr. Dean Staley of IAP, states: "I guess I saw some loose ends to him." Staley is referring to an incident which several of his IAP colleagues recall. It concerned a civilian worker in a meteorology group at nearby Ft. Huachuca. This young man had learned that McDonald had worked on a problem related to a project that he was working on. McDonald spent quite a bit of time with him and showed him some of his (unpublished) results to help guide the young man in his research.

"Subsequently," relates Dean Staley, "this guy wrote a paper and submitted it to the *Journal of the Atmospheric Sciences*, which is the premier journal in the field. It was accepted, but it turned out that he'd used great chunks of McDonald's work...that were things that McDonald himself had intended to publish, after cleaning up loose ends."⁶⁰

When McDonald heard about this, he was upset and talked to colleague Lou Battan, who was president of the AMS at that time. The young man's paper had already gotten down to galley proofs, but Battan was able to stop the publication of the article because of McDonald's honest objections. The journal came out with pages missing, where the article had been "killed."

"What I really want to get at here is Mac's behavior," continues Dean Staley. "At some point in that whole episode...Ken Barnett, who was head of the Ft. Huachuca group, came up here with the offending party. McDonald wanted the whole faculty to attend that could attend. And they went over this stuff, and it was quite clear what this person had used, that he had plagiarized.... I remember Ken Barnett saying, 'Well, what more do you want of us? The paper has been withdrawn.' That's when I first really got to wondering about Mac, because...he seemed to want more detailed admission of not only guilt but of motivation...and the rest of us...Ben Herman, Bill Sellers, and maybe George Dawson, we were getting pretty uncomfortable with this.... It's enough for most of us to have some guy get caught.... I think possibly this person...was sort of naïve about scientific credit for certain work; I don't know that it was

59. *Ibid.*

60. Interview with Dr. Dean Staley, 28 February 1994.

necessarily with evil, malicious intent. But McDonald was badgering, as if this guy were the embodiment of evil and had consciously decided to do this, when things don't really work this way."⁶¹

McDonald was so strictly honest in his own scientific work and with his dealings with colleagues that it really isn't strange that he wished to know the young man's motivations. Probably no one had dared to plagiarize any of his work before, and since his own scientific research projects were so fresh and new he was never tempted to plagiarize another's work. Probably his colleagues at the university were surprised because they saw McDonald subtly changing, showing a troubled side they'd not seen before.

In spite of these troubling problems, McDonald continued researching the radar-visual sightings which had recently surfaced at Maxwell AFB. Besides the Haneda and Lakenheath sightings (see Chapters 13 & 16) he worked consistently on the "RB-47 case." He tracked down the six Air Force witnesses personally and wrote a paper, which included all technical information he was able to glean on the case. He wrote, "This is one of the most interesting Air Force UFO cases that I have examined."⁶²

Briefly, it concerned an Air Force surveillance aircraft, with the call sign "Lacy-17," which was followed by an unidentified flying object for an hour and one-half on July 17, 1957, as it flew from Mississippi, through Louisiana and Texas and into Oklahoma. "Lacy 17" was equipped with special electronic countermeasures (ECM) equipment. The object was seen visually at times as an intensely bright light, demonstrating extremely rapid maneuvers far beyond the capacity of Earth technology. The UFO was tracked by both ground-radar and by the ECM gear aboard the RB-47. Of special interest to McDonald was the fact that the three types of ECM equipment were not radar and did not emit a signal. Their functions were to listen passively to incoming radar signals and perform signature analyses for securing geographical coordinates, pulse characteristics and precise timing. Also of special interest were several instances of simultaneous appearances and disappearances of the object on three separate "channels", i.e., visual, ground radar, and airborne ECM gear.

In his RB-47 paper, McDonald stated a facet of UFO research which lies at the heart of government "cover-up." Without terming it as such, it shows he was getting to the heart of how government treated important cases:

61. *Ibid.*

62. McDonald, James E., "Air Force Observations of an Unidentified Object in the South-Central U.S.," July 17, 1957, 26 pp., including graphs of RB-47's flight over several states.

*Actually, the case file for this incident, like that of many other scientifically significant UFO cases, is less than complete. It is quite possible that some of the original investigative records were sent not to Project Blue Book, but to Air Defense Command intelligence units, as several of the RB-47 crew indicated to me.... The men described quite detailed interrogation.... A number of extremely significant points are scarcely hinted in the Blue Book case file.*⁶³

Perhaps one of the most significant portions of the 1957 Intelligence Report on this case, found by McDonald in the Maxwell AFB archives, was the statement that the Director of Intelligence of the 55th Strategic Reconnaissance Wing had no doubt "the electronic D/F's coincided exactly with visual observations by aircraft commander numerous times, thus indicating positively the object being the signal source."⁶⁴

Solid cases like the RB-47 case buoyed McDonald's spirits. He seemed to be zeroing in on solid data, which could not be covered up with inane Blue Book explanations. The ADC had been involved, and their "Intelligence Reports" verified that radar and concurrent sightings by trained observers of unexplained, airborne objects, performing maneuvers far beyond the capability of Earth technology had occurred beyond any doubt. In fact, Project Blue Book did not even know about the case until it received summary information from the ADC about two months after the incident! When it finally reached Wright-Patterson AFB, V.D. Bryant of the Electronics Branch tried to evaluate the RB-47 case:

*The electronic data is unusual in that radar signals (presumably emanating from the "object")...have all the characteristics of ground-radar equipment, and are in fact similar to the CPS-6B. This office knows of no S-band airborne equipment having the characteristics outlined.... On the other hand, it is difficult to conclude that nothing was present, in the face of the visual and other data presented.*⁶⁵

In spite of these expert opinions, Blue Book resumed its dirty tricks. Capt. G.T. Gregory, of Lakenheath "fame", suggested that the "object" was a combination of mistaken, conventional objects passed along the four-state trek, including an airliner near Dallas and Ft. Worth, and it is so carried in the official Blue Book files. The Condon Report, which discussed the RB-47 case in three different sections (failing to identify each section as related to the others) speculated that the visual observations were due to oil-well flares near Oklahoma City, "perhaps" a thin inversion layer causing optical distortion of airliner

63. *Ibid.*, p. 4.

64. *Ibid.* D/F means Direction Finders.

65. *Ibid.*

headlights, and, the old standby, AP. In spite of this, the RB-47 case was assigned to the "Unidentified" category in the Condon Report. The irony of Blue Book's unsubstantiated "explanation" is that Blue Book received a report that the very same airliner, American Airline #655, flying 50 miles east of El Paso, at 3:30 A.M. that same date, almost collided with a "huge green UFO which appeared out of clear sky without warning."⁶⁶ Ten passengers were injured when the pilot violently maneuvered to avoid collision. McDonald summed up the Blue Book's trickery succinctly: "To try to equate that incident to the complex sequence of events involving the RB-47 is less than reasonable...."⁶⁷

McDonald planned to include the RB-47 case in the book he planned to write, which he hoped would convince the scientific community that the UFO question must be taken seriously. He included the case in a talk he gave to the 14th Radar Meteorology Conference, which met November 17-20, 1970, in Tucson. A beautifully prepared handout was distributed to attendees, and his paper was printed in the Conference "Proceedings." It was his last talk on UFOs before a scientific gathering. He was already deep in another atmospheric physics research project, which would result in his last appearance before a Congressional hearing, a hearing which would lead, indirectly, to his death.

66. *Ibid.*, p. 21.

67. *Ibid.*, p. 23.

The Black Spot of Our Inner Lives...

*But now, alas!
the tide has changed, my love she has gone from me,
And winter's frost has touched my heart,
and left its blight upon me...*

—from “Flow, sweet river, flow”

The most interesting stage in any investigation is the one in which people are still struggling to understand what sort of thing they are dealing with. Once we understand what kind of thing it is, the further developments follow with a certain predictability.

—John A. O’Keefe in Foreword to *Tektites*

In spite of the concern of close colleagues, McDonald’s reputation survived intact. Carping had come from a few quarters, but those who criticized him, such as Ratchford and Condon, were not in a position to hurt him professionally. The entire UFO field felt that he was making a crucial difference.

McDonald was encouraged by data that were coming to him after years of trial. Since 1968, he’d tried to track down Art Lundahl, a photogrammetrist who knew the inside facts of the government’s analysis of the Newhouse UFO film, which had been photographed by a Navy warrant officer near Tremonton, Ut., and was a classic in the UFO field. The government had made many attempts to prevent the details of their analysis from becoming public, and McDonald, intrigued by this, spared no effort in pursuing it (see Chapters 8 & 10). He tapped several contacts from 1968 to 1970, and finally he and Lundahl met for a confidential talk. His journal relates unusual aspects of this meeting: “4/28/70 Tuesday noon Art Lundahl picked me up with sandwiches and drove to Lincoln Memorial where we talked 1.5 hrs.”¹

1. McDonald, fourth journal, p. 46.

Sandwiches at the Lincoln Memorial? McDonald customarily planned lunch and dinner meetings, at times even over breakfast. Never before, in any of his journals or file notes, was such a public place mentioned for a meeting. Could it be that Lundahl hesitated to talk about sensitive material in a building that might be "bugged"? Or was McDonald concerned by now that his activities were being monitored?

McDonald had also tried for three years to track Newhouse down for a personal interview; Lundahl brought him two possible addresses. Lundahl did not know Newhouse personally, but his associate (and later deputy) Capt. Pierre Sand, knew him well. Newhouse had a good reputation; Pierre Sand had described him as "no feather merchant, no mendicant."² Then McDonald listened carefully as Lundahl told him how the film had been analyzed. At the time, Lundahl had been the Assistant Chief Engineer of the U.S. Navy PIC in Anacostia. By the time he met with McDonald, he had 4,000 employees working for him, handling CIA, Air Force and Navy photos.

The Newhouse film had been thoroughly investigated by NICAP and other researchers. The photographer, Delbert Newhouse, was a totally reliable, solid citizen and was a career Navy warrant officer at the time of his sighting. He was an expert in aircraft recognition, as well as photography, and was adamant that the objects he had photographed were not aircraft.

USAF investigators had come to Newhouse after they heard about his film and borrowed the original before he could get it copied. In the Newhouse film today, there are no frames of the objects as he saw and filmed them when the objects were closest to him. Newhouse was adamant that they were clearly artificial craft of the classic flying saucer type, that is, like two plates, with their rims touching. Yet, when the film was returned to him after analysis, the frames which showed the objects in this aspect had been snipped away. Newhouse never saw this portion of the film again. The Air Force returned a copy to him instead of the original he'd lent them, saying they ran the original so many times it was worn out!

McDonald queried Lundahl about the interest the Robertson Panel had shown in the Newhouse film. Even though that panel had "studied" 75 cases during its four-day meeting, the USAF and their CIA hosts made available only two UFO film/photos, one being Newhouse's. Lundahl had sent Lt. R.S. Neasham, USN and Harry Woo to brief the Robertson Panel. That panel's report, de-classified in 1975, states that, at Air Force request, the PIC spent about 1,000 man-hours in the preparation of graph plots of individual frames of the film.

2. *Ibid.*, reverse p. 46.

Woo and Neasham had emphasized to the panel that, in their professional opinion, the objects were not birds, balloons or aircraft. Neither were they reflections of any kind but self-luminous. The Robertson Panel had been shown a film of a flock of circling sea gulls photographed in bright sunlight. In spite of Woo and Neasham's expert testimony, the Panel concluded that the sea gulls were sufficiently bright that the Newhouse film might also be "circling sea gulls."

Lundahl told McDonald he was sure that the Robertson Panel had tried to act responsibly. After all, a major flap of American UFO sightings had clogged the communication channels of the military and the government during and immediately after the 1952 D.C. sightings. In the early 1950s, our military communication channels were capable of being jammed.

Art Lundahl knew Philip G. Strong of the CIA's O/SI, who had been instrumental in calling the Robertson Panel together. "Phil Strong was open-minded regarding UFOs then, in 1953, and he's open-minded now," Lundahl assured McDonald. "I'm sure he'd not have covered up the UFO subject. But those who convened the Panel were concerned about the possibility of intelligence machinery being swamped."

McDonald was eager for details of how the Newhouse film was analyzed. "The Air Force came around rather informally, asking help on the Newhouse film, after they heard about them and borrowed them," Lundahl told him. "It was an informal request, with no official orders. Bob Neasham and Harry Woo of the PIC did the work, mostly in their spare time."³

"The film shows a cluster of objects whirling around at a very fast speed," said McDonald. "How did they go about tracking each object's motion in a swarm like that?"

"They set it up on a device used to evaluate firing accuracy," replied Lundahl. "They decided that the objects were revolving around each other in an irregular fashion, and each object was possibly spinning on its own axis at the same time. They detected color changes on the objects, too—from red to green to blue, in no ordered sequence." These were definite colors; there was no obvious Kodachrome explanation. UFO literature mentions only that the whirling disks, photographed at considerable distance, were "bluish-white" with no features visible. Were the color changes discernible only in the frames which had been taken when the objects were closer to the witnesses? And were other features visible in the closest frames? McDonald's notes on his meeting with

3. *Ibid.*, reverse p. 46.

Lundahl end abruptly with the cryptic notation: "Cf. note in pocket notebook on some of this. I think I'll dictate rest when get home."⁴

Lundahl probably told McDonald essentially everything he knew about the PIC's frame-by-frame study of the Newhouse film, but we may never be sure of this unless McDonald's "pocket notebooks" are found.

McDonald also asked Lundahl about Secretary of the Navy Kimball and CNOPS.⁵ Kimball had sighted a UFO while flying over the North Atlantic. Lundahl confirmed some information McDonald had on this case and added that Kimball's sighting had led to an extended UFO study conducted by the ONR in 1955.⁶ Lundahl was in a position to know about this. He had personally spotted the Soviet Union missile launcher on Cuba and personally briefed President John F. Kennedy about it, leading to the explosive Cuban missile crisis. Lundahl was proud of his work with the government. "I'm not killing anybody," he told McDonald. "I'm just helping to solve problems."

After their meeting, Lundahl drove him back to Park Central and the NSF session from which he'd played hooky. During his return flight to Tucson that night, he ran into seven colleagues who worked for Raytheon as well as Tom Donahue of the University of Pittsburgh. Three other colleagues were also on the plane, whom McDonald did not name in his journal. From these three, he felt "cool salutations."

While some of his own colleagues were expressing displeasure toward him, however, his antagonist Philip Klass was perhaps softening a bit. James McDonald's good friend, James Hughes, remarks: "Eventually they came to some kind of an understanding. Philip Klass, I don't know if he came to like McDonald, or whether he finally figured out he'd bit off more than he could chew." Klass continued to send him items of mutual interest, taking care always to mark on the envelope, "Not UFO material." McDonald had not responded to Klass's letters after their early exchanges, and Klass wondered if McDonald simply tossed away any mail bearing his name without even opening it. Actually, in McDonald's files, letters from Klass were neatly filed and preserved though most were apparently unanswered.

4. *Ibid.*, p. 47.

5. It is not known what CNOPS stands for.

6. Early in 1952, Navy Secretary Dan Kimball was in a plane flying to Hawaii when it was buzzed by a UFO. Kimball's pilot radioed a second Navy plane, some distance behind and learned that the UFO had just buzzed that second plane, so swiftly that no one aboard could make out its shape. Cited by Keyhoe, Donald E., in his second book, *Flying Saucers from Outer Space*, New York, Henry Holt and Company, 1953, p. 50.

McDonald received a postcard from Art Lundahl about a month after their meeting, containing additional information about an ONR-UFO project Lundahl had mentioned. The name of one project officer involved was Fred Lowell Thomas, to whom Lundahl had spoken on January 26, 1955. The ONR-UFO Committee had met in Building T-3, Room 1803 on March 3, 1955. McDonald must have wondered anew why the ONR repeatedly turned down his requests for funding to study UFOs. If they had studied them secretly in 1955, why not now, when so much more data had surfaced?

Between 1966 and 1970, McDonald naturally had been busy on many things besides UFOs. Several aspects of the physical and chemical modification of atmospheric environments, occurring as a result of human technology, had caught his attention. Around the time he met with Lundahl, he'd also prepared a research proposal for the NSF, which expressed his growing concern over the increase of carbon dioxide, water vapor emissions, thermal structure changes, cane-field burning, metallurgical operations, and lead contaminants from automobiles,⁷ and had spoken to scientific gatherings on these problems.^{8,9}

About the same time, the aerospace industry was all atwitter over the possibility that, within a couple of decades, their fleets of subsonic airliners, which flew at about 35,000', would be outdated and that supersonic transports (SSTs) which would fly much higher and faster would be available for civilian air travel. The Boeing Corporation, based in Seattle, Wa., had a government contract to develop a prototype for an American SST; General Electric was developing the engines for the giant aircraft. Because of growing public concern about atmospheric pollution, Boeing had sought out McDonald some years prior to clarify a specific question: Would SSTs, flying at the edge of the upper atmosphere, leave permanent condensation trails? If this was likely to happen, the SSTs could not be built in large numbers, for permanent clouding would interfere with the normal action of sunlight on the surface of the Earth.

McDonald had traveled to Seattle to consult with Boeing and took advantage of the opportunity to spend some quality time with his family "We all went up to Seattle and camped up there while he talked with the Boeing people," says Betsy McDonald. "That [SST] question had been around for a while and, basically, we were opposed to it."

7. McDonald, James E., "Studies of Physical and Chemical Modification of Atmospheric Environments," unpublished research proposal to NSF September 24, 1969, 15 pp.

8. McDonald, "Some Subtleties and Misconceptions Concerning Southern Arizona Air Pollution," self-published summary, 8 pp.

9. McDonald, "Airborne Lead: An example of Technological Contamination of the Atmosphere," unpublished manuscript, dated Oct. 2, 1969, 42 pp.

The activist causes with which she was involved were also concerned about the growing problem of pollution; McDonald was concerned from a scientific viewpoint. He had researched the question of permanent condensation trails and had come to the conclusion SSTs would not cause this. He so informed Boeing. The aircraft company's officials were relieved and went ahead developing their prototype.

"His ecologically minded associates were very disappointed in him, suggesting that he should have said 'yes,' [to the question of permanent condensation trails] because most of them politically opposed the SST," states Betsy McDonald. "They told him, 'You shouldn't have published the truth, because you really oppose it.' But they couldn't get him to do it. He and I believed in the truth, whether we liked it or not. So then, through the years, he wondered if there was something wrong with the SST, and he began to learn about it on his own."

He assiduously researched the effects supersonic transport fleets would have on the upper atmosphere, partially in connection with an NAS POWACM panel. By August 1970 he'd come to the conclusion that fleets of SSTs, operating in the stratosphere would possibly act to deplete the ozone layer. He discussed this in a 85-page paper which he prepared for the NAS Panel.¹⁰

McDonald was one of the early pioneers to issue public warnings on this subject. Few lay people even knew about the fragile "ozone layer" which protected Earth from the sun's harmful ultraviolet radiation. This imminent problem excited McDonald's scientific interest as well as his public awareness. By November, his preliminary results were imparted to a meeting of the NAS. Atypically, his paper comprised only one page but was laden with data. He had factored in the total rate of (projected) SST emissions and demonstrated major problems associated with this.¹¹

Many scientists disagreed with his warning. He responded by sending a 23-page letter to Dr. Charles L. Dunham of the NRC.¹² With the scientific controversy in full swing, Congress decided to hold hearings as to whether or not they should withdraw the government contracts on the SST. McDonald decided to devote total energy toward this problem and informed his colleagues in the UFO field that he would not be able to participate in UFO research until after the Congressional SST hearing set for March 1971.

10. McDonald, "Revised Draft for the Panel on Weather and Climate Modification," self-published paper dated August 1, 1970, 85 pp.

11. McDonald, "Atmospheric Modification from SST Operations," self-published summary of points present at COSPUP meeting, Washington, D.C.

12. Letter from McDonald to Dr. Charles L. Dunham, November 19, 1970, 23 pp.

By late November, McDonald's research indicated that fleets of SSTs could damage the ozone layer beyond its ability to repair itself. The resulting increase in ultraviolet radiation reaching the Earth could cause significant increases in skin cancer in the U.S. He researched the epidemiology of skin cancer, journeying to several major medical facilities to obtain the best possible data. He then made a strong plea to the NAS panel, urging that Congress act immediately on the SST question instead of waiting until March, but the panel dragged its feet.¹³ Further pleas did no good, so McDonald went ahead on his own, refining his data as an independent scientist rather than as a member of the panel. He was invited to testify at the Congressional hearing by Rep. Sidney R. Yates of Illinois.

He continued to seek out the world's skin cancer experts: at the University of Texas, at Temple University, and at Baylor. Once they realized the extent of this study, he was invited to give lectures on this subject at these institutions.

Even though he was totally immersed in SST research by November, he took time out to give a talk on UFOs to the Radar Meteorology Conference which met Nov. 17-20 at Tucson. His talk was printed in that conference's *Proceedings*, one of the rare times a UFO paper was published in the scientific literature. It showed his grasp of radar technology and rebutted the Condon Report's coverage of the Kincheloe AFB case of Sept. 11-12, 1967, involving 17 separate unidentified returns from radar. Gordon Thayer had tentatively identified these as "anomalous propagation." McDonald, however, had personally interviewed the senior radar operator on duty during the episode, who gave details of the case which demonstrated effectively that Thayer's explanation was false. Kincheloe AFB was one of the cases McDonald intended to include in the book he planned to write.

At the Radar Meteorology Conference, he also included the RB-47 Gulf of Mexico case (see Chapter 17), as well as an incident that had occurred October 14, 1957, at the Naval Air Station near San Diego, Calif., involving the chase of a brilliant UFO by a Navy submarine search aircraft. His detailed discussion of the San Diego case brought out a restriction which had been placed upon him by the Air Force.¹⁴ He'd been forced to sign a written agreement that he would not publicly use witnesses' names on certain official cases, even though he had found them in the Maxwell AFB archives and had made copies of them! In his discussion of the San Diego case, he bluntly challenged this "Air Force stricture."¹⁵

13. McDonald, "Tentative Estimate of SST Emissions—Working Assumptions 1985-1990+," self-published summary, Nov. 30, 1970, 3 pp.

14. SAFOI letter, 7 August 1970.

Even as he immersed ever deeper into his SST-ozone studies, the UFOs kept creeping in. In early February, Allen Hynek came to Tucson and asked to see him. McDonald told Hynek about the radar-visual cases he'd found at Maxwell AFB. "I found hundreds of really significant cases...objects exhibiting performance characteristics that are not in anybody's aeronautical engineering book," he told Hynek. "You must have known about some of them, at least!"

"Stop trying to re-write history and take a good, long, hard look at it," McDonald further advised Hynek. "You were with Blue Book from 1948 on!¹⁶ Until you honestly admit that you were part of the problem, why UFOs have been ignored these past 25 years, you can't be part of the solution no matter what you do."

Hynek replied, "I'm doing my best now. I've come around to a full acceptance that there is a problem, and I'm speaking out openly! What else is needed?"

"I need to know you're not going to try to re-write history," said McDonald. "That book of yours you're writing had better be an honest account of UFO history. Because if it's published and it isn't honest, everybody will hear about it, from me!"

The two men exchanged verbal blows for over two hours, leaving James McDonald thoroughly galled and Hynek hostile.¹⁷ It was to be the last time they would see each other.

About a month before he was due to testify in March, top-level government officials reportedly got in touch with McDonald. Just when and where this came about is unclear; our present knowledge is based on first-hand testimony of persons in the UFO field. Marty Lore relates how she learned that McDonald was talking with "people at the top."

"It was one of the last times I saw him," Lore describes. "He said he was meeting with these people—he wouldn't even tell who they were. He was saying that he was so sorry that he couldn't tell, but that it was so high-up that he wasn't supposed to tell anyone about it. I think he felt that he was being separated from the people he was most comfortable with."

If McDonald had, in fact, been contacted by "top people" in government who were knowledgeable about UFOs, the feeling of separation which Marty Lore describes would have been disturbing to him. The sharing of information

15. McDonald, James E., "Meteorological Factors in Unidentified Radar Returns," reprinted from *Proceedings 14th Radar Meteorology Conference*, November 17-20, 1970. (His hand-out is included as Appendix Item 18-A, .)

16. McDonald, fourth journal, p. 49.

17. *Ibid.*, reverse p. 49.

with like-minded colleagues was all-important to him. But in spite of the fact that McDonald seemed to be experiencing a sense of "separation," his equable nature still appeared unchanged.

"He had the same unbounded energy, up through the last time I saw him," Marty Lore continues. "I never saw any change in Jim—his enthusiasm and that sort of thing. He was always that way, a very warm and a very sweet man." She is not the only person whom McDonald told about "being close to the answer." He also talked to Robert Wood about it when, around the beginning of February 1971, Wood had the chance for a brief stopover at Tucson. McDonald dropped his SST-ozone study for the afternoon and met him at Tucson Airport, where they ordered a beer in the airport bar. The conversation started out in the usual way, the "What's the latest that you've heard?" type of discussion.

"But after we did a little bit of that," relates Wood, "Jim got into a mode where he seemed to confide in me a bit. An imperceptible change in the way the conversation was going." He does not remember the exact words that followed, but relates the spirit of it.

"Bob," said McDonald. "I think I've got the answer."

"To what?" asked Wood.

"I found out what's behind it," said McDonald. Wood realized from the change in his manner that McDonald had found out something very important about the UFO phenomenon. "What is it, Jim?" he inquired.

"I just can't tell you right now," said McDonald. "All I can tell you is, I think I'm hot on the trail." He paused a moment, then added, "You won't believe it! I've got to pin it down a little bit more, and then it'll come out."

"And that was it," says Wood. "I just don't remember the details of the rest of the conversation, but I do know that part really stuck in my mind. I can speculate, now that I know what I know, about what he might have meant. I think he found the trail to the classified work...and some documentation that made it pretty clear that there was a cover-up going on, that this was the most classified program in the country."¹⁸

"The thing that would have made him say, 'you wouldn't believe it'—the first thing that was 'unbelievable' in that era—is that we had in fact recovered a craft." Wood refers to the widespread reports that something "unidentified" may have crashed near Roswell, N.M. Officials at the 509th Army Air Force Group initially released the report, describing a debris field of unknown types of metal and other strange structural fragments, but higher Air Force officials

18. Dr. Robert M. Wood interview with author, 21 August 1993.

rapidly hushed up the report, claiming the debris was from a high-altitude balloon. The Roswell incident remains a matter of intense controversy within the UFO community. Of course, if he had found the trail to the classified work, as Wood puts it, McDonald may have been referring to other documents describing a government cover-up other than the Roswell incident.

Another unusual fact about McDonald's conversation with Wood that day was that McDonald did not discuss the perennial question of foul-up vs. cover-up which he invariably brought up at their prior meetings. This compounds Wood's conviction that McDonald had somehow stumbled upon, or been led to, government documents which contained proof of UFO reality.¹⁹

Other things changed in McDonald's life about the same time he was confiding to Robert Wood. In the late winter months of 1970-71, he walked into the office of IAP's head secretary, Margaret Sanderson-Rae. "Margaret, you and I had a falling-out a couple of years ago, and I told you never to come into my office again," he said. "You tried to explain to me what was going on, and I wouldn't listen. I'm listening now. Would you like to tell me?"

"I wasn't just doing a routine organization of your office, like I did all those years," Sanderson-Rae told him. "I was getting your mail ready for you when you came back from that trip. I had to assign you a secretary those couple of months who didn't know how to sort your mail. I had gone in there after she was dismissed, and re-organized everything. I didn't intend any intrusion into your private affairs."

"I know that now," said McDonald. "I'm sorry for the way I acted. I was under a lot of stress at the time."

"Only Dr. McDonald would have done that," Sanderson-Rae relates. "I have been grateful so many times that he was good enough to come to me and ask for that explanation and apologize—before the end."

During the time McDonald was studying the link between ozone damage and skin cancer, he often discussed problems of continuing pollution of the upper atmosphere with Dr. Al Mead, head of the zoology department.

"He would be riding his bicycle on the campus and...would call to me and straddle his bicycle," says Mead. "I walked to school, so we would stand there and he would indicate what his thinking was...new aspects, and new ideas he

19. Interview cited above, and adjunct phone interview with Dr. Robert M. Wood, 28 March 1997. The phrase, "You wouldn't believe it" seems like an echo of Arthur Richards's statement to Duane Mack, an NWC employee who had imparted Richards's "landing case" experience to McDonald some months before. Could McDonald have been successful in following up this case? (See Chapter 15.)

had.... His main concern was the chemistry of the upper atmosphere, and what it was doing to the radiation that we get from the sun. His fear was that we were upsetting the very delicately balanced upper atmosphere to such an extent that it would endanger human life.... I had been working on the economic aspects of my research animals, and somehow that transferred into his assuming that I would be interested, which I was. [All of us] had such good faith in his predictions about the atmospheric disturbances, because we knew he could take a problem and get to it.... We would respect his answers."

In talking with many scientists and researchers who were interviewed for this book, a remarkable aspect of McDonald's life comes to light. Over and over again, they slip easily from the past tense into the present tense while speaking about him: the man they knew and worked with is still powerful in their minds. Dr. Mead continues in this vein:

"I appreciated that mind—that he would pick things up, and mull them over...and penetrate the question deeper. That's just like him. Well, you're working with a very, very interesting man, who's left a definite mark in his field.... He'd get interested in anything he touched."

Mead was interested in all forms of life, and currently is researching the evolutionary patterns of giant African land snails.²⁰ Regarding McDonald's concern that atmospheric contamination could possibly wipe out all human life, he says:

"Yes, the whole of life...because he knows that there are catastrophic events in the past—he knew there were," Mead corrects the verb tense. "The paleontological history shows that there were great destructions of life. He knew those things, and he could see an impending serious situation developing here, that could be controlled by [human beings] if they would."

Around this same time, McDonald met another researcher who is able to add valuable insight into what was going on in his mind. Stephan A. Schwartz was director and chairman of the Mobius Society, a (formerly) Los Angeles-based research organization which conducted scientific inquiries into the nature of human consciousness, field research projects in intuitive criminology and psychic archeology.²¹ He had heard from Dr. David R. Saunders about McDonald's UFO research and realized he had possibly the most complete files of anyone in the country, including government docu-

20. A recently published article by Dr. Mead, who is now Professor Emeritus in the Department of Ecology and Evolutionary Biology of the University of Arizona at Tucson, is: Mead, Albert R., "Anatomical studies reveal new phylogenetic interpretations in *Lissachatina* (*Pulmonata: Achatinidae*)," *Journal Of Molluscan Studies*, 61 (2): 257-273, 27 figs., May 1995.

ments, as well as a large library of UFO books. Schwartz had also met Donald E. Keyhoe in the 1950s.

In the course of working as a civilian special assistant to the Office of Naval Operations (ONO), Schwartz had come across a once-secret project which involved UFO-related propulsion technology. He was anxious to discuss this with McDonald, since no one else in the UFO field seemed to know about it. He'd been given an introduction to McDonald by a mutual friend, Frank Woidich, an oncologist researcher who was also interested in UFOs. On a business trip in late winter 1971, Schwartz stopped over in Tucson to meet with another old friend. He'd never been in Tucson before, but he liked used-book stores. He happened upon The Book Stop and started looking through the UFO section. It happened to be the very book shop where McDonald bought his own UFO books.

"There was a guy in the shelves...a very nice, scientific-looking guy," says Schwartz. "We started talking without introducing ourselves." They discussed their mutual interest in the UFO subject for a little while.

"Oh, I'm supposed to meet this guy, McDonald," Schwartz told him. "I have this introduction to him. He lives here, somewhere in town. Do you know him?"

"Well, that's who I am," replied McDonald.

"Oh," said Schwartz. "I understand you've got these tremendously great UFO files."

"I've been studying the question," said McDonald.

"I'm only in town for a very short space of time," continued Schwartz. "I'd like very much to see your files. I'm interested in whether or not you've happened to stumble upon Project Winterhaven?"

"What is Project Winterhaven?" asked McDonald.

"It was a project that T. Townsend Brown did for Admiral Radford, who was then head of Naval Research," replied Schwartz. "Brown apparently had made a small flying saucer and flew it."

"How did you know about that?" asked McDonald.

21. For information on the Mobius Society and/or Stephan A. Schwartz, access www.irva.org or stephanaschwartz.com. For one example of the ample, popular literature describing the Mobius Society's work, see Druffel, Ann, "The Psychic Laboratory of the Mobius Society, Parts I and II," *Fate Magazine*, June-July 1989.

"Well, I had security clearances with my work for the Navy," explained Schwartz.

"I don't really know that much about T. Townsend Brown," said McDonald. "Though I've heard bits and pieces that are intriguing. Don Keyhoe told me about him."

"He made a UFO model six to nine feet across, one that actually flew," said Schwartz, "and [Admiral] Radford said, 'We're going to do it,' and never did it."

"Where did you learn this?" inquired McDonald.

"Believe it or not, I got it out of some guy's attic," replied Schwartz, telling McDonald the name in confidence. "He had been one of the scientists on the project and kept a copy of the report."

"I'd be extremely interested in meeting with you and chatting about all this," said McDonald. "However, I have to go out of town today on business and just can't do it right now." They stayed there a few more minutes, chatting, and made plans to meet at a later date, whenever they could arrange to have their paths cross again. When they met a few weeks later, it would be in Washington, D.C., and their conversation would revolve around troubling events.

In spite of his intense concentration on his SST/ozone study, UFOs still tapped at McDonald's mind. As the time grew near for the hearing, he added items to his "Controversies and Unorthodoxies" file:

3/30/70 Tonite re-read last section of Tyrrell's "Personality of Man" & am a bit shocked now to see how closely scientific response to UFO's parallels his remarks re closed-mind attitude re paranormal. His discussion very good.²²

He looked forward to resuming UFO research and writing his book rebutting the Condon Report. Plans were firming up as early as July 1970:

6/15 to 7/4/70. Spent most of time getting all my M[axwell] AFB Xeroxes in order... Real bonanza there. Plan to do paper at Nov/70 IAP Wea Radar Conf... Hope to then expand that into book as per conversation with Rod Hastings [history professor, U.A.] c. 6/20 + or - in his office. A[rizona] Press looks fair bet, faster now.²³

But his book had to wait until after the SST hearing. On March 2, 1971, McDonald appeared as a witness before a subcommittee of the House Appro-

22. McDonald, "Controversies and Unorthodoxies" file.

23. McDonald, fourth journal, reverse p. 47.

priations Committee conducting the "Civil Supersonic Aircraft Development SST" hearings. His basic testimony was contained in a 29-page "Statement" and expressed his indebtedness to many other scientific colleagues in a variety of different fields, who had offered advice and critique, including those on the NAS Panel where he had begun his study.²⁴

It is impossible to give his full testimony here, but he began by explaining the difference between the troposphere (the layers of atmosphere closest to the Earth) and the stratosphere, or upper layers of the atmosphere, emphasizing that the stratosphere was about 100 times more sensitive to pollution than the troposphere. Military supersonic jets already flew in the stratosphere, where the projected SST fleets would cruise at about 65,000'. The total number of military flight hours per year was small, however, compared with the operational levels projected for commercial SSTs. Eloquently, he described the basic problem:

[T]he stratosphere...has no cloud-and-rain washout mechanisms comparable to those that are effective in our troposphere. Instead, gases or particulates emitted into the stratosphere find themselves in an extremely stable region in which removal hinges upon slow transport and downward mixing...where rain scavenging can complete the removal process. For the lower stratosphere, where the proposed SSTs would fly, the average turnover time...[is] about two years....²⁵

Without belligerence, McDonald remarked that the American aircraft industry was thinking first of efficient fuel consumption and decreased flight-times. In view of the money profit, he suggested, they were not taking enough time to study the possible damage the atmosphere would sustain. On the subcommittee were certain congressmen backed by business interests; among these was Rep. Silvio O. Conte of Massachusetts, who sat quietly listening.

In his testimony, McDonald covered all the complexities of the problem. Although much was already known about the stratosphere, high-altitude technologies could cause problems that science was barely beginning to understand. Using graphs and other visuals, he demonstrated how water-vapor emissions

24. McDonald, "Statement: Submitted for the record by Dr. James E. McDonald, Institute of Atmospheric Physics, University of Arizona, Tucson, Ariz., at Hearings before the House Subcommittee on Transportation Appropriations, March 2, 1971, concerning the Supersonic Transport Program," p. 2. Transcripts of the entire hearings are contained in "Civil Supersonic Aircraft Development (SST): Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, Ninety-second Congress, First Session, Subcommittee on Department of Transportation and Related Agencies Appropriations, John J. McFall, Calif., chairman," Government Printing Office, 648 pp.

25. *Ibid.*, p. 3.

from fleets of SSTs would allow excessive ultra-violet radiation to strike the Earth's surface. He conservatively presented a "round-number estimate near 10,000 new [skin-cancer] cases per year:"

*I can fully understand why some persons might...think that such a suggestion sounded ridiculous. But though there may well be errors in my analyses of the various parts of this problem...the water vapor concentrations could lead to just such modest ozone changes.*²⁶

He added a chilling statement, reflecting his concern for all life on Earth:

*Finally, the purely biological and evolutionary evidence that we, as well as all other life forms, have evolved in ways leaving us only marginally protected from highly adverse effects of ultraviolet radiation is essentially incontrovertible.*²⁷

In November, while still on the NAS panel, McDonald had made a plea to the DoT advising that Congress should be informed immediately of the danger of the ozone damage-skin cancer link. Even though many scientists on that NAS panel had backed him up, the DoT had dragged its feet. In referring to this, Reps. Jackson and Magruder had called the skin-cancer concern "kooky" and "nutty." McDonald answered that charge in plain English: "It is not 'kooky,' it is not nutty, it is not ecological extremism. It is physics and chemistry, photochemistry, cell biochemistry, atmospheric physics."²⁸

Boeing's officials had calculated that water vapor emission from SSTs would decrease the ozone layer by 4%, which they considered an "acceptable" figure. A group from MIT had used a 2% calculation, derived by British scientist Dr. Julius London. McDonald was talking about a 1% reduction, a very conservative figure, but enough to cause greatly increased skin-cancer rates on the American continent, the rates dependent on varying climate, latitude, elevation, sun angles and particularly on the ancestry of Americans concerned. People of Celtic stock, particularly Americans of Irish descent, would be most susceptible because of their generally fair coloring, but most Americans of European ancestry would be endangered. By contrast, Americans of darker skin color would not be affected in such great numbers, for they would be biologically protected. His conclusions were documented by data from other parts of the world.²⁹

26. *Ibid.*, p. 309.

27. *Ibid.*

28. *Ibid.*, p. 319.

29. *Ibid.*, p. 321.

James McDonald's testimony brought high praise from the subcommittee's chairman, John J. McFall of California. Rep. Yates also remarked, "Dr. McDonald is testifying at my request. I must say...that somebody told me about Dr. McDonald's skin-cancer theory, and immediately I shrank, because most people would think that this is one of those mad scientists.... I checked with the NAS...and with other scientists, and I said, 'Who is this fellow McDonald and what are his credentials?' and without exception they all said he was a very fine scientist."³⁰

At this point, Rep. Conte started questioning McDonald in a rather folksy manner, saying that he could appreciate his concern about "those ozones and skin cancer.... I rode pretty hard on William Ruckelshaus yesterday, the administrator of the EPA, because he couldn't give me any timetable when they would make some tests regarding ozone and other problems..." Conte continued. "With all the years that they've been kicking this SST around I felt that some studies should have been made."

"I have to agree very strongly," replied McDonald.

"On the other hand...I have to ask this because no doubt it will be brought up in debate..." continued Conte, with a disarming gesture. "I have been told that you are an expert on unidentified flying objects, or flying saucers. Do you think that these flying objects are extraterrestrial probes, vehicles or products, of some technology other than our own?"

McDonald, as well as many of the committeemen, were taken aback, but Conte continued rapidly. "I recall that you did testify before the Congress that you believe the power failures in New York in the mid-sixties were caused by these flying saucers—"

McDonald tried to interrupt, but Conte hammered ahead. "I also recall that the FPC found that the cause was due to a relay being set too low for the load which the line was carrying. I think it is very, very important to this hearing to determine how you came to that conclusion."

McDonald heard a murmur of laughter from the audience. "I didn't come to that conclusion," he objected. "Congressman Ryan asked me a question on that and he worded it in the following way: 'Did I think there was enough correlative evidence of UFO sightings at the same time as power failures to raise a major investigation?' My answer was essentially negative, but enough of a correlation to be a little bit disturbing. That was the answer I gave to the House Committee."

30. *Ibid.*, p. 330.

"Why would you think it would be disturbing?" pursued Conte. "I want this for my own edification, because it is going to be bandied around and I think we ought to know."

"Why would power failures be disturbing?" James McDonald asked.

"Oh, not power failures," replied Conte. "Rather, UFOs causing power failures." By now some of the audience and Congressmen were openly laughing.

"You asked a question which I am prepared to talk about in far more detail than I am prepared to talk about the things you have just heard me discuss," said McDonald. "The reason for that [1969] hearing was that the Committee on Science and Astronautics wanted to get an evaluation from some scientists who had seriously examined the problem, and scientists from Northwestern and various places discussed the problem. I am very seriously considering the UFO problem, above all, after three weeks of careful study of Maxwell Air Force Base archives in Montgomery, Ala., the content of which was to me simply astonishing. The number of Air Force radar cases, some of which have been in conjunction with power failures, to come back to your point, is really disturbingly large.... My answer is very forthright, that this is a problem which has been scientifically ignored by persons who know practically nothing about it. But a close examination of the Air Force files and the kinds of detailed investigation that I have done on the problem leads one to be quite scientifically concerned about it."

"Have your views in connection with unidentified flying objects tended to open up a credibility gap in the scientific community?" asked one of the other Congressmen.

"I don't think so, not that I am aware of," replied McDonald. "I have discussed that problem with a very large number of scientific groups around the country. I suppose I have had plenty of chance to encounter answers to that question and, no, I think not. I think I have looked at that problem with about the same attempt to keep an open mind and go at it diligently as I have on this one. I have a feeling that scientists have in fact, many of them, become quite concerned about the problem as a result of my attacking it." He saw the chance to get back to the subject. "But it is not entirely clear that there is a relationship between SSTs and UFOs." The audience chuckled more softly, appreciating his deftness.

"I think there is a relationship," insisted Conte, boring in. "I voted against the SST last year. I am not certain now how I am going to vote on it, but I am probing everyone who comes before us. Certainly, if you come up with a theory, and assuming I oppose the SST and use you as an expert, it would be thrown

against me on the floor of the House, and I must know whether your theory on 'flying saucers' has held up and whether it did have any connection with the power failure in New York."

Conte's emphasis on the words "flying saucers" caused many in the room to laugh anew. McDonald controlled his reaction. "I have answered that question, of course," he replied.

"Do you understand my point?" said Conte, pretending to plead for understanding. "That is the relationship."

"To some extent, yes," said McDonald, more wary now. "But take a look at the total block of testimony in that hearing which was mine, about an 80-page inserted statement in the House document that grew out of that. You would have no difficulty finding a large number of scientists who know a great deal about my examination of that problem, who could give you a good reading on how thoroughly I have dug into it and why in the end I am concerned about that as a scientific problem. Yes, there is a connection, in that sense. But are we talking about a nut? You used the term 'flying saucers.' You used the term 'believe.' I don't use those terms."

Conte tried to insist he'd used the term "unidentified flying objects." McDonald didn't quibble and instead suggested that Conte take his own look at the Maxwell Air Force archives. Conte wiggled out of the exchange, saying that he wished he "had the time."

Conte then got back on the subject at hand—the SST—and asked James McDonald for referrals to other scientists who would back up his skin cancer theory. McDonald told him about English scientific studies on ultraviolet carcinogenesis, but pointed out that the link between the SST, ozone damage and increased skin cancer rates had only newly surfaced because of his own research. Conte then dropped the subject abruptly, and Rep. William E. Minshall of Ohio jumped in.

"I would just like to point out to you, Doctor, that I serve on the Defense Appropriations Subcommittee, and we have discussed the sighting of UFOs with Defense Department witnesses who have appeared before that Subcommittee," Minshall said. "We have held secret hearings on it, we have held open hearings on it, and I think the hearings are now open to public inspection. All the experts, both civilian and military, absolutely discounted any possibility of actual incursion into airspace by people from the outer planets."

Minshall was perhaps referring to the Rivers Committee, where Hynek and Quintanilla of Blue Book had downplayed importance of the 1952 Washington, D.C., UFO overflights, particularly. The full transcripts of that hearing had not been released; only a summary of part of it. "A lot of this was behind

closed doors as well," said Minshall, giving some the impression that he was relishing his privileged position.

"Are you asking for a comment on this?" asked McDonald bluntly. "I'm afraid that all the indications are that the full measure of that problem has been no more laid before Congress than the skin cancer problem has been laid before you, prior to today."

"We went into it quite thoroughly," said Minshall, protecting his status.

"I would be most interested to have an opportunity to study the closed hearings," challenged McDonald.³¹

Minshall didn't answer, and the session went into recess. When it reconvened a little later, there was no rest for McDonald. Rep. Tom Steed of Oklahoma, who was either rather dull or deliberately trying to obfuscate the issues, challenged McDonald on his ability to talk about the photochemical reactions which could destroy the delicately balanced ozone layer. McDonald was quite patient with him, explaining how he had sought the advice of photochemists at ORNL and Baylor, and how he had derived data from a true expert in photochemistry, Dr. J. London. "One draws on other people's work," McDonald told Steed. "That is what is involved here." Steed persisted, and the hearing dragged on.

Then it was Rep. Jack Edwards' turn to question him. In answer to one of his interminable inquiries, McDonald explained that supersonic aircraft of the military services gave off only about 1% of the water vapor that would be emitted from fleets of SSTs flying daily.³²

McDonald was followed to the stand by other witnesses, who testified both pro and con; McDonald stayed on to hear their testimony. One was Stewart L. Udall, former Secretary of the Interior, who also urged that SST development be stopped. In all, 30 individuals—scientists and representatives of citizen groups alike—testified on different ways fleets of SSTs would harm the environment, including harmful noise level, sonic blasts and various contaminants in all layers of the atmosphere. One of these speakers commented on Sen. Barry Goldwater, who was a firm proponent for SST development, and who had publicly attacked the truthfulness of environmental organizations that were trying to "spare the world."

"Senator Goldwater is probably the most charming, most radical and most consistently wrong person I have ever had the pleasure of debating," one envi-

31. *Ibid.* pp. 333-36.

32. *Ibid.*, pp. 337-42.

ronmentalist testified. "Still, anyone who likes to run the Grand Canyon in boats cannot be all wrong." These words forewarned a clash which would soon occur between Goldwater and McDonald.

When Dr. Will Kellogg, McDonald's colleague at Colorado's NCAR, testified, he initially supported McDonald's testimony about the effect SSTs would have on the ozone. He also predicted that fleets of SSTs could create a smog problem in the stratosphere and other adverse environmental effects. However, Kellogg considered McDonald's data for an ozone damage-skin cancer link as flawed.³³

As Kellogg fielded questions from the Congressional Panel, Silvio Conte again brought up McDonald's UFO research, reading from a page of disjointed quotes from McDonald's testimony before the 1968 Congressional UFO hearings. Conte read these as a "paragraph," but actually they were snippets plucked from McDonald's 85 pages of UFO testimony and arranged in such a way as to distort their original meanings and give the impression he believed firmly in UFO occupants! Conte's unethical approach omitted most of McDonald's important qualifying phrases, made no mention of the credibility of occupant-sighting witnesses, and the fact that such sightings occurred worldwide. Conte ostensibly "quoted" McDonald:

*An extremely unusual category of cases, those involving reports of humanoid occupants of landed UFOs.... I have tended to skirt such cases on tactical grounds; the reports are bizarre.... One or two early attempts to touch up that point...taught me that one loses more than he gains in speaking briefly about UFO occupants.... But occupants there seem to be, and contact of a limited sort may well have occurred....*³⁴

Conte abruptly followed his reading of the "quotes" with this comment: "A man who comes here and tells me that the SST flying in the stratosphere is going to cause thousands of skin cancers has to back up his theory that there are little men flying around the sky."³⁵

The hearing room broke into laughter. We cannot be sure of the motives behind Conte's bitter attack. Jacques Vallée remarks: "This is the [sort of] situation [against] which Hynek had cautioned him. Jim...was arguing before people who were not ready for what he said and the way he said it. Hynek's position 15 years earlier had been even worse."

33. *Ibid.*, p. 526.

34. *Ibid.*, p. 562.

35. *Ibid.*

McDonald realized that Conte had publicly ridiculed him, a situation which had never confronted him before in his scientific life. Stephan A. Schwartz, the researcher who had talked with him in the Tucson book store not many weeks prior, was also in Washington, D.C., for part of the SST hearings, because the Navy had an interest in them. He saw McDonald later that day in a hotel coffee shop, sitting at a table with another man whom Schwartz could not identify. Schwartz approached and told McDonald he'd tracked down T. Townsend Brown.

"Did Townsend have a copy of Project Winterhaven?" asked McDonald, shoving his own problems aside for the moment.

"No, he told me about it, what he'd done, but ironically he did not have a copy," Schwartz replied.

Schwartz was not aware of the ridicule McDonald had just sustained at the hearing. "I'm still looking for more information on Project Winterhaven," he relates. "I was blind to the sub-text that was going on. But McDonald was depressed, or bitter, almost cornered. He was just like a guy [who'd] gone up to shake hands with someone that he knew and instead...the guy had reached down and picked up a 2 x 4 and hit him on the side of the head. It was just completely unexpected."

McDonald spent very little time talking about the hearings, but the conversation led to his UFO research. Schwartz asked him if he'd considered the possibility of funding from the NSF. "They won't let them say 'yes,'" McDonald answered.³⁶

This short statement spoke volumes. Somehow, in the short period—a few weeks or a couple of months, after he had appeared so upbeat to Robert Wood and Marty Hall, confiding the fact that he had "high-level" information about the nature of UFOs, something had happened that showed him he'd been led down a garden path. But who were "they"?

"It was the scientific establishment," reasons Schwartz. "They weren't going to go along with what he wanted. And he was stunned at that. He felt his case was compelling, that on the strength of its merits he ought to win."

What Schwartz did not know—the "subtext," as he called it—was that he encountered McDonald just after he had sustained a double blow. He had been publicly ridiculed for his stand on UFOs, and, apparently, he had just learned that funding would never be made available to him to study the UFO question scientifically.

36. Author's interview with Stephan A. Schwartz, 13 January 1993.

“Were ‘they’ taking that position because some few members of the [NSF] knew that there was another on-going effort?” asked Schwartz in an interview for this book. “I don’t know. Was it because they thought the whole thing was utterly bogus? I don’t know that, either. The sense I got from that conversation was that it had dawned on him that he wasn’t going to get what he wanted, not because of the merits of his argument, but because there were political agendas within the power structure of the scientific community that simply were not going to focus on UFOs.”

Schwartz’s description of the meeting in the coffee shop indicates that McDonald must have made another attempt during that same period of time to obtain funding from the NSF. McDonald’s fourth journal indicates he had given a briefing to an NSF “student training program,” hoping that NSF funding might still be forthcoming.³⁷

“That would explain why he was so depressed,” muses Schwartz. “He had tried to publish, he had tried to get funding, he had tried to get the NSF to pay attention to what he had. He didn’t understand why they turned him down, because he’d made what he felt was an intellectually compelling case. He had begun to realize that there were other issues than just simple scientific curiosity; there were other agendas. There are decisions that get made, not on the basis of the scientific information. And [when] they turned him down, they just didn’t say, ‘Well, this is a very compelling argument, but we’re not going to do it this year.’ The sense I got is that they said, ‘We think this is a stupid line of exploration, and you ought to have better sense than to come and talk to us about it.’”

Researchers in the UFO field who knew him well also noticed changes in McDonald after this time. Gordon Lore saw him in Washington, D.C., though not directly in the context of the SST hearings. “I picked up something that seemed to be bothering him,” Lore says. “The last time I saw him, he didn’t seem to be the ball of fire that he usually was, although he was more of a ball of fire than most people, even at his worst.”

Still dealing with the double blow, McDonald went home to Tucson and continued his professional duties while the SST controversy droned on. For a couple of weeks it seemed that his testimony and the testimony of colleagues against SST development would come to nothing, and he was deeply troubled. During this period, he talked with his friend Dr. Al Mead, who was worried about “the touch of despondency” that he displayed.

37. McDonald’s fourth journal, p. 49.

"The impression I had was he was feeling very much that he was not being heard," Mead said. "I talked with him on the mall on the campus—and here again he was riding his bicycle and standing there and hanging onto the handlebars—he was feeling very depressed about the fact that he was calling, 'Hey, there's a problem over here! We've got to give it attention!' As I say, he just couldn't seem to get people to see the seriousness of it. He saw the whole of life as we know it..."

The key to the rejection which McDonald was experiencing lies in the fact that he was never able to fully accept the fact of his own worth. Although he had an adequate amount of self-esteem that enabled him to accomplish many things in science, he was never able to accept praise from others around him, not even Betsy. Gordon Lore and other researchers experienced the same reaction.

"I think that goes with people who repress their emotions a lot," stated Lore. "Everybody else saw the person for what he was...but the person didn't feel that way about himself. I think he had adequate ego-strength to know that he was doing a good job, but I don't think he knew how very intelligent he was. This is what he had trouble with, people telling him that he was super intelligent. He wouldn't accept that—but he was."

Additional clues to McDonald's personality lie in occasional remarks he made to friends about his life as a child. "Oh, what a family he had! I can't believe that family!" says his colleague, Dr. Cornelius Steelink. "He once told me, 'My mother and father never talked to each other, period. For years.' It didn't take much imagination to figure the effect of that on a kid."

McDonald did not often make such personal comments. His father, James Patrick, was never mentioned in the family's Tucson home. He had so adversely influenced James E.'s childhood that he was virtually incapable of showing normal emotions. Everything about McDonald, with the exception of his love for Betsy, was expressed on an intellectual level. Yet his parents' courtship and early marriage were apparently happy; an early photo shows Charlotte and James Patrick walking railroad tracks hand-in-hand (see Figure 34).

In the early 1920s, McDonald's father had owned a successful creamery in Duluth. He lost ownership when the Great Depression hit and was forced to continue working as an employee of the new proprietor. This was a harsh blow to the elder McDonald. Another man might have adjusted and accepted it as fickle fate, but McDonald's father withdrew into himself. He took out his unhappiness on his wife, throwing the entire family into a cycle of ever-increasing turmoil. He withheld his wages from his wife and gave the household money to young James, with instructions that the boy dole it out to his mother. Young McDonald carried this burden from the age of nine years until he left home to attend college.



FIGURE 34. McDonald's parents, Charlotte and James Patrick, in the early 1900s, shortly after their wedding, and before their lives changed tragically.

McDonald's emotional growth during his formative years was severely affected; he suffered from the lack of paternal warmth and the responsibilities laid upon him. The only one to whom he was ever able to form any emotional attachment was Betsy. With her, a thin ardent cord was forged. The love he gave his children was deep and real, but mainly intellectually based. This was even more obvious in his friendships with his numerous friends. His Irish-Scandinavian ancestry enabled him to establish cordial relationships, backed by a hardy sense of humor. However, this sense of fun was almost entirely absent in his interactions with Hynek and Menzel, as well as others who irritated his sense of scientific honesty. Jacques Vallée, unfortunately, was caught in this due to the fact that Hynek was Vallée's mentor and friend. "I never saw any sense of humor in Jim," Vallée says. "Intelligence, honesty, integrity, intensity, yes. Humor, no."

Because of the difficult relationship with his father, McDonald never showed any pride or delight in "being Irish," a happy trait shared by most people of that heritage. Only very infrequently did he mention his lineage, such as a brief mention at the SST hearings, while discussing the fact that people of Celtic stock

were more susceptible to skin cancer rates. On that occasion, in his testimony, he used the phrase, "Irish, like myself."

It was this basic personality that McDonald brought to his professional work. Although he realized that his research abilities were adequate for any task he might take on, he could not quit even when a task proved to be impossible. On rare occasions he became depressed when an important problem, such as the Titan missile controversy, seemed irresolvable. On that occasion, he sank into deep depression, which was magnified by his conviction at the time that he had multiple sclerosis (MS). That depression ended when the Air Force grudgingly conceded he was right, and also because he found out he did not have MS.³⁸

The UFO question, however, was another matter. Whoever it was that he was talking to at the "highest levels" of government in late 1970 or early 1971, the meetings which he had told two close friends were bringing him close to the answer, had apparently stopped. This cries out for clarification.

Back in Tucson, McDonald turned the SST hearings over and over in his mind, particularly Rep. Silvio Conte's attitude and comments. McDonald was never one to write off a potential ally; he decided to give Conte the benefit of the doubt. He rationalized that Conte might have an honest interest in UFOs and would need to counter fellow Congressmen who might bring up the subject in floor debate, in an attempt to determine if McDonald's testimony on the SST question was credible. On March 8 he wrote Conte a letter, enclosing several of his UFO writings, which presented the problem as a "matter of potentially highest scientific significance" (see Appendix Item 18-B, page 582). Conte did not respond.

After the SST hearings, McDonald assiduously attended to his university teaching and his research contract responsibilities. He handled additional fallout from his SST testimony and continued work on other atmospheric projects. For some time, he'd been intrigued by the fact that early exploration by Earth satellites had discovered ionized layers of nitrogen oxide high in the atmosphere. He was intrigued by the fact that, at about 100 and 175 kilometers altitude, the main positive ion is nitric oxide (NO^+): these NO^+ layers do not lose their charge by charge transfer. He heavily annotated a copy of *Space Physics* by Harrie Massey on those pages which refer to these NO^+ layers.³⁹ One of his handwritten annotations emphasized, "NO has lower ionization potential than

38. McDonald, personal letters to Betsy McDonald, 21-25 April, 1971.

39. Massey, Harris: *Space Physics*, London and Colchester, Spottiswoode, Ballantyne and Co., Ltd., 1964.

O₂, O, N₂, N, while NO⁺ has highest dissociation potential of any diatomic molecule or ion in [the] atmosphere.”⁴⁰

Why did the information about these high-altitude NO⁺ layers catch his attention so intensely? It does not seem linked to his ozone research, which involved a stratospheric layer much closer to Earth's surface. Why did he put his copy of *Space Physics* in his UFO library instead of his even more voluminous collection of atmospheric sciences books? Could his interest have been related to the notion that ionization is possibly associated with UFO propulsion? (See Chapter 12.) Positive evidence that ionization is related to UFO propulsion still eludes us, but McDonald's interest in the NO⁺ layers should be noted. Perhaps a speculation might be in order here: e.g., are UFOs coming in from space surrounded by NO⁺?

Following the SST hearings, McDonald also assiduously studied “firestorms.” Firestorms are violent explosions which occur within intense heat concentrations, such as forest fires. Up to the mid-1990s, at least, the source of their energy still remained a scientific puzzle. The firestorm phenomenon is intriguing to many meteorologists and atmospheric physicists. It was not the first time McDonald had researched it, but his 1971 phase was different. Margaret Sanderson-Rae recounts: “He was into this firestorm thing again. It was really bothering him. He had a lot of literature about it strewn about his desk.... Something about it was worrying him.” Betsy McDonald also noticed his renewed interest in firestorms.⁴¹

“Good firestorms can act like tornadoes. That's what happened in Dresden and Hamburg and Tokyo,” relates his colleague, Prof. Charlie Moore. “I remember some discussion of firestorms with McDonald. San Luis Obispo [Calif.] had a famous [fire]storm—three million barrels of oil burned in a lightning-initiated fire.... I've been interested because the energy concentration in tornadoes is a puzzle.”⁴²

Dr. A. Richard Kassander states, “A fire, of course, could cause an updraft and therefore accelerate its spreading from the surface winds caused by the convection.... It is not unusual to find a cloud forming over a big fire or a volcano, for that matter, which would be the same sort of thing. There was even some hope, I guess, that fire could cause a cloud big enough that it could be seeded to put itself out, or help put out the fire.” But would McDonald be “worried” and “bothered” about the possibility that clouds formed by fires could be seeded to help put out fires? Could he instead have been wondering if the un-

40. McDonald's handwritten note referring to p. 139 in Massey's *Space Physics*.

41. Author's interview with Betsy McDonald, 23 May 1993.

42. Author's interview with Prof. Charles B. Moore, 27 September 1994.

explained energy that produces firestorms might be related to the unexplained energy that propels UFOs?

All through March and into April 1971, McDonald was receiving letters from leading medical researchers nationwide, applauding his ozone-damage/skin-cancer research.⁴³ He also received a letter from Phil Klass, inviting him to respond to an article in *Aviation Week And Space Technology*, which decried the imminent defeat of Boeing's SST. Klass believed McDonald should have the opportunity to respond in a "Letter to the Editor" and invited his input.

"Although I was convinced he was wrong about UFOs, I felt he might be correct about SSTs and ozone layer," states Klass. "Although we sharply criticized one another on [the UFO] issue, I admired...his willingness to speak out candidly on those things which he felt strongly about.... In the article I wrote for *AW&ST*, based on McDonald's Congressional testimony, I reported his forecast that a fleet of SSTs would seriously deplete the ozone layer."⁴⁴

The SST-ozone controversy was being actively discussed pro and con in leading newspapers and top journals,⁴⁵ but McDonald was encountering other problems resulting from his SST testimony. Dr. Will Kellogg of NCAR in Boulder, interpreting McDonald's testimony about UV damage, stated:

I became intrigued by [McDonald's estimate of] 10,000 cases of skin cancer out of a population of 200 million.... This means that one person in 20,000 might be affected.... I live about 20,000 days and this means if I covered my head one day in my lifetime I would have eliminated the effects of the SST.⁴⁶

McDonald determined that Kellogg had made a "1000% error" in his calculations and brought this to Kellogg's attention. He also discussed it before a group of 40 scientists who assembled in Boulder on March 18-19, 1971, to discuss the SST. This meeting was convened by the Department of Commerce Technical Advisory Board. Kellogg conceded his error before the assembled scientists but never retracted it publicly.

Sen. Barry Goldwater, who was a proponent of SST development, picked up on Kellogg's Congressional testimony without recognizing the 1000% error. He wrote about it in his syndicated column on April 1, blithely titling it, "Don't Worry, Girls: Bikinis Safe With SST." On the basis of Kellogg's faulty

43. Letters in McDonald's "SST" files.

44. Letters from Philip J. Klass to me, Jan. 26, 1994, and September 14, 1996.

45. For example, Kallis, Stephen A., "Leapfrogging the SST," *National Review*, April 20, 1971.

46. Goldwater, Barry, "Don't Worry Girls: Bikinis Safe With SST," Syndicated Column, appearing in *Tucson Daily Citizen* and other newspapers, 30 March 1971.

calculations, Goldwater concluded that "scantly clad female bathers could wear bikinis and ward off the possible skin cancer effects of the SST by making sure they wore bathrobes at least once in every 2,000 years."⁴⁷ The column also mentioned McDonald several times in rather demeaning terms and ended: "To raise such an outlandish probability that Prof. McDonald raised is to do a disservice to laymen trying to understand if the development of SST constitutes a dangerous health hazard. Obviously it doesn't."⁴⁸

Goldwater had been a valued ally in the Titan missile controversy and was also knowledgeable about UFOs. Having become convinced that UFOs were a serious scientific question, he had boldly stuck his neck out more than once. His views were quoted from time to time in NICAP's *UFO Investigator* and in other UFO literature, and he was widely respected in the field. McDonald respected Goldwater for his stand on the Titans and on UFOs. He knew that Goldwater once asked Gen. Curtis LeMay for permission to go up to Wright-Patterson AFB to study UFOs. LeMay refused, told Goldwater to forget that he'd ever heard of UFOs, and "gave him a good-natured kick out of the office."⁴⁹ The *Tucson Citizen* had quoted Goldwater as saying that Wright-Patterson had lots of UFO data, "but you can't get near the information."⁵⁰ He and McDonald exchanged cordial correspondence in 1968, and had made tentative plans to get together when time permitted.

McDonald was greatly irritated by Goldwater's April 1, 1971, column and told IAP's director, Dr. A. Richard Kassander, about it. Kassander was likewise upset, and wrote immediately to Kellogg, expressing concern that Kellogg would have used "this kind of a silly analog in the first place when speaking to a difference of opinion with another scientist."⁵¹

In March 1971 Congress killed Boeing's SST contract, concluding that it was unwise to take on the environmental hazards about which McDonald and 30 other scientists and knowledgeable persons had testified. The French-British SST, the Concorde, was allowed to make regular flights into New York airports after Atlantic crossings, but regular overflights of the Concorde over the U.S. mainland were forbidden. McDonald had won his part of the fight.⁵² He could have ridden out the storm and overcome his depression, judging from his experience with the Titans. But no one, not even McDonald himself, realized he was hanging on by his fingertips. He could not have

47. *Ibid.*

48. *Ibid.*

49. McDonald, "Cover-up vs. Foul-up" file, entry dated January 20, 1968.

50. Goldwater, *Tucson Citizen*, January 17, 1968.

51. Letter from Kassander to Dr. William W. Kellogg, dated April 1, 1971.

known how *very* right he was, that problems with the ozone layer would occupy the world's concern just a few decades later!

Before he left for Boulder and the March 18-20 governmental SST conference, Betsy told him she was experiencing a problem. Since he didn't have time to discuss it with her, she told him she would write the details in a letter, which she wrote during his absence. Upon his return, she realized the SST controversy was still causing him stress. (Congress had not yet revoked Boeing's contract.) When he asked for the letter, she tried to keep it from him, but he insisted. There was nothing she could do but give it to him.

The letter laid out her problem: McDonald was seriously neglecting her. As a consequence of his frequent absences from home, she had become involved with a younger man who was active in the anti-war movement and whom she saw frequently at the Peace and Freedom Center. He fulfilled her need for companionship and also claimed to share her Marxist philosophy. He assured her he was not of Stalinist/Communist persuasion, which she abhorred.

Betsy's letter asked for a divorce. McDonald found her decision "all too painfully understandable."⁵³ He tried to convey his sorrow, but this didn't help. The emotional cord he'd formed with her snapped, and he sank into full depression.

Even in the throes of clinical depression, however, McDonald's mind worked fully. He began immediately to plan suicide, and over the next four days carefully worked out a strategy that he was confident would leave his family financially sound. All details were recounted in long letters to Betsy, which he kept with other papers where they could be found afterwards.⁵⁴ He hid his plans and his depression from his colleagues and family but in these letters expressed concern about what would happen to his research files. He knew that his atmospheric physics research papers would be properly handled by the IAP but was deeply concerned about his UFO files. He methodically described the value of his UFO files, and most especially the radar-visual cases he had recently copied at the Blue Book archives:

That UFO material remains of very real scientific significance. The batch of Xeroxes I spent a good many hundreds on at Maxwell AFB are extremely useful, to the right person.... I don't really know just

52. For how long, however? About 2001, the media reported Boeing's plans to produce fleets of super-large transports with Japan. Further information has not surfaced on this at time of publication, spring 2003.

53. Personal letter from McDonald to Betsy McDonald, dated March 21, 1971, hand-typed with added, handwritten notes.

54. Personal letters dated March 21-24, 1971.

*what to say about it all.... My present best suggestion is that it be archived at the UA Library, though maybe they'll view that as presumptuous.... That stuff is the one part...that really bothers me at this stage—its scientific value is, I think, quite large.... I'd sure hate to see that stuff burnt.*⁵⁵

He also worried about the UFO book he'd planned to write:

*If only someone with roughly my combination of background and concerns could squeeze out...of my files the full dimensions of USAF's incredible handling of the UFO problem. [But they would need] the radar & meteorology & astronomy background. Maybe you could store it till Lee and Kirk might sense its significance.... & dig into that mine (morass?) of material and write "my book." Think it over.*⁵⁶

He left his UFO files in order, most of them arranged alphabetically in three cabinets marked "UFO," along with his library of UFO reference works. He also worked on his atmospheric research files. "He had organized all his papers from his work together," Betsy relates. "He had assembled it all into these documents. Everything—all of his work."

During these last few days, he also finished a technical paper related to thermodynamics titled "A Variational Derivation of Young's Equation For the Contact Angle."⁵⁷ He noted on the first page that it was done "with the support of the ONR" yet strangely, none of his colleagues at the Institute who were interviewed for this book remember anything about it. Only Margaret Sander-son-Rae, who typed the final draft, recalls it. It has been shown to several physicists and engineers, but no light has been shed on it. He made one minor correction to the last draft and dated it, in his handwriting, on Monday, March 22, 1971, the next day after he began planning to end his life.

Why did he choose to finish this particular paper, out of 70 unfinished papers in his files? The puzzle is compounded by the fact that the manuscript was found among his UFO materials rather than his atmospheric physics files. In the hope that qualified person(s) might shed some light upon it, it is included as Appendix Item 18-C, page 583. Could this paper possibly have anything to do with the unknown energy involved in UFO propulsion? Dr. Robert M. Wood states: "The contact angle paper concerns any solid-liquid-vapor system.... This is a very general kind of paper in that sense.... What I see is that

55. *Ibid.*, dated Tuesday, March 22, 1971.

56. *Ibid.* Handwritten note on margin.

57. McDonald's bibliography by Valerie Vaughan (see note 22, page 396) lists the date of this paper as March 15, 1971. However, a copy found in his UFO files had been corrected in his handwriting and dated March 22, 1971.

Jim McDonald was writing an article...with the support of the ONR. And I think you'd find that all of a sudden his conscience said, 'Well, my normal job for the university says I gotta do this stuff.' And so he did what he promised he would do."⁵⁸

McDonald did not go ahead with his plans for suicide on March 26; the reason remains unclear. He continued working at top-speed for two more weeks. Then just before dawn on April 9, alone in the main house, he abruptly wrote a short note to Betsy, took his handgun and fired. The bullet missed the brain and hit the optic nerve instead. Divorce plans were dropped while Betsy and his family spent several very difficult weeks, during which hospital personnel helped him learn to cope with blindness.

As he slowly began the climb back, McDonald continued to influence the world of science. On April 14, 1971, the *Washington Post* reported that the U.S. Court of Appeals was reconsidering whether a secret presidential report condemning the supersonic transport should be released.⁵⁹ On April 26, the press reported on an NAS meeting in Washington, D.C., including the NAS panel's report to the DoT asserting that SSTs might affect the Earth's radiation shield and cause a worldwide increase in skin cancer.⁶⁰ This had been McDonald's independent research finding, but the NAS had adopted it as their own, a common occurrence in science.

Between June 7 and June 11, 1971, McDonald dictated detailed notes concerning his re-entry into academic life. He was still staying in the hospital at night but going to his university office several hours a day. These daily notes, transcribed by Sanderson-Rae, were upbeat in tone, describing input he was getting from friends who visited him frequently and planning ways he could continue his professional life, even though blind. They included talks with colleagues George Dawson, William Sellers, Ben Herman, Phil Krider and others. One of the most revealing was a description of a talk with Dawson, during which Dawson sought to convince him that his abilities and worth to the Institute were so great that help from everybody was desirable.

"He even expressed the view that, in all of his experience, here, in England, and at Berkeley, I have greater breadth and depth in science than any other scientist he had seen!" McDonald wrote. "I told him I found that very hard to believe, and that I am also unable to quickly accept rather complimen-

58. Author's interview with Dr. Robert M. Wood, 21 August 1993.

59. Ungar, Sanford J., "Court to Restudy Release Of Secret Report on SST," *Washington Post*, April 14, 1971.

60. Cohn, Victor, "Science Academy Facing Cries for Reform," *Washington Post*, April 26, 1971.

tary remarks from other colleagues. I pointed out to him that I tend to kid them with the charge that they are buttering me up with undeserved praise. He strongly disagreed...."⁶¹

Among the ideas which his Institute colleagues offered, and which James McDonald thought feasible, was the preparation of a manual for teaching cloud physics, which would serve as a continuation of the one-year graduate course in cloud physics, which McDonald had always enjoyed teaching. He also planned to write a textbook for advanced meteorology students whom he'd guided through advanced degrees for many years. He expressed the view that blindness would not prohibit teaching if a graduate assistant was available in the classroom.

He was also impressed by Dawson's description of a blind professor at Kiel University who had developed a system of "acoustic radar." McDonald planned to try to locate other professors of physics and other sciences who taught despite total blindness. He was also intrigued by preliminary research at Bell Telephone Labs, which involved implantation of tiny electrodes which would communicate coded information to a person's brain. He described this evolving technology as fully as possible and made plans to consult with electrical engineers about this. He held out hope that he and Betsy, who had remained at home with the family, could reconcile.

McDonald's Friday, June 11, entry in these detailed notes describe his plans to discuss the possibility of setting up a new center at the university, incorporating the "world gaming" ideas of Buckminster Fuller and other advanced thinkers—ideas that could possibly bring a broad approach to worldwide human interests.⁶² A friend, Mike Brewer, who had spent some time at Fuller's center in Carbondale, Ill., had visited McDonald and told him he'd also gotten the impression Fuller was interested in UFOs. Implicit in McDonald's July 11 notes was the idea that both UFOs and parapsychology might be included among "worldwide human interests."

He also planned to track down "a fellow from NASA, John Deal," whom Mike Brewer had met at Fuller's center. Deal was interested in both UFOs and parapsychology. McDonald thought that Deal might be a NICAP member who'd come up to him after one of his talks and given him a card. "There would be no perfect way of sorting that out unless I had Bets check my file on that particular case," wrote McDonald. "I might try that."⁶³

61. In series of private notes, typed from McDonald's dictation, covering Monday, June 7, 1971, through Friday, June 11, 1971.

62. *Ibid.*

63. *Ibid.*

Upon his return to his office in early June, the energy with which he threw himself into his work was vastly encouraging to his IAP colleagues. With the help of a graduate student, Alex Long, he reviewed two papers which had been submitted to him for peer review, by the *Journal Of Applied Meteorology*. He wrote letters to Tom Malone and other colleagues. He made a point of visiting everyone around the IAP offices and had pleasant chats with each. His new interests seemed genuine. His daily notes also contained details of "conversations" he was having with a Dr. Cutts at the Veterans' Hospital. From him, McDonald had learned the value of counseling sessions directed toward "understanding the divisive force in marriages where the husband is professional and spends a great deal of time on his work and tends to put the wife off."⁶⁴ Instead of rejecting counseling and trying to solve his own problems by reading psychology books, as he had in the past, he was discussing his personal problems with a doctor, and the interchange seemed to be benefiting him.

Even though McDonald seemed to be returning wholeheartedly to his work, his wife Betsy was very worried. She had participated in some of his counseling sessions and had been warned that McDonald might be pretending to handle things well so he could get out of the hospital and try suicide again. "At the Institute, they were helping him get back to work, but for me it was all wrong." Betsy McDonald states. "That was just his device to get out of there and commit suicide. He fooled the doctors, he fooled the Institute. He was just so smart, and he was, like, 99% suicidal. Our whole thing was to work for time. The only reason we had him in the Veterans' Hospital was for time, but everything he did was to get out." She also tried other ways to help him, offering to quit her work and help him write his UFO book. "He told me 'no, that I didn't have to do that.' I would have been glad to do it, but he knew it wasn't 'my thing.'"

McDonald was told by his doctors that some of his vision might return within two months' time. His children begged him to wait the two months to see what would happen. By the end of two months, a small amount of peripheral vision had returned on both sides, but only his family knew this; his IAP colleagues did not.

During the week of June 7-11, a colleague, Dr. Paul E. Damon, visited him one evening at the hospital. Toward the end of that talk they discussed UFOs, which McDonald had never discussed at any length with Damon before. "He was concerned with what he could do, about how he could still make the contribution," states Damon, "and the UFOs [were] a lot of it." McDonald described to Damon two widely disparate cases, one being the Portage County UFO chase that had impressed him so deeply and was one of the spurs that

64. *Ibid.*

launched his own research. McDonald expressed his deep shock that the Air Force had mishandled that case so grossly. "Air Force officers...just passed it off as nothing at all and had some scientifically implausible explanation," says Damon "He said their attempts to explain cases were quite absurd and that he was shocked by their incompetence and low level of scientific knowledge."

The other case which McDonald told Damon about was the Papua, New Guinea, case, where the Anglican priest, Fr. Gill, some native clergy and many mission natives had seen a large hovering object with "humanoids" clustered on its top. "He didn't go into detail about the case, but everything he could learn about it made it very difficult for him to believe that Fr. Gill was not being truthful."

Damon could see the distress with which McDonald was struggling. "I don't think it was the blindness per se—I think it was the estrangement from Betsy. He was not blaming her, at all. He felt that the problem was in his upbringing, his having lived with those very cold parents.... He didn't blame her. He always had just the most endearing things to say about her.... He was thinking about the future—[saying] 'There's a number of things I can do.'"

By Tuesday, June 8, McDonald had completed an application for sabbatical leave for July through December 1971. His stated purpose: "To engage in a number of limited studies of new techniques capable of meeting the demands of teaching and research duties with perhaps special attention to the expanding undergraduate field."⁶⁵ He also planned to prepare two manuals for teaching atmospheric physics. On a second page, he elaborated on three manuscripts he planned to write from already completed research, including one on a "group of nucleation events occurring in super-cooled carbonated liquids," another on "the interaction between weather modification projects and the wide range of public response thereto," and a brief paper on "a useful variant of the Beer's absorption equation." If time permitted, he added, one or two other papers of completed work would be written. His signature on the sabbatical application is virtually indistinguishable from his signature before he lost his sight.

As he had done all that week, McDonald went to his IAP office on Saturday, June 12. Betsy agreed to pick him up that afternoon. McDonald was looking forward to this; he felt encouraged that it might be a tiny step toward reconciliation. Some time after he settled himself at his desk, dictating various items, he learned that Betsy's young man had unexpectedly persuaded her that she needed a rest and that they had gone to the White Mountains for an overnight trip. Instead of Betsy, one of his daughters would pick him up later that afternoon. His frail

65. James E. McDonald, "Application for Sabbatical Leave," dated June 8, 1971. His last sabbatical had been for a six-month period from 7/1/63 to 12/31/63.

threads of hope for reconciliation snapped again. He made his way down the hall to the office of Ben Herman, who was also there that Saturday, finishing up some work before catching a plane to attend business meetings in Colorado.

"I spent two hours with him," relates Herman. "He was talking— nothing about UFOs, but about his personal problems. He kept telling me he...missed the first time and he was 'going to do it again.' He didn't say that day, but that he knew he would do it again. I remember trying to talk him out of it.... I said, 'Mac, we all have problems, and along that [vein].' And I remember him saying, 'Yeah, but you're much better balanced than I am. You've got hobbies. You don't just do your science and nothing else.' And I said, 'Yeah, but Mac...your science is your hobby.' I was concerned about his safety, because of the way that he was talking. And Lou Battan was there. When Mac left my office, I went down to Lou's office and said, 'Lou, I'm going to be going home, I'm leaving soon. I really don't think Mac should be left alone. He's talking crazy.'" Lou Battan told Herman that he was going to lunch right then, but would come back and check on McDonald. That he 'would take care of it, don't worry about it.'"⁶⁶ Battan then went home for lunch.

"When I went home his daughter called me and said they were trying to find him," continues Herman. I didn't know what to do. I called Betsy. She wasn't home, so I called Lou and Lou said he had gone down to check again, and he'd gone out. I'm not sure of the whole story.... I remember I was trying to convince Mac that, even though he was blind, he could still—" Herman pauses, then continues, "I wasn't convinced he was totally blind, by the way. I was never convinced. He saw something. He did. There were some things that happened that convinced me that he wasn't totally blind."

McDonald had called a taxi and left the Institute, apparently unseen by anyone there. The taxi driver took him to the other side of town, where he bought a 0.38 Spanish-made revolver at a pawn shop. After that, the taxi driver drove him north several miles into the desert, which was very sparsely populated at the time. Why a taxi driver would have driven a blind man to a pawn shop where he could purchase a gun concerns his family and colleagues to this day. The only possible explanation is that McDonald did have enough limited vision to accomplish this without arousing suspicion of the pawn-shop owner or the taxi driver. The pawn shop owner might not have realized McDonald was blind, and the taxi driver might not have known that he'd purchased a gun. No specifics on these particular questions have been found in newspaper accounts or police records of the time.

66. Herman's interview with author, 2 November 1993.

The police queried the taxi driver, who stated that he let McDonald off about 4:00 P.M. at an isolated intersection in the desert. He inquired if he'd "be all right," and McDonald had replied that "someone was picking him up." The taxi drove off, and McDonald apparently walked over a mile to the Canyon del Oro, a steep-sided, dry wash with which he was familiar, having explored it thoroughly just six weeks before. There, under a bridge, his body was found midday on Sunday, June 13, 1971, by a family that was hiking in the wash.

The circumstances of his death have led to speculation in the UFO community that perhaps it was not self-induced. Accounts in Tucson newspapers at the time contain inconsistencies and errors. The most accurate account is included as Appendix Item 18-D, page 584, but it, too, errs in stating that he left the hospital Sunday by taxi; actually, he left the Institute by taxi on Saturday, as described above.

When McDonald's body was found midday on Sunday, police at the scene estimated that he'd been dead eight to ten hours. This suggests that he may have been alive quite a few hours after being let out at the isolated desert intersection. Theoretically, he might have been found in the desert the same day he disappeared if the police had been called immediately and if Tucson's efficient search-and-rescue team had been notified. Yet the team was never contacted. Instead, two friends of the family, a man and woman, who had been called by the family during the initial search, advised the family that they would find him. The woman, who presented herself only as "Dr. Martin," found out where the taxi driver had left him in the desert, and she made numerous calls from an isolated house within a mile of Canyon del Oro. Why did "two friends" insist on looking for him instead of calling in the experts? This remains unclear, and the "two friends" remain unidentified.

Margaret Sanderson-Rae describes another unexplained event. "When he came back from the hospital, I went through his office, removing anything that was sharp or dangerous, being sure it was a good working environment.... After he passed away, Dr. Kassander wanted me to go through some things there and I [discovered] one of the books on his shelves had no cover. Dr. McDonald would always preserve the jackets of his books. If they had no jackets, he very carefully made one. All the books on his shelves had jackets.... That one book hit my eyes. I pulled it out, and there was something behind it. It was the book jacket, all crumpled up, as if it had been wrapped around something." Even though she was so close to the tragedy, Sanderson-Rae never knew that McDonald had bought the gun he used that very day. She felt a profound sense of relief when told, during interviews for this book, that McDonald had not concealed a gun in the crumpled book jacket. But what was wrapped in the book jacket? Was it, perhaps, a number of 5" x 7"

"small notebooks" or notebook pads, on which he'd written the confidential notes regarding UFOs mentioned in his journals? If so, where are they today?

McDonald's suicide deeply shocked and grieved his numerous colleagues and friends. "I thought afterwards that this man, who could stand up against the United States Government, the Air Force, and bring it right to Washington and get them to admit what he had already said—a man of such great courage when faced with such powerful institutions—could be so vulnerable in his personal life," says Dr. Paul E. Damon. Damon's words express virtually the helpless feelings of all who knew McDonald well.

A memorial resolution by Drs. Dick Kassander, Lou Battan, Paul Martin and Cornelius Steelink, written a few days after McDonald died, reveals the deep admiration and appreciation they felt for him personally and for his contributions to science (see Appendix Item 18-E, page 585). And Dr. Al Mead, in a March 27, 1996 letter to this author, updates the fondness and respect that the University faculty still feel for McDonald. ["It is important] to the memory of Jim," Mead writes, "to let the reading public know the great depth and distress within the mind of a truly great scientist, James E. McDonald, who was tragically ahead of his time."

The shock felt by the UFO community upon hearing of McDonald's death was even more abysmal, because most were not aware of the factors which had led up to it. They were not nearly so prepared. Many UFO researchers suspected that the government had silenced him because his research was incredibly thorough and his knowledge of confidential material far-reaching. He was getting information on classified UFO cases which had never surfaced before. Indeed, he had confided that he was "close to the answer" and speaking to "high-level persons." He had confided this to Dr. Robert Wood and Marty Lore, and possibly also to others who have not yet spoken out openly.

Two alternate hypotheses are probably more reasonable. There is Betsy's theory that McDonald had been pretending to adjust to blindness so that he could seek an opportunity to "do it again." Secondly, there is his colleagues' contention that McDonald seemed to have made a degree of adjustment to his blindness, had planned to complete many projects during a six-month sabbatical and felt confident that he could return to teaching with the assistance of a teacher's aide. This hypothesis would necessarily have to incorporate the notion that his emotional makeup was still so fragile that any setback would immediately send him into a deep depression. Was the telephone call which informed him that Betsy was not picking him up that afternoon enough to send him into the depths?

There is a third alternate hypothesis, however, which combines factors from the three others and which could under certain circumstances be "logi-

cal." Confirmed facts surfaced in the mid-1970s through Congressional hearings and through the FOIA about experiments which were conducted by government intelligence agencies in the 1950s and 1960s. It is an established fact that human behavior can be influenced through the use of chemicals, microwaves, long-range hypnosis and several other techniques that can work from a distance. These techniques can cause depression, violent behavior, and other detrimental alterations of normal conduct. All these effects can be brought about without the subjects' knowledge.⁶⁷

Giving credence to the third hypothesis is the fact that McDonald, during the course of his six-year UFO research, was repeatedly cajoled, disappointed, blocked, ridiculed and finally emotionally devastated. All of these events are described separately in this book, but it is not illogical to speculate that some of them were orchestrated attacks. Add to these the fact that Betsy's young man, four months after McDonald's death, admitted that both he and his father were of Stalinist/Communist persuasion. Shocked and betrayed, Betsy broke off the relationship immediately.

The most solidly confirmed facts, however, reveal that McDonald had sustained a series of severe personal problems which he had fought against valiantly but was not able to solve. His history of at least one other sustained depressive period, in the early sixties, and his basic rigidly intellectual personality, point to a more prosaic explanation. His family members, and all of the scientific colleagues interviewed, with two possible exceptions, believe that his death was self-induced, with no conspiratorial factors entering in.

While his colleagues in the UFO research field, scientist and non-scientist alike, staggered from McDonald's loss, other colleagues set about minimizing the importance of his UFO research. His AAAS paper, which was such a superb example of critical thinking, as well as solid facts demonstrating the scientific importance of the UFO question, was included in a book written by Carl Sagan and Thornton Page. The book, *UFOs: A Scientific Debate*, while retaining the facts of radar-visual cases McDonald had researched, edited out his related criticisms of the Condon Report.⁶⁸ McDonald had made it very plain to all of his colleagues that a complete rebuttal of the Condon Report was to be his next im-

67. "Project MKULTRA: Joint hearing before the Select committee On Health and Scientific Research of the Committee On Human Resources, United States Senate," Washington, D.C., Government Printing Office 1977. Also see: Bowart, Walter, *Operation Mind Control*, New York, Dell Publishing Co., Inc., 1978; "Microwave Harassment & Mind-Control Experimentation," by Julianne McKinney, Director, Electronic Surveillance Project, Association of National Security Alumni, Silver Spring, Md.; "Mind Control," by Harry V. Martin and David Caul, 12-part series, Napa Sentinel, 1991.

68. Sagan, Carl and Page, Thornton, editors, *UFOs: A Scientific Debate*, New York, The Norton Library, W. W. Norton & Company, Inc., 1972.

portant step and was crucial to a scientific understanding of the UFO question. He also planned to point up the fact that the government (Air Force), backed by the NAS, used the Condon Report to justify closing all public official channels for reporting observations.

Even as the UFO community continued to research the phenomenon, the mystery deepened. In the mid-seventies UFOs, which had been generally accepted as one phenomenon or, at the very least, a closely-connected series of phenomena, suddenly exploded into a multitude of aspects. The so-called "UFO abductions," similar to Betty and Barney Hill's experience in New Hampshire increased exponentially. Suddenly hundreds and then thousands of so-called "abductees," many of them demonstrably rational individuals, began coming forward, claiming UFO "occupants" had forcibly taken them aboard their craft—creatures which, to put it briefly, the "abductees" did not feel had their best interests at heart. The second aspect was even more mysterious—demonstrably rational persons described events which were strangely reminiscent of 1950s' "contactee" stories except that many of the "entities" involved were not so human-like.

These two aspects have evolved into a two-headed coin, in which the two sides of so-called "UFO abduction" have developed a sort of clouded mirror-image. Researchers and "abductees" on one side allege that the UFO humanoids are, at best, "scientific, unfeeling explorers of the galaxy" and, at worst, malevolent entities serving their own nefarious purposes. The other side alleges that space-traveling humanoids are here to "raise human consciousness" and/or to "evolve" the human race to prepare it for imminent catastrophes or "cleansing." At present writing, for many UFO researchers, the line between the old-time "contactees" and the new breed of "evolving abductees" has become vanishingly small.

Another element which must be addressed in assessing the veracity of abduction reports is the growing evidence that many "abductees" are instinctive resisters and find it possible to wake up from the altered state in which the great majority of "abductions" occur. I wrote a comprehensive book in 1998 describing nine simple mental and physical techniques which 70⁺ witnesses have described as being effective in ending abduction scenarios.⁶⁹ There is growing evidence that there is a strong, unrecognized parapsychological element in abduction scenarios, and many UFO researchers are presently hypothesizing that they might have an interdimensional component, rather than occurring in physical space-time as do other classes of UFO re-

69. Druffel, Ann, *How to Defend Yourself Against Alien Abduction*, New York: Random House, Three Rivers Press, August 1998, 241 pp.

ports involving unidentified flying craft which are chased by jet pilots, caught on radar, and photographed.

In the meantime, through the mid-seventies, eighties, nineties and into the new millennium, while researchers were investigating the plethora of differing "abduction" stories, the basic phenomenon—unidentified metallic aeroforms traversing Earth's atmosphere—which had seized the attention of McDonald and all objective researchers since 1947, has continued. The military, especially the USAF, still encounter UFOs, but there is no longer any governmental reception center to receive reports. Inadequate as it was, Project Blue Book's files and archives contained amazing material which excited McDonald's, and other researchers,' scientific curiosity. Until very recently, however, the "basic phenomenon" has been downplayed drastically, mainly because, for over 20 years, the "abductee" phenomena seemed to hold out hope of obtaining physical evidence, but this hope has not yet borne fruit. This author's present hypothesis is that the "Visitors," whatever they are, are "posing" as physical occupants from the physical unidentified craft that still travel Earth's skies.

Two large civilian research organizations, the Mutual UFO Network (MUFON) and the Center for UFO Studies (CUFOS), filled the void the disintegration of NICAP had left in the field. While many veteran researchers who wet their feet in UFO data in the '50s and '60s remain in the field, many scientists and other professionals have joined the field. Although this combination of new and old is effective in many ways, no top scientist with the unique combination of McDonald's intensity, persistence, persuasiveness, brilliance, worldwide reputation, unswerving vitality and influential contacts has come to the fore.

In the early seventies, CUFOS was established by J. Allen Hynek; this organization attracted many scientists to the field. As the years passed, Hynek became regarded by younger researchers as the first prominent scientist to take an interest in the UFO phenomenon. These younger researchers are not fully aware of NICAP's seminal work and did not know Keyhoe or McDonald personally. Veteran researchers still attempt to correct re-written history.⁷⁰

In the last couple of years, there has been an encouraging surge of interest in the history of UFO research and in the importance of the basic UFO phenomenon. Archival material is increasingly available. Some of Edward U. Condon's files surfaced in the Philosophical Society of Philadelphia; thus not all of his UFO files were "burned" as he had claimed. Some of Hynek's files

70. Frequent historical articles/papers/books are published by The Fund for UFO Research, The J. Allen Hynek Center for UFO Studies, the Mutual UFO Network, and in *Flying Saucer Review*, FSR Publications in England.

have become available since his death, and many researchers have produced valuable accounts of older cases in which NICAP, McDonald and Hynek had taken such interest.⁷¹ Recently, the Fund for UFO Research (FUFOR) in Mt. Rainier, Md., granted me funds for the archiving of McDonald's voluminous UFO files. They are now available to researchers in the James E. McDonald Personal Collection at the University of Arizona Library, Tucson.⁷²

The loss of McDonald, a remarkable genius, still affects many today. Many of his colleagues who knew and loved him still grieve his loss. Those in the UFO community who worked with him remember and mourn. The mystery of his confidences to a few colleagues that, toward the end of his life, he was "talking to top-level people about the UFO phenomenon" and that he was "close to the answer and would soon be free to speak openly" has not been solved. Did he mention this to others in the UFO field besides Dr. Robert Wood and Marty Lore? If he had uncovered information that no one else had, why wouldn't he let someone know before leaving the Earth plane? Knowing what we do today, it is very likely that the "high-level" information was just a ploy to further depress him. Perhaps the answers to this mystery are contained in his missing "pocket notebooks," which are still being sought.

James E. McDonald was the first prominent American scientist to recognize clearly the possibility that UFOs were from extraterrestrial sources. With unwavering persistence he urged the scientific and governmental establishments to study the evidence with adequate funding and complete objectivity. His courage, honesty and stamina through years of governmental resistance are legendary.

McDonald's untimely death can be traced, in large part, to his frustration with widespread official blindness that even to this day prevents powerful people from studying undeniable evidence that Earth is possibly being visited by advanced intelligences. He recognized that the UFO issue is perhaps one of the most important questions that has ever faced the human race, and that to ignore it could easily be a mistake of incalculable enormity. McDonald dedicated his life to gathering the best available data relevant to the question.

Eltjo Hasselhoff, Dutch experimental physicist, perhaps expressed James McDonald's dilemma when he said, "To look at the evidence and go away un-

71. As one outstanding example, see article by Ted Bloecher and Paul Cerny titled, "The Cisco Grove Bow and Arrow Case of 1964," in the *International UFO Reporter*, Chicago, Ill., J. Allen Hynek Center for UFO Studies, Vol. 20, No. 5, Winter 1995.

72. Druffel, Ann: "James E. McDonald's UFO Files," *MUFON UFO Journal*, January 1997, No. 345, pp. 3-9.

convinced is one thing. To not look at the evidence and be convinced against it is another. That is *not* science.”

McDonald's staunch fight in the face of disbelief and danger stands today in mute testimony to the difficulty that the human race faces in the coming days, as it waits until the truth inevitably emerges. The struggle continues....

About the Author...

Ann Druffel



Ann Druffel began investigating UFO reports in the Southern California area in April 1957 with the National Investigations Committee on Aerial Phenomena (NICAP), which was directed by the UFO research pioneer Major Donald E. Key-

hoe, USMC (Ret.). She became acquainted with Dr. James E. McDonald through his contacts with the Los Angeles NICAP Subcommittee from 1966 to 1971. After NICAP's demise in 1970, she joined the Mutual UFO Network (MUFON) and the then newly-formed Center for UFO Studies (CUFOS).

She has researched over 2,000 Los Angeles Basin UFO reports, including alleged landings, UFO photo cases, close encounters with physical effects on witnesses and terrain, alleged "abduction" reports and other UFO-related phenomena. A prolific writer, Druffel has contributed over 180 articles on various aspects of the UFO question to numerous UFO journals and newsstand magazines.

Frequently speaking on UFOs before civic and educational groups, she is noted for lively slide presentations and Q&A sessions and has presented many papers at UFO symposia/conferences. Since 1965 she has been a spokesperson on various aspects of UFOs for TV, radio and press as well as consultant/ researcher/ film writer on numerous UFO documentaries. She wrote the classic book *Tujunga Canyon Contacts* with parapsychologist D. Scott Rogo and contributed to other major literary works such as the *UFO Encyclopedia* and the anthology *UFO Abductions*. Her *How to Defend Yourself Against Alien Abductions* was published by Three Rivers Press/Random House in August, 1998.

Her ten years' academic and professional experience in sociology and child/family social case work provided her skills in interviewing, value-judging and report-writing. Later, she went on to become a free-lance researcher known for her objective and skeptical approach toward UFO sightings and abduction reports.

Beginning in 1965, she coordinated and directed SKYNET, a filter center and tracking-system for public UFO reports in the Los Angeles Basin area. Although set up as a tracking system to receive reports in real-time, SKYNET proved invaluable in revealing numerous conventional objects often mistaken for UFOs. SKYNET was an adjunct at first to NICAP in the Southern California area and later to MUFON and CUFOS.

Besides UFO work, Druffel free-lances in various aspects of psychic research. From 1986 to 1991 she worked as research assistant/consultant and, later, researcher with the Mobius Society, the Los Angeles-based parapsychology lab. She has written numerous articles on disparate psychic phenomena for newsstand magazines and authored books with famed psychic Armand Marcotte.

Ann Druffel lives in a wooded glen in Pasadena, California. Her husband Charles K. Druffel and she had five daughters, who are grown and live their own exciting lives. Ann's hobbies include hiking, swimming, snorkeling, orchard gardening and exploring Native American sacred sites.

UFOs May Have Been F102s *Star 4/5/58*

Possibility Suggested By D-M's Acting PIO

Those unidentified flying objects reported seen Tuesday at sunup may have been nothing more mysterious than F102 jet fighters.

This possibility was suggested yesterday by sources at Davis-Monthan Air Force Base.

One spokesman, Sgt. John W. McDonald, acting public information officer, explained that the delta-wing F102's could easily appear to a civilian observer as tear- or oval-shaped "blobs of light" in the pre-dawn twilight, especially if the planes were flying at an unusually high altitude.

"Airmen, used to seeing planes in flight at all hours and under all circumstances, and trained in aircraft identification," he said, "are apt to regard such sights as



Flying Saucer 222

routine. Several airmen on the base say planes reflecting the sun's light often appear as ovals of light from certain angles."

Others agreed that Sgt. McDonald's "is as good an explanation as any."

Civilians who reported seeing the UFO's at about 5:55 a.m. Tuesday say there were four or five of them flying in V-formation.

Sgt. McDonald pointed out that he has seen F102 jet fighter planes, presumably from George AFB at Victorville, Calif., fly over Tucson, usually in V-formation and always in groups of four.

Those who saw the objects say they were followed by vapor trails, as though from jets in pursuit.

"It's possible they were jets that disappeared from view between 50,000 and 70,000 feet just as they formed a vapor trail, leading some observers to assume they were being pursued by jets," Sgt. McDonald suggested. He said vapor trails form only at 50 or below zero and when humidity conditions are right.

Sometimes, he added, jets leave behind intermittent vapor trails like dashes as they go from cold to warm layers of air.

Whether a formation of F102's did, indeed, fly over Tucson Tuesday morning could not be learned yesterday. Lt. Col. Robert C. Smith, commanding officer at the UA Air Force Radar Station on Mt. Lemmon, was on leave and unavailable for comment.

Sgt. McDonald said if the station's radar equipment did pick up such a flight it can be assumed it was a routine flight, as no emergency alert was reported given.

The UFO's were seen flying easterly parallel to the Benson Hwy. and appeared white and round and stayed in sight about 15 minutes. Observers included LeRoy Gaskins, 1931 S. Campbell Ave.; Dean Wood, 5922 E. 22nd St.; Eugene Ford, 905 W. Santa Rosa St.; J. C. Hurst, 5962 Waverly Pl.; Mrs. Warren Gray, 2449 N. Edith Blvd.; Lennie Wells, 511-A W. Planta St.



DEPARTMENT OF THE NAVY
OFFICE OF NAVAL RESEARCH
WASHINGTON, D. C. 20360

IN REPLY REFER TO
ONR:4121JH:rmc
25 May 1966

Dr. J. E. McDonald
University of Arizona
Institute of Atmospheric Physics
Tucson, Arizona 85721

Dear Mac:

Since you are coming to Washington for the meetings of the Storm Fury Panel, I wonder if you would mind spending a few extra days so that I could have the benefit of your consultation on some aspects of our program particularly those concerning weather modification. There are also some interesting proposals we have under consideration for remote sensing of the atmosphere on which I would appreciate your comments.

Speaking of remote sensing, I see there is a resurgence of interest in UFO's. Jim Kearney at PMR in his current observation program with a laser-radar built by SRI tells me about some interesting return signals from locations where stratus is not yet visible but forms in the same location shortly after the laser signal; the reverse phenomena also occurs, i.e. stratus after dissipating from view still gives a return signal. Stratus or other cloud forms dissipating in one place and reappearing in another could give the illusion of very rapid movement. Incidentally, incidents like these were observed by the Italian navy in the Ligurian sea when making sonar observations. They were getting returns off different underwater peaks but thought they were on a moving object. Naturally the presumed object appeared to have a high rate of displacement. What I am leading up to is that laser observations could possibly eliminate some of the unidentified in UFO's. There are other interesting implications of laser observations in connection with what Ron Callis calls subvisible or invisible clouds. I will discuss them with you when you are in Washington.

Some of the phenomena recorded in Project Blue Book must be the result of uniqueness of partial size and circumstances of altitude and illumination that would be of special interest in connection with laser applications. If on your return trip you can spare the time to examine the Project Blue Book data, at least the unclassified data, would you give us some assessment of the aspects of the problem I have described? I hate to impose on your time this way, but in the interest of efficient use of time, perhaps you could include all these chores in one trip. Since you will be doing these things in our behalf, it will be legitimate to charge your time and travel against our contract.

Sincerely yours,

J. Hughes
J. HUGHES

cc: Mr. Russell Lathrop, ONR Pasadena



OFFICE OF NAVAL RESEARCH
WASHINGTON, D. C. 20360

IN REPLY REFER TO
ONR:412:JH:rmc
25 May 1966

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University of Arizona
Institute of Atmospheric Physics
Tucson, Arizona 85721

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Dr. Condon
Mr. Q. W. F. F. F.
Mr. J. J. J. J. J.

DEPARTMENT OF THE AIR FORCE
WASHINGTON 20330



August 2, 1967

Dear Ray:

I appreciate the copy of Lt. Marley's briefing, and we sincerely appreciate your interest and response to our public affairs problem with UFO. I think we are a long way from getting a handle on this problem.

I have thought about the problem many times since your briefing here. I am more convinced than ever that a positive program in extraterrestrial life or communications studies should not be tied to the UFO problem. I know you don't agree with this and I am not sure Bill Doolittle does either; however, I am convinced that we would really open the flood gates on UFO problems if the public thought that the Condon group was about to involve in extensive research on extraterrestrial activities. I realize that Condon must address this subject, but this is different from conducting active research. I think research in this area should be accomplished by an entirely unrelated activity.

Please pass on any ideas you have and keep us alerted in any way that we might help.

Sincerely,

Bill

WILLIAM C. GARLAND
Brigadier General, USAF
Director of Information

Colonel Raymond S. Sleeper
Commander
Foreign Technology Division (AFLC)
Wright-Patterson Air Force Base, Ohio 45433

Like say
SETI?

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WASHINGTON 20330



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Colonel Raymond S. Sleeper
Commander
Foreign Technology Division (AFLC)
Wright-Patterson Air Force Base, Ohio 45433

R.H. Pestalozzi
5712 East Whittier Street
Tucson, Arizona

7 July 1966

Dr. James E. McDonald
3461 East 3rd Street
Tucson, Arizona

Dear Jim,

The information you requested several weeks ago concerning a UFO report submitted by me, as reporting officer, to USAF Project Blue Book, follows:

The intervening years and a very mediocre memory do, of course, preclude my recalling the exact date, report data such as time, meteorological conditions, flight altitude (which must have been about twenty thousand feet) names of observers, etc., etc. I will, however, relate the incident to you to the best of my recollection.

This observation occurred in the hours just before noon in the early months of 1952. (March, April, May or June.)

While standing on the front entrance steps of the Davis-Monthan Air Force Base Hospital, I observed the approach of two UFOs upon a B-36 flying on a general east-west heading directly over the base. The UFOs appeared from the ground, to be round in shape and metallic in color. (The same color as the B-36.) The objects approached the aircraft from the north-east at speed about three or four times that of the aircraft.

The two objects appeared to be about the same size when first observed. One object appeared to gain altitude as it approached the aircraft because it seemed to grow smaller. It stationed itself, at the B-36 speed, just behind and to the port side of the B-36. The other object approached the aircraft at the altitude of the B-36 and stationed itself between the pusher-type prop spinners and the leading edge of the starboard elevators. The air crew, which landed the aircraft at DMAFB, and were interrogated by me, confirmed the ground-observed stationing of this object in this extremely close proximity to the aircraft.

I can no longer remember the length of time of the observation but all of the air crew members, except one who flew the aircraft during the entire incident, were able to get to the starboard observation port to see the UFO.

The objects were reported to be symmetrically convex top and bottom, about ten or twelve feet thick from top to bottom at the middle and quite sharp at the edge. (The crew gave an approximate figure in inches which I cannot remember.) The object was reported by the crew, as I remember, to be about twenty or twenty-five feet in diameter. (It fit rather snugly between spinners and elevator.)


Some of the air crew members reported seeing a pale band of red color about half way between the top and the edge of the object. All members did not see this color band, however.

Upon questioning, the pilots denied that the object interfered with either the flying characteristics of the B-36 or the navigation or radio equipment.

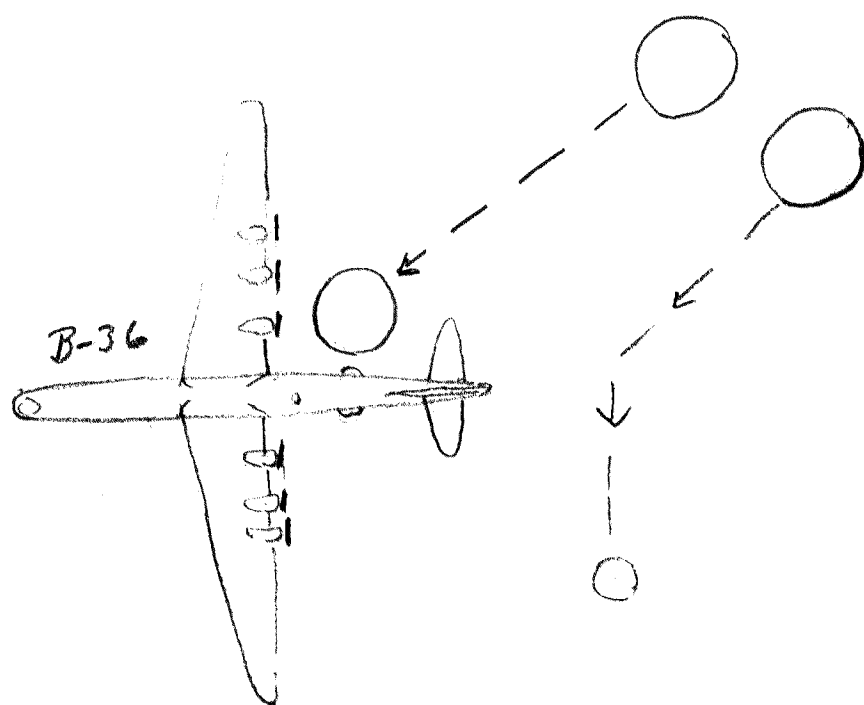
Upon departure from the aircraft the UFO lost altitude, crossed under the aircraft, joined the other object and the two departed at extremely high speed in a southerly direction. (Aircraft altitude, airspeed, heading, UFO headings, approximate speeds and exact size estimates are in the original report but I can not remember them.) During the close proximity of the object the pilots did not try evasive action.

The aircraft and crew were from Carswell AFB, Texas and were on a flight to March AFB, California. It is possible that this report is filed in Blue Book Archives under either of those base names.

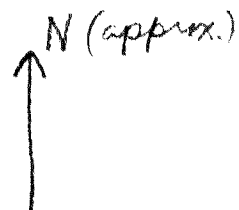
I hope this report and the diagrams are of some help, Jim.



R.H. Pestalozzi Maj. USAF-Ret.
5712 E. Whittier Street
Tucson, Arizona

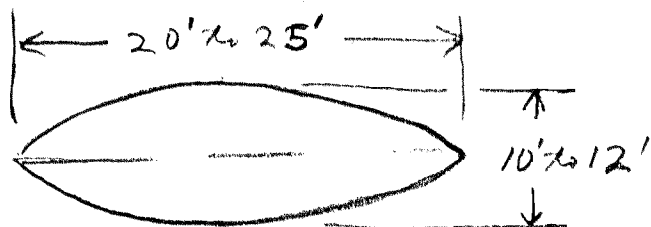


Pestalozzi UFO
1952

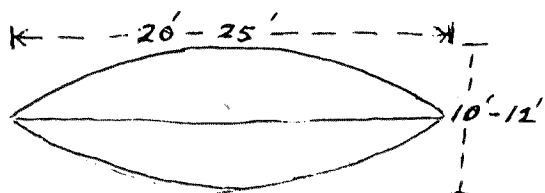
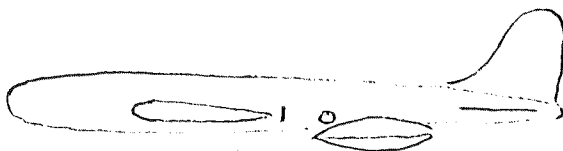
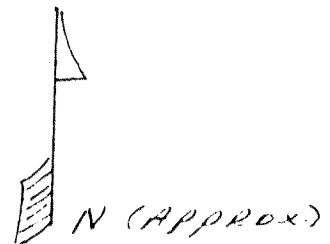
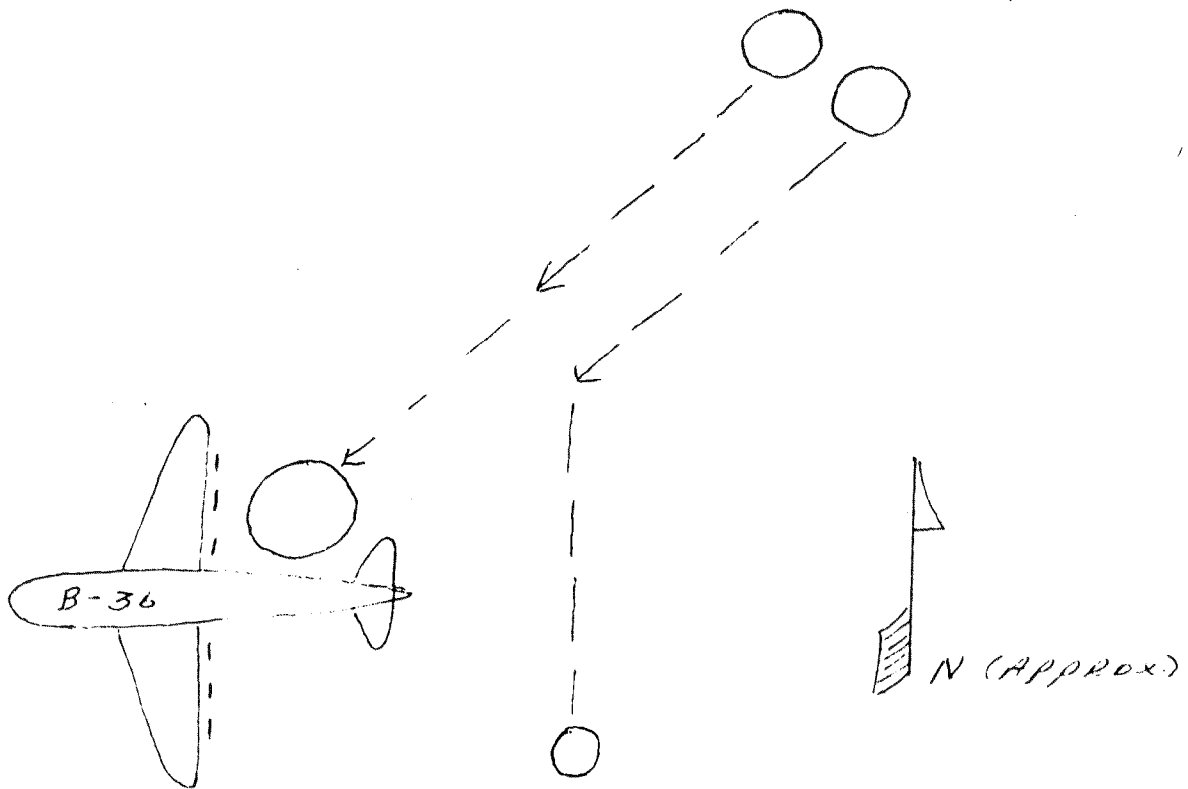


VIEW LOOKING
TO SOUTH

ESTIMATED UFO DIMENSIONS:



TESTALORZI
7/7/66



— July, 1970

Dear Allen,

This is a delayed reply to your note of May 4, 1970, which you sent along with a tear sheet on your 4/22/70 article in the Christian Science Monitor. I had already seen it and filed it, but thanks for a spare copy. What interested me, irritated me, and finally led me to undertake a long and blunt letter to you was your closing sentence:

"I still look forward to the day that we might work together rather than somewhat at loggerheads."

That seems a faint, but unmistakable, intimation that you and I are working at cross-purposes because of some sort of a stubbornness on my part, the cessation of which you anticipate with patience. I simmered almost long enough to write you this letter back in May, then cooled off again. However, subsequent receipt of the March/April issue of FSR brought further irritant, and two weeks of intensive work on the Bluebook files down at Maxwell AFB still later, followed by another long and careful look at the role you played in Project Grudge and sequelae, have made me decide that I had better spell out, once again in a long and specific letter, the kinds of points that I have tried to get across to you at one or another time in the past, evidently with limited success.

When you suggest that we are working "somewhat at loggerheads", I presume you can mean only one thing. Since you're not directly interfering with anything that I am currently doing on the UFO problem, and since I'm not directly interfering with anything that you're doing on it, and since there is a concurrence in what each of us is currently saying (at least in a general way about the present scientific importance of the UFO problem,) I must conclude that your cited sentence really is to be translated as saying that you look forward to the day when I stop being critical of the role that you have played in the past twenty years' developments in the UFO problem.

I might suggest that I will probably stop being critical of that role soon after you stop trying to "rewrite history" and become considerably more candid (perceptive?) about the fact that you have been much more a part of the problem than part of the solution in the UFO area since 1948.

On June 9, I spoke to the IEEE in the Los Angeles area, just a few days after returning from Maxwell. My mood was similar to that which marked my first encounter with you, in Evanston on June 8, 1966, immediately after getting my first fairly good look at those incredible Bluebook files. And just as that first good look at the files had led me to outspoken criticism which I presented quite bluntly to you in your office, so this latest and in some ways better

look at the Bluebook files and all those memos and all the rest of that material that outsiders to Bluebook never could have realized was tucked away there, leads me to more of that blunt criticism. So, yes, I would say we're still at loggerheads on past history, if that's the way you'd wish to phrase it.

And we're at loggerheads when I find you stating, in your 4/22/70 CSM article, that: "After twenty years, we are still pretty much where we started,..." and then following that up with a dig at the "scientific establishment", as if it were somehow "they" rather than you yourself as the one scientist who, through those twenty years, had unparalleled opportunity to see what was going on, to truly evaluate the situation, and to take the kind of steps that could and should have alerted the scientific community long ago to the importance of the UFO problem. There's a quite real sense in which you were the scientific Establishment (or the core of it) relative to this scientific problem area in the 1949-69 bidecode, and I believe you may lack the intellectual honesty to face up to it.

Again, we are at loggerheads when I read, on Page 3 of the March/April 1970 FSR, that you are ready to criticize Bill Hartmann as "a young man on the make," who "cannot afford to be pro-UFO and expect to get anywhere in the astronomical profession," and who you suggest is putting a "protective coloration" over his attitude for reasons scientifically politic. Surely you must realize that those charges against Hartmann would immediately put me in mind of your own defenses back in June of 1966, when I asked you with a good deal of vehemence how you could have failed to alert the Robertson Panel to the fact that they were getting only the barest glimpse of the UFO problem in their 1953 three-day session, only to have you tell me, by way of explanation, that you were "only small potatoes then," and that you were "overawed" by that prestigious committee. (Or were you as unperceptive as to fail to see that this was essentially what I ended up trying to tell you on 6/8/66?) Either in that just-cited remark or later in that rather warm exchange in which Bill Powers and Jacques Vallée pitched in for your defense from time to time, you allowed that your colleagues must be very different from my physicist colleagues, inasmuch as you wouldn't have dared to openly and emphatically suggest to astronomers that there really was a problem of great significance in the UFO area. I believe I recall correctly that you followed that statement with a crack to the effect that I was "the first guy with a union card" whom you'd ever heard take the problem seriously. Between those revealing comments and other indications that I subsequently got from you and persons who have been in a position to know your mode of operations, I must say that I find it about a 50/50 mixture of the surprising and the irritating that you would...

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whom you'd ever heard take the problem seriously. Between those revealing comments and other indications that I subsequently got from you and persons who have been in a position to know your mode of operations, I must say that I find it about a 50/50 mixture of the surprising and the irritating that *you* would put into print such a charge against someone else. I wonder if Bill has seen that statement yet?

And we're at loggerheads when I turn a page or two and find you cutting down Hartmann a notch further by noting his

"remarkable lack of acquaintance with the subject."

That one brings back to mind another of my own reactions to our first conversations in Evanston, 6/66, namely, that I was struck by your astonishing lack of familiarity with specific UFO cases that I brought up in the course of the day's discussion. I had many subsequent opportunities to verify that early estimate-reaction. As the months passed, and I had more and more opportunity to assess the point, I realized that you never have known very much about the UFO problem, and don't seem to yet as far as I have been able to determine. Unseemly then, I thought, for you to be scoring Hartmann on that point. (Mind you, I do not disagree with you about Bill's lack of familiarity with the UFO problem; but I do disagree with you on your above-cited charges that he is tailoring his UFO views to fit the figure of an up-and-coming, ambitious young astronomer. He took on that task at a time that Kuiper's views on UFOs were outspokenly negative, yet evinced no perceptible bias in that direction himself. Had ambition and caution dictated his moves, he's sharp enough to have seen that the wise thing would have been to avoid the whole subject. I don't defend his negativity one bit, and told him so after the AAAS symposium in no uncertain terms. But I believe it is something quite different from a calculated or instinctive response to his fellow-astronomers, based on overawe or a feeling that he's small potatoes and hence better not speak out about his real feeling that there's a serious scientific problem here.)

And I do indeed find myself at loggerheads with you when I read on page 1 of that same issue of FSR that, in *"private talks"* with the FSR editorial staff, you have informed them that it was only after eight years as consultant that you

"became convinced that there was something more to the UFO problem than just fantasy or hoaxing."

As noted there, $8 + 48$ is 56, so maybe FSR is try[ing] to suggest that your 1956 concern over possible "embarrassment to the Air Force" should any of the Lakenheath facts "get into the public domain" is rendered excusable. What kind of self-serving, pro-Hynek propaganda are you putting out, Allen?

When I read the FSR statement to the effect that

*"All in all we feel it is as well he took the line
'he did; a too-openly 'pro' course would probably
have earned him an early 'good-bye,'"*

I am taken back once more to June 8, 1966, and I hear Bill Powers sticking in his oar by defending your failure to speak out on all of that UFO file material that I had just seen down at Wright-Patterson. Bill's defense was, in brief, that of course you couldn't have spoken out because the Air Force would have fired you immediately. My comments then were to the effect of "So what?" My reaction to the FSR on your behalf would now be that an "early

good-bye" from you as UFO project scientific consultant would have been very much in the best interests of science. Maybe they might possibly have replaced you with some [one] with some guts and some feeling of obligation to do his homework on the many areas of science that you never, in 20 years, took the trouble to become familiar with despite their strong relevance to UFO questions. Maybe they would have secured a UFO consultant less concerned to maintain easy working relations with his contracting agency than speaking out forcibly and effectively against scientific atrocious procedures and policies. I still laugh at your namby-pamby plea that Quintanilla wouldn't "let you do" certain things .

(A paragraph here, illegible due to water damage, is omitted. Text continues.)

I recall clearly that, either before or after Powers' odd interjection for the defense, you had also remonstrated with me to the effect that at least your having been there on the UFO project all those years made it possible for someone like myself to come along and pick the problem up and carry it on! Do you recall my immediate and unequivocal rejoinder? I made it emphatic that, as far as I was concerned, the net effect of your having been the Air Force consultant on UFOs all those years was to delay by a dozen years my own serious grappling with the problem, inasmuch as my reading of your 1953 *JOSA* article had misled me into the erroneous notion that there must not be anything very significant in those Air Force UFO files or you would have done something about it long ago, since your *JOSA* article appeared to imply a fairly open-minded view. How misled I was!

Well, I'm trying to get several points across to you in these opening remarks, and one of them is the reminder that already by June, 1966, I didn't like at all what I saw of your role in the UFO problem, Allen. I tried to find out from you why you had never straightened Quintanilla out on matters of meteorological optics and radar-propagation physics, and the like. It was a good many months before it fully dawned on me that one reason why you hadn't was that, in all those years as Bluebook consultant, you had never done your own homework to the extent that you knew even elementary matters of such high relevance as radar propagation physics, meteorological optics, balloon technology, etc. I had then just come from two days' work on the Bluebook files, in the course of which I expressly asked Quintanilla to see the last two or three months of 1966 cases that you had "audited." I cannot cite specific case dates and locations now, but you'll recall, I trust, my charges that in the spring of 1966 you were still approving absurdly non-scientific Bluebook evaluations. I do recall one in which you had switched Quintanilla's explanation of "Jupiter" to "Capella" (or possibly vice versa), when it seemed entirely obvious to me that the described amplitude of excursions of the luminous aerial source rendered either explanation so patently nonsensical that I thought it was nothing short of the absurd that your role in the whole business would be to polish up the explanation from one silly astronomical context to another silly astronomical context. And I do

recall, since I spelled these out to you there in Evanston that day, another where the observers had seen the luminous source come down an airport glide path, stop and go back up, and you had okayed an astronomical explanation for that one, too. I think it was ASTRO-METEOR, because you were doing as [two or three words washed out] with "meteors" in 1966 as I learned you'd done back in 1949 for Project Grudge. In the four years that have elapsed since 6/66, I've had ample opportunity to see plenty more examples of that sort of contribution that you made, early and late, to 20 years of Air Force handling of the UFO problem.

The facts thereon really aren't in doubt at all, Allen. Back there on my Evanston visit of 6/66, I had seen the Grudge report the day before at Bluebook, and I challenged you concerning my shock at having seen what you'd done on Project Grudge, you may recall. I was startled to see in 6/66, albeit much too briefly for a comprehensive evaluation of the true dimensions of the matter, a far larger number of seemingly significant cases back there in that 1949-vintage report than I had ever suspected. I didn't at that time, have nearly enough time to get in fair perspective the Menzelian way in which you had gone about your very bulky contribution to the Project Grudge Report, but I did have time enough to see that there were some very good cases in there that you'd just glossed over with a smooth and clever remark or two and a bland suggestion that perhaps all this might be worth some further study. And that was part of the reason why I took you to task on 6/8/66 for your failure to make clear to those ill-informed scientists comprising the Robertson Panel that they were not getting a true view of the UFO problem. Your "*small potatoes*" remark was your defense at that juncture. As I have returned several times in the ensuing years to pondering the Grudge material, I came to realize that there was much more than your overconcern for professional peck-order involved; you entered the UFO field almost as good a Menzelian as Donald himself, Allen. The Grudge Report attests to that. That point only really struck me with due impact in my latest review of the Grudge materials, carried out during the past month. (I'll return to that below.)

What amuses me is that you seem able to convince some people (*FSR?* Powers? *APRO?*) that you played your cards, down those years, in the only shrewd way they could have been played. You may be able to kid some people about that, Allen, but you sure aren't kidding me. You didn't kid me in June, 1966, and it only makes me wince when I read it warmed over lightly and almost pathetically in a 1970 issue of *FSR*. I told you in your office back there in 1966 that, in my opinion, you had defaulted on your responsibilities to science and you had defaulted on your responsibilities to the Air Force. Four years later, I'd still put it that same way to you. Only now the volume of supporting evidence to back that statement up that is at my disposal, if you ever really care to argue the point, is very substantially enhanced.

I recall that Bill Powers jumped me with the remark that I had been working on the UFO problem for eight years. I learned later that afternoon

that item of information had come up to Evanston by telephone the night before from Quintanilla, so why was I in there criticizing you when I had never spoken out in all those years. (I heard an echo of that query in some remarks that Coral Lorenzen published in the *APRO Bulletin* some months later, and I've come to be entertained by the relation that exists between you and APRO. (If they'd get a chance to study some of the Bluebook memos and communications in which you make explicably or emphatically scornful remarks about APRO and other such groups, they might second-guess their acceptance of your line.) My remark to Bill at that time centered on the point that I had never encountered any really significant cases in my casual checking down here in Arizona, and that I was therefore wholly unprepared for what I had seen the two days preceding in the files down there at Wright-Patterson, above all, case from Air Force sources. However, you might just note that, unlike you who had been in close touch with this material for two decades, I had, within only a few weeks of that first stunned look at the Bluebook files, (a) pressed the Commanding General at FTD (Cruikshank) hard enough that he put a colonel and two majors into a special review of the Bluebook operations, (b) gotten to the Office of the President's Scientific Advisor (6/27, Nick Golovin) with a plea that they take serious look at the problem, (c) gone to FPC trying to sort out some of the facts centering around the New York blackout after learning the extent to which you and Quintanilla had yawned over that one, (d) contacted the office of the Director of Defense Research and Engineering (Dr. P. J. Larsen) urging that they get onto it and review the matter, (e) spent a day at AFOSR, conferring with Price and Ratchford about the then upcoming "*university Teams*" contract, and (f) had even briefed a group at NASA, all by August, 1966, Allen. Now, recalling some of your past remarks about my having a "*different temperament*" from yours, and recalling the above-mentioned claims that your work had made present progress possible, I stress that those neck-out steps were taken by me, not because I am the "brash" person that Bill Powers charged me with being at one stage of our discussions in your office, but simply because I had in a mere two days at Bluebook gotten a sufficiently good look at the mine of information on significant UFO cases that you'd been in touch with all those years at Bluebook, and I was reacting accordingly. Your inaction, pussyfooting, calculated equivocation, and careful talking out of both sides of your mouth was not yet in the clearest focus for me when I jumped on you in 6/66, but it was clear enough that I made some highly pertinent charges that time has not led me to retract. Very far from it.

And just to keep things in perspective, let me remind you, with deserved emphasis, that I was not the first person to react so vigorously to a limited opportunity to review the early Air Force UFO file-material, back there in 1949-50, when you were safely but unperceptively and unscientifically Menzelizing some 240 Grudge reports, Don Keyhoe, without your scientific credentials but with a common-sense notion of when he was in contact with a real-life problem of highest importance, had sensed that in

this file material was the kind of "pay dirt" that you were still continuously and confusingly pontificating about (before Congress and elsewhere) over 16 years later. And when Don Keyhoe managed to get hold of some of that 1952-53 material, which through your entree was far more accessible to you the scientific consultant than to Keyhoe the magazine-writer, he really took off, once and for all; but you still played it safe or else were so scientifically inept as not to see what lay before your consulting eyes. I find it very droll to draw comparisons between you and Don Keyhoe, the very different roles you've played, and the way you as the academic pussyfooter managed to look down from far above on Keyhoe's ever-mounting exasperations, writing him off in internal memos still to be found in the Air Force files, as one of the "*publicity artists*" who had damned well better not get any of this hot UFO case material, lest he turn it to the embarrassment of the Air Force, etc. Some of your contributions to this whole picture made you seem pitiful; others are just sort of nauseating.

I think when the facts are all set forth, Don Keyhoe will appear, in the deeper sense of the term, a far better scientist than you; when your respective contributions to progress in the UFO area are finally toted up. Keyhoe will get praise and you'll get some of the criticisms you've felt free to aim in his general direction over the years of your Air Force consultancy.

Perhaps some of the above will serve to remind you how we initially got "*at loggerheads*". Perhaps it will remind you of the kinds of points that I have attempted rather unsuccessfully to bring up, clarify, and get you to comment on fully and frankly in subsequent exchanges in the ensuing years. Each time I tried to open up such a frank discussion as this you pulled out of that kind of a discussion, so my concerns and deep criticisms never got full expression.

And then there is that matter I brought up in my September 27, 1966 phone call to you from Tucson. That was a bit of a slow burn, too, old boy. Right after getting back from that first trip to Wright-Patterson in Evanston, I called up Charlie Moore, who had only a month and a half earlier urged me to talk with you about the UFO problem. Moore had been over here for some discussions of atmospheric-electrical problems in late April, shortly after I had begun arrangements to spend what I then anticipated to be nothing more than the coming summer vacation on the task of once and for all trying to find out if there really was anything to the UFO problem. (I had gotten the green light from a committee within the National Academy of Science at a meeting in Boulder on April 7, only to have the Academy light turn red when that April 6 Congressional hearing before the Rivers Committee led to public announcement of intent on the part of the Air Force to undertake a new and ostensibly much more thorough look at the whole UFO problem. The Academy felt it could not be involved in supporting any individual examination of the problem when such a high-level decision to instigate new investigations had just been released.) In an evening discussion with Moore, knowing of his interest stemming from his own 1949 sighting, I had brought

up my intent to look into the UFO matters. That evening he had mentioned that you had been in Socorro not long before and talked "rather frankly" about the UFO problem. (His actual phrase was that you had "really let down your hair about your relations with the Air Force", and he put this in a context which, I later saw, was intentionally ambiguous.) I got the distinct impression, that evening's chat, that Moore was favorably impressed with your role in the problem. Knowing Charlie, that substantially increased my interest in getting up to Evanston to meet you and talk shop with you. That was how it came about that I added that stopoff in Evanston to the itinerary that had taken me to Wright-Patterson after a weekend of my first look at the NICAP operation. Because I had gone to Evanston with Charlie's urging in mind, I was all the more puzzled at what a strongly negative impression of you and of your UFO role I had obtained during my day at Evanston. A week or so after getting back to Tucson, I phoned Charlie and told him that I could scarcely agree with the impression I had gained from his earlier remarks to the effect that you were quite seriously and honestly concerned about the UFO problem and all its scientific overtones. Charlie then revealed, without making any bones about it, that he had not been entirely honest with me in that earlier discussion in Tucson on 4/28/66. He made several comments which I'll not elaborate here, but it was in that telephone conversation that he brought up remarks he said you'd made to him in Socorro a few months earlier, to the general effect that you had never felt willing to speak out or rock any boats because you had two youngsters in college and those Bluebook consulting fees were not unimportant to the Hynek household exchequer. I did not bring that up to you immediately, you will recall, but when I heard precisely the same remark attributed to you by a second party who had been in conversation with you in August 1966, and when my continuing review of the history of the UFO problem during the later part of the summer brought out increasingly clearly how you'd failed to respond to and speak out on all that Bluebook material I had by then reviewed, my simmering reached the ebullition point. So I phoned you on 9/27/66. I had also been simmering a good bit, in the intervening weeks, about your presence during the sessions of the Robertson Panel, and I brought that up first, according to my telephone notes, trying to find out how much you had really known about their findings and seemingly disturbing recommendations.

I was, at that time, becoming more convinced that the Robertson Panel marked the key turning point in the history of the UFO problem. My notes indicate, amusingly enough, that you disagreed with that, suggesting that a much more important turning-point had occurred back in the era of the Grudge report. (While on the phone, I didn't quite realize that this was all the more damning to you, inasmuch as you played a really crucial role in the Grudge Report, whereas you were only an "associate member" of the Robertson Panel. Your virtuous remarks in your *Satevepost* [*Saturday Evening Post*] article about how you'd not have signed their statement if they'd asked, in vintage Hynek.) In any event, after considerable discussion of

why I felt you had failed your scientific responsibilities at that time of this 1/53 Panel, I turned, I recall, to the matter of Moore's statements about what you had said concerning reluctance to really speak out about what was going on in the Air Force UFO project because of not wanting to lose those consulting fees. Maybe it's less than surprising that you got hot under the collar, objected that you were not on the witness stand, and ended by saying that if you had made any remarks along such lines they were intended only as a joke. You know Charlie Moore. Do you think Charlie would pass on a jocular remark and portray it instead as a serious admission in a candid discussion? I do not think so, and I know Charlie pretty well.

I will now add that, by that date, I had also heard an Air Force General summarize in three words,

"He's an opportunist!",

your scientific dealings with an Air Force agency with which he had been previously associated; and I had heard a well-known colleague from your own university spit out the phrase, *"nothing but an operator,"* when your name came up in connection with the history of the UFO problem. And an astronomer who has followed your activities summed you up as *"a politician, not a scientist"* when I brought up your name. And so, perhaps you will at least have some notion, (though you're not getting it all here), of why the members of the University of Colorado UFO Project team found me noticeably cool toward you when October, 1966, had rolled around and both of us were beginning to be in contact with the Colorado Project people. Mary Lou Armstrong was the one who repeatedly tried to prevail upon me to see you in some different light. I leave unsaid the outcome of that one, but I can still chuckle over Norm Levine's telling me, one time when he was driving me back to the airport at Denver in that late-1967 period when the mutineers were working themselves towards their difficult decision, that you had said to him,

*"I'm behind you all the way ----- but don't
quote me on that!"*

Norm laughed, I groaned. It was getting to be old stuff by that time, your working both sides of the street.

I think perhaps you may be almost unaware of how systematically you have tried to play the field in such a way that you never moved against the wrong people. In doing so, and in trying concurrently to maintain a semblance of your responsibilities to science, you did a lot of talking out of both sides of your mouth.

Let me just remind you of a few examples that have influenced my annoyance with you:

(1) In our 6/8/66 session, you gave me a copy of your 5/25/66 letter to Dr. Harold Brown, Air Force Secretary. In it, you treat John Fuller's [Incident at] Exeter as if it were almost subversive:

*"And hardly a page goes by without some
between-the-lines derogation of the Air Force*

that makes one think that the Pentagon
reaction is something out of *Dr. Strangelove*."

Speaking of Fuller, NICAP, and others who were getting so critical of Bluebook, you patriotically offered Brown an idea as to how

*"we can...quickly pull the carpet out from under
Air Force detractors by adopting and extending the
SAB recommendations."*

In those passages, you were treating Fuller almost as if he were some enemy of the People, yet it was only a matter of weeks later that you cultivating Fuller assiduously.

(2) Your tortuous walking of the tightrope to avoid offending Quintanilla in that letter, a carbon of which you indicate as going to Hector, is nothing short of laughable. Putting deference to an unintelligent major who handled your consulting arrangements with Bluebook much higher than crystal-clear scientific obligations to speak out unequivocally in just such a situation as that letter, is one more indications of why I fear you were being more candid than humorous in your remarks to Charlie Moore.

(3) And, indeed, since you, Powers and Vallee made it quite clear by the end of my 6/8/66 visit that what you had uppermost in your minds was to garner an Air Force Contract to switch all UFO research to Northwestern, that entire letter to Harold Brown has your self-serving style obtruding in such glaring manner that I marvel at the fact that you would have even let me glance at that letter, let alone give me a copy as if it put you out on some forefront of the effort to do right by the UFO problem.

*"Adverse public reaction is growing, and I think
that we must act decisively to establish an
independent civilian scientific backup to Bluebook,
which, to be utterly blunt, can take the monkey
off the Air Force's back."*

You've always had your obligations to the Air Force uppermost in your mind, haven't you, Allen?

(4) And then look at that next sentence in the same paragraph:

*"Major Quintanilla can tell you that Bluebook is
already doing everything it can to find reasonable
explanations for all sightings, and that to deal with
cases in the way that seems to be demands would
require quite a different sort of effort."*

You pat Hector on the head in a letter that he's going to see; your remarks to me at Evanston painted him as a bit of an ignoramus, who just wouldn't let you do what was scientifically necessary to get things straightened out. (And back up in an earlier paragraph, you paint yourself as the outstanding authority on UFOs, when you told Brown that you've been associated with the UFO problem for 20 years,

*"...and by virtue of that continuity I have been far
more familiar with the nature of UFO reports than,*

I believe, any other scientist."

Then you close your promotional piece with an indication of how eager you are to

"be of any help...toward the end of preventing further embarrassment to the Air Force."

Are you really so dense, so unperceptive, that you didn't see that it was your own ignorance of UFO matters and your own ineptness in case-investigation at Michigan that had just plunged the Air Force into the largest volume of hot water they'd been in for some time, with respect to UFOs?)

(5) By the mid-60s, you had managed to cultivate successfully the goodwill of some UFO groups like APRO; you had been slipping in snide comments about just such groups in your internal Bluebook communications for over a decade. I remind you again of your admonition to the Air Force on studying the Lakenheath report:

"The Lakenheath report could constitute a source of embarrassment to the Air Force, and should the facts, as so far reported, get into the public domain, it is not necessary to point out what excellent use the several dozen UFO societies and other 'publicity artists' would make of such an incident."

And I can't help adding, Allen, on reading all of that memo, that for you to sum up your reaction to that stunning case with the conclusion that

"The preliminary report submitted by Captain Gregory covers the case as well as it possibly could, under the circumstances,"

is a damning commentary on how superficially you performed your evaluative role and how appallingly ignorant you were about scientific matters whose relevance to Bluebook should, as early as 1949, have led you to do your homework. Your memorandum on the Lakenheath case fusses around inconclusively and without insight, on several different basically irrelevant hypotheses, talks about how long you discussed the case with Whipple, and then in the end pretty much lets it go with that warning not to let any of this out to the UFO groups.

(6) In the Levelland case, you were happy enough to go along with that absurd "ball lightning" explanation in 1957, and I have seen other "ball lightning" explanations that you offered Bluebook in other instances, yet it became quite clear to me, on 6/8/66, that you were almost totally ignorant of ball lightning phenomenology, and I found you trying to explain away that particular case as one that you were especially regretful of. More talking out of both sides of your mouth.

(7) You have found it convenient to try to present your role in the "swamp gas" episode as if you had just made the swamp gas suggestion more or less in passing, an idly offered hypothesis not to be taken seriously, and, in any event, more or less forced upon you by Air Force pressures to come up with some kind of an answer. (I could, by trying had, come up with a fairly

long list of people who, at one time or another, told me how you had confided in them about the pressures that the Air Force put on you.) Unfortunately for that bit of tergiversation, I read at Bluebook, in 6/66, your rough-draft memorandum notes that led to the press report in which you indicated your considerable debt to the University of Michigan chemists who had helped you work out the explanation of that case, namely, marsh gas. The entire tone of that memo gives not the slightest hint that you thought this was an unsatisfactory explanation. Indeed, when you were talking in what may have seemed the closure of a restricted Congressional hearing on 4/5/66, you described your swamp-gas explanation as

"a logical explanation." (Page 6071)

And you even offered it to your listeners in that hearing as a good illustration of

"the method the Air Force has used with great success in finding logical explanations for the great majority of the reports."

I should think you would have regarded that one as kind of hard to slip out of, but you certainly have worked hard at it ever since, both verbally and in print.

(8) And in that same Congressional hearing, only a month before you were touting yourself to Secretary Brown as probably the outstanding expert on UFOs, you let Quintanilla answer Schweiker's question about radar-unidentifieds without correcting Quintanilla. I can't decide whether that was more of your ignorance or more of your lack of courage. It certainly left them with misinformation.

(9) Your predilection for talking out of both sides of your mouth has left its impression with many members of audiences before whom you have talked in the last couple of years. I know it because I've talked to many of the same audiences and have heard plenty of comments to that effect. Let me just cite one that may get a point through to you: When I spoke to the scientific staff at the National Science Foundation on 4/17/67, a woman cornered me after I was finished, and proceeded to ask me if I had any idea just where you stood on the UFO problem. When I told her that I thought your present opinion was not terribly different from my own, she seemed very puzzled and explained that her husband is on the NASA staff at the Goddard Center, where you had spoken only a couple of months before. She said her husband had come away with the impression that, after all your cartoons and jokes, the main emphasis of your remarks was negative in tone. She went away, as far as I could tell, quite unconvinced that I was informed on what your present opinion really was.

Well, those examples may at least be better than generalizations. I think you've been working overtime to play both sides against the middle, to say nothing that would get you into scientific hot water with your colleagues, and to stay with the ship until it was entirely obvious that it was sinking. I think you did exactly the same thing with the Condon Project, Allen; and I

believe, if I wanted to take space to defend that view, I could do it. You were willing to speak quite critically of what was happening on the Condon Project by the summer of 1967 (for example, at our session at Jacques' house). Behind the scenes, you were even more critical by our December 12, 1967 meeting in Boulder. But, carefully defending your public silence as a virtue related to an unwillingness to interfere with the Condon Project, you waited it out until the final day of the release of the report, to be sure that you didn't leave yourself an anchor to windward, in the slim possibility that Condon came out with some positive recommendations. Or so I and more than a few others see it, at least.

And I still recall your strange remarks on the telephone to me, when I phoned you from O'Hare on my way back from the January 10, 1969 NICAP press conference on the just-released Condon Report. I told you it had come out basically negative, and what was your reply. It was to the effect that you were basically pleased to hear that, that now the big boys of science (or was your phrase "Big guns" of science?) wouldn't move in on the UFO problem and take it all away, so that people like "you and me" in the Universities could still be working on it. I thought that was a very curious reply; I disagreed with you right on the spot, I trust you recall. I also thought it was a very revealing remark. You make many revealing remarks.

I think it is only deserving that some of them come home to roost in the not too distant future. The woman at NSF whose husband was uncertain as to which side of the fence you were on, has a fair amount of company.

Persons who have read over your remarks would come away equally puzzled. I suppose I've read your 4/68 Yale Scientific Magazine article four or five times, trying to make up my own mind what you were trying to get across to your reader in that one. You vaguely convey the notion that there might be something to it, but you throw together such a potpourri of poor explained cases and poor unexplained cases that no one would gain the slightest bit of suspicion that there really were startlingly inexplicable cases reported to the Project, which you had, by then, been associated with, off and on, for 14 years. As in your 1949 Grudge statements, you still pussyfooted in 1962, with various remarks about this bizarre phenomenon, and the very sentence with which you open that Yale article is a clear intimation that the author is telling his reader that he is bringing him an account of a rather weird and wonderful world apart. Your Britannica 1963 article on UFOs is more of the same. Here you tell your reader that it has been a

"sequence of bizarre circumstances,"

since 1947, that has generated the term, UFO; you stick in a few provisos that there might be something to it, but these are pretty well lost in the shuffle as you meander in and out among the obstacles. You appear to summarize "many years of investigation" by suggesting that

*"There are no compelling reasons to believe
that the great majority of sightings arose from
anything other than misidentification of natural*

*objects and phenomena and that the real cause
of these sightings generally lay in the conditions
under which an object or phenomenon was seen."*

And, a bit later on, you dispose of the small percentage of unexplained cases by telling the reader that

*"For none of the extraordinary unknowns,
however, were there scientific data on which
to base valid, definitive investigations."*

I don't think I need to quibble about the dominantly negativistic tone of that 1963 statement of your position because you expressly stated to me, on 6/87/66, how much you regretted the way you had handled that Britannica article. (I have found you expressing your regrets on an unconvincingly large number of such instances.) But how do you intend to square such statements in 1962 and 1963 (not to mention a number of other points that are still unknown to the UFO reading public, but which are quite well-known to me) that it was

"only after eight years as consultant"

that you became

*"convinced that there something more to the
UFO problem than just fantasy or hoaxing."*

as you evidently told FSR?

That same cautious equivocation marks your 1953 IOSA paper, and it, like subsequent discussions that you have put into print, puzzles me by your curious selection of case-material. In almost every instance where you have purportedly put down some "good cases", you throw in the most unconvincing melange of cases that I could imagine. And I would include your 1969 AAAS paper in that generalization. To me, it's just one more of many strong indications that you never have and still don't know much about the UFO problem.

And, abundant facts notwithstanding, you are now beginning to try to develop an image of that scientist who, in his Bluebook consulting capacity, worked with meticulous patience, going over innumerable reports, mostly of dubious quality, and always fighting an uphill battle against Air Force counter-scientific tendencies, to dredge out of all that material something of scientific significance. For example, look how you worked out your PR on page 3 of your AAAS abstract:

*"The speaker has arrived at the conclusion
stated at the outset, after many years of outspoken
skepticism, from a detailed examination of
thousands of reports and the interrogation of
hundreds of witnesses, and a painstaking effort
to separate the signal from the noise."*

You were trying, but I'm afraid you're not going to succeed. How can you have the gall to speak of your detailed examination of thousands of reports, of

your painstaking effort to sort out signal from noise in Bluebook reports? I think the answer probably is that it's not gall at all but more of your nearly complete lack of awareness of how you've failed utterly in your responsibilities as Bluebook consultant. You went to Socorro, publicly expressed surprise that no radars at White sands saw Zamora's object; it didn't take the Lorenzens much painstaking effort to straighten that one out by explaining that it was Friday afternoon, and all the radar is shut down at 4:00 p.m. When you were up at Hillsdale, as was explained to me by Milton M. Ferguson, of the Hillsdale administrative staff, your "painstaking efforts" were so mysteriously absent that you wouldn't even walk from your car on Barber Drive through the grove of trees that prevented you from seeing that what you publicly identified as a "swamp" was a neatly manicured lawn and lagoon area, where the Hillsdale College holds its annual reception for the families of graduating seniors every year. And I could go on and on, and on, Allen, citing Bluebook cases for which you had evaluative responsibilities and for which your methods were light-years away from anything that a self-respecting scientist would dare call "painstaking." Much of it is not only far from painstaking, but very far from intellectually honest, in my opinion. The swamp-gas episode is replete with other examples that I am prepared to document, and will in proper time.

Just to remind you of one more example of how painstaking have been your methods in discharging your responsibilities to the Air Force and to science, I call attention to your letter to me dated July 9, 1969, in which you brought up the 3/6/68 case near Amarillo, Texas. There were you, an astronomer, whose very field rests on optics and on the optical propagation characteristics of our atmosphere, asking me if a 3/5-degree inversion could make

"a mirage appear in the zenith",
and asking

*"...Isn't it about time that we settled this hash
about atmospheric inversions once and for all?"*

Incredible! As I remarked in my 7/11/68 reply to that letter, it is more than depressing to realize that, at the end of 20 years of holding down the consultantship with Bluebook, you had never taken the time to review enough elementary optics to sort that one out for yourself. (As I read that 7/9/68 letter of yours, I was reminded of some charitable remarks by an eminent astronomer who was on your Doctoral committee, the remarks being to the effect that you almost didn't pass. With such low standards of what constitutes adequate scientific response to a question confronting you, I think you shouldn't have passed. Don Keyhoe should have, in your place. I have expressed my amazement elsewhere that an astronomer like Menzel would be so ignorant of the optical properties of our atmosphere as to make suggestions like the one you were toying with in your letter about the Amarillo case; and there you are, another astronomer, totally ignorant of the

same elementary points, yet having a 20-year responsibility to have straightened that one out in your mind long ago. Painstaking, piffle!

And then there's the matter of the radar cases. I asked you in Evanston on 6/8/66 how you could possibly let that long-standing explanation of the July 1952 Washington radar case go through. Your remark to me was the question:

"How could I set myself up against all those radar experts in Washington?"

Between that session and my September phone call, I'd taken the trouble to devote about two weeks of study to the basic physics of radar propagation and to an intensive study of radar systems, in general. I pointed that out to you in my telephone call of 9/ /68, reproaching you for your failure to do the same over all those many years. And yet, over three years later, at the AAAS Symposium, you were still blandly remarking that you were no radar expert, and, a few months later, in your article in FSR Review, you were still saying

"I have paid little attention to the radar cases, since I am no radar expert, and the radar expert at Bluebook invariably ascribed all radar cases to malfunctions or anomalous propagations..."

If we had a graduate student who took an equally casual attitude towards his responsibilities for learning about scientific matters adjoining his principal area of responsibility, we'd regard him a rather unpromising candidate. My own guess, taking into account all information at my disposal, is that you can make such admissions without wincing painfully because you have so little scientific competence that you really do regard these radar matters as some kind of a mystery, comparable (evidently) to the mystery about whether total internal reflection can occur at 90 degrees incidence on atmospheric inversions over Amarillo.

The sad and actual facts, as I shall be showing, are that the one or two people you have deferred to as "radar experts" over all these years of your Bluebook consultancy were also incompetent. Bluebook is a testament to incompetence, and you've engraved yourself a place on one prominent facet of that eminent memorial.

Therefore, Allen, wake up to the fact that you're only getting yourself in deeper when you try to tell uninformed people about your "detailed examination of thousands of reports," and of the "painstaking effort" you've been making as Bluebook consultant.

You closed your letter of 7/9/68 with the following statement:

"Again let me express my hope that, even if we can't agree about the past, we should be able to agree about the present, and therefore, presumably, about the future also."

If you would squarely confront how you might best influence early and general scientific scrutiny of the UFO problem, Allen, I believe that you might recognize that it would be through a perhaps painful but not necessarily

utterly candid admission of the fact that anyone who thought Bluebook had a scientific consultant who was really doing justice to his job through those 20 years is dead wrong. Such an admission might wake up some of the scientists who are still on the fence, might make them take that new and earnest look at the UFO problem that would help get it out in the open where some really capable scientists can begin to hammer away at it. But instead, I think you're busily, and with fancy footwork that is only going to make you fall on your face, trying to waltz the various facts around on the stage to where you come out looking like some sort of a martyr to a great scientific cause; it won't wash.

There is a bit of that fancy footwork in the paragraph on page 5 of the 3/70 FSR review, where you inform your reader that

*"Now that Bluebook has been terminated,
I will be free to discuss some of their 'scientific'
methods, and indeed a part of the book I am
now writing will be devoted to that."*

Do I understand from that that you really are going to try to write a book that makes out Quintanilla, his predecessors, and the "Establishment" as the malefactors in this drama? You've gotta be kidding! Take a few weeks off from writing that book to review your own "scientific" methods, beginning with Project Grudge and running down through the years that followed. You can make a greater scientific contribution by a few weeks devoted to opening your own eyes about what you've done to the UFO problem, rather than trying to come out with a book that rewrites history in a way that will only get you into deeper hot water, Allen.

Earlier in this long letter, I had indicated what was then my intent to devote quite a bit of the space to a detailed discussion of the Menzelian nature of your Grudge evaluations. As I said, they are very much in my mind because, only a couple of weeks back, I have completed another pass through all of that material. However, I believe I've probably made enough points of criticism without extending this letter by the substantial amount that would be required to spell out my conclusion that many of the characteristic Bluebook syndromes concerning explaining away UFOs in terms of balloons, meteors, planets, aircraft, and miscellaneous meteorological-optical phenomena were well set forth, in numerous examples, by what you contributed to Grudge. and since your Grudge contribution amounts to about 2 inches of the total of 2 1/2 inches of thickness of that famous report, that contribution is by no means minor. It really hit me this last time, almost every kind of a Menzelian explanation that Donald has ever come up with was anticipated by you in Grudge. Not all of them, but most of them. Hence I'm afraid that you're one of the last people to sneer at Menzel, and the record from Grudge on through 1968 stands in flagrant contradiction to any suggestions you may ever try to make to the effect that you were the knight in shining armor trying to slay the Air Force dragon of anti-scientism.

As I've said before, all of those who follow me in taking a really good look at the total record will see that you weren't part of the solution, you were a great, big, solid hunk of the problem.

So, to come back to your memo of 5/4/70, if you really look forward to the day that we won't be working at loggerheads, stop trying to rewrite history and take a good, long, hard look at it.

Sincerely,

James E. McDonald

JEM/mar

P. S.: There was a Letter to the Editor of *Playboy* which never got published because it was never sent. I wrote the enclosed letter, dated 12/11/67, but simmered back down and didn't send it. Because it constitutes a brief paraphrase of much that appears in the foregoing letter, I'll send you a file copy of it at this juncture.

END OF LETTER

[James E. McDonald also wrote further criticism of J. Allen Hynek which was apparently intended to be incorporated in his July 1970 letter. These pages begin with the subtitle, "Tergiversations."

Tergiversations

In an interview with the *Chicago Tribune* on October 22, 1967, byline Ronald Kotulak, your seventh in a list of reasons why one has to take the UFO problem seriously is as follows:

"Radar, meteor cameras, and satellite tracking stations have picked up 'oddities' on their scopes or films which have remained unidentified."

And only a few months earlier, you emphasized to the Congressional Committee (p. 6009) that

"During the International Geophysical Year, I was in charge of the optical satellite tracking program, and you would think that with the surveillance the astronomers placed on the sky that, if these objects existed as tangible objects, surely these astronomers would have seen more than they did. It is a dilemma."

Painstaking Efforts

Again, in the swamp-gas case, you emphasized, in reply to a question from Congressman Rivers (p. 6071), that

"No individual that I talked to, and no group of persons, could agree that they had seen anything either enter or leave the swamp."

As a matter of fact, you will find, when I write up my summary of that case, that three of the persons you directly interviewed saw just what you said did not happen and stated to me that they told you so clearly. In addition, there were persons involved in those two incidents whom in your slap-dash investigations, you just didn't get around to interviewing, who also saw objects moving in and out of the area of observation. More of your meticulous methodology and painstaking effort at work.

Your name appears as one of the two investigators on the White Sands radar-visual case on 3/2/67, in the Condon Report. Do you include this as one of your meticulous investigations? The number of basic, fundamental questions about the circumstances of that case and especially those which are most crucial in relation to the radar, aren't even hinted in the summary of that case. Perhaps this is one more case about which, on being pressed, you would express "regrets"?

Then there's a case, which I dug out of the Air Force files, where your painstaking effort involved almost exactly a one-year delay between the time you were asked to check on the witness and when you finally got around to running him down, despite the fact that he was someone you personally knew and for whom you evidently had high regard. That's scientifically a bit sloppy, wouldn't you say? I refer to the Cambridge sighting, of course.

In a rebuttal to Keyhoe's 1/66 True Article, a rebuttal appearing in Hayden Hewes' *Interplanetary Intelligence Report*, Vol 2, No. 3, September-October 1966, Oklahoma City, you take up eleven cases that Keyhoe has talked about. If your painstaking thoroughness had been such that you had been checking UFO evidence in the thorough way your position called for, you would certainly not have been unaware of a number of those cases over which you just raise your eyebrows, on grounds that you've never heard of them. One in particular, where your comments belie your meticulousity, is No. 2, 12/21/64, Staunton, Virginia. You close your paragraph with a remark that

"After due investigation, the entire Staunton incident is regarded as unreliable and suspect."

I've studied that case in some detail, I've talked to Horace Burns, and I've talked to three people in that community who know him very well, and I've also reviewed very carefully Sergeant Moody's typically incompetent and superficial investigations, which you are underwriting with that comment, just as you have underwritten other such Bluebook investigations in the past. Incidentally, anybody who has really followed the UFO problem carefully and was on his toes about it certainly would recognize Case 6, whether Keyhoe identified it in True Magazine or not. One more example of your slack

handling of your responsibilities. The same, I might add, would apply to your failure to correct Quintanilla on page 6075 of the Congressional hearing, when Congressman Stratton asked him if there hadn't been some kind of a case at National Airport, back in earlier years, where radar was involved; and Quintanilla indicated he wasn't sure, and, though you were in the room, the record shows no indication that you were able to fill in that surprising gap in Quintanilla's information. Your standards of meticulousness are far from typical for a scientist.

Tergiversation

It would be easy to fill out a long list of your tergiversations that stem from making one kind of a comment when you think it's safe because nobody of importance may hear you, and then having to whip around and change your story, if it gets out. The episode with the Richmond News Leader, which NICAP picked up in their 1/68 Investigator, appears to be a case in point. As soon as they publicized a statement that you had reportedly made to a newsman, to the effect that you'd bring out sensational evidence if the Condon Report proved negative, you denied it, both in press and by letter to NICAP. Judging from the records of both you and NICAP, I will prefer the NICAP interpretation of this one, until clearly contrary evidence emerges.

Similarly, a rancher I know in this area was fascinated by private conversations that he and some others had with you up at Phoenix, when you were down here some time ago to give a talk. He stated that he gained the impression that you are outspokenly in support of the extraterrestrial hypothesis. He indicated that it was rather puzzling, however, when you got on the rostrum because a very different kind of a picture emerged.

When I was in Los Angeles last month, talking to the IEEE, a number of the Los Angeles NICAP people were commenting on just this same syndrome, the difference between what you have the courage to say when you're on the rostrum vs. the bold approach you take in a safe and private discussion. I have earlier remarked on how your pussyfooting with respect to the Condon Project, up until the time that the final report came out, illustrates that same tendency, despite the "non-interference" interpretation that you like to put on those actions.

In some instances, the best way to show your tendency to tailor your remarks to suit your present convenience is to pick up statements and quotes from widely separated points in time. In your statement reported in 1966 in Hayden Hewes' little magazine (issue identified elsewhere here), you defend the Air Force UFO program with fairly clear intimations that

*"The alleged superficial and negative attitude
of the Air Force"*

is some sort of a figment of the NICAP imagination. Similarly, in the Arizona Daily Star of 6/123/67, bylined by Dave Brinegar, now the editor of that paper, Brinegar summarizes a seemingly confidential discussion with you in Phoenix in February 1967 and makes the following remark:

"He (Hynek) said he believed that the Air Force effort to study UFO reports had been misrepresented widely, and that this program was thorough and honest."

How do you hope to square statements like that with your remark to the FSR that it was sometime around 1956 that you began to realize there was something to all this, and how do you square it with other remarks that you have made since the termination of your consultantship with Bluebook? The evidence for superficial and incompetent Air Force investigation was already so striking by 1954, that the fact that you were still defending it in 1963 and 1967 put you in a rather curious position when you attempt to castigate the Air Force now, rather than to take the proper share of the blame that you so richly deserve. Do you really think that the facts will let you get away with such footwork, Allen?

Tergiversations

Similarly, in the Electronic News for 1/6/67, a story based on your talk to the NASA Goddard Space Flight Center seminar includes the following remark:

"He said the United States has a superb tracking system to detect and study unidentified flying object -- the extensive Early Warning military radar networks. Asked by Electronic News if these networks had ever tracked UFOs, Mr. Hynek reported that on several occasions they had. He said the IGY world optical tracking network pictured UFOs which could not be explained."

Since the IGY was almost a decade old by then, why this sudden switch from what you said in April of 1966 about the same point. Especially inasmuch as you were sufficiently close to the IBY program to have known all these matters in 4/66, and especially because of some remarks to the same general effect that you made to me in 6/66 in Evanston. I think the simple answer is that every time you make a statement you test the wind very, very carefully before opening your mouth. Unfortunately, the wind changes, and hence a rather inconsistent sequence of utterances has emerged. Back in 1965, an AP dispatch out of Chicago, published locally on November 8, 1965, represents the kind of a statement you were making when you regarded it as dangerous to talk very seriously about UFOs. That's the one where the main thrust of the interview is contained in your quote:

"I think it might be more to the point to study the people who make them (UFO reports) than to study the reports themselves. I have recommended to the Air Force that a panel, including sociologists and psychologists, be set up to look into the growth of rumor -- this new

folklore of flying saucers."

Elsewhere in that interview, you had stated:

*"You'd think we must have a very sick society
at times,"*

referring to the "utterly fantastic" reports that Bluebook gets. How can you see any essential difference between the way you approached the problem back in that period when you didn't have the courage to speak out alone, and the way Condon and the Condon Project handled much of their task? They also threw together a hodgepodge of positive and negative statements, with the negative statements far more intrusive. That's the sort of thing that you've done repeatedly in your writings on the problem, and if you think that equivocation adds lustre to your record in this area, there are some of us who certainly cannot agree.

Swamp Gas

In a long interview in the 10/22/647 Dayton Daily News, the reporter asked you if there was anything new on the Michigan case that would lead you to attribute the sighting to anything other than swamp gas, and your remark was:

"I've said that, despite the fact that swamp gas seems to be far-fetched, no one has come up with a better answer. And I never said that the swamp gas was any more than a strong possibility. If you want a physical explanation, that would be a physical explanation."

Despite all those provisos, it's clear that, even as late as that, you still weren't recognizing the utter absurdity of your swamp gas explanation. And that failure to recognize it is simply, in my opinion, a tribute to your incompetent, superficial way of going at cases like that.

Tie to Brinegar Statement

A year later, in a UPI story, dateline 1/12/68 out of Princeton, New Jersey, one reads:

"Dr. J. Allen Hynek, the U. S. Air Force consultant on Unidentified Flying Objects, said Thursday the AF does a poor job of investigating UFO reports. Dr. Hynek, head of Northwestern University's astronomy department and a UFO expert for 20 years, accused the AF of working on the theory that most UFO reports are false and a thorough investigation as a 'waste of taxpayers' money.' "

Now it should be just as obvious to you as it is obvious to me that nothing that happened in the preceding two or three years represented any deterioration of the scientific caliber of Bluebook. Yet here, as the months were ticking by and as more and more vocal and open opposition was coming

out, you found it politic and safe to join the critics of the Air Force, beginning to sound almost like NICAP yourself. What you apparently missed in all of this, as you attempt to shift your ground right up to recent months, is that nobody who works at the actual records is going to draw any significant distinction between you and Bluebook because your role as scientific consultant carried, incontrovertibly, responsibilities to undo precisely the kind of shortcomings that had been there all along and which you began to criticize only after it became safe and convenient. I reiterate this point throughout the letter, Allen, because it is so patently impressed upon the record, despite your strong wishful thinking to the contrary. And, let me remind you that what I'm saying here is in no way different, except for its elaboration, from what I have said to you on almost every occasion when we have met. And I remind you, to give you some hint of the fact that I have stronger feelings about all this than you tend to recognize, that when you began to make that remark in the radio-TV interview in Denver at the time of the 8/69 NAA Symposium, to the effect that well, you were glad to see that I was finally coming around to recognizing some of the things that you'd been saying to me all along (re scientists' resistance to looking seriously at the UFO problem), I opened up on you in no uncertain terms. For you to suggest to me that I am finally waking up to a situation about which I have been keenly aware from the very start of my 1966 efforts, and above all when that situation is, to a very significant extent, your own doing, is some kind of further evidence, I suppose, of your strange misperceptions about the history of this whole problem. After that exchange, you may recall, I attempted once again, down in the lobby of the Writers Motel, to tell you that I wished we could sit down and really thrash this whole thing out. We never have, and this letter is a poor attempt to do a bit of that.

Comments on Grudge

In view of the already great length of this letter, and because I just can't afford to spend much more time on trying to pound into your head the points that so profoundly contradict the way in which you're trying to rewrite history, let me just cite a few examples of the way your Grudge analyses set a pattern, early in Air Force investigations of UFOs, that has come to be termed "Menzelian." Right off, we can cite Chiles-Whitted, which you interpreted as a "meteor", the explanation that still stands. Similarly, you preferred the "balloon" interpretation for the Garland sighting, and that's the official explanation now. You were clearly the author of the "chaff" interpretation and evaluation which is still carried for sightings in Portland on July 4, 1947. I have elsewhere commented on your fantastic explanation of the Twin Falls, Idaho, case of August 1947, which you explained as perhaps due to an atmospheric eddy because the object moved the treetops and was reported as blue in color. That one is still carried in the files as "eddy", a tribute to your early contributions. You are the one who made two of the Murock AFB

sightings "balloons", as still carried. You were the one who took the sighting by an Air Corps lieutenant flying near Lake Mead in June, 1947, who reported 5 or 6 objects that streaked by his aircraft at an estimated speed of nearly 300 mph, and turned it into "balloon cluster", where it still sits in the files. You allowed that maybe Mantell saw "Venus". You suggested the "balloon" explanation for the Andrews Air Base case of 11/18/48, just as absurd as your "balloon" suggestion for Gorman. An object moving faster than the C-47 from which the witnesses sighted it near Pittsburgh, you felt free to tag as a "balloon". And one of the earliest of radar cases, in Germany in late 1948, is now carried as a "balloon" and was so evaluated by you, despite obvious factors contradictory thereto. (Do note that, whereas you have often taken refuge in that claim that you only evaluate astronomical possibilities (typing breaks off in mid-sentence))

END OF "TERGIVERSATIONS" SECTION

[This letter from McDonald to Hynek was found in McDonald's UFO files while this author (Druffel) was archiving them for the University of Arizona Personal Collection Section at Tucson, Arizona, under a grant from the Fund for UFO Research. The letter was in draft form, with McDonald's changes written in. What appears above is the entire text of his last draft. Apparently the letter was never mailed to Hynek in finished form. AD]

McDonald's List of Favorite Quotes

It is certainly likely that our present knowledge of (elementary) particles is incomplete. I remind you of the story of the fisherman who was fishing with a net of 6-inch mesh. He concluded that all of the fish in the sea were larger than 6 inches.

... W.K.H. Panofsky in Ridenour p. 223

To observations which we ourselves make
We grow more partial for th' observer's sake. Alexander Pope

Common sense is a docile thing. It sooner or later learns the ways of science. Henry Margensu

Santayana spoke truly when he said that nothing gives such an idea of the infinite as human credulity. Hildebrand

Some things take a certain minimum time to accomplish; you can't make a baby in one month by putting nine men on the job. Hugh Dryden

Mathematics can never tell you what is; only what would be if. Po'ncare

The main business of a university is to examine the discrepancies between natural phenomena and the currently accepted explanations of them. In Hildebrand

One nourishes the tree of science without knowing which branch will bear the apple. R. H. Ellis

Blessed is he who expects nothing, for he shall never be disappointed.

Knowledge is a sacred cow, and our problem is to figure out how to milk her while keeping clear of her horns. Szent-Gjorgyi

Ill fares the land, to galloping fears a prey,
Where gobbleydook accumulates, and words decay. J. Thurber

The camel is a horse designed by a committee.

There may be less here than meets the eye. Tallulah Bankhead

If you want to heat the dog, you can always find a stick. DuToit

Is it more probable that nature should go out of her course, or that a man should tell a lie? Thos. Paine.

A definite maybe. Sam Goldwyn

When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible he is very probably wrong. Arthur Clarke

Anyone who looks for a source of power in the transformation of atoms is talking moonshine. Rutherford 1933.

There has been a great deal said about a 3000-mile high-angle rocket. In my opinion, such a thing is impossible today and will be impossible for many years. Vannevar Bush 1945 Senate Hearings.

Every time we make an atomic bomb we corrupt the morals of a host of innocent neutrons below the age of consent. S. W. Auden

An optimist is one who sees the world in a rosy light; a pessimist is one who sees it in its true light.

he had been eight years upon a project for extracting sunbeams out of cucumbers which were to be put in phials hermetically sealed, and let out to warm the air in raw inclement summers.

Swift. Voyage to Laputa

If you take the king's shilling, you must fight the king's battles.,

An assistant dean is a mouse training to become a rat -Kuiper

Experts have sometimes been defined as people who hold vehemently antagonistic views with great tenacity. Eysenck

Sit down before fact as a little child, be prepared to give up every preconceived notion, following humbly wherever and to whatever abysses nature leads, or you shall learn nothing. THHuxley
Ev

Every genuine test of a theory is an attempt to falsify it. Popper

Matters of elegance should be left to one's tailor. Boltzmann

Science may be advanced by rejecting bad hypotheses as well as by forming good ones. H. A. Newton, 1886 AAAS address re origin of molecules

Already they have created a climate of opinion in which anyone can publicly attack the extraterrestrial theory in perfect safety -- regardless of what gross ignorance or bias he displays in the process -- but he cannot defend it without risking his business, his reputation, or his professional career. Isabel Davis CRIFO 3/56

New truth is always a go-between, a smoother-over of transitions. It marries old opinion to new fact so as ever to show a minimum of jolt, a maximum of continuity...By far the most usual way of handling phenomena so novel that they would make for a serious rearrangement of our preconceptions is to ignore them altogether, or to abuse those who bear witness for them. Wm. James in Pragmatism

If someone hands you a lemon, make lemonade. Dale Carnegie

Clark Kerr defined a "multiversity" as "a group of independent scholars united by a common parking problem."

If Edison had had an advisory committee, we'd still be in the dark.

Those who refuse to go beyond fact rarely get as far as fact... Almost every great step in the history of science has been made by the anticipation of nature, that is, by the invention of hypotheses which, though ultimately verifiable, often had very little foundation to start with. T. H. Huxley.

If you want to get along, you've gotta go along. Speaker Sam Rayburn.

It's better to keep your mouth shut and appear stupid than to open it and remove all doubt.

Few things are harder to put up with than the annoyance of a good example. The man with a new idea is a Crank -- until the idea succeeds. Truth is stranger than fiction, because truth is constrained to the probable.

Science is wonderful: It gives you such wholesale returns of conjecture for such trifling investment of fact. Mark Twain.

The history of scientific investigation is full of periods of uncertainty of this kind (inability to understand how ether could transmit transverse waves of sort implied in polarization effects), in which the facts seem to demand an interpretation which is rationally impossible. Barton, Optics p. 349

The entire incident (Rapid City 8/5/53), in my opinion, has too much of an Alice in Wonderland flavor for comfort. Hynek Satevepost 12/17/66.

Ibid. Hynek on scientists' unwillingness even to examine the UFO data: Some scientists refused to look through Galileo's telescope at sunspots, explaining that 'since the sun was perfect, it couldn't have spots, and therefore it was no use looking for them.'

Ibid. On life in universe: You would expect to find planets around a star just as you find kittens around a cat or acorns around an oak.

Ibid. ...The Air force has probably spent less on UFOs so far than it has on wastebaskets.

Seneca on comets: Why should we be surprised...that comets, so rare a sight in the universe, are not embraced under definite laws, or that their beginnings and ends are not known, seeing that their return is at long intervals? ... The day will yet come when the progress of research through long ages will reveal to sight the mysteries of nature that are now concealed. The day will yet come when posterity will be amazed that we remained ignorant of things that will to them seem so plain." Quoted by Whipple in New Astronomy (Sci. Am.)

The construction of an aerial vehicle which could carry even a single man from place to place at pleasure requires the discovery of some new metal or some new force. Even with such a discovery we could not expect one to do more than carry its owner. -Simon Newcomb 1903.

Re 1950 opinions as to what UFOs might be: Scully p. 187 says Soviet Deputy Foreign Minister Andrei Gromyko suggested they might be due to a Russian discus thrower who didn't know his own strength.

Scully 103 recalls New York World correspondent who telegraphed from near Kitty Hawk in December, 1903, that Wilbur Wright had just flown 250 yards in a plane. The reporter got fired for wasting telegraph charges.

All this has been said before -- but since nobody listened it must be said again. Words used to open a lecture by French philosopher Andre Bide.

Corroborative detail to lend artistic verisimilitude to an otherwise bald and unconvincing narrative. Pooh Bah, Gilbert & Sullivan (Hmakk 53)

Due to a shortage of trained trumpeters, the end of the earth will be postponed for three months.

A fanatic is one who redoubles his efforts when he has forgotten his ends. George Santayana

Truth is stranger than fiction. Truth isn't constrained to be probable. Mark Twain

I didn't understand what you said, but I disagree with it. Quip by Kuper.

1. New truth is always a go-between, a smoother-over of transitions. It marries old opinion to new fact so as ever to show a minimum of jolt, a maximum of continuity...[By far the most usual way of handling phenomena so novel that they would make for a serious rearrangement of our preconceptions is to ignore them altogether, or to abuse those who bear witness to them.]

- Wm. James in "Pragmatism". Quoted by Hall, CRIFO III-12

2. Already they have created a climate of opinion in which anyone can publicly attack the extraterrestrial theory in perfect safety-- regardless of what gross ignorance or bias he displays in the process-- but he cannot defend it without risking his business, his reputation, or his professional career.

-Isabel Davis in CRIFO II-2. 3/56

3. Anthropological files contain many examples of societies, sure of their place in the universe, which have disintegrated when they have had to associate with previously unfamiliar societies espousing different ideas and different life ways; others that survived such an experience usually did so by paying the price of changes in values and attitudes and behavior.

1961 Brookings report, "Proposed Studies on the Implications of Peaceful Space Activities for Human Affairs. p. 215

4. The reins would be torn from our hands and we would, as a tearful old medicine man once said to me, find ourselves "without dreams", that is, we would find our intellectual and spiritual aspirations so outmoded as to leave us completely paralyzed.

Carl Jung on effects of direct confrontation with superior beings from a more advanced technology. WANA p. 279.

5. Thus Philip Morrison, in one of his lectures, questioned whether any civilization with a superior technology would wish to harm one that has just entered the community of intelligence. If he were looking through a microscope, he said, and saw a group of bacteria spell out, like a college band, "Please do not put iodine on this plate. We want to talk to you," his first inclination, he said, would certainly not be to rush the bacteria into the sterilizer.

WANA 279.

6. Intelligence may be a cancer of purposeless technological exploitation, sweeping across a galaxy as irresistibly as it has swept across our own planet...

Our business as scientists is to search the universe and find out what is there. What is there may conform to our moral sense or it may not. .. It is just as unscientific to impute to remote intelligences wisdom and serenity as it is to impute to them irrational and murderous impulses.

Freeman J. Dyson, letter to Sci. Am., April 1964.

7. Consider the willingness of some to believe in flying saucers as something supernatural, to believe incredible things, to ignore basic scientific principles and embrace the totally irrational..... The non-scientific observer grabs at the most exciting explanation and produces bizarre accounts of interplanetary visitors, or something equally foolish. -- Harlow Shapley in "The View from a Distant Planet" p. 115-6.

On p. 5, Preface, Shapley, outlining book, say, "We dwell a bit on the exciting possibilities of..."

I know all the answers but I just don't understand the question. Sign
Help! The paranoids are after me! Button

A mistake is evidence that some is trying to do something.

There are two levers for moving men; interest and fear. Napoleon

Success has a hundred fathers but defeat is an orphan, JFK, Cuba crisis

Few things are harder to put up with than the annoyance of a good
example. Mark Twain

The reports of my death are greatly exaggerated. Mark Twain

It seems to me that the most interesting stage in any investigation
is the one in which ~~the~~ people are still struggling to understand
what ~~they~~ sort of thing they are dealing with. Once we understand
what kind of thing it is, the further developments follow with a
certain predictability...In the tektite problem we are still in the
stage of attempting to find out what it is all about....(though)
the outlines of the answer are beginning to loom up out of the fog.
-John A. O'Keefe in Foreward (p. v) to Tektites, ed. by o'Keefe,
U. Chicago Press, 1963.

Problems cannot be solved until they have been discovered. - Edwin
G. Boring. Quoted in Life book on eye and vision.

Show me a man who is not confused and I will show you a man who
has not asked enough questions... It takes courage to engage confusion
deeply. - John Ciardi, quoted by prinkle in FSR June 1969

- . Sullivan - WANA-177 quotes from 1962 NAS panel report: The search for ETL, they said, "is, in the opinion of many, the most exciting, challenging, and profound issue, not only of this century but of the whole naturalistic movement that has characterized the history of western thought for 300 years. What is at stake is the chance to gain a new perspective on man's place in nature, a new level of discussion on the meaning and nature of life."

(Conference held, summer, 1962, at Univ. of Iowa, by NAS Space Sciences Board) 11-2-66

. "Another argument against the spaceship idea concerns the lack of formal contact with the UFO occupants. Since visiting spaceships ought to be piloted by some sort of intelligent beings, wouldn't it be reasonable to expect that they would desire contact with other intelligent beings, namely us?...

"This argument assumes that we can understand the motives of an extraterrestrial being. Of course we cannot.... To inductively extrapolate from our own current sociological approaches to those of other intelligent entities would be to commit the logical sin of extrapolation in a most flagrant manner.

/// "Imagine the Aborigines of Central Australia, who are still in the stone age and who have not even developed the bow and arrow. They have had no contact with modern civilization. What happens when a jet plane flies overhead and one of them observes it? When he tells of the huge, shiny bird that didn't flap its wings, had no feet, made an ear-splitting roar, and even had smoke coming out of its tail, surely his fellows assume that he is crazy. Or if the phenomenon becomes so common that it must be accepted as real, they could hardly be expected to deduce from it the condition of our modern civilization, let alone our motives. "Why", they might ask, "don't the intelligent beings who guide this mighty bird land and trade bone nosepieces with us?"

Frank B. Salisbury, Bioscience, 17, 15, Jan. 1967

11. According to (Michel), one of four main "contact" hypotheses may hold

- 1) At the time of space exploration, contact between races of different biological origins may be impossible, or may follow one-way channels parallel to the "contact" between a naturalist and the insects he observes; insects do perceive the contact but only on their level, and they are unable to participate in a voluntary exchange of information.
- 2) Although possible, this contact may be systematically or temporarily avoided.
- 3) The contact may already have taken place secretly.
- 4) The contact may be openly realized on a "spiritual" level which is not perceptible to us; it is made on "their" mental level and remains invisible to us in our present state of consciousness. Similarly, mice may have eaten thousands of books without ever perceiving them for what they are.

-Vallee. Anatomy of a Phenomenon p. 172

12. Such is the spectacle of Prof. Bernard Lovell, who last year produced such gems as "UFOs are purely American phenomena" and "no trained observer or astronomer has ever reported such a sighting." Lovell obviously does not know the first thing about the subject, and it would be better if he'd admit it. From FSR Review, 13/2, March-April 1967, p. 26

ETL - Quotes

13. Michel TAFS-9 quotes French Prof Auge' as describing ufos as "the aerodynamical version of sea serpents."

14. Shklovski and Sagan 385: "...the discovery of life on one other planet...can, in the words of the American physicist Philip Morison, of MIT, "transform the origin of life from a miracle to a statistic."

15. Sir Bernard Lovell, director of Jodgell Bank Observatory was quoted in the April 19, 1966 London Daily Express as having said in Montreal on 4/19 that reports of flying saucers seen over North American lately and the suggestion that they carried visitors from outer space are utter nonsense. "All the unidentified flying objects reported are no more than bits of meteorite burning up as they enter the earth's atmosphere." Quoted in Aug. 1967 issue of UFO Contact, my files.

16. Heinz Haber's paperback, "Stars, Men & Atoms", pp. 106-8 equates popular belief in flying saucers to reactions to A-bomb and to fascination with idea of populated planets. "The flying saucer myth springs from these emotions: 7/ it is an echo of the atomic bomb." "...hope appears to be the strongest force that keeps the flying-saucer myth alive."

17. Lyman Spitzer, quoted by Leo Golberg in Int. Sci. Tech. Aug. 1965, p. 27: "Our view of man and his place in the universe depends deeply on whether planetary systems such as our own are exceptional or whether they occur very frequently throughout our Galaxy. In fact, in many ways, the question of how frequently stars are accompanied by planets capable of supporting life is fully as important as the over-all structure of the universe."

18. Harrison Brown, in his September 1964 *Science* article (ETL file) concludes that planetary systems "are far more abundant than we have so far suspected." He indicates that his numbers "may mean that life is far more abundant in our universe than we have previously thought possible." "If it develops that planetary systems are indeed as abundant as this discussion indicates, the search for intelligent extraterrestrial life is placed in a somewhat new perspective. With 10¹¹ planetary systems available in our galaxy, life-forms may well be both abundant and diverse." "If planetary systems are indeed extremely abundant, one might conclude with equal conviction that man is not alone - that his equivalence may occupy hundreds or even thousands of bodies within our galaxy." Listening for evidence of the existence of such forms may indeed prove to be in the long run a profitable and exciting pursuit."

19. In Ley's *Watchers of the Skies*, page 503, he quotes Sir James Jeans, who concluded that "the chance is about a hundred thousand to one against a star's being surrounded by planets." He quotes Sir Arthur Eddington as follows: "Not one of the profusion of stars in their myriad clusters looks down on scenes comparable to those which are passing beneath the rays of the sun." Ley emphasizes that, at the time of these statements, the consensus was that planetary systems could form only if there was a very close encounter between a single star and a binary, obviously an exceedingly rare event.

19-a. "It is probable that their (dolphin's) intelligence is comparable to ours, though in a very strange fashion." We may be faced "with a new class of large brain so dissimilar to ours that we cannot within our lifetime possibly understand its mental processes." - John C. Lilly, quoted by Sullivan in *We Are Not Alone*, p. 245.

19-b. "We submit, rather, that the foregoing line of argument demonstrates that the presence of interstellar signals is entirely consistent with all we now know, and that if signals are present the means of detecting them is now at hand. Few will deny the profound importance, practical and philosophical, which the detection of interstellar communications would have. We therefore feel that a discriminating search for signals deserves a considerable effort. The probability of success is difficult to estimate; but if we never search, the chance of success is zero. - Cocconi and Morrison in *Nature*, 1959. Quoted by Sullivan in WANA p. 196. on p.191 it's indicated that Sir Bernard Lovell dismissed it as frivolous at first.

19-c. "A civilization only a few hundred years more advanced than ours would have technical possibilities by far greater than those available now to us." Cocconi in letter to Lovell 1959, quoted in WANA p. 191. (Cf. quote of Schwartz and Townes on p. 215 *ibid.* that says same but very much more conservatively, in terms of "a few thousand years" edge on us!)

19-d. "...a civilization passes abruptly from a state of no radio ability to one of perfect radio ability. If we could examine a large number of life-bearing planets, we might expect to find in virtually every case either complete ignorance of radio techniques or complete mastery." - Frank Drake, quoted in WANA p. 201.

This might be termed the Technologic Transition by analogy with demographic transition.

19-e. Alistair Cameron terms the possibility of life in other worlds as "currently the greatest question in scientific philosophy." "...there ~~are~~ may be millions of societies more advanced than ourselves in our galaxy alone. If we can now take the next step and communicate with some of these societies, then we can expect to obtain an enormous enrichment of all phases of our sciences and arts. Perhaps we shall also receive valuable lessons in the techniques of stable world governments. Quoted in WANA p. 281.

19-f. "I believe, as to the question of extraterrestrial life, that it is one of the most important and exciting problems that confront us." - Harrison Brown quoted in WANA p. 16.

19-g. Harold Urey on carbonaceous chondrites; "If it can be shown that these hydrocarbons and the 'organized elements' are the residue of living organisms indigenous to the carbonaceous chondrites, this would be the most interesting and indeed astounding fact of all scientific study in recent years." Quoted in WANA 153.

19-h. "Philip Morrison noted that the really logical way (for communicating) may be by 'Q' waves 'that we're going to discover ten years from now.' Or, he said, a way may be found to handle
WANA 210

20. NAS Space Sciences Board (quoted in January-February 1963 Investigator): The discovery (of ETL) will have an enormous and lasting impact on people of every race and culture...Finding and exploring extraterrestrial life should be acclaimed as the top-priority goal of our space program."
21. NY Times, Dec. 15, 1960 quotes 12/14 statement from Brookings Institution re effects of meeting ETL: "It is possible that if the intelligence of these creatures were sufficiently superior to ours, they would choose to have little if any contact with us."
22. In Edwards II, p. 160. Sir Bernard Lovell quoted on UFOs: "It is just escapism. It is all due to the fact that some people are not educated. May 4, 1966, evidently -- after a brief visit to U.S. He told UK newsmen he was shocked at press space devoted to UFOs. "It is an absurd situation that this fallacy, this form of escapism, should be in conflict with such realities as Viet Nam and real Science."
23. Professor Zdenek Kopal, colleague of Lovell's, quoted in 1/18/68 Miami Herald (see clip this file): "So there is absolutely no need to be concerned about anything extra-terrestrial. There is simply nothing to support any such theory....All right, perhaps we on earth are not so unique, perhaps there is another form of life somewhere in a distant part of our galaxy. But let us suppose for a moment that this form of life was so supremely intelligent as to create a craft to bring them all this way across time to our planet. Why they are they being so stupid at the end of the journey...Are they so shy up there that they are afraid to land?"
- Reporter Peter Brock then closes article with his remarks: "For me, that -- and the recent remarks about the 'nonsense' of it all by Sir Bernard Lovell -- is good enough." 2-28-68
24. In The Airman, Aug. 1967, Werner von Braun's note: "The Need for Positive Credible Proof" contains following: "But it is that unaccounted two per cent that makes flying saucer enthusiasts cling tenaciously to their conviction. I cannot account for that two per cent either. But a lifetime spent in testing of rockets has taught me to be extremely careful with eyewitness accounts of mishaps during launch. If three experienced observers are questioned after a typical mishap, their accounts of what they saw will differ widely..."
25. "With superhuman knowledge, there must go equally great compassion and tolerance." Arthur C. Clarke, in "Exploration of Space", quoted by Keyhoe in FSC p. 81
26. Any sufficiently advanced technology will appear indistinguishable from magic. Arthur C. Clarke, in Time, 7/19/68 (Said is for will b
27. Asimov, speaking of dangers of rejecting new scientific hypotheses just because don't fit "common sense" (re peculiar properties "ether" had acquired by 1880's): "Such a combination is against "common sense", but this must never be allowed to stand in the way of the acceptance of an

(OVER)

hypothesis. We experience only a very limited portion of the universe and are sensitive to only a very limited range of phenomena. It is therefore dangerous to suppose that what seems familiar to us is and must be true of all the universe in all its aspects. Thus it is only "common sense" to suppose that the earth is flat and motionless, and this argument was strenuously used to oppose the notion that the earth was spherical and in motion." In Asimov's "Understanding Physics, V. II, Light, Magnetism and Electricity, Signet 1969 (paper). (Same stress on dangers of deciding hypotheses on common sense is stressed in Landau's little book on relativity and in Bondi's. One of bases of rejecting Pasteur's germ theory was commonsense notion that it couldn't be since we'd be inhaling them all the time, etc. 6/1/69)

28. Charles Darwin refused to speculate on ultimate origin of life: "Talk of the origin of life? You might just as well talk about the origin of the elements!" Source:

29. See my "Science" ed. by Rapaport and Wright¹⁸⁷ for Shapley's The Fourth Adjustment. First three are rotundity of earth, geocentricity of our universe, heliocentricity and finally notion we were in midst of stellar universe. Fourth is notion that we are only intelligent life in universe. (One might take as fifth, the notion that life is here engaged in surveillance, and sixth could be that this life is uninterested in us.) 6/1/69.

30. Gell-Mann's Totalitarian Principle: "Anything which is not prohibited is compulsory." - cited in Phys. Today article on tachyons by Bilaniuk and Sudarshan. Smoother variant: Everything that is not impossible is inevitable.

31. Frederick J. Hooven, now at Dartmouth, in letter to me of 3/19/70: "I find it true that scientists will almost invariably fail to predict any new scientific discoveries when they discuss the future (or by implication, the capabilities of a presumably more advanced extra-terrestrial civilization) but will instead predict superhuman accomplishments of us poor engineers on the basis of today's science. One of the funniest of these is the Shklovsky-Sagan book on Life in the Universe, where it is speculated that engineers will one day encircle the sun, or vaporize Jupiter, to obtain energy, but the possibility of some knowledge about space, time, gravity or anti-matter is not touched upon, any one of which is likely to make our quest for energy seem like the idea of breeding faster horses to improve communications." (my italics on main item) 3/70

32. "In two billion years the impossible becomes the inevitable".- Anonymous quote in Sullivan WANA p. 96 re evolution of life.

33. George Gaylord Simpson: "There probably are forms of life on other planetary systems somewhere in the universe, but if so it is unlikely that we can learn anything whatever about them, even as to the bare fact of their real existence."- in WANA p. 109.

34. "The universe is not only queerer than we imagine -- it is queerer than we can imagine." J.B.S. Haldane, quoted by AC Clarke in Promise of Space p. 299.

35. "Why sometimes I've believed as many as six impossible things before breakfast" Queen to Alice.

36. "On the basis of the new estimates of the great abundance of stars and the high probability of millions of planets with highly developed life, we are made aware -- embarrassingly aware--that we may be intellectual minims in the life of the universe. This uncomfortable idea can be further developed by pointing out that sense receptors, in quality quite unknown to us and in fact hardly imaginable, which record phenomena of which we are totally ignorant, may easily exist among the higher sentient organisms of other planets." - Harlow Shapley, View from a Distant Star, p. 81. Also on p. 17 and 158 Shapley stresses the limits of our sense organs.

37. "Doubtless numerous domiciles of life have produced beings more sentient than we, beings more comprehending, more experiencing, and possibly, by their unimaginable standards, more divine than we.....For example, as remarked in an earlier chapter, man does not possess well-developed sense organs to tell him very fully what is what. We have no good physiological register of long electric waves and must resort to gadgetary feelers. We have no bodily organ for sensing directly the ultraviolet radiation or the infrared. Some stars have enormous magnetic fields; ours has a relatively weak one. We have no recognizable magnetic organ; it may naturally be otherwise elsewhere." Shapley in View from a Distant Star p. 158

38. Other quotes from Shapley, ibid.

"My simple, perhaps too simple, diagnosis of our failure to comprehend the universe is that we have been and still are bedevilled by a natural and persisting anthropocentrism." p. 36

"..in its early days, Harvard College stood by the geocentric interpretation for more than a century after the appearance of De Revolutionibus Orbium Coelestium." p. 37

On p. 18 Shapley notes that there are 3500 species of ants. Prompts thought that maybe UFOs are interested in ants, not the single human species.

39. "H. G. Well once pointed out," AC Clarke notes on p. 244 of "Coming of the Space Age," that "even if the aliens tell us in all truthfulness that their only intention is to serve mankind, we must endeavor to ascertain whether they wish to serve us baked or fried."

40. "Not since Darwin -- and before him Copernicus -- has science had the opportunity for so great an impact on man's understanding of man." Concluding sentence of entry on ETL in "Encycl. Atm. Sciences and Astrogeology" by T. Sall.

41. Stan Friedman, in CSA hearings p. 216, negates idea that UFOs violate laws of physics by noting: "Piston aircraft can't fly faster than the speed of sound, a conventional dynamite bomb couldn't have wrecked Hiroshima, and a vacuum-tube circuit can't fit on the head of a pin; but surely we don't say that supersonic flight, atom bombs, or microcircuits violate the laws of nature or physics."

Also, on p. 218: "It is interesting to note that most scientific progress has come from doing things differently rather than using

the same technique -- microcircuits aren't just smaller vacuum tubes; lasers aren't just better light bulbs."

(One could extend that general point: Light bulbs weren't just better candles. Locomotives weren't just bigger horses. Nuclear reactors aren't just hotter furnaces. Radar wasn't just an improved binocular ranging method. Electron microscopes aren't made with better optical glass. Modern digital computers aren't old desk calculators with faster-acting gears. The telegraph wasn't a semaphore system with reduced reaction-time. The airplane isn't based on the principles of bird flight per se. Quasars weren't detected with bigger optical telescopes.

42. From Brookings Institution 1961 House Document (in ETH file): "The discovery (of intelligent life in outer space) would certainly be front-page news everywhere; the degree of political or social repercussion would probably depend on leadership's interpretation of (1) its own role, (2) threats to that role, and (3) national and personal opportunities to take advantage of the disruption or reinforcement of the attitudes and values of others."

"The knowledge that life existed in other parts of the universe might lead to a greater unity of men on Earth, based on the 'oneness' of man or on the age-old assumption that any stranger is threatening.."

p. 225: "If superintelligence is discovered, the results become quite unpredictable. It is possible that if the intelligence of these creatures were sufficiently superior to ours, they would choose to have little if any contact with us. On the face of it, there is no reason to believe that we might learn a great deal from them, especially if their physiology and psychology were substantially different from ours."

"It has been speculated that, of all groups, scientists and engineers might be the most devastated by the discovery of relatively superior creatures, since these professions are most clearly associated with the mastery of nature, rather than with the understanding and expression of man. Advanced understanding of nature might vitiate all our theories at the very least, if not also require a culture and perhaps a brain inaccessible to earth scientists."

43. "If we start with as many assumptions about the reasonableness of our friends (ETL), the extraterrestrials, as UFO enthusiasts do, we might end up with English-speaking, anti-Communists white-Protestant centaurians." S. Golomb, quoted p. 241 of Arthur Clarke's Coming of Space Age.

43. Leslie C. Peltier (am. astron and comet discoverer) quoted in Clarke's Coming of Space Age: "...I believe that I would refer to the decade following the halfway mark (of 20th cent.) as the Flying Saucer Fifties. It was a period of mass psychosis, when people wanted desperately to believe that we were not alone -- that other people were watching us. It was not just a field day but a field decade for the crank and crackpot..." (Also good quote re his insistence on having one to look at and take apart before he'd believe UFOs were real. Cf. Condon.

44. Sagan & Shklovski 22: "Finding life beyond the Earth -- particularly intelligent life, although this is highly unlikely on Mars -- wrenches at our secret hope that Man is the pinnacle of creation, a contention that no other species on our planet can now challenge."

45. Sagan & Shklovski p. 22: "It is chastening to read 19th century prognostications of the events of the middle 20th century. Even their most grandiose extrapolations have proved a pale echo of our realities. It strained Jules Verne's imagination to picture giant passenger balloons transporting people through the air over thousands of miles in a period of only a week. He could not imagine contemporary jet transports, which cover the same distance in hours." (Verne predicted TV but it was for about 25th cent. I believe.)

46. Huxley on "belief": "Belief, in the scientific sense of the word, is a serious matter, and needs strong foundations. To say, therefore, in the admitted absence of evidence, that I have any belief as to the mode in which existing forms of life originated, would be using words in the wrong sense... But expectation is permissible where belief is not..."
In Shklovski-Sagan p. 214

47. "If we were to succeed in establishing contact with an extraterrestrial civilization, especially one possessing a high degree of scientific development, the impact on our lives, our society, and our philosophical outlook would be incalculable."
Shklovski-Sagan p. 380

48. George Wald on high probability of ETL and its probable chemical similarity to terrestrial life, in NAS "Sci. Endeavor," pp. 220, 221, 228, 231: "What is perhaps more interesting is the dawning realization that this problem involves universal elements, that life in fact is probably a universal phenomenon, bound to occur wherever in the universe conditions permit and sufficient time has elapsed." / It is "difficult to avoid the conclusion that life is widespread in the universe."

"For these and similar reasons I have become convinced that life everywhere must be based primarily upon carbon, hydrogen, nitrogen, and oxygen, upon an organic chemistry therefore much as on the earth; and that it can arise only in an environment rich in water."

49. Herman Muller, "Life Forms on Other Worlds" in Clarke's "Coming of Space Age" p. 191: "Thus, even without taking into consideration the great differences in the biochemical basis and the lower evolutionary stages between life somewhere else and that on Earth, the higher developments there would be expected to be at least as different from ours in their general pattern and workings as the ordinary dog, the tarantula, and the chambered nautilus of our world are different from one another." (Muller has other germane comments on "multiple solutions", on the bizarre forms to be expected in ETL. But he does concede that sensory and coordinating systems will surely play an important survival role in any higher beings. This was a 1959 article, surprisingly well thought out and informed.)

JEM NOTEBOOK 33 PP.

UFO Panel

(1) 4/5/66 Gen

--> Relevant check with Atlas & FAA traffic controller re kinds of spurious echoes one can get under given conditions.

--> Navy - Check photo in 4/77 LIFE alleged to have been taken from a Navy ship off California coast.

--> 4/15/66. J. R. Sievers phone call.

Said Rep. Ford seem to be trying to make some political hay with the UFO-USAF problem, but not clear just what he's doing.

In Feb. an Ad Hoc Comm. under USAF Sci Adv Bd was set up to review the problem. Chaired by Brian O'Brien (now a private consultant, formerly chief scientist Am Optical Co.), members include several scientists whose names I didn't get. One was Richard Porter, V. P. M. (?) Research at G.E.). Wrote a brief report to Sci Adv Bd in March, just a few pages. Confidential copy received at NAS April 11. Take USAF to task for its public relation & argue? better scientific investigation. Urged USAF set up contracts with a number of universities to do field investigations in region. Each should have one Physical scientist and one clinical psychologist plus field investigation. Estimate an average of 10 man-days per investigation. Would deal with the roughly 100 sightings/year that fall in Unexplained category. Feel that public should be kept better informed on nature & results of investigations.

Evidently the Ad Hoc report contained info that Project Blue Book consists of 1 officer, 1 sergeant, 1 secretary!

--> NAS has been approached by Geo Miller of H. Science & Astronautics Comm, but NAS decides against any positive action now. Will not go thru with my idea of 1-man study, since would be presumption of criticism of USAF Board. I urged John to get John Coleman to suggest my name for any new Advisory Board & he said he'd try.

--> I asked Arthur Lowery's reaction to news story that U setting up USAF-supported investigation teams headed by one clinical psychologist & one physical scientist. Didn't bother him very much. Thought that some people might welcome the opportunity to "clear themselves". Later agreed, however, that it could dissuade certain others from reporting in first place. (end first side, first page)

(other side, first page)

(in top margin, seems added after page was written) ABBREVIATIONS
CONTD.

Charlie Moore 4/28/66. Check Nunn-Baker camera wide-angle search photos. Radar with 200 mile range. Check their systems, NASA Spacewatch radars (Tennessee?) [Cf Hall 180. Nunn-Bakers do show many UFOs. NICAP has some data on this.] Ground Observer Corps 1950-59 - Produced many reports.

Notes for H-8 re 6/18 media post hoc, re DCA, on 6/19/68

Apr 28, 1968 T. A. B. for AAS & NAS-POWACM.

Discussed Look & CV with Knutson at Thruway Tower 4/30. ^{Wanted short list for}

Long Small abstracts re Look & Humboldt AIAA on 5/68. Knutson sent good copy of Vietnamese surprise re Look among Conference participants. [White, Dreyfus, Bagshaw]

May 1-2 NAS-POWACM session at SUNYA

Filled ALO-LGA with order for D. (see yellow notes).

Double NAS will not voluntarily. Chief concern: NAS being

Dirty hands. Soldier's pers - sealed. Ryan & Knutson good help

DJFM said will only. Daniel Dreyfus re focus on CV.

He surprised at Look content

5/2 At Seabell's in P.M. after supper with Knutson at Thruway road

Long summary NICA. Pro Conf re Look at 7:00 P.M., Tues 4/30.

Handled out 20-30 rounds. Knutson, Ryan, Dreyfus, Knutson. 27 reporters present.

Told P.M. about D.R. Sanders from Seabell

See yellow notes. CV without legal support from Lt. Dreyfus &

Also asked Pro Sunday for report, following Powell statement

5/3/68 To Ronch's office ca 0900

Saw O'Callaghan & Stanton See yellow notes

Has written Campbell. David (DAO), Michael Rouse, & USAF Staff. Dan

Phyllis not called to Philadelphia. He did have full meeting. Gained if all knew

Fully first from last got for newspaper reporting. Told by meeting of Seabell

not really working at CV anything (coming whitehead). Said there are some

surprise "behaviors" were planned in CV report by 0100 P.M. Right on ex-Corbin

Saw Dick Olsen briefly. He proposed Dan Chis held some more work

put in good word with all Congressmen

Saw Ryan 12:40-12:55. spoke of some delays & he said re receipt

seemed concerned. Said will support plan for leaving

Stratospheric Cloud over Northern Arizona

James E. McDonald

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STRATOSPHERIC CLOUD

Stratospheric Cloud over Northern Arizona

James E. McDonald

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Stratospheric Cloud over Northern Arizona

Abstract. An unusual ring-shaped cloud was widely observed over northern Arizona near sunset on 28 February 1963. From a large number of observers' reports it is known to have appeared overhead near Flagstaff, Arizona. From initial computations based on four photos taken in Tucson, 190 miles south of the cloud, its altitude was approximately 35 kilometers. The most distant observation reported was made 280 miles from the cloud. The cloud remained sunlit for 28 minutes after local sunset. Iridescence was noted by many observers. Tentatively, the cloud may be regarded as similar to a nacreous cloud; but its unusually great height and unusually low latitude, plus its remarkable shape, suggest that it was a cloud of previously unrecorded type.

Near sunset, on 28 February 1963, a cloud of unusual configuration and coloration was observed in widely scattered localities in Arizona and some surrounding states. The cloud took the form of a large oval ring (clear in the middle) with the long axis running north and south (Fig. 1 and cover photograph, this issue). It remained brightly illuminated well after the sun had set on high cirrus clouds to the west. From Tucson, 190 miles to the south, its angular elevation appeared to be about 6 degrees. A rough computation of its height, based on sunset geometry (1), made immediately after the cloud entered the earth's shadow, led me to appeal by press and radio for confirmatory reports in order to establish the approximate location and to secure descriptions from the largest possible number of other observers.

From approximately 150 reports, many communicated by persons well aware that they had seen a type of cloud unprecedented in years of skywatching, it was quickly established that the cloud lay overhead in the vicinity of Flagstaff, Arizona, that it exhibited iridescence of the sort associated with stratospheric nacreous clouds in the arctic (2, 3), and that its internal structure was very peculiar. To observers nearly underneath, the colors green and blue were visible, and a pinkish cast was noted at times. A fibrous texture, described by several independent observers as resembling a "wood grain" appearance, was present over much of its northern extent, but



Fig. 1. Stratospheric cloud over Flagstaff, Arizona, from a point about 160 miles east-southeast, after sunset. The dark clouds in the west are cirrus clouds on which the sun has already set. (J. E. Daniels, Springerville, Arizona)

its southern end was denser and more cumuliform. Its overall shape was compared by some (ranchers) to a horseshoe or a harsecollar if it was viewed from the south; from the north it appeared as a closed loop with a long thin trail that could be seen extending northward, from the oval, and several observers in that sector compared its shape with that of a "hangman's noose." The cloud was seen from distances as great as 280 miles (near Douglas, Arizona, and Albuquerque, New Mexico, respectively).

Many observers reported a second cloud off to the northwest of the main cloud, with shape very much like that of the main cloud, but only about a quarter as large. Correctness of these reports has been established from some of the first photographs that have come in from northern Arizona. The cloud was evidently moving generally south-eastward, though visual reports are in some conflict on this point; this point can only be resolved from further studies by triangulation.

By fortunate coincidence, the cloud appeared within a few tens of miles of the U.S. Weather Bureau radiosonde station at Winslow, Arizona, and a high-altitude sounding had been completed there only an hour before the appearance of the cloud. A jet stream lay almost directly under the cloud and over Flagstaff, and there were peak

winds of 98 knots from the northwest occurring over Winslow at an altitude of about 11 kilometers. The radiosonde run terminated at the 13-millibar level of atmospheric pressure (about 29 km), where the temperature was -46°C . There was very little direction shear in the Winslow wind sounding, a condition known to favor formation of mountain waves and believed to be conducive to nacreous clouds, at least in Scandinavia (2). It is possible, therefore, that the San Francisco Peaks just north of Flagstaff disturbed the flow so that wave motion was set up in the stratosphere, but this remains a conjecture, pending further study of reports of first appearance. Whereas some recent studies (4) suggest strong local stratospheric cooling as a prerequisite for the formation of nacreous clouds, the sounding at Winslow showed little departure from average temperature conditions in the lower and middle stratosphere.

Photogrammetric analysis of the four photographs known to have been taken in the Tucson area have yielded elevation angles of the near point ranging from 5.9 to 6.2 degrees. Because the exact range to the nearest point of the cloud is not yet known to better than about 10 or 15 miles in 190 miles, the exact height cannot yet be determined. However, the cited elevation angles plus allowance for earth curvature give

a cloud height of 35 kilometers, possibly a bit higher if the range to the heat point proves to be greater than 190 miles. This height is distinctly greater than that of reported Scandinavian nacreous clouds. Photogrammetric heights obtained over many years by Störmer and others (2, 3) are no higher than 30 kilometers, and the majority lie between 22 and 28 kilometers.

The estimated height of 35 kilometers rules out the possibility that the Flagstaff cloud could have been the condensation trail from a jet plane. The present American altitude record, made under the most favorable conditions directly above the home field by a Lockheed F-104 in 1959, is 103,395 feet (31.6 kilometers). Perhaps more conclusive is the fact that the upper limit of height for possible contrail formation (5) as indicated by the sounding from Winslow was just under 24 kilometers at the time of the cloud's appearance.

These preliminary indications mark the Flagstaff cloud of 28 February as a most unusual phenomenon of considerable meteorological interest. Requests for photographs, still being made at time of this writing, have already brought promises of photographs from a total of 16 sites reasonably well dispersed around Arizona, so fairly precise data on the cloud's height, shape, and dimensions should be obtainable by triangulation. A conflict between heights estimated from the Tucson photos and from sunset geometry is under study (the indicated height based on available reports of fadeout time is about 25 kilometers). Premature fadeout may have been due to cirrus clouds between the cloud and the ray-tangency point, computed to lie at or very near Los Angeles.

The hydrodynamics of the field of vertical motion that produced such a toroidal cloud form are very puzzling. Present estimates give the closed oval a length of about 60 kilometers and a width of about 30 kilometers, with a ring cross section of perhaps 3 to 4 kilometers in the horizontal. I am not aware that a cloud of such form and size has been observed at any level within the atmosphere before. Interesting questions about the source of the requisite water vapor are posed by its unprecedented altitude (6).

JAMES E. McDONALD

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6. I thank Leon Nilsen for alerting me to the cloud when it became visible in the Tucson sky and for further technical assistance, and I. E. Daniels and C. E. Peterson for permission to reproduce their photographs. The cooperation of the numerous Arizonans submitting reports is gratefully acknowledged. Supported by the Office of Naval Research under contract NBR DMC-164.

20 March 1963

2 Part III—WED., AUG. 10, 1960 Los Angeles Times 2*

'SELECTED BY OUTER SPACE'

Flying Saucer Man Runs for President

BY JACK SMITH

Gabriel Green, a 35-year-old bachelor from Whittier, threw his hat in the ring yesterday for President of the United States on the flying saucer ticket.

At a press conference in the Biltmore, Green announced that he had been selected by people from outer space.

He said his advisers were from the Alpha Centauri system and they "looked like people."

Green admitted he doesn't expect to beat Vice President Nixon or Sen. Kennedy but he does believe he can carry Whittier if he gets enough publicity.

He said the space people could overpower the earth in a few hours, but they don't operate that way. They want us to believe in them first, he said, so they can teach us peace and economic security under universal law.

"They could completely take over this planet between breakfast and lunch any day of the year," he warned, "but that would be in violation of their principles."

Interfering All Along

Green said he has seen at least 75 flying saucers from space, the last contact being only three months ago.

"I have seen them with my own eyes," he said.

Contrary to popular opinion, he said, space men are not new to this planet but have been "interfering all along."

"They are more advanced than we are, mentally, spiritually and scientifically," he said.

Green said he doesn't expect to be believed because skepticism is the general attitude of the race.



CANDIDATE — Gabriel Green, 35, flying saucer candidate for President.

Times photo

"They didn't believe the world was round," he said. "They didn't believe we could crack the sound barrier, and we cracked it. The reporters wouldn't even report the Wright brothers' early flights."

Green was asked why he didn't have a Martian or a man from Venus at his press conference to help prove his claims.

"What would be the use?" he said. "If he said he was from outer space nobody would believe him."

Green was wearing a spectacular set of red socks.

"Did you get those from outer space?" he was asked.

"No," he said, "I bought those right here in Los Angeles."

The Presidential candidate said the women in space are beautiful.

"One of my friends made a contact with one of them not long ago," he said. "He said she was really out of this world."

UFOs—the Modern Myth

by Donald H. Menzel

Myths come in a wide variety of sizes, shapes, and colors. Myths are stories, whose origins are usually forgotten, devised to explain some belief, institution, or natural phenomenon. Especially the last.

Let me remind you of a few ancient myths. Echo is a mischievous nymph who pined away for love of Narcissus until nothing was left but her voice. Earthquakes occur when a giant, chained underground beneath a mountain, tries to free himself by shaking his bonds. Lightning is a thunderbolt hurled by Zeus or Jupiter. And so on! The rain! The winds! Ocean storms! All controlled by or at the mercy of some personalized deity.

Man has traditionally tended to construct myths to explain anything he cannot understand. And this is precisely the way that Flying Saucers or UFO's came into existence.

The evidence and conclusions were about as follows, in 1949. The Air Force had collected several thousand reports of queer things in the sky. Many had come from military and airline pilots who, presumably, were reliable and at least not likely to foster hoaxes. Objects were reported to move at speeds enormously greater than that of any known terrestrial aircraft. Similarly, the observed accelerations of these objects were far in excess of those of ordinary aircraft. They exhibited an ability to maneuver in such a way as to avoid being intercepted, so that the investigators felt themselves forced to conclude that the objects were "under intelligent control. "No terrestrial craft could behave in such a manner, ergo they must be extraterrestrial!

That, gentlemen, was the position of the military in 1949! And today, twenty years later, the two previous speakers have said essentially the same thing. In brief, they are saying that they support the extra-terrestrial hypothesis (ETH) simply because they cannot find any other explanation acceptable to them. I see nothing to justify their assumption that they are the ultimate authorities. I ask, is this science?

On such slender evidence McDonald has flatly stated that "the problem of unidentified flying objects is, indeed, the greatest scientific problem of our times. "He has further urged that Congress provide, for their study, a budget that would dwarf that of NASA....

UFOs - THE MODERN MYTH

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On such slender evidence McDonald has flatly stated that "the problem of unidentified flying objects is, indeed, the greatest scientific problem of our times." He has further urged that Congress provide, for their study, a budget that would dwarf that of NASA.

Hynek—I understand—has made a proposal to NASA for another study of UFO's. For your information I have no intention of making any such proposal.

They warn about the danger of repeating the historic boo-boo of the French Academy about 1800 in failing to recognize that stones could fall from the sky. And yet neither of them has produced a single artifact—let alone "a baby UFO," to use one of Hynek's phrases—in support of their sensational, wide-sweeping conclusions.

They further admonish us to remember that there will be a science of the twenty-first, and of the thirtieth centuries. Presumably they thus seek to refute the old-fashioned scientists who—like myself—continue to believe in the second law of thermodynamics, the impossibility of perpetual motion, the laws of conservation of matter and energy, and the laws of action and reaction.

Since the previous speakers have indicated their connection with the field of UFO's, let me briefly present my own qualifications. During three years of active service as.

Commander in the U.S. Navy during World War II, I had the responsibility of initiating and interpreting research in the field of radio propagation in general and radar phenomena in particular. I was head of the Section of Mathematical and Physical Research for Naval Communications, in Naval Operations.

I summarized the results of some of these studies in a book. There I cited startling examples of what we then called "anomalous propagation. "

The phenomena were indeed "anomalous" when we first encountered them. No one had foreseen that these short radar waves, whose range was supposed to coincide roughly with the optical horizon, would sometimes follow the earth's curvature for thousands of miles and produce false targets that confused the armed forces. In the Mediterranean a cruiser shelled and reported sinking a target that later proved to be a false image of the island of Malta. At last report, Malta still exists. From a distance of 600 nautical miles, a task force in the Pacific witnessed the Japanese evacuation of Kiska and ignored it because they didn't know anything about anomalous propagation. Proper interpretation of the radar record would have enabled our task force to engage with the Japanese fleet and inflict severe losses upon them. I think you can see why such problems were vitally important to Naval Operations.

It was evident to many of us that a radar phenomenon analogous to optical mirage might be involved. And so I turned toward meteorological optics for clues. The subject was intensely interesting. The "Wave Propagation Committees of the Joint and Combined Chiefs of Staff, of which I was a member and later chairman, met weekly to discuss such problems. We directed research, both U.S., and Allied, toward a solution of this question.

The key to the problem was indeed temperature inversion: layers of cold air close to the earth's surface with the temperature increasing upward for a time. The region below the temperature maximum was called a "duct" because it tended to trap and guide the radio waves around the earth's surface. Moisture content as well as temperature proved to be important. Whether or not a radio wave remained in the duct depended on the wavelength.

We still encountered difficulties. Nature is never as uniform as our equations assume. The earth's surface is rough and irregular. The vertical distribution of temperature varies from point to point in an unpredictable manner. One can never have all the data necessary to achieve a full mathematical solution. So we did our best on a statistical basis. We defined a "trapping index, " in terms of moisture content; temperature gradient, duct height, and wavelength.

Our researches in the radar field turned up numerous cases of false targets and apparent trapping when the trapping index was much less than the simple theory indicated. We sometimes encountered dozens of false targets in an area where we were sure no real targets existed. Of course one can never know the temperature and moisture distribution over the entire area, but only near those regions where a sounding balloon has been sent up. From such studies we surmised that irregularities in the atmosphere—such as bubbles of hot air—often produce false targets even when the trapping index is less than the critical figure.

Now let us examine a few specific cases, first of radar and then of optical phenomena. I have already pointed out that—in my opinion—the views expressed by McDonald and Hynek are highly subjective. It is very hard to pin either of them down. Although both have spoken volumes on the subject, their writings are extremely meager.

For McDonald's views I turn to three sources: some of his numerous press releases, a pamphlet published by NICAP, and Hearings before the Committee on Science and Astronautics, U. S. House of Representatives, Ninetieth Congress, July 29, 1968, otherwise known as the Roush Report, since it represented a symposium chaired by Hon. J. Edward Roush of Indiana.

For Hynek's views I must turn to the same Roush Report, to an earlier Congressional Hearing, or to two articles in those well-known scientific journals. *The Saturday Evening Post* and *Playboy* magazine.

When, in the hot summer of 1952, a multitude of radar saucers invaded Washington, D. C. , with concentration over the National Airport I felt quite at home. Here were all the familiar features of anomalous propagation with its partial trapping. In confusion and fear, the authorities closed the National airport and ordered aircraft from Andrews Air Force Base to try to intercept the Unknowns. The jets, directed by radar, roared into the air and found absolutely nothing. A few reported seeing distant lights but they weren't clear at all about it. The lights could have been stars, ground mirages, meteors, or false images on the retina.

The atmospheric conditions persisted for two days and repeated themselves five days later. Still no UFO's! No intercepts! But this failure did not discourage the Ufologists. As one sensation monger wrote, "It was bad enough to know that UFO's were flying over Washington, but to find that they knew how to make themselves invisible was frightening! "

In the midst of this confusion I released the facts to the newspapers. I attributed the cause to a form of anomalous propagation not fully understood perhaps but no cause for worry. No UFO's. And General Samford, a few days later, affirmed my position. Studies by the U.S. Weather Bureau and the Air Force supported my views. And so does the Condon report. It was not surprising, I said, to expect bubbles of hot air over Washington.

Now what does McDonald have to say about my views ? How does he proceed? I call your special attention to his methods because they are typical of his evaluations in other cases.

I quote from the Roush report. He says: "I have interviewed five of the CAA personnel involved in this case and four of the commercial airline pilots involved, I have checked the radiosonde data • against the well-known radar propagation relations, and I have studied the CAA report subsequently published on the event. " He then states: "The refractive index gradient, even after making allowance for instrument lag, was far too low for 'ducting' or 'trapping' to occur," He continues in this vein for a couple of paragraphs, quoting this or that witness or authority in support of his final conclusion: "I am afraid it is difficult to accept the official explanations for the famous Washington National Airport sightings. "

This kind of argument—I submit—is hardly science. The basic data, consisting of the observers reports, obtained under conditions of panic, are clearly questionable. Those who made the reports are highly biased because they want to justify their original conclusions. The only hard data bearing on the question consist, of radio-sonde measures from several isolated points. What does McDonald know about the general propagation conditions over the entire Washington area? Nothing at all! He clearly just wants to believe that the UFO's are real and arbitrarily ignores the hard evidence. It was true that

severe trapping did not occur. But this was one of the marginal cases of partial trapping. Harder to recognize but the evidence is unmistakable.

Let me give you a sighting, as reported in the Denver Post in January 1968. The headline read: "30 Citizens Sight UFO. One of the best-verified sightings of a UFO in recent months was reported in Castle Rock, a small community 30 miles south of Denver. Deputy Sheriff Weimer said about 12 'reliable citizens' " - I wonder why they put "reliable citizens" in quotation marks- "reported seeing a large, bubble-shaped- object flying over the town between 6:10 and 6:25 p. m.

"Morris Fleming, director of the Douglas County Civil Defense Agency, said about 30 persons saw the object.

"Howard Ellis said that ' all of a sudden about a dozen lights shined on me. ' He said the lights were ' all the color of car head- lights that have mud on them. '

"Phelps said he didn't see the bubble-shaped object, but, instead, a big, real bright light. Not a brilliant light, but a bright one." He said that the light, which moved at different speeds, seemed to be about 600 feet high and at least 25 feet in diameter.

"The object ' shot straight up and disappeared, shooting out a couple of balls of flame, ' Ellis said. He thought the egg- shaped bubble was about 50 feet long, 20 feet wide and 20 feet deep.

"Fleming said the Douglas County Civil Defense Agency would administer a blood test to Ellis on Wednesday to determine if any ' radiation or unknown or foreign matter is in his blood stream. ' "

A remarkable and spectacular UFO! Grist for the mill of the ufologists! - And so it would be today and forever, except for a small notice in the same paper two days later.

Under the headline, "Mother of Two Young Scientists Identifies UFO, " we read "A slightly embarrassed Castle Rock mother came forth Thursday with an explanation for the UFO viewed and reported by some 30 persons Tuesday night.

" The UFO," Mrs. Dietrich explained, "was built by her two sons Tom, 14, and Jack, 16. Tom learned how to make the thing in science class at school, and he was showing us how to do it, " she said . "It actually was a clear plastic dry-cleaning bag, a small one, the kind that comes on a suit jacket, " Mrs. Dietrich said.

Let me come back to a case I know something about because I was the observer and McDonald has questioned either my veracity or my conclusions. Flying in the Arctic zone, near Bering Strait on March 3, 1955, I observed a bright UFO shoot in toward the air- craft from the southwestern horizon. Flashing green and red lights, it came to a skidding stop about 300 feet--as nearly as I could judge-- from the aircraft. Its apparent diameter was about one-third that of the full moon. It executed evasive action, disappearing over the horizon and then returning until I suddenly recognized it as an out-of-focus image of the bright star Sirius. The sudden disappearance was due to the presence of a distant mountain that momentarily cut off light from the star.

McDonald, "analyzing" this sighting, characteristically and accusingly reports: "I have discussed that sighting with a number of astronomers, and not one is aware of anything that has ever been seen by any astronomer that approximates such an instance. " Here we go again! He questions the observation because I did not show how the index of refraction could have produced such an effect. The same procedure. Interviewing selected and unidentified witnesses. Significantly, he did not interview me. I ask how many astronomers have seen a bright star just on their optical horizon from an altitude of 20,

000 feet? With refraction, the object would lie about 1 1/2 degrees below the geometrical horizon. McDonald makes the absurd claim that such an observation would require "a peculiarly axially- symmetric distribution of refractive index, which miraculously followed the speeding aircraft along as it moved through the atmosphere, that it seems quite hopeless to explain what Menzel has reported seeing in terms of refraction effects. "

Here is a man who, on the basis of a few scattered radiosonde observations rejected anomalous propagation as an explanation of the 1952 Washington sightings. Now he implies that I need detailed refractive measurements through hundreds of miles of atmosphere tangential to the earth's surface--much of it over the USSR--before he can accept my observation as valid! Nor is his statement correct that an axially symmetrical distribution of refractive index would be necessary. He is obviously unaware of an analysis I made some years ago, of the "random walk" of a light beam through an atmosphere consisting of irregular layers. You can see, perhaps, why I distrust his views and opinions. McDonald is probably disturbed because I claim--and prove-- that many of his classical sightings have a similar explanation, explicable as bright stars or planets on the optical horizon. Incidentally, the ufologists were quick to get his message. One of the leading proponents of ETH wrote that Dr. Menzel saw in Alaska a real UFO and wasn't capable of identifying what he saw.

Let's have another example of McDonald's scientific method—an Air Force case both of us have studied in depth. This was a sighting from the airport in Salt Lake City, October 3, 1961. Harris, a private pilot, on take-off noticed an object shaped like a silvery pencil which proved to be not a plane. It appeared to be metallic. As Harris tried to intercept it, the UFO moved away and finally, with a sudden burst of speed, faded away into the distance. During all this time ground observers reported no motion whatever.

There are many details corroborating the identification of the UFO as a sundog phenomenon, more properly called parhelia. McDonald claims that the UFO could not have been a sundog. He reported "the skies were almost cloudless. " Now this condition with reference to sundogs sounds as if he had said "It couldn't have been a rainbow because it had almost stopped raining. " For sundogs require only a very thin layer of cirrus, to become visible. Later, without explanation for his change of mind, he stated that the skies were "completely clear. "

For his second point McDonald objected that a sundog would have occurred either 22° to the left or the right of the sun and at a higher elevation. On the contrary, the lower tangential arc—theoretically and practically—lies directly beneath the sun, a pencil-shaped object, at an altitude in close agreement with Harris' estimate of elevation. Moreover, parhelia—like rainbows—are centered in the eye of the observer. You can no more intercept a sundog than you can a rainbow. It is well known that parhelia possess a metallic sheen, but that does not indicate the presence of metal in the apparition. McDonald blindly accepts the observer's conclusion that he had seen a solid, metallic object.

Let me give you one final example: one of the classic sightings by Eastern Airline pilots Chiles and Whitted near Montgomery, Alabama, in July 1948. They saw what appeared to be a huge, cigar-shaped, wingless aircraft. A brilliant blue glow accompanied the object and red-orange flames shot from the rear. Hynek identified this UFO as a bright meteor and, after seeing and studying the official record, I concurred with this identification. I further noted that many exceptionally bright meteors had been observed

that night by amateur astronomers all over the country, because it was the date of the delta Aquarid shower. McDonald belabors me for even implying that the meteor might have been a delta Aquarid, which actually I did not do. He accuses me of glossing "over the reported rocking of the DC-3. " Nonsense! There was no mention of such "rocking" in the official report, only in some of the fictionalized reports by ufologists.

McDonald's sole contribution—as far as I can find out—has been his re-interviewing of more than 500 UFO witnesses. As an interviewer, I am sure McDonald is skillful enough to find support for his ETH hypothesis. The evidence at best is only subjective. But is this a new way of doing science? Without experiment or theory, and using only interviews, one can make a case for just about any concept whatever.

This is not science. With McDonald and the other believers, every UFO is immediately considered as from outer space--and they put the burden on us non-believers to prove them wrong. I ask, should not they bring to us a better documented case than we have heard today--if they want us to take them seriously.

Now let me turn to Dr. Hynek. I confess I am much more sympathetic to his viewpoint than I am to that of McDonald. He is somewhat more cautious in his claims and does not come straight out in his support of ETH. Instead he implies that some vastly important scientific phenomenon may lie behind the UFO mystery.

Or that there is some big secret, which he hopes to find out. Some basic discovery like that of radioactivity.

I quite understand why he would not wish to take a position that might stand in the way of such a discovery. I wouldn't want to obstruct the advance of science either. On the other hand I think there is one far greater danger, that of fostering what the late Dr. Irving Langmuir termed "pathological science, " and he included flying saucers among his items.

Most of you here in this room are too young to recall the infamous N-rays, mitogenetic radiation, or the Allison effect, yet these topics were as highly debated in their time as UFO's are today. N-rays were supposed to be a mysterious radiation emitted spontaneously by various metals. After being passed through a spectroscope whose lenses and prisms were of solid aluminum, these rays impinged on the dark-adapted eye, which detected them as flashes of visible light. Nearly 100 papers on N-rays were published in Comptes Rendus in the first half of 1904 alone. And the French Academy awarded Blondlot the Lalande prize of 20, 000 francs and its Gold Medal for the "discovery. " The irrepressible R. W. Wood cleverly exposed N-rays as a figment of Blondlot's imagination--self-delusion. The "flashes" were.. purely physiological, an optical illusion, a natural reaction of the unreliable human retina. To see them yourself, simply go into a completely darkened room. Wait till your eyes have become dark-adapted and watch. In time a you will see/psychedelic pattern of pulsing glow, punctuated from time to time by bright flashes. A phenomenon undoubtedly also responsible for many UFO reports.

SCIENTISTS CLASH ON UFO THEORY

Los Angeles Times - 4/28/67
WASHINGTON (UPI)—Before an audience of 500 newspaper editors, two scientists clashed sharply Saturday on whether "flying saucers" are nonsense or "a serious phenomenon which urgently demands scientific investigation."

Involved in the bristling exchange at the convention of the American Society of Newspaper Editors were Dr. James E. McDonald, research physicist and professor of meteorology at the University of Arizona, and Dr. Donald Menzel, professor of astrophysics and astronomy at Harvard.

McDonald said that on the basis of a 12-month intensive study of UFO's (unidentified flying objects), he has become convinced that "something is going on here of greatest scientific interest which is being swept under the rug by ridicule."

He charged that an Air Force investigation of UFO sightings has been "superficially and incompetently handled" and has been governed by a desire to debunk rather than to ascertain.

McDonald urged an immedi-

ate launching of a large, well-financed investigation by "top caliber scientists from all over the world."

In opposition, Menzel said he has spent many years examining the evidence of UFO sightings and is convinced that they can be explained by purely natural phenomena.

He said some of the apparitions are mirages, while others result from reflections of the sun or moon from the airborne ice-crystals, ball-lightning, electromagnetic "plasmas" generated by high-tension electric power lines, simple hallucinations and most of all by the visual "after images."

The latter occur in the human eyes after looking at bright light or taking too long into darkness or at a uniform color such as blue sky.

"The very term 'UFO' is a misnomer," Menzel said. "These sightings are not unidentifiable, they often are not flying and many are not objects at all."

He scoffed at investing more money or scientific talents in UFO investigation.

- Young Xerox of Wendell's anonymous paper (hand & file), titled: "Classical strange populates 'Rings for this' p. 87"
- R.K. Klass' Monday Oct 12, 66 ca 1530-1645.
- Schepelers' At 11:36 - During dust storm E₀ can get to 100 V/m
 I think - Under TFR's, before storm, seldom exceed 200 V/m except during brief surges.
 In coronal area - 100 V/m may be attained
- Chalmers 2nd p. 221. - Whipped down p.s. that with TFR's reduced, often had less than 10 V/m (20% of norm).
 Also lines drawn by Wormald above TFR at 3 km from E₀ for -55 to +175 V/m as 3 km
- Vonnegut's paper in Vol 65 Weather "Orientation of the X₀ in the Clouds Field of a TFR"
 - Also 1954 notes a bright streamer projecting out horizontally from oval of a TFR in multiplexers. Also a solid oval of the kind of light crossing top of an oval
- Epat (no mod.) see X₀ in diffusion chamber. Bright changes don't occur near X₀ & their reflection either. Also done in N. Hs 1962 notes bright changes of color of TFR clouds of order few tenths of a percent accompanied by discharges.
- In 10/17 photo exchange R.K. alluded to deep breakdown although as one goes aloft. Must also remember that fair-weather E falls over fairly. These too fall to half E₀ @ 0.5 km & is only 5% E₀ at 70,000 ft (Brah. 1944)
- Note HD-55 p. 6002: In the 667 came logged by Bluebook in 1965 that was only one case logged as "lightning" (even tho apparently misapprehension! & not qualified on ball & suggest that even Bluebook, precluding to find any semi-plausible explanation doesn't sound much more of ball & lightning. So Klass aware of this?
- Though does not rebut any specific Klass' claims only WW & Epat [HD-55 p. 6003 - For less than 100 ft: Class, NW made 50 mph, T in low 50's. Class, of course, says was common
- 11/3/67 Cf. Lajoie "Wonders of the Skies" p. 235-6. A French scientist tried to explain away fireballs, after Chladni's claims of their extraterrestrial origin, as some special form of lightning!

P James E. McDonald's handwritten notes on the back of a copy of Phil Klass' article. "Many UFOs are Identified as Plasmas," which appeared in the October 3, 1966 issue of AVIATION WEEK AND SPACE TECHNOLOGY. McDonald's notes point up errors in Klass' "plasma" theory to explain UFOs.

pebble-like, strange for such pos.
PJK Plasma Monday Oct 17, 66 ca 1530-1645.

Schoenland 'At E' p 36 - During dust storm E₀ can get to 100 V/cm

Shield - Under TR's, before strike, seldom exceeds 200 V/cm except during brief surges.

In snowstorm - 100 V/cm may be attained

Cholmon 2 Dec p 221. - Whipped & Surged p.d. that with TR's released, often had less than 100 V/cm (20% of case).

Cites & case observed by Wornell where a TR at 3 km gave E₀ for SS to +375 V/cm as E₀

Vonnegut's paper in J. 65 Weather "Orientation of the X₀ in the Electric Field of a TR"

- Cites 31450 meters a bright streamer projecting out horizontally from anvil of a TR in mid-afternoon. Also a pilot obs of a band of light crossing top of an anvil

- E₀ (no nos.) see X₀ in diffusion chamber. Bright charges about not near X₀ & their reflections also. Also done in N.M. 1962 where brightness changes of anvil of TR clouds of order few tenths of a percent accompanied by discharges.

- J. 10/17 above exchanges PJK alluded to drop in breakdown strength as one goes aloft. Must also remember that fair-weather E falls even faster. Thus too fallen to half E₀ @ 0.5 km J is only 5% E₀ at 30,000 ft (Dash - COM)

Note HD-SS p 6002: In the 667 cases logged by Bluebook in 1965 there was only one case tagged as "Lightning" (even that apparently misspelled!), & not qualified on ball E₀, suggest that even Bluebook's proclivity to find any semi-plausible explanation doesn't prevent much use of ball E₀ hypothesis. Is Klass aware of this?

- Though does not rebut any of the claims, note WW @ Expts, [HD-SS p 6013 - Fowler. New Rep't: Chen, NW winds 5 mph, T in low 50's.] Klass, of course, says was common.

- 1/31/67 Cf Lajoie "Wonders of the Skies" p 235-6. A French scientist tried to explain away fireballs, after Chladni's claims of their extraterrestrial origin, as some special form of lightning!

P James E. McDonald's handwritten notes on the back of a copy of Phil Klass' article, "Many UFOs are Identified as Plasmas," which appeared in the October 3, 1966 issue of AVIATION WEEK AND SPACE TECHNOLOGY. McDonald's notes point up errors in Klass' "plasma" theory to explain UFOs.

'SAUCER EXPERT FROM U.S.

A top American scientist flew into Sydney last night on a "secret mission" to investigate unidentified flying objects in Australia.



He is Professor J. E. McDonald (pictured), of the Institute of Atmospheric Physics at Arizona University.

He is expected to meet leading scientists in Sydney, Melbourne and Canberra, and to interview Australians who claim to have seen flying saucers and other types of unidentified flying objects.

At Mascot airport last night, Professor McDonald refused to reveal any details of his mission.

"I have nothing to say," he said. "I have certain objectives and it is not my habit to talk about them until they are accomplished."

Professor McDonald refused to say whether Australia was considered a fertile country for flying saucer sightings.

"Do you think the Press will treat this matter seriously?" he asked.

Govt. grant

Officials of the Sydney branch of Unidentified Flying Object Investigation Centre met Professor McDonald.

The president of the centre, Dr M. Lindtner, said he was surprised, and embarrassed by Professor McDonald's secrecy.

"We have been corresponding with the professor,

and he told us that he wanted to meet people who have seen unidentified flying objects," he said.

"We plan to introduce Professor McDonald to four people in Sydney who have seen objects.

"He will meet others in Melbourne.

"He is the most distinguished flying saucer expert to visit Australia."

THE SUN-HERALD, JUNE 25, 1967

- 4 -

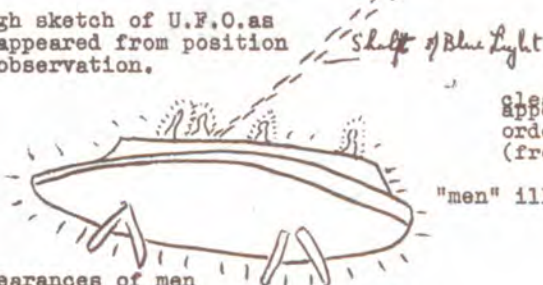
Time p.m.
 9.46 Overhead U.F.O. re-appears, is hovering.
 10.00 Still there, stationary.
 10.10 Hovering, gone behind cloud.
 10.30 Very high, hovering in clear patch of sky between clouds.
 10.50 - Very overcast, no sign of U.F.O.
 11.4 - Heavy rain.

1 Q A. !!!

Data sheet of observation of U.F.O.'s
 6.45 - 11.4 p.m.
 26/6/59.

(sgd.) William B. Gill

Rough sketch of U.F.O. as
 it appeared from position
 of observation.



1 - 4 men
 clearly seen in this
 order at 7.10 p.m.
 (from waist up)

"men" illuminated.

Appearances of men
 1. 2 & 3 at 6.55 p.m.

William B. Gill

Stephen Gill Moi.

William B. Gill

Stephen Gill Moi

Appearances of men at 7.00 p.m.

1 & 2

William B. Gill

Stephen Gill Moi

Ananias Rarata

Nessie Moi

William B. Gill

Stephen Gill Moi

Ananias Rarata.

Nessie Moi

Appearances of men & light shaft at 7.10 p.m.

1, 3, 4 & 2 (in that order)

William B. Gill

Stephen Gill Moi

Ananias Rarata

William B. Gill

Stephen Gill Moi

Ananias Rarata

Appearances of men 1 & 2 and light shaft at 7.12 p.m.

William B. Gill

Stephen Gill Moi

Ananias Rarata

William B. Gill

Stephen Gill Moi

Ananias Rarata.

This paper drawn up and signed by chief observe:

at 7.30 p.m.

26/6/59.

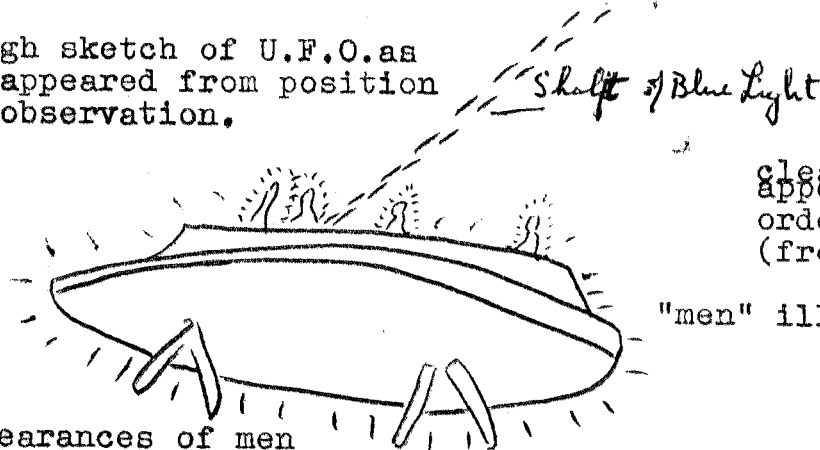
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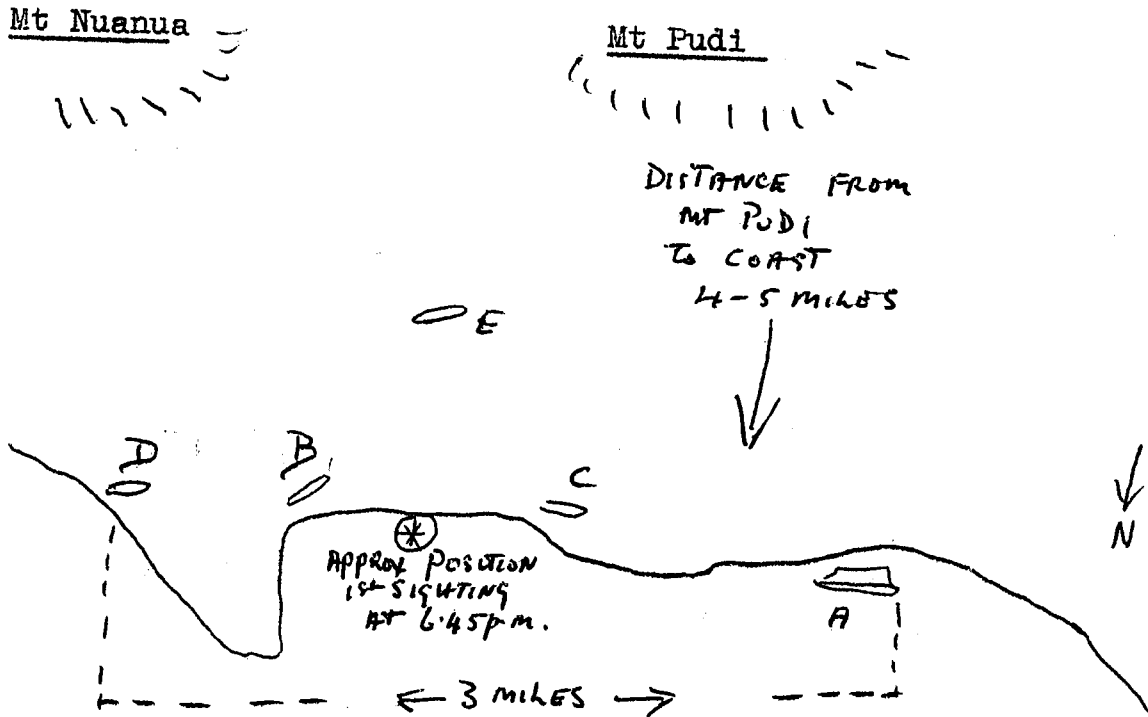
Appearances of men 1 & 2 and light shaft at 7.12 p.m.

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 Stephen Gill Moi
 Ananias Rarata

William B. Gill
Stephen Gill Moi
Ananias Rarata

This paper drawn up and signed by chief observer

at 7.30 p.m.
 26/6/59.



Positions of U.F.O.'s observed from Bioanai Station
at 8.28 p.m. and 9.15 p.m.

26/6/59

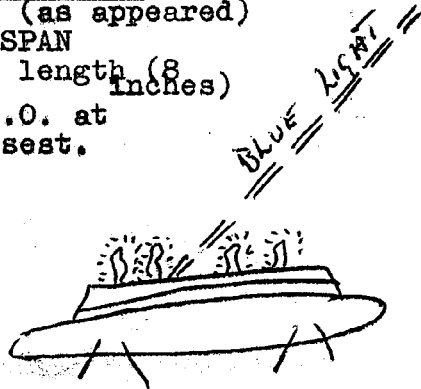
(Sgd.) William B. Gill *William B. Gill*
Stephen Gill Moi. *Stephen Gill Moi*

WEATHER VARIABLE SKY - SCATTERED CLOUDS to CLEAR AT FIRST,
BECOMING OVERCAST AFTER 10.10 p.m.

APPROX. HEIGHT of CLOUDS - 2,000 ft.

NOTE. This determined by relationship of clouds to
highest point visible of mountains. As U.F.O.'s
were often below (under) clouds and their glow
gave off a wide halo of light reflected on clouds
it follows that U.F.O.'s descended to below
2,000 ft.
The first sighting over the sea seemed not more
than 500 ft. above the water at times.

Size of U.F.O. "A"
(across) (as appeared)
Full HAND-SPAN
at arm's length (8 inches)
when U.F.O. at
closest.



U.F.O.
"A"

Colour
Dull yellow
(perhaps pale orange)
except when moving, then very bright.

When finally moved away at great speed at 9.30 - colour changed from thin white to deep red, then to blue-green

A rough sketch of U.F.O. as observed between 6.55 p.m. and 7.22 p.m. by 38 witnesses at Boianai, T.P. & N.G., Friday, 26th June, 1959;

This sketch is a reasonable reproduction of U.F.O. which was clearly visible and mostly stationary for 25 minutes.

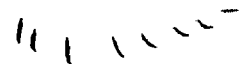
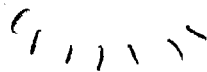
(sgd.) William B. Gill - Priest
" Stephen Gill Moi - Teacher
" Eric Kodawara - Schoolboy.

William B. Gill
Stephen Gill Moi

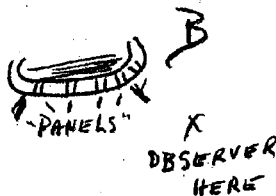
Colour
Same as "A"

Mt. NUANUA

MT PUDI



NOTE
"B" had 5 panels of bright "windows" on near edge.



SIZES of U.F.O.'s
(as appeared)
"E" about $\frac{1}{2}$ " across
"C" " " "
"B" " $\frac{1}{4}$ " deep
"D" " $\frac{1}{2}$ " across.

Four of the five U.F.O.'s seen in the sky at the one time between 8.28 p.m. and 9.15 p.m.
(as they appeared. "B" was directly overhead.)

(Sgd.) William B. Gill - Priest
" Stephen Gill Moi - Teacher
Eric Kodawara - Schoolboy.

William B. Gill
Stephen Gill Moi

PAPER SIGNED BY MAJORITY OF WITNESSES
at 7.45 p.m. 26/6/59.

Signatures of WITNESSES OF U.F.O.

Observed on the night of 26th June, 1959,
at BOIANAI, PAPUA.

William B. Gill
Dulcie Freda Guyorobo - Teacher
Ilma Violet Iorere - Teacher
Eric Kodawara
Ida Mary Giriebo - Teacher
Love Daisy Kolauna - Medical Asst.
Annie Laurie Borewa - Medical Asst.
Milton Baramani
Amos Nudai Rarata
Ananias Rarata - Teacher
Lily Davis Niniwara
Annie Grace Yaweige
Maurice Sangford Totianawai
Ronald W. K.
Daisy Ponehewa
Nurse Mary Gunaula
Jane Rarata
Frank Gunuala
Randolph Gill Kawarewa
Nessie Moi
Stephen Gill Moi - Teacher
Kipling Guveropa - Teacher
Montague Tauwarunani
Carson Kivaua
Cecil Tyonai

W. B. Gill
Dulcie Freda Guyorobo
Ilma Violet Iorere
Eric Kodawara
Ida Mary Giriebo
Love Daisy Kolauna
Annie Laurie Borewa
Milton Baramani
Amos Nudai Rarata
Ananias Rarata
Lily Davis Niniwara
Annie Grace Yaweige
Maurice Sangford Totianawai
Ronald W. K.
Daisy Ponehewa
Nurse Mary Gunaula
Jane Rarata
Frank Gunuala
Randolph Gill Kawarewa
Nessie Moi
Stephen Gill Moi
Kipling Guveropa
Montague Tauwarunani
Carson Kivaua
Cecil Tyonai

William B. Gill
Dulcie Freda Guyorobo
Ilma Violet Iorere
Eric Kodawara
Ida Mary Giriebo

Annie Laurie Borewa

Annie Grace Yaweige

Daisy Ponehewa

Ananias Rarata

Jane Rarata

Stephen Gill Moi

Kipling Guveropa

Cecil Tyonai

10/21/66

THE PROBLEM OF THE UNIDENTIFIED FLYING OBJECTS
James E. McDonald*

(Summary of a talk given October 19, 1966, to the District of Columbia Chapter of the American Meteorological Society, Washington, D. C. To meet a number of requests for a brief summation of the above talk, this summary has been prepared as an extension and revision of a short digest of which a limited number of copies were available at the time of the AMS meeting.)

ABSTRACT. Conclusions drawn from a continuing, intensive study of the problem of the UFOs (Unidentified Flying Objects) were summarized. Although atmospheric phenomena (ball lightning, mirages, scintillation, parhelia, anomalous radar propagation, etc.) have been invoked to account for many UFO reports, such explanations have been seriously misapplied. Specific examples were discussed.

Careful scrutiny of hundreds of the better UFO reports from quite credible observers during the past twenty years (and longer) reveals that not only does it seem impossible to explain them away in terms of atmospheric physics, but also the other officially proposed categories of geophysical, astronomical, technological, and psychological hypotheses fail to encompass the UFO phenomena. Reasons were given for regarding as probably the least unsatisfactory hypothesis that of the extraterrestrial nature of the UFOs. Serious shortcomings in the past official investigations of the UFO problem were discussed, and a radical change in the level of scientific study of the problem was urged.

* * *

One might group past and current explanations of the unidentified flying objects (UFOs) into eight broad categories comprising the following spectrum of UFO hypotheses:

1. Hoaxes, fabrications, and frauds;
2. Hallucinations, mass hysteria, rumor phenomena;
3. Lay misinterpretations of well-known physical phenomena (meteorological, astronomical, optical, etc.);
4. Advanced technologies (test vehicles, satellites, re-entry effects);
5. Poorly understood physical phenomena (rare atmospheric-electrical effects, cloud phenomena, plasmas of natural or technological origin, etc.);

* Senior Physicist, Institute of Atmospheric Physics, and Professor, Department of Meteorology, The University of Arizona, Tucson, Arizona.

UFOs: GREATEST SCIENTIFIC PROBLEM OF OUR TIMES?
James E. McDonald

(Prepared for presentation before the 1967 annual meeting of the American Society of Newspaper Editors, Washington, D. C., April 22, 1967.)

* * *

SUMMARY - An intensive analysis of hundreds of outstanding UFO reports, and personal interviews with dozens of key witnesses in important cases, have led me to the conclusion that the UFO problem is one of exceedingly great scientific importance. Instead of denouncing the description of "nonsense problem," which it has had during twenty years of official mishandling, it warrants the attention of scientists, press, and public, not just within the United States but throughout the world, as a serious problem of first-order significance.

The curious manner in which this problem has been kept out of sight and maintained in dispute is examined here. Basic responsibility for its systematic misrepresentation lies with Air Force Project Bluebook which, on the basis of firsthand knowledge, I can only describe as having been carried out in the past dozen years in a quite superficial and incompetent manner.

Years of Air Force assurances have kept the public, the press, Congress, and the scientific community under the misimpression that the UFO problem was being studied with thoroughness and scientific expertise. This I have found to be completely false. Illustrative examples, drawn from a very large sample, will be described to demonstrate this.

It is urged that the time is long overdue for a full-scale Congressional investigation of the UFO problem, an investigation in which persons outside of official Air Force channels can put on record the astounding history of the way in which a problem of potentially enormous scientific importance has been swept under a rug of ridicule and misrepresentation for two decades.

The hypothesis that the UFOs might be extraterrestrial probes, despite its seemingly low a priori probability, is suggested as the least unsatisfactory hypothesis for explaining the now-available UFO evidence.

INTRODUCTION

June 24, 1967, will mark the twentieth anniversary of what we might whimsically call the "birth of the flying saucer." For just twenty years earlier, on the afternoon of June 24, 1947, Kenneth Arnold, a Boise businessman flying in his private aircraft, reported seeing a formation of nine disc-like objects skimming along at high speed between him and distant Mt. Rainier. He said that they moved in an unconventional manner "like a saucer would if you skipped it across the water." A reporter who interviewed Arnold after he landed that evening in Pendleton, Oregon, coined the phrase "flying saucers" to add a feature-story twist to an observation

that this experienced pilot had told in consternation - and a journalistic era was thereby opened.

As one digs back through the subsequent history of the UFO problem, it becomes evident that a wave of UFO sightings actually began several days prior to Arnold's observation, but it was not until about July 4 that press interest rose exponentially and "flying saucers" were headline news throughout the country. I have recently had the opportunity of reviewing a compilation of UFO sightings for those first few weeks of what is usually regarded as the beginning of UFO observations, a compilation being prepared by T. R. Blocher for publication later this year, probably by the National Investigations Committee on Aerial Phenomena (NICAP). Although I was already familiar with much UFO history when I began to examine Blocher's material, I was startled to see the large number of reports of high-speed unconventional objects that flooded into press offices throughout the country in that early period, far more than I had ever guessed. Only a small fraction of the reports were carried by national wire services, so it has been necessary for Blocher to dig into old newspaper files in many major U. S. cities to unearth the dimensions of that wave of sightings.

I cite this early period as exemplifying much that has happened subsequently although most of the reports of that period have never been checked as were later cases, so one cannot yet regard the evidence for all the 1947 sightings as conclusive. A mixture of denials led to a rather quick fall-off in news value of the "flying saucers" in late 1947. Hoaxes were headlined with about as much emphasis as were reports from experienced observers. The published reports fell off, and for awhile it appeared that one had witnessed just another "silly season phenomenon," as some newspapermen described it.

But, surprisingly, the UFO reports began cropping up again. Here and there they received press coverage, mostly non-wire coverage in local papers. By 1948, considerably more reports were coming in, and military concern (which had probably never died out) was responsible for establishing an official investigatory project, Project Sign (often loosely called "Project Saucer"). Sign was set up January 22, 1948, with headquarters at Wright-Patterson AFB, within the then newly-created United States Air Force. That date marks the beginning of Air Force responsibility for investigating UFO phenomena, a responsibility it carries to this date. I think it is rather striking that USAF was exactly seven days old when it was handed the UFO problem in 1948.

Project Sign gave way to "Project Grudge" in February, 1949; and, with ups and downs, Grudge continued until about March, 1952, when it was superseded by "Project Bluebook," an organizational entity that survives today, still headquartered at Wright-Patterson AFB. The summer of 1952 brought one of the greatest waves of UFO reports on record, and the first Bluebook Officer, Capt. E. J. Ruppelt, has related (Ref. 1) the hectic efforts of his staff

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explanations and find them entirely inadequate, incidentally.) Although press attention subsided in the face of these assurances. Air Force concern behind-the-scenes continued, and early in the following year a panel of scientists was assembled to review the situation.

THE ROBERTSON REPORT AND THE CIA

The Robertson Panel (chaired by Cal Tech theoretical physicist H. P. Robertson) met in January, 1953, and reviewed selected UFO reports apparently about eight in detail and about fifteen others on a briefing-basis. Two working days of case-reviews followed by two days of summarizing -and report-drafting constituted the entire activity of this Panel during the period January 14-17, 1953. I describe that Panel's work in more than passing manner because I believe that the Robertson Panel marked a turning point in the history of UFO investigations.

On the first of three visits to Project Blue Book at WPAFB last summer, I asked to see the full report of the Robertson Panel and was given that report by the present Blue book officer, Maj. Hector Quintanilla. He informed me that he had "routinely declassified" it earlier on the basis of the "12-year rule" covering DOD documents. I made extensive notes from it and discussed its content with Maj. Quintanilla. On my next trip to Blue Book, on June 20, I requested a Xerox copy of the report. The copy was prepared for me, but not given to me because a superior officer suggested that since "another agency" was involved, they'd have to check before releasing it to me. I reminded them that I already had extensive notes on it and that I had already discussed its contents with many scientific colleagues around the country. I was assured that their check was perfunctory and that I would be sent the copy in a week or two.

In fact, I never received it. The "other agency," the Central Intelligence Agency, ruled that this document did not come under the "12-year rule" and reclassified it. Although a so-called "sanitized version" was later released, the full document remains undisclosed. A number of sections of the "sanitized version" have been published by John Lear, who asked for full release but got only the partial version (Ref. 2).

I studied the full version in unclassified status. Military and scientific staff -it WPAFB have been fully aware of my possession of this information for months. I have discussed it with many scientists. I regard it as open information in no way bearing on the security of the United States, and I shall now describe its contents here. I urge that press and Congress demand full and immediate release of the entire text of the Robertson Report, including the CIA recommendations which have had such strong bearing on the way in which the Air Force has subsequently treated the UFO problem, so that other scientists can make their own evaluations of the manner in which scientific pursuit of the UFO problem was derailed in 1953.

The scientists comprising the Robertson Panel (Robertson, Luis W. Alvarez, Lloyd V. Berkner, Samuel A. Goudsmit, Thornton Page), on the basis of what I must regard as a far too brief examination of the evidence already in Air Force files as of January, 1953, ruled (first) that there was no evidence of any hostile action in the UFO phenomena. In particular they ruled (secondly) that there was no evidence for existence of any "artifacts of a hostile foreign power" in any of the records which were submitted to them. And (thirdly) they recommended an educational program to acquaint the general public with the nature of various natural phenomena seen in the skies

(meteors, vapor trails, haloes, balloons, etc.), the objective being to "remove the aura of mystery" that the unidentified objects had "unfortunately" acquired.

In view of the rather limited sample of UFO evidence which was laid before this Panel, such conclusions were perhaps warranted. The crucial shortcoming was this: There is no evidence that any of these five men had previous extensive contact with the UFO problem. The principal cases they examined excluded some of the most "Interesting and significant cases already on record (e.g., United Airlines, 1947; Chiles-Whitted, 1948; C. B. Moore, 1949; Tombaugh, 1949; Farmington, 1950; Chicago & Southern Airlines, 1950; TWA Airlines, 1950; Seymour Hess, 1950; Mid-Continent Airlines, 1951; Nash-Fortenberry, 1952; and many other very significant 1952 sightings). And a mere two days of review of the UFO data (prior to going into report drafting session) would not be enough for all the Newtons of science to sort out the baffling nature of this problem. The only scientist present at these sessions who had already examined a substantial number of reports was an associate member of the Panel, Dr. J. Allen Hynek. When I asked him last June why he did not then speak out, on the basis of his then five years experience as chief scientific consultant to the Air Force on LTD matters, he told me that he was "only small potatoes then" and that it would have been impossible for him to sway that eminent group. In reflecting on all that I have learned in the past year's work on this problem, I regard this four-day session of the Robertson Panel as a pivotal point in UFO history. For instead of a recommendation that the problem be taken out of Air Force hands (on grounds of non-hostility of the UFOs) and turned over to some scientific agency for adequate study, there was a most regrettable fourth recommendation made, in addition to the three cited above, a recommendation made at the specific request of CIA representatives present at the final sessions of "this



THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

COLLEGE OF LIBERAL ARTS
DEPARTMENT OF PHYSICS

April 3, 1968

MEMORANDUM TO: Professor James McDonald
Institute of Atmospheric Physics

CONCERNING: Support for Studying Unexplained Atmospheric and
Aerial Objects.

The Space Sciences Committee voted not to support an extension of your work on Unexplained Objects. This decision is based on the Committee's opinion that the NASA Institutional Grant was not intended for use in gaining support for an investigation or for stirring up the scientific and lay community in favor of some particular study and that we can't in good conscience stretch its mandate that far. We realize, of course, that there are overtones of selling some point of view or another in every scientific investigation and that it is quite proper for the scientific discussion of the results to become heated in some cases, but as the emphasis of an investigation shifts to politics (however necessary that shift may seem to be), we feel the use of NASA grant funds become questionable.

The only consideration that has given us pause is a thorough respect for your own scientific judgment and acumen (I need not point out that there are very few others on campus who would have received any support for UFO studies from this committee). We are constrained, however, to follow our own best judgment.

A. B. Weaver, Chairman
Space Sciences Committee

ABW/eb

cc: Mr. Simmons

Addendum - p. 1

The following is a list of groups before whom formal talks (colloquia and lectures) and discussions were presented by J. E. McDonald in the period October, 1966 through March, 1968, in connection with his continuing studies of observations of anomalous aerial phenomena. (For brevity, only group addressed and location are listed. Title and emphasis varied from talk to talk.)

<u>Date</u>	<u>Group</u>
Oct. 5, 1966	Colloquium, Dept. of Physics, Univ. Ariz.
Oct. 6	Colloquium, Dept. of Meteorology, Univ. Ariz.
Oct. 10	Aerospace-Mechanical Engineering Seminar, Univ. Ariz.
Oct. 19	Washington, D. C. Chapter, American Meteorological Society
Oct. 26	Colloquium, Dept. of Psychology, Univ. Ariz.
Nov. 1	Staff, Steward Observatory.
Nov. 2	Tucson Amateur Astronomers Assn., Steward Observatory
Nov. 9	Planetary Atmospheres Seminar, Kitt Peak National Observatory, Tucson.
Nov. 15	Seattle Chapter, American Meteorological Society, Dept. of Meteorology, Univ. Washington.
Nov. 16	Conference, Dept. of Psychology, Univ. Washington, Seattle.
Nov. 17	Staff, Dept. of Geophysics and Astronomy, RAND Corporation, Santa Monica, California.
Dec. 6	Tucson Chapter, National Pilots Assn.
Dec. 8	Seminar, Dept. of Electrical Engineering, Univ. of Arizona.
Dec. 14	Joint colloquium, Arizona State University psychology and sociology honoraries, Tempe, Arizona.
Mar. 8, 1967	The University Club, Pioneer Hotel, Tucson.
Apr. 17	Scientific staff, National Science Foundation, Washington, D. C.
Apr. 17	Staff, USAF Office of Information, SAFOI, Pentagon, Washington, D. C.

<u>Date</u>	<u>Group</u>
Apr. 18, 1967	Staff, Office of Naval Research, Navy Dept. Washington, D. C.
Apr. 19	Staff, Naval Research Laboratory, Anacostia, Md.
Apr. 20	Staff, U.S. Naval Observatory, Washington, D. C.
Apr. 20	Staff, Advanced Research Projects Agency, Dept. of Defense, Pentagon.
Apr. 20	Staff, Naval Ordnance Station, Indian Head, Md.
Apr. 21	Staff, Office of Naval Research, Navy Dept., Washington, D. C. (overflow from talk of 4/18).
Apr. 22	American Society of Newspaper Editors, Washington, D. C., annual meeting.
Apr. 24	Physics Division, Los Alamos Scientific Laboratory.
Apr. 29	Arizona Academy of Sciences, Tucson, symposium.
May 8	Arizona State University, Interdisciplinary Seminar.
May 16	International Students Club, Univ. Ariz.
May 19	American Society of Civil Engineers, banquet, Tucson.
June 7	Staff, Goddard Institute for Space Sciences, New York, New York.
June 7	Outer Space Affairs Group, UN Building, New York, New York.
June 9	Staff, Federal Aviation Agency, Washington, D. C.
June 21	Staff, RAND Corp., Santa Monica, Calif.
June 21	Annual meeting, American Meteorological Society, Los Angeles, banquet talk.
June 27	Staff, Radiophysics Division, CSIRO, Sydney, Australia
June 29	Institute of Physics and Dept. of Meteorology, University of Melbourne, Melbourne, Australia.
June 29	Staff, Division of Meteorological Physics, CSIRO, Aspendale, Vic., Australia.
Aug. 2	Staff, Sandia Corp., Albuquerque, New Mexico.
Aug. 28	American Institute of Aeronautics and Astronautics, Seattle, Washington

<u>Date</u>	<u>Group</u>
Sept. 24, 1967	Kent State University, Kent, O., public lecture.
Sept. 25	Interdepartmental Physics Colloquium, Westinghouse Research Laboratories, Pittsburgh, Pa.
Sept. 26	Boston Chapter, American Meteorological Society, Boston, Mass.
Sept. 27	Staff, Air Force Cambridge Research Laboratories, Bedford, Mass.
Oct. 8	Sunday Evening Forum, Univ. Ariz., public lecture.
Oct. 12	Tucson Chapter, Reserve Officers Assn., Davis-Monthan Officers Club.
Oct. 23	Colorado Springs Chapter, American Meteorological Society, Colorado College, Colorado Springs.
Oct. 24	Dept. of Psychology, Harvard Univ., Cambridge, Mass.
Oct. 26	Pennsylvania State University, University Park, Pa., public lecture.
Oct. 27	University of Omaha, lecture to staff and students.
Oct. 28	Omaha-Offutt Chapter, American Meteorological Society, Omaha, Neb.
Nov. 3	Arizona Science Teachers Assn., UA campus meeting.
Nov. 28	Newman Forum, Univ. New Mexico, Albuquerque.
Jan. 26, 1968	United Aircraft Research Laboratories, E. Hartford.
Jan. 29	Naval Ordnance Laboratory, Silver Spring, Md, Applied Physics Dept.
Jan. 30	Baltimore Chapter, American Institute of Aeronautics and Astronautics, Towson, Md.
Feb. 8	Sigma Delta Chi Journalism fraternity, Tucson
Mar. 12	Canadian Aerospace Institute, Montreal
Mar. 13	Institute for Aerospace Studies, University of Toronto
Mar. 26	American Institute for Aeronautics and Astronautics, Flight Test, Simulation and Support Conf., Los Angeles.
Mar. 26	Santa Ana, Calif. chapter, American Institute for Aeronautics and Astronautics.

MEMO

PHILIP J. KLASS

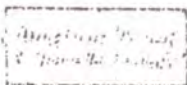
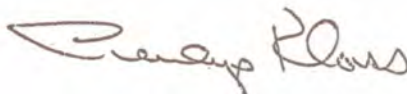
Sept. 16, 1968

Dear Mr. Frosch:

The shocking mis-use of Navy research funds cited in the enclosed article is not only true, but was condoned (if not encouraged) by the Office of Naval Research contract monitor who was responsible for protecting Navy/taxpayer interests.

Furthermore, the situation was allowed to continue for many months after it was brought to the attention of ONR officials.

I am prepared to document these charges if your interest warrants.



McGraw-Hill, Inc., 425 Natl. Press Bldg., Washington, D.C. 20004



THE UNIVERSITY OF ARIZONA

TUCSON, ARIZONA 85721

INSTITUTE OF ATMOSPHERIC PHYSICS

September 25, 1968

Dr. Robert A. Frosch
 Assistant Secretary of the Navy
 for Research and Development
 Navy Department
 Washington, D. C.

Dear Dr. Frosch:

On September 17, I received a call from the contract monitor of my recently expired contract with the Office of Naval Research, asking me to comment on allegations in Jack Anderson's Washington Merry-Go-Round column of Saturday, September 14, 1968. After hearing a brief summary of passages which suggested that I have mispent Navy funds, I wired the Chief of Naval Research that Anderson had seriously distorted statements that I made to him, and I indicated that a letter would follow commenting in more detail.

You will excuse me, I am sure, if not quite according to the contract monitor's directions, I choose to make my extended reply directly to you, in the interests of economy of time and first-handedness of information. I choose this course because my contract is at present expired, and I therefore feel in a position to present my side of the case as an independent university professor with enough studies and publications on atmospheric physics to speak with some background on what is, or is not, work related to the field of atmospheric physics.

Let me begin by assuring you that, when Anderson stated that "Dr. McDonald told this column that his flying saucer research and his expenditures had been approved by the Navy", he was either grossly missing the point I explained to him in his September 7 phone interview, or else he was trying for a spicier column than his information warranted. Briefly, I told him that there are certain areas of overlap between (1) problems for whose study I had ONR support, and (2) problems of atmospheric physics bearing on the UFO problem. I believe I made it entirely clear to Anderson that only such overlap areas (meteorological optics, atmospheric electricity, radar propagation anomalies, etc.) and not my other much more extensive studies of the UFO problem have been ONR-supported. His column gave readers a very different impression. There were other errors in that column, but comment thereon is not pertinent here.

You cannot understand what is going on in all of this without my commenting a bit further on the Anderson interview and on some other background matters. I have been seriously concerned with scientific aspects of the UFO problem for over two years. In that period, I have spent a great deal of energy in trying to get the scientific community to take a new and much more careful look at what I now believe to be a seriously neglected problem of potentially great importance in the UFO area. My position thereon has received sufficient notice in national publications and through my writing and speaking that I am frequently contacted by writers and reporters (e.g., three long-distance calls

just today). Because Anderson sounded seriously concerned, I spoke with him for about an hour about the history of the UFO problem and about its scientifically puzzling nature. Late in his phone call, he suddenly asked me if I had any detractors who were trying to discredit me. I pointed out that, of the hundreds of scientists before whom I have spoken in the past year, most have shown a genuine curiosity about the long-standing UFO question, and I remarked that none had evinced any interest in discrediting genuine scientific effort to assemble information about the problem. Then I added casually that there was, however, one person who did seem bent on discreditation, namely, Mr. Philip J. Klass, a senior editor of *Aviation Week*. His book, *UFOs Identified*, I had bluntly criticized in a paper given before the Canadian Aeronautics and Space Institute on March 12 of this year (copy enclosed, see pp. 18-37). Almost immediately after that session, in which Klass also participated as another one of the four speakers, he began distributing a curious series of one- and two-page multigraphed *ad hominem* attacks on me, under the rubric of the "JEM White Papers". Klass does not mail these routinely to me, but I do get copies from time to time from some of his addressees. Since they have carried no substantial scientific rebuttal to my own criticisms of the scientific content of his book, I have not felt it worth my time to try to reply to them; and since they are not openly published, I wouldn't know quite how to reply, should I care to. Since I think you will find them relevant to your assessment of this matter, I enclose copies of such numbers as various persons have mailed to me in recent months.

After Anderson queried me a bit on Klass's odd attacks on me and after I had made clear that I knew of no other reasons than the pique of a disgruntled author for his strange series of mimeographed circulars, I was surprised to gather from Anderson's guarded statements that Klass had apparently approached him or his colleague, Mr. Pearson, with charges that I was mispending Navy funds on UFO studies. Although Anderson did not state, in so many words, that Klass was the source of this charge (he emphasized to me that he had not met Mr. Klass in person, for example), he left little doubt that this was the source of the allegation, an allegation Klass has put into one or two of his mimeo circulars, you will find. When Anderson next asked me about my Australian trip (another point Klass has touched on in his "JEM White Papers"), it was even more evident that this part of Anderson's queries must have come from Klass. At that point in the interview, I explained to Anderson the facts of the case, stressing that I was in Australia on a number of matters of research interest to me and to ONR, and that my interviewing of Australian-area UFO witnesses was aimed primarily at cases where interesting atmospheric-physical aspects entered (*e.g.*, such cases as a Tasmanian sighting which the RAAF has explained as due to anomalous refraction of the moon by scud clouds, or an Australian Navy radar case in which radar propagation anomalies entered into consideration, or a case in which an unusual vortical circulation was implicated). Anderson seemed to grasp the point, and we dropped that subject shortly.

However, if he did get the point, his column seriously distorted it. I cannot claim to understand and shall not speculate on whether that was an honest error on Anderson's part or attempted sensationalizing at the

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expense of accuracy, but other distortions in the column might indicate the latter.

I have burdened you with the above because I understand that Mr. Klass has used the Anderson column of September 14 to begin a new and still more curious mode of attack. You will be unable to understand Klass's latest maneuvers without at least the above comments on my conversation with Anderson.

In talking with the contract monitor about this a few days ago, I gathered that Mr. Klass has now come to the Navy with some charges of my "shocking" misexpenditure of Navy funds, and has even hinted that the contract monitor was involved in this dark business. This is just a little too much. If you do not decide to quickly dismiss all of this as the ridiculous matter that I regard it, I wish you could find some way of bringing Mr. Klass out into the open where I might confront him with what I believe he is actually engaged in doing here. Unable to rebut on any substantial scientific grounds my rather lengthy CASI critique of his book and my earlier criticisms of his writings on UFOs, he seems bent on a campaign of character assassination, a campaign in which he now seeks to involve the Navy. He began this sort of thing months ago, when I made some brief but pointed remarks on the shortcomings of his analyses in a talk I presented before the 1967 annual conference of the American Society of Newspaper Editors (copy enclosed). My own advice would be that you study his book, study my Montreal CASI paper and other papers enclosed, examine the nature of the enclosed copies of his "JEM White Papers" and then drop the entire business as basically irrelevant to Navy interests. I urge you, however, to first secure the comment of Navy scientists familiar with plasma physics and atmospheric physics, the two areas in which Klass makes the highest density of errors in his book and in his *Aviation Week* writings on UFOs. In particular, get some of your people to assess my Montreal critique of Klass's inept mishandling of rather elementary matters of physics, meteorology, and even electrical engineering (Klass's own field). You will better understand Klass with such assessment in hand.

Although I have regarded these charges that Klass has made as too diversionary to rebut them in the past, his current efforts might succeed in getting me more irritated. He has come to the Navy in the past with his *Aviation Week* hat on, obtained various information, and then returned to his attacks wearing his disgruntled-author hat. Why, but for authorial pique, would an editor of *Aviation Week* get himself worked up about the activities of a scientist whose salary-support-fraction on a Navy contract came to only 17 per cent and whose direct expenditures on the above-cited overlap areas are at most a small number of thousands of dollars? If guardianship of the taxpayer's welfare is his cited reason, it is clearly specious, since it would be coming from an editor of a journal accustomed only to editorializing about funds approaching the billion-dollar level!

But, in fact, no misspent funds are involved here. Let me illustrate that with one or two specific points: In the course of my UFO studies, I came upon an interesting Air Force photograph which has been

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explained as a particular meteorological-optical phenomenon known as the "subsun". In the course of my assessment of that photo (and some other "subsun-UFO" cases), I have used ONR time to look into the optics and the photometry of the subsun. An outcome of this effort has been new insight into the factors governing relations between subsun luminance and subsun terrain-obscuration. In addition, my work led me to a quantitative method using emulsion-density of photographs of subsuns to secure estimates of the ice-crystal covering-fraction of a cirrus layer generating a photographed subsun. Now I ask you, Mr. Secretary, is this UFO research or is it atmospheric physics research? And is it "shocking?"

Let me cite another illustration. Dr. Donald Menzel, formerly Director of Harvard Observatory, has sought to explain many UFO sightings in terms of refractive anomalies and other unusual meteorological-optical phenomena. In the course of my examination of the UFO problem, I have gone over his writings rather carefully and have decided that several questions raised by his work fell quite justifiably within the domain of my ONR-supported research. His suggestions that a number of specific pilot-sightings were a result of mirage-looming of stellar images from below the geometric horizon have led me to examine several problems in atmospheric optics not previously treated very adequately in the literature. To cite only one of these I might mention the problem of atmospheric extinction of light arriving via near-tangent rays from objects outside the earth's atmosphere. The astronomical literature contains only very scanty and unreliable information on this matter, so I attempted to secure new quantitative estimates, aided by conversations with astronomers at the University. (I might interject that two of the most useful background papers on tangent-ray geometry which I utilized in my analysis were written by physicists at the Naval Research Laboratory in connection with NRL studies.) My results look useful, and I shall prepare them for publication, just as I shall submit my subsun-luminance analysis. But what I call attention to is the question of whether such an analysis of light-extinction for celestial objects near an observer's apparent horizon, even if stimulated by a UFO-related problem, is itself UFO research or research in atmospheric physics? Would anyone at ONR suggest that my use of ONR-supported time to pursue such a problem was shocking mispending of Navy research funds?

Another example: Early in my scrutiny of the UFO problem (months before Klass advanced his ball-lightning UFO hypothesis in the pages of *Aviation Week*), I had looked into the possibility of certain UFO cases being misidentified ball lightning. I was not impressed with the correlation. Later, after Klass began to champion the theory that plasmoids related to ball lightning were responsible for most of what he regarded as the interesting UFO cases, I again examined that possibility and undertook a thorough review of ball lightning theory and observation, one portion of which I discussed at an ONR-sponsored atmospheric electrical conference. Although I have adjudged the UFO problem too important to stop to prepare this for publication to date, I have a substantial amount of ball lightning material at hand from that study and have

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made it available to colleagues here working on related problems. I see nothing amiss in having conducted that background study on my ONR-supported time, and I daresay you will concur. To postpone publication of such studies as I have cited, in favor of continuing effort to get the UFO problem out into the full light of scientific inquiry, is a scientific decision for which I alone am responsible. It might prove to be a mistaken judgment, though I believe not. At any event, I hope I am correct in thinking that no fellow-scientist would construe such a decision as malfeasance. But Klass, I sense, thinks that, because I find his own theorizing about ball lightning, coronas, and plasmas lacking in scientific significance, I have so ruled out all atmospheric electrical hypotheses that I cannot still be seriously examining such possibilities. Not so.

My situation is herein quite comparable to a position I maintained for many years with respect to cloud-seeding and rainmaking; I was a notorious skeptic. However, in the course of my 1965-66 work on the National Academy of Sciences Panel on Weather and Climate Modification, my very skepticism led me to examine, much more closely than anyone had done before, a collection of reports of commercial seeding operations. As you can readily verify, my findings not only led me to an about-face, but led our entire Panel to a shift in its position on cloud modification that has had marked repercussions in many Washington agencies and offices. With respect to UFOs, I do not now prefer the hypothesis that they are primarily phenomena of atmospheric physics, but I keep looking for that interesting possibility, even if it should present itself in only a fraction of all reports. I think Klass does not understand that kind of viewpoint because he concentrates on sustaining an almost litigious courtroom manner, citing fine points, seizing on isolated statements, or parts of statements, and operating generally in a manner one does not encounter in scientific circles. I think Klass is confused in many ways, and confusion as to my scientific confrontation of the UFO problem is one of them. Out of his confusion and out of his rancor over being criticized has come a strange determination to find one or more ways to undermine me and my research support, and now, I gather, to call into question the judgment of the ONR staff.

Part of my reason for elaborating on these matters here is that I have so long smiled at his efforts that I begin to wonder if my amusement in the face of his several modes of attack has been a mistake. When I got copies of the first two or three "JEM White Papers", I showed them to colleagues here at the University and asked for their comments pro and con attempting some form of written rebuttal. Most felt that to dignify them by reply would be a mistake; a few felt that Klass appeared to be the type of person who would try to make capital of failure to rebut. Since he was not sending me copies, and since I regarded his mimeo circulars as almost at the level of much of the crank and nut mail I continually get as a result of my known interest in UFOs, I have, until now, ignored these mimeographed poison-pen circulars. I have not, however, been insensitive to a peculiar degree of determination on Klass's part to find some grounds on which to discredit me. That has been unmistakable for months.

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Without going on to other instances that I could cite to illustrate ways in which I have explored areas of overlap between UFO matters and atmospheric physics, let me cite just one more observation which exposes particularly clearly the curious nature of Mr. Klass's position. From reading his recent book (or my critique thereof), you will quickly find that Klass feels that the interesting and previously hard-to-explain UFO observations actually involve "freak atmospheric-electrical phenomena", which he likes to call "plasma-UFOs". Now I ask: Does it not strike you as a bit odd that an author-editor who insists that the UFO problem has atmospheric physics at its very core would come to the Navy and make charges that a scientist who has been investigating the UFO problem is thereby mispending funds intended for research on atmospheric physics? It seems odd to me. If Klass had shown, either in our floor discussion at the Montreal CASI UFO Symposium last March, or in anything he has since written, that I was exhibiting incompetence in my assessment of the possibility that UFOs are some new, poorly-understood aspect of atmospheric physics, that my handling of the plasma physics or the atmospheric electricity was almost ludicrous (as I believe his own handling of those topics to be), some kind of a low-keyed complaint alleging ONR's low standards of scientific competence in granting research contracts might have been in order. Although he seems to feel that scattered paragraphs and innuendoes in his mimeo circulars call into question one or two points of scientific content (which points I urge you to get independent comment on if they leave you in any doubt), he has actually attempted no scientific rebuttal to the numerous and specific points of criticism to which I drew attention on pp. 18-37 of my Montreal presentation. Instead, he comes now to the Navy with a charge that I used some funds provided for research on atmospheric physics to study UFOs, phenomena he himself claims to be chiefly in the realm of atmospheric physics!

Mr. Klass cannot accomplish scientific rebuttal by trying to make my work appear to be some kind of misdemeanor; he can, I fear, only stultify himself by these odd actions. I have used ONR funds in interviewing witnesses in selected UFO cases, in assembling other relevant information, and in doing consequent analyses of various questions of physics posed by various UFO reports. Does Klass really hope to defend a charge that this is mispending of public funds?

Vague and vindictive charges that I and the contract monitor have conspired to mispend Navy funds, viewed in the context of Mr. Klass's role as a disgruntled author, ought not arouse serious concern within your office or within the Office of Naval Research, especially in the light of other work growing out of the contract, details of which are available at ONR. I tried repeatedly to secure permission from the contract monitor to pursue the full range of my UFO studies with ONR support, but such permission was never forthcoming. For this reason, I sought and secured other support from intramural sources here at the University of Arizona and from one non-government source. Recently I have even used personal funds to an extent not really compatible with my bank-account. That only a small amount of my effort, namely, that

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which concerned atmospheric physics in cited "overlap areas", was approved by the contract monitor (on the grounds, I believe, of my past record of research) was to me disappointing. When my contract-continuation finally expired, my continuing strong interest in the UFO problem, coupled with the contract monitor's complete lack of readiness to entertain a proposal aimed directly at the heart of the UFO problem, led me to let my ten-year-long contract end without my submitting a renewal proposal. I am seeking support elsewhere; in my judgment, the UFO problem is too important to drop my efforts just because ONR won't support them.

Evidently Mr. Klass conveyed to Anderson (if I correctly interpreted Anderson's oblique statements about the role Klass played in bringing up this "misexpenditure" charge) the impression that UFOs are Air Force country, that only the Air Force could legitimately engage in UFO analyses. Such an intimation, at any event, was tied by Anderson to remarks about what "they" have said about my "using Naval funds intended for atmospheric research to investigate flying saucers." As a matter of fact, I have searched rather carefully for anything like a statutory assignment of the UFO mission to the Air Force and have not found it. Aside from directive JANAP-146 and Air Force Regulation 200-2, which bear only on report-gathering, I know of no prescription saying that only the Air Force shall engage in or support research in matters bearing on the UFO problem. Here again one sees Mr. Klass occupying a curious position, since he seems to feel that there would be something basically improper about the Navy supporting investigation into the UFO problem, if it were doing that. Would he argue that it is permissible for avionics editors to publish theories on the atmospheric origins of UFOs, while Navy-supported atmospheric physicists must keep hands off?

There has certainly been nothing clandestine about my own efforts to throw some light on the UFO problem. To give you some notion of the variety of scientific and professional groups before whom I have discussed my viewpoint that we have overlooked matters of potentially great scientific importance in our neglect of the UFO problem in the past 20 years, I enclose a number of relevant items: 1) Copies of a number of my past statements on the UFO problem; 2) A list of about 50 groups before whom I have discussed my position on the UFO problem in the last two years; 3) A recent communication from the national offices of the American Institute of Aeronautics and Astronautics listing me as one of several speakers asked to serve in their "distinguished lecture series" for the coming year; 4) A copy of my prepared statement submitted as one of the six speakers at a UFO Symposium held by the House Committee on Science and Astronautics on July 29, 1968. (The latter Committee proceedings have just been published; I urge you to examine them in full to secure still better notion of the growing scientific concern over past neglect of the UFO problem, and to see that I have not been indulging covertly some personal whim in my studies of the UFO problem.

I trust that I have gone far enough beyond the brief remarks of my telegram of September 18 to apprise you of my position. If some

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points are still unclear, please call on me for further comment.

Mr. Klass's previous efforts to use innuendo in place of pointed scientific rebuttal have amused me more than they have annoyed me. My disposition is still to be just a bit amused that he has managed to carry his odd brand of vindictive attack to Secretarial levels within the Navy. But, if this goes any further, I ask that you take steps to afford me an opportunity to confront Klass directly rather than to have to defend my position without full knowledge of just what he is charging.

Sincerely yours,

James E. McDonald
Senior Physicist

JEM/msr
Air Mail, Special Delivery

cc: Chief of Naval Research
ONR, Washington
Philip J. Klass
Dr. A. Richard Kassandra, Jr.

December 14, 1968

Mr. J. C. Deyo
ONR Regional Representative
Room 401, Space Sciences Building
University of Arizona
Tucson, Arizona 85721

Dear Mr. Deyo:

Attached are ten copies of a brief final report for Contract No. N0nr-2173(03).

We have made no attempt to summarize the work performed under the contract. We believe that the most satisfactory record of performance lies in the publications in the formal literature which have been subject to review by other specialists in the field prior to publication and also are subject to published comments. In this way the work supported by ONR reaches the broadest possible community of scientists and also permits the non-specialist to know that the work has been appropriately reviewed prior to publication.

In this spirit we are especially proud to be able to present as our final report a formidable list of 41 citations in the regular literature all of which carry an acknowledgment of support from the Office of Naval Research.

Sincerely,

A. Richard Kassander, Jr.
Director

ARK:mlt
Attachment
CC: J. Hughes

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*Official government document detailing Capt. Richard T. Holder's
investigation of the Socorro case.*

UFO REPORT

April 1964

I, Richard T. Holder, Captain, USA, 095043, Up-Surge Commander, was notified by Lt. Hicks, Executive Officer, Co C, USAF, that he had just been notified by Mr. D. Arthur Rynnes, Jr., Dredentials No. 3617, Federal Bureau of Investigation, of a reported UFO in the area. Lt. Hicks said that Mr. Rynnes would like for me to contact him at the State Police Office, Socorro, if possible. I tried to call, unsuccessfully, then started dressing. While dressing, approximately 3 minutes later, Mr. Rynnes called me, informed me of the UFO report. I stated that I would be at the office (State Police) in about 5 minutes. When I arrived Mr. Rynnes introduced himself, we each examined the others credentials and found them satisfactory. Officer Lonnie Zamora, Socorro Police Department, was present, and was introduced by Mr. Rynnes as the witness (only witness initially) to the UFO. We both then interviewed Officer Zamora, and this is substantially represented in entirety by the enclosed statements. We then departed for the scene of the reported landing of the UFO. En route (Mr. Rynnes and I went by the same vehicle) we stopped by the residence of Sgt. Castle, MOBILE SRC M.P., who then accompanied us to the site and assisted in taking the enclosed measurements and observations. Present when we arrived were Officer Zamora, Officers Melvin Latta-Jeff, Bill Pyland, all of the Socorro Police Department, who assisted in making the measurements. When we had completed examination of the area, Mr. Rynnes, Officer Zamora, and I returned to the State Police Office at Socorro, then completed these reports. Upon arrival at the office location in the Socorro County Building, we were informed by Wep-Lopes, Sheriff's Office radio operator, that approximately three reports had been called in by telephone of a blue flame of light in the area. Initial sighting was made by Officer Zamora at approximately 1750— I was notified by Lt. Hicks at approximately 1910. These reports were not entered on the dispatcher's log so no time on these reports is available — the dispatcher indicated that the times were roughly similar. Reports were completed at approximately 0100 25 April. I requested that I be notified in the event of a similar occurrence or report.

Richard T. Holder
Captain Ord/C

NOTE By Request of the FBI, please do not refer to the FBI as participating in any fashion — use of local law enforcement authorities is acceptable.

(There follows Zamora's interview)

Socorro, NM; April 24, 1964

Lonnie Zamora, 606 Reservoir St., Socorro, NM, 835-1134, Officer Socorro PL about 5 years, office phone 635-6941, now on 2:00 PM to 10:PM shift.

About 5:45 PM 4/24/64 while in Socorro 2 Police Car (64 Pontiac White) started to chase a car due south from west side of Court House. Car was apparently speeding and was about 3 blocks in front. At point on Old Road Street (extension of Park St.) south/near George Morillo residence (about 1/2 mile south of Spring Street) the chased car was going straight ahead toward rodeo grounds. Car chased was a new black Chevrolet (it might have been Floyd Reynolds boy Vivian about 17). Chased car still about 3 blocks ahead. Lonnie alone.

At this time heard a roar and saw a flame in the sky to the southwest some distance away — possibly 1/2 mile or a mile. Came to mind that a dynamite shock in that area had blown up, decided to leave immediately chased car go.

Flame was bluish and sort of orange, too. Could not tell size of flame. Sort of motionless flame, slowly descending. Was still driving car and could not pay too much attention to the flame. It was a narrow type of flame. It was like a "stream down" — a funnel type — narrower at top than at bottom. Flame possibly 3 degrees or so in width — not wide.

Flame about twice as wide at bottom as top, and about four times as high as top

April 1964

I, Richard T. Holder, Captain, USA, 095042, Up-Range Commander, was notified by 1/Lt Hicks, Executive Officer, Co C, USAG, that he had just been notified by Mr. D. Arthur Byrnes, Jr., Dredentials No. 3617, Federal Bureau of Investigation, of a reported UFO in the area. Lt. Hicks said that Mr. Byrnes would like for me to contact him at the State Police Office, Socorro, if possible. I tried to call, unsuccessfully, then started dressing. While dressing, approximately 3 minutes later, Mr. Byrnes called me, informed me of the UFO report. I stated that I would be at the office (State Police) in about 5 minutes. When I arrived Mr. Byrnes introduced himself, we each examined the others Credentials and found them satisfactory. Officer Lonnie Zamora, Socorro Police Department, was present, and was introduced by Mr. Byrnes as the witness (only witness initially) to the UFO. We both then interviewed Officer Zamora, and this is substantially represented in entirety by the enclosed statements. We then departed for the scene of the reported landing of the UFO. En route (Mr. Byrnes and I went by the same vehicle) we stopped by the residence of Sgt. Castle, NCGIC SRC M.P., who then accompanied us to the site and assisted in taking the enclosed measurements and observations. Present when we arrived were Officer Zamora, Officers Melvin Hatzlaff, Bill Pyland, all of the Socorro Police Department, who assisted in making the measurements. When we had completed examination of the area, Mr. Byrnes, Officer Zamora, and I returned to the State Police Office at Socorro, then completed these reports. Upon arrival at the office location in the Socorro County Building, we were informed by Nep Lopez, Sheriff's Office radio operator, that approximately three reports had been called in by telephone of a blue flame of light in the area. Initial sighting was made by Officer Zamora at approximately 1750 — I was notified by Lt. Hicks at approximately 1910. These reports were not entered on the dispatcher's log so no time on these reports is available — the dispatcher indicated that the times were roughly similar. Reports were completed at approximately 0100 25 April. I request that I be notified in the event of a similar occurrence or report.

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Flame about twice as wide at bottom as top, and about four times as high as top

was wide. Did not notice any object at top, did not note if top of flame was level. Sun was to west and did not help vision. Had green sunglasses over prescription (sic) glasses. Could not see bottom of flame because it was behind the hill.

No smoke noted. Noted some "commotion" at bottom -- dust? Possibly from windy day - wind was blowing hard. Clear sunny sky otherwise -- just a few clouds scattered over area.

Noise was a roar, not a blast. Not like a jet. Changed from high frequency to low frequency and then stopped. Roar lasted possibly ten seconds -- was going towards it at that time on the rough gravel road. Saw flame about as long as heard the sound. Flame same color as best as recall. Sound distinctly from high to low until disappeared. Windows both were down. No other spectators noted -- no traffic except the car in front -- and car in front might have heard it but possibly did not see it because car in front was too close to hill in front, to see flame.

After the roar and flame, did not note anything, while going up the somewhat steep rough hill -- had to back up and try again, two more times. Got up about half-way first time, wheels started skidding, roar still going on, had to back down and try again before made the hill. Hill about 60' long, fairly steep and with loose gravel and rock. While beginning third time, noise and flame not noted.

After got to top, traveled slowly on the gravel road westwardly. Noted nothing for awhile .. for possibly 10 or 15 seconds, went slow, looking around for the shack -- did not recall exactly where the dynamite shack was.

Suddenly noted a shiny type object to south about 150 to 200 ~~yards~~ yards. It was off the road. At first glance, stopped. It looked, at first, like a car turned upside down. Thought some kids might have turned over. Saw two people in white coveralls very close to object. One of these persons seemed to turn and look straight at my car and seemed startled -- seemed to quickly jump somewhat.

At this time I started moving my car towards them quickly, with idea to help. Had stopped about only a couple of seconds. Object was like aluminum -- it was whitish against the ~~som~~ mesa background, but not chrome. Seemed like (oval, long axis vertical) in shape and I at first glance took it to be an overturned white car. Car appeared turned up like standing on radiator or on trunk, at this first glance.

The only time I saw these two persons was when I had stopped, for possibly two seconds or so, to glance at the object. I don't recall noting any particular shape or possibly any hats, or headgear. Those persons appeared normal in shape -- but possibly they were small adults or large kids.

Then paid attention to road while drove toward scene. Radio'd to sheriff's office "Socorro 2 to Socorro, possible 10-44 (~~with~~ accident). I'll be 10-6 (busy) out of the car, checking the car down in the arroyo."

Stopped car, was still talking on radio, started to get out, mike fell down, reached back to pick up mike, then replaced radio mike in slot, got out of car and started to go down to where knew the object (car) was.

Hardly turned around from car, when heard roar (x was not exactly a blast), very loud roar -- at that close was real loud. Not like a jet -- knows what jets sound like. Started low frequency quickly, then roar rose in frequency (higher tone) and in loudness -- from loud to very loud. At same time as roar saw flame. Flame was under ~~above~~ the object. Object was starting to go straight up -- slowly up. Object slowly rose straight up. Flame was light blue and at bottom was sort of orange color.

From this angle, saw what might be the side of object(not end, as first noted). Difficult to describe flame. Thought, from roar, it might blow up. Flame might have come from underside of object, at middle, possibly a four feet area — very rough guess. Cannot describe flame farther except blue and ~~orange~~ orange. No smoke, except dust in immediate area.

As soon as saw flame and heard roar, turned away, ran away from object but did turn head toward object. Bumped leg on car — back fender area. Car facing southwest.

Object was (oval with long axis horizontal) in shape. It was smooth — no windows or doors. As roar started, it was still on or near ground. Noted red lettering ~~some~~ of some type, like (see later diagram of insignia). Insignia about 2½' high and 2' wide, guess. Was in middle of object, like (shows insignia centered in object oval). Object still like aluminum - white.

After fell by car and glasses fell off, kept running to north, with car between me and object. Lanced back couple of times. Noted object to rise to about level of car, about 20 to 25 feet guess — took I guess about six seconds when object started to rise and I glanced back. I guess I ran about halfway to where I ducked down — about fifty feet from the car ~~where I ducked down~~ is where I ducked down, just over the edge of hill. I guess I had run about 25 feet when I glanced back and saw the object about level with the car and it appeared directly over the place where it rose from.

I was still running and I jumped just over the hill — I stopped because I did not hear the roar. I was scared of the roar, and I had planned to continue running down the hill. I turned around toward the object and at same time put my head toward ground, covering my face with my arms. Being that there was no roar, I looked up, and I saw the object going away from me, in a southwest direction. When the roar stopped, heard a sharp tone whine from high tone to low tone. At end of roar was this whine and the whine lasted maybe a second. Then there was complete silence about the object. That's when I lifted up my head and saw object going away from me. It did not come any closer to me. It appeared to go in straight line and at same height — possibly 10 to 15 feet from the ground, and it cleared the dynamite shack by about three feet. Shack about eight feet high. Object was travelling very fast. It seemed to rise up, and take off immediately across country. I ran back to my car and as I ran back I kept an eye on the object. I picked up my glasses (I left the sun glasses on the ground), got into the car, and radio'd to Nep Lopez, radio operator, to "look out the window, to see if you could see an object." He asked what is it? I answered "It looks like a balloon." I don't know if he saw it. If Nep looked out his window, which faces north he couldn't have seen it. I did not tell him at the moment which window to look out of

As I was calling Nep, I could still see the object. The object seemed to lift up slowly, and to "get small" in the distance very fast. It seemed to just clear the Box Canyon or Six Mile Canyon mountain. It disappeared as it went over the mountain. It had no flame whatsoever as it was travelling over the ground, and made no smoke or noise.

Feeling in good health. Last drink — two or three beers — was over a month ago. Noted no odors. Noted no sounds other than described. Gave directions to Nep Lopez at radio and to Sergeant M S Chavez to get there. Went down to where object was (had been), and I noted the brush was burning in several places. At that time I heard Sgt Chavez (NM State Police at Socorro) calling me on radio for ~~my location~~ my location, and I returned to my car, told him he was looking at me. Then Sgt. Chavez came up, asked me what the trouble was, because I was sweating and he told me I was

white, very pale. I asked the Sgt. to see what I saw, and that was the burning brush. Then Sgt. Chavez and I went to the spot, and Sgt. Chavez pointed out the tracks.

When I first saw the object (when I thought it might be a car) I saw what appeared to be two legs of some type from the object to the ground. At the time, I didn't pay much attention to what it was — I thought it was an accident — I saw the two persons. I didn't pay attention to the two "legs". The two "legs" were at the bottom of the object, slanted outwards to the ground. The object might have been about three and a half feet from the ground at that time. I just glanced at it.

Can't tell how long saw object second time (the "close" time), possibly 20 seconds — just a guess — from time got out of car, glanced at object, ran from object, jumped over edge of hill, then got back to car and radio as object ~~disappeared~~ disappeared.

As my mike fell as I got out of the car, at scene area, I heard about two or three loud "thumps", like someone possibly hammering or shutting a door or doors hard. These "thumps" were possibly a second or less apart. This was just before the roar. The persons were not seen when I got up to the scene area.

Just before Sgt. Chavez got to scene, I got my pen and drew a picture of the insignia on the object.

End of narrative.

Distances from object

First sighting of flame approx 3/4 mile

First sighting of object with people (2) by object - 0.15 miles

2nd sighting of object where insignia observed - 103 feet.

Object started to depart or lift off surface

3rd sighting of object; object left surface, object departing - approx 200 feet.

Followed by diagram showing two footprints; indentations 1/2 to 2 inches in soft sand.

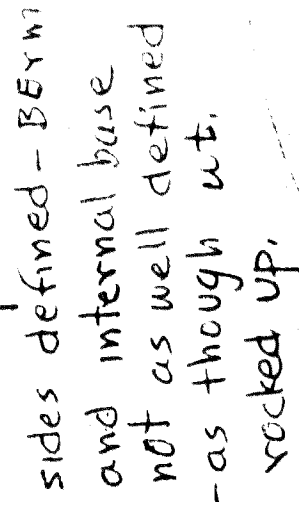
(Layout of marks - reproduced to scale on basis of sketches given and distances between marks indicated). Comments on page: Examination charred areas 1,2,3,4, indicated that: 1 and 2 had heat applied in a straight or almost straight down direction- #3 & 4 had heat applied in the vectors indicated (approx) - this was determined (estimated) by examination of grass-roots and bushes in the area.

Note: no other indications of a blast - i.e., a thrust force - were noted - no other charring, indentations or area disturbances were noted!

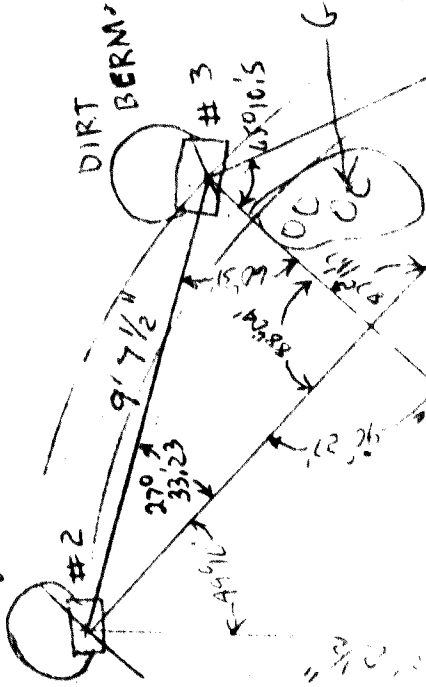
First view of the Object - from approximately 0.15 miles, looking down on it:



well defined as though
it placed directly and
removed directly



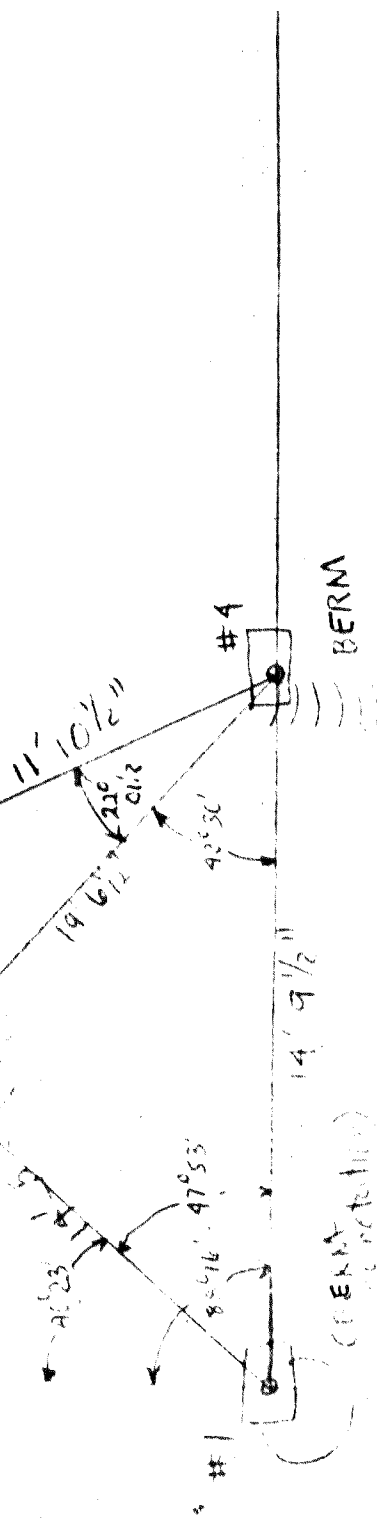
DIRT ERM



General Area of Footprints

Average central angle
= $89^{\circ} 01'$

Average radius to vertex = 8
Average positional error a.
Average vertex = 1.8 inches



(Not printed at Government expense)



Congressional Record

PROCEEDINGS AND DEBATES OF THE 86th CONGRESS, SECOND SESSION

NICAP UFO Report

EXTENSION OF REMARKS

OF
HON. LEONARD G. WOLF

OF IOWA

IN THE HOUSE OF REPRESENTATIVES

Wednesday, August 31, 1960

Mr. WOLF. Mr. Speaker, under leave to extend my remarks, I include an urgent warning by Vice Adm. R. H. Hillenkotter, former Director of the Central Intelligence Agency, that certain potential dangers are linked with unidentified flying objects—UFO's. Admiral Hillenkotter's request that Congress inform the public as to the facts is endorsed by by more than 200 pilots, rocket, aviation, and radar experts, astronomers, military veterans, and other technically trained members of the National Investigations Committee on Aerial Phenomena. Among them are Rear Adm. H. B. Knowles; Col. Joseph Bryan III, U.S. Air Force Reserve; Lt. Col. Jas. McAshan, USAFR; Lt. Col. Samuel Freeman, U.S. Army Reserve, Aviation; Mr. J. E. Hartman, president, Aircraft Owners Pilots Association; Capt. R. H. McLaughlin, Navy missile expert; Mr. Frank Rawlinson, physicist, National Aeronautical and Space Agency; Dr. Leslie Kachurn, space consultant, University of Southern California; former Air Force Maj. William D. Leek, with three officially reported UFO encounters while an Air Force pilot; Frank Halstead, 25 years as curator, Darling Observatory; Rear Adm. D. S. Fahrney, former chief of the Navy missile program; Col. R. B. Emerson, U. S. Army Reserve, head of Emerson Testing Laboratories; Prof. Charles A. Maney, astrophysicist, Deane University; Capt. W. B. Nash, Pan American Airways.

279009-77460

The "NICAP Report on Secrecy Dangers," with documented evidence on UFO's, was first submitted confidentially to me, and to several other Members of Congress, including Senator Lyndon Johnson. In a reply to NICAP, July 6, 1960, Senator Johnson stated that he had ordered the staff of the Senate Preparedness Investigating Subcommittee to keep close watch on UFO developments and to report on any recent significant sightings and the Air Force investigations of such sightings.

Although I have not had time for a detailed study, I believe the conclusions of these experienced NICAP officials should be given careful consideration. Certainly their sober evaluations should be completely dissociated from the obvious frauds and delusions about UFO's which unfortunately have been publicized. The NICAP report is stated to be the result of a 3-year investigation—its conclusions based only on verified visual, radar, and photographic evidence by trained, reputable observers.

On August 20, 1960, NICAP sent me the following statement to be added to the original report:

There is a growing danger that UFO's may be mistaken for Soviet missiles or jet aircraft, accidentally causing war. Several Air Defense scrambles and alerts already have occurred when defense radarsmen mistook UFO formations for possible enemy machines. NICAP agrees with this sober warning by Gen. L. M. Chassey, NATO coordinator of Allied Air Services.

"It is of first importance to confirm these objects . . . the business of governments to take a hand, if only to avoid the danger of global tragedy. If we persist in refusing to recognize the existence of these UFO's we will end up, one fine day, by mistaking them for the guided missiles of an enemy—and the worst will be upon us."

Today, this danger may surpass the one cited in NICAP's report: That the U.S.S.R. might spread false rumors that the UFO's are secret Red devices which have mapped all the U.S. and allied targets and could be used as surprise-attack weapons. (Emphasis added.)

We are sure you will agree it is imperative to end the risk of accidental war from defense forces' confusion over UFO's. All defense personnel, not merely top-level groups, should be told that the UFO's are real and should be trained to distinguish them—by their characteristic speeds and maneuvers—from conventional planes and missiles. This is not in effect today.

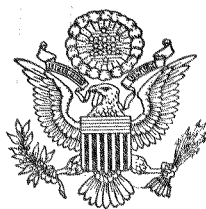
Second, the American people must be convinced, by documented facts, that the UFO's could not be Soviet machines.

Certainly every Member of Congress will agree that any such danger of accidental war—even if slight—must be averted in every possible way. It is also important to prevent any unfounded fear that the UFO's are secret enemy devices.

After discussing the subject with colleagues, I am certain that there is real concern by many Members of Congress. Without necessarily accepting all the conclusions of the NICAP Board of Governors and technical advisers, we are convinced that a thorough study of the UFO problem should be made. Pending such action, I believe that publication of the NICAP report will help to reduce the dangers cited by Vice Admiral Hillenkotter and the other NICAP officials.

For those Members desiring to do so the previously mentioned confidential report can be obtained upon request at the National Investigation Committee on Aerial Phenomena, 1336 Connecticut Avenue NW., Washington, D.C.

Handwritten notes in right margin:
Huh, governments fear? I guess that's just so valid as CIA, good earth, etc.
It certainly has the look of knowledge theory



United States
of America

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HARVARD COLLEGE OBSERVATORY
CAMBRIDGE, MASSACHUSETTS 02138

May 19, 1967

Dr. James E. MacDonald
Institute of Atmospheric Sciences
University of Arizona
Tucson, Arizona

Dear Jim,

I have carefully read your article "UFO's: Greatest Scientific Problem of our Times?" and want to tell you immediately that, although I may object to an occasional point here and there, I think the article is altogether creditable, and I want to congratulate you on it. Regardless of who's right, I think it is very important that someone with your background has looked into many of the classic sightings and has reached opinions different from the official ones. If your article is widely disseminated in the scientific community I think it can only stir interest and unhardened opinions, but an address to the American Society of Newspaper Editors is not quite the same as a scientific article. Let me urge you to write up your discussion in a form suitable for some scientific journal. I do not think you will have much difficulty publishing it.

I have some misgivings about the section beginning on your page 20. I don't understand what the presence or absence of a magnetic field on Mars or Venus has to do with the possibility of life there. The argument of Purcell against interstellar space travel has several attendant objections which are outlined in the book by Shklovskii and me. It is possible to design even today a spacecraft which can achieve interstellar space flight. It's huge and expensive and far beyond our present engineering capability, but physically possible, and if we can imagine such spacecraft, then civilizations far beyond us must be able to do a lot better. Not only will they have vastly superior engineering techniques, they will have a science which involves principles that today we cannot even dimly guess at. What concerns me is the variety and frequency of objects which are on your list of unidentifieds. Why should there be huge numbers of extraterrestrial spacecraft investigating the Earth? Why such a great variety of spacecraft, and why us? What's so special about the Earth?

Please look me up next time you're East.

With best wishes,

Cordially,



Carl Sagan

If the probe hypothesis is correct it has nothing to do w/ us being special so much as we're one more exo life discovered and catalogued

CS:sec

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Please look me up next time you're East.

With best wishes,

Cordially,

A handwritten signature in black ink, appearing to be 'Carl Sagan', written in a cursive style.

Carl Sagan

CS:sec

*A page from McDonald's second journal detailing the conversation,
re: possibilities inherent in UFO propulsion with
Drs. Robert M. Wood and Darrell Harmon.*

Douglas Aircraft - Santa Monica.

① 6/19/67. Dr. Roll M. Wood phoned today 399-7711 Ext 2529-750.

Wanted to get together, while I'm LAX today this week. P.O. Box 10000 in the
group doing h.t. work, wanted to chat. Offer to work with 4 BS people (persons ESP-750).

Wood p.s. he has been following UFO literature. Is going to get book on subject
known PM, wants to know if I have any studies he could use. (This next day BS-0 book sent
to at AMS tonight & supposedly at 10:00 am.)

Letter, of RQND in his words. Target - expect about it.

We agreed to phone him from Wood & I some time in 6/21 the Douglas -

22nd Ocean Park, 11th St. A, Main lobby.

② 6/21 Wood & Dr. Darrell B. Harmon went on mainly propulsion targets. Probably had been
1000-1745

were multi-mode system involving electrostatic & magnetohydrodynamic reactions against
air E & H fields [$i \cdot qE$ or $\vec{r} \cdot \vec{V}H$]. Showed Q vs V plot about $\frac{1}{2}$ the curve he

and assembly for magnetic - dipole mode. Q -mode not really bottom by curve - checking time,
just starting away, but to left of V limit. Early & I did not get much clear. Am logging this quest and w/
Playa Vista. Think that Apple & Q ~ 100C. Definitely, graph of fields yields 10⁶ Gauss
became about 10⁶ Gauss but after 500, was given to also a cap.

Wood says he has recently been doing the anti-gravity. Harmon also feels can do with
with combination of ionospheric mode, involving some dependence on magnetron - reaction (get there).
We discussed some other mode problem. Harmon felt 2000 ft or more area might appear, get to go
about 1000 ft, can work on design for non-magnetic mode. We first have to be on earth mode.

Harmon has 20-yr old file, placed ideas & carry on with solution. UFO problem. Wood said
at 10:00 AM told that Harmon had been done this. Said this only by others, because of Harmon's interest
in this but he attended meeting together. Said H believes Christ came in UFO & story of Bible about UFO.

③ NACF-LANS- 6/22 - Approximate 403 N. Airline. 1600-2000. Subject: magnetic field
development. Co 10 ft. LAX. Kalam document

1) Coastal Mall, Calif. - End of afternoon from (about 2:00 PM)
Oct & Nov 1966. Mrs Emily Wallis (Dum)

Her husband was never there & was there during period. Some day
beforehand there have been 150-miles 2-way radio to keep all hand
press in UFO movement.

Mrs Darrell Wallis P.O. Box 317, Corner Blvd 93 & 1st
LAX : 426 South Westminster, San Jose

Orange lights, numerous. Came almost nightly for 2-3 week
period. Within 2-3 miles of San Jose. Didn't know how to call. as
get USAF in, but not satisfactory. Some had photo, mostly at night
but none came out. Saw by all ranks. A believe too rapidly

Douglas Aircraft - Santa Monica.

① 6/19/67. Dr. Rolt M. Wood phoned today 399-9311 Ext 2529-77

Wanted to get together, while I'm LAX later this week. P.O. Don Roddehe in his group doing b.l. work, wanted to chat. Offer to work with NBS people (presume ESR-750).

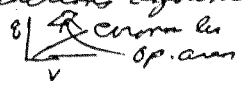
Wood p.s. he has been following UFO literature. Is giving his 1st talk on subject tomorrow PM, wants to know if I have any slides he could use. Had read my ASNE talk, was he at AMS banquet & supposedly at Epperson.

Lipp, of RAND in his work. Target - expect about it.

We agreed I phone him from Rolt & I come over on 6/21 to Douglas -

33rd & Ocean Park., Suite 81 A, Main lobby.

6/21 Wood & Dr. Daniel B. Harmon want over mainly propulsion thoughts. Probably heated 1600-1745

was multi-mode system involving electrostatic & magnetostatic reactions against also E & H fields [i.e. $q\vec{E}$ or $\vec{m} \cdot \nabla H$]. Showed Qvo Voltage chart 

and similarly for magnetic-dipole mode. 'Q-mode' not really bothered by corona-discharge here since operating area lies to left of V limit. Beclis I did not get sat. clear. Am logging this just out of Percy Page. Think Beclis spoke of Q ~ 100 C. Definitely spoke of fields of order 10^6 Gauss because said that just about Ford told Cole it will need 500,000 Gauss to stop a car.

When Wood has recently been being to anti-gravity, Harmon still feels can do his with combination of conventional modes, including some dependence on momentum-reaction (jet effects). We discussed soundlessness problem. Harmon felt 200 fpos over broad area might suffice, get 4. I later chose quiet, calm workers lowering his non-momentary cases. We over had to be an anti-mode.

Harmon has 20-yr clip file, planned edue & career around solution UFO problem. Wood said at his other AMS talk that he had heard Harmon describe this. Said he only by chance learned of Harmon's interest when they had to attend a meeting together. Said H believes Christ came on UFO & story of Bethlehem UFO!

② NICAP-LANS-6/22 - Epperson's 403 N. Ardmore. 1600-2000. Ideal reception/help developments. Ca 10 hr buffet. Kachum discussion

1) Coarse Gold, Calif. - East of ~~Yosemite~~ Fresno (about 2 Ysa
Oct & Nov 1966. Mrs Dorely Wallis (Dorely)

Her husband owns ranch there & was there during period. Some law enforcement officers have procured 150-mile 2-way radio to keep all law posts on UFO movements.

Mrs Dorely Wallis P.O. Box 317, Coarse Gold 93614

L A X : 426 South Westminster, near Solobels

Orange lights, maneuvering. Came almost nightly for 2-month period. Within 2-3 miles of her ranch. Didn't know how to call, so got USAF in, but not satisfactory. Some had photos, mostly at night.

*Letter from McDonald to his contract monitor
at ONR, Mr. James Hughes.*

J. Hughes, ONR

4-30-66

Dear Jim:

That old puzzler that's bothered me so long, the UFO problem, is very much in my mind these days. Charlie Moore and Martin Uman were here a couple of days ago for the IEFEE session on atmospheric electricity, and we had a long discussion of the problem over beer and steaks. Martin has become interested in the matter because of certain similarities with ball lightning observations, so we were going over the pros and cons of that idea. Charlie had recently talked at length with Hynek (USAF scientific consultant in the UFO area) and it was most intriguing to hear about Hynek's views.

About a month back I decided to try to get NAS to look into the UFO problem. I wrote Tom Malone a long letter asking that something be undertaken within the Comm. of the Atm. Sciences. He discussed it with some of the people at NAS and that eventuated in my presenting some suggestions to the CAS at a meeting up at NCAR early this month (I was mainly there to provide backup in still another bout with Wally Howell over our Panel report and sequelae). Things were shaping up to permit me to do some kind of a low-keyed study with NAS support when Rep. Ford's Congressional noises led to some changes. Actually, even before he asked for a "full Congressional investigation", the USAF Sci. Adv. Board had been taking a new look at Project Bluebook and the inadequacies of its UFO investigations, and were considering setting up a civilian scientific panel of some kind just about the time the Michigan sightings got Ford riled up. The net result has been that DOD has gone to NAS to get suggested names and universities to participate in some kind of a UFO study. At least that's one version I've heard. There are others. I understand I'm at the head of the list of those who might tilt with the little green men -- but to date I've heard nothing from DOD or USAF. John Sievers indicates it may take a bit longer. My own suspicions are that my Titan activities may make me less than the Air Force's ideal candidate to check up on this problem. But in any event, something is cooking on this long-standing problem. I continue to check UFO reports in this area and continue to grow more convinced that there is a problem of high scientific importance that is being ignored and laughed out of court.

Well, all that by way of asking a favor. Do you suppose you could ask around as to the origin and circumstances of the photo that Life ran on p. 29 of its April 1, 1966 issue? I enclose a copy. Says it was taken "from a Navy ship off the coast of California in 1957", but I've kept close track of all such matters and this is the first I heard of such a photo. The rather casual way Life mentions it seems quite out of keeping with the quality and detail of the photo. I'm keenly interested in knowing if the Navy had previously released this photo, or if Life somehow got it under special circumstances. I'd like to know what the ship was, the date and time, and what other observations were reported. Any chance that you might run down any dope?

P.S. Possible to get copy of photo?

*Compare this
against Isaac's list*

CHAPTER 11

Chronological list of some UFO cases of interest. The basis for inclusion is varied: Many are widely known cases, many are included only because I have personally checked them and see in them characteristics of special interest. Several are shown only because they are carried as Unidentified in Bluebook files and illustrate the quite non-conventional nature of many such cases. Only a few are foreign, though UFO reports occur with about the same apparent areal and temporal frequency in other parts of the world as in the U.S. -- J. E. McDonald 3/13/67

Year	Date	Identification
1897		Airship
1904	Feb. 28	USS Supply
1926	Aug. 5	Roerich exped.
1931	Jun 10	Chichester
1944		Foo fighters
1946	Summer	Ghost rockets
1947	Jun 24	Kenneth Arnold, Mt. Rainier
	Jul 4	United Airlines, Capt. Smith
	" 4	Portland, Ore.
	" 8	Maroc AFB
1948	Jul 23	Chiles-Whitted, EAL
	Oct 1	Gorman, Fargo, N.Dak.
1949	Apr 24	C. B. Moore, Jr., White Sands
	Jul 3	Longview, Wash.
	Aug. 19	Clyde Tombaugh
1950	Mar 17	Farmington, N. M.
	" 20	Little Rock, Chicago & So. AL
	Apr 27	Goshen, Ind., TWA
	May 20	Flagstaff, Seymour Hess
	" 29	Sperry, AAL
1951	Jan 20	Sioux City, Vinther, Mid-Continent
	Oct 10	J.J. Kaliszewski, also 10/11
1952	Jul 2	Tremonton, Utah, Newhouse
	" 14	Nash-Fortenberry
	"	Washington Natl. Airport, 17th and 26th
	" 26	F-94 lock-on
	" 27	Manhattan Beach, Calif.
	" 29	Port Huron, Mich.
	Aug 1	Yask, Mont.
	" 1	Bellefontaine, O.
	" 5	Haneda AFB, Japan
	" 25	Pittsburgh, Kans., Squyres
	Sep 19	Operation Mainbrace
	Oct 27	Gaillac, France AH
	Dec 6	Gulf of Mexico, B-29
1953	May 23	So. Africa
	Jun 24	Hampton Bays, L.I.
	Aug 12	Rapid City, S.Dak.
	" 31	Port Moresby, New Guinea, Drury
	Nov 23	Kinross AFB
1954	Jun 29	BOAC Stratocruiser
	Oct 22	Dublin, Ohio
	"	France
	Dec 3	Gulfport, Miss.

Year	Date	Identification	
1955	May 4	Keflavik, Iceland	
	Aug 21	Kelly, Ky.	
	Nov 25	Mt. Mestas, Colo.	
	Dec 21	Washburn, Me.	
1956		Navy Constellation	
	May 22	Monroe, La. T33	
	Jun 6	Banning, Calif.	
	Aug 27	Juniata, Pa.	
	Nov 14	Capital AL, Hull, Mobile	
1957	Mar	Ruby, Ariz. Harayda-Snyder	
	" 9	Van Winkle, PAA, San Juan	
	" 23	Oxnard AFB	
	Jul 25	Niagara Falls Arpt.	
	Sep	Ft. Belvoir, Va.	
	Nov 2-3	Levelland, Tex.	
	" 3	White Sands, N.M.	
	" 5	Sebago, Gulf of Mex.	
	" 5	Long Beach, Calif.	
	" 11	San Fernando, Calif. Rocketdyne	
	1958	Aug 17	Warren, Mich., Chisholm
Oct 3		Monon RR, Indiana	
" 26		Loch Raven Dam	
Dec 20		Dunellen, N.J.	
1959	Jun 26-7	New Guinea, Boianai-Gill	
	Jul 11	Pacific Ocean ALs	
	Sep 13	Gills Rock, Wisc.	
	" 24	Redmond, Ore.	
1960	Feb 5	Hollywood, Calif.	
	Aug 13	Red Bluff, Calif.	
	Oct 4	Cressy, Australia	
1961	Oct 2	W. J. Harris, Salt Lake City	
	Aug 12	Kansas City, Kans.	
	Sep 19	White Mtns., N.Y., Hills	
	Nov 8	T. L. Goff, Chadron, Nebr.	
1962	Jul 30	Ocean Springs, Miss.	
1963	Feb 15	Moe, Australia, Brews	
	Sep 14	Susanville, Calif.	
1964	Apr 3	Monticello, Wisc.	
	" 11	Homer, N.Y.	
	" 24	Socorro, N.M.	
	May 26	Cambridge, Mass.	
	Jul 20	Littleton, Ill.	
	" 27	Daubert, Norwich, N.Y.	
	Dec 19	Patuxent River NAS	
	1965	Jan 4	R.S. Woodruff, Vt.
		" 27	Crimmins, Hampton, Va.
	Mar 15	Jas. Flynn, Ft. Myers, Fla.	
May 20	LeRoy Township, O.		
Jul 3	Deception Is.		
Aug 1	Midwest		
" 3	Rex Heflin, Santa Ana		
" 4	Tennopir, Abilene, Kans.		
" 19	Cherry Creek, N.Y.		
Sep 3	Exeter, N.H.		
" 3	Damon, Tex.		

Year	Date	Identification
1966	Mar 20	Dexter, Mich.
	" 23	Anderson, Temple, Okla.
	Apr 17	Portage Co., O.
	" 22	Beverly, Mass.
	" 23	Clarinda, Ia.
	" 25	Gov. Burns, Fla.
	Jun 23	Bernalillo, N.M.
	" 24	Richmond, Va., Stevens
	Jul 18	Baytown, Tex.
	Aug 1	Uzunoglu
	Dec 30	Canadian-Pacific AL
1967	Jan 16	Trittipoe-Welsh
	" 20	Methuen, Mass.
	" 21	Kuntz, Houston
	Feb 11	Milford, O.
	" 13	Davis, Calif.
	Mar 2	White Sands PG
	Mar 6	Galesburg, Ill.
	" 9	Goodland, Kans.

Thurs 4/28/68 To NAS Bldg 0830 PIVACM session.

Followed - agency WACM programs reported on. (Giving them Herb Applegate's (who sent his mailed DCA - 1952 review report) Mrs Whelan, Col Howard, Eugene from Norfolk, Capt O'Neill, Art Cunningham, Russ Renda, etc.).

10:30 After lunch - Phoned O'Callaghan. Reported Miller had decided his Committee will hold hearing & review O'Brien's suggestion re a document providing back-up re Congressional investigation. He passed on both items to Renda.

P.O. to Tom Malone Mullins decision. He thought it fine one to go ahead with the after NAS review of Caden Report. He also felt a bit of apprehension from me to Renda (at the time) & passed on to NAS, asking conclusion of CV project could be delayed. But Tom & Linda Mrs O'Callaghan would not let Mullins.

Phoned - Came back to PA Central, thinking I'd overheard at Wright, but no document only to have leaving in DC (Renda Report). Highlighted to him Renda really to return to OAR & Mullins decision also. Rejected.

5:30 J.R. Davis had one to PA Central.

Phoned O'Brien & had passed little part in seeing Parag's man. He gave to Renda Renda's people who also of back-up report/document re hearings.

Phoned Jacob, offered the 2-page paper as found in file room N1100 edition of Standard rights 1952 meeting.

10:30 After dinner at Renda Restaurant, Chevy Chase (Paul, Tracie, J. Hays), discussed with Hays @ Renda Smith the Congressional hearing, GAO, & NAS. I felt very desirable have on news, via a limited GAO agency, none of who spend what & how much of when. Last meeting, SR1, any Caden files kept? How many also field trips? Fred's Leagle?, Callaghan's? When does officially leave project? When Delina says not. But deep request that GAO also self-aware & scientific aspect. Indeed, transfer, better to NAS, along with my letter.

Sales would be to prepare for 3 possibilities re Caden report. ① Very negative ② Equivocal ③ Positive, VFI to document much more work.

Of ③ way is paved for SFA hearings, without much further action from NAS Council. But ④, will need all available documentation even to get at before Miller Committee. My bill of particulars, submitted to NAS by a concerned Congressman urged them to proceed, a document

as 6/20/68 To NAS Bldg 0830 POWACM session.

Federal-agency WACM programs reported on. (Among them Herb Appleman (who said his mailed DCA - 1952 today report) Mrs Whelan, Col Howard, Cozine from Norfolk, Capt O'Neill, Ab Cunningham, Mrs Benton, Kuba).

10:30 Coffee break - Phoned O'Callaghan. Reported Miller told ~~Round~~ that his Committee will hold hearings & raise Olsen's suggestion re a document providing back-up re Congressional investigation. She passed on both items to Round.

P.O. to Tom Malone Miller's decision. He thought it fine one to go ahead with after NAS review of Carlson Report. He also felt a statement of particulars from me to Round (at his req) & passed on to NAS, citing weaknesses of CV Project could be helpful. Both Tom & Gordon Mrs D had good words for Miller.

Phon - Came back to Ph Central, thinking I'd overrule at Hedges, but we decided only to have hearing in DC [Round Rest]. Hedges glad to hear Round ready to retreat to ONR & Miller's decision also helpful.

5:30 J R Lewis drove me to Ph Central.

Phoned Olsen & his decision little bit in seeing Percy's man. He glad to hear Round's people like idea of back-up report/document re Hearings.

Phoned Isobel, offered do 2-pg paper or foreword re forth coming NIA/P edition of Bluebook repts of 1952 vintage.

10:30 After dinner at Roma Restaurant, Cherry Lane (Pat, Trist, J Hedges), discussed with Hedges @ Regn Smith the Congressional hearing, GAO, & NAS. I felt very desirable have on record, via a limited GAO inquiry, record of who spent what & how much & when. Last week trip, SR1, any Carlson field trips? How many low field trips? Ford? LeJelle? Ballup Poll? When low officially leave project? When Delmore sign ~~note~~ But deep request that GAO don't make sense & scientific appear. Instead, transfer battery to NAS, along with my letter.

Olsen would be to prepare for 3 possibilities re Carlson report: ① Very negative ② Equivocal ③ Positive, VFI's demand much more work.

If ② or ③ way is paved for S&A Hearings, without much further assist from NAS Panel. But if ①, will need all available ammunition even to get it before Miller Committee. My bill of particulars,

to cite, a yardstick of Panel's thoroughness. And the list of CV expenditures could, at that point be very useful to Roush, or to Miller Committee.

Has added virtue that keeps CV & Cordan but more off balance during interview & makes NAS more careful.

Jim showed me the first, revised drafts that went out for OVP to Udall & to Roush. No mention of UFO's. Jim feels Capt Van Ness does not wish to give any indication Navy recognizes UFO's exist. Jim doubts that the Admiral more than casually examines this correspondence.

Discussed with J.H. how write a document for Roush, laying a basis for hearings that met Miller's expressed wish that Roush not pre judge USAF. Jim felt that by merely stating bald facts (as in sequence in which USAF meets Congressman Ladd of Ohio, etc.,) with no editorial comment at all, the needed points could be made.

1/21/68 Phone O'Callaghan 0930. Roush letter to Sicuti went out last night. They willing to write back again to OVP, & were but annoyed at Van Ness' non-committal reply to Roush's first letter. Wanted to see me re new idea on hearings & relate.

Phone Hughes 0945. Had handwritten drafts ready for possible letter to OVP from Udall & Roush.

10:00 Phone Sabal. Ted concurs in idea of my doing a short Preface to NICAP edition of the old Dumbly/Blushko monthlies. Ted sends copy of Form to Hughes office & I get it en route to airport at noon.

10:30-11:40 at Roush's office

He thinks Roush can still get GAO to assemble fiscal-type data on the CV Project, listing on various expenditures & contract, etc. I met O'Callaghan has just been talking with Deming sub-officer GAO re some budgeted contract details. I p.o. no tampering with Academic freedom herein. I get Indiana does detailed checks at IAP. Shall discuss it with Roush Monday when he back from Andrews.

I gave her draft of letter to Van Ness & also Udall letter to be sent carrier to Dick Olson since I had no time to get them today.

They'd come up with idea of 1-day "seminar" where maybe 6-8

APPENDIX - ITEM A
CHAPTER 12

Oct 18, 1965
Santa Ana, Cal.

I was heading north on Myford Rd at 11:30 A.M. on Aug 3, 1965, and was attempting to make radio contact with the Orange County Road Maintenance Superintendent (Mr. Art Calkcraft) regarding two limbs growing as to obstruct the view of the crossing sign at the rail crossing nearby. About three words were received by our base station on East Fruit St. near Fruit and Coronado Avenue in Santa Ana, (as told to me later by the Traffic Engineer for Orange County - Mr. Kemmel). I proceeded to try contacting the superintendent of maintenance, however this attempt although unsuccessful. The radio went completely dead. The radio signal (158,000 Megacycles) or audio of my first could be heard. At this time I became aware of the UFO, however I thought it was a conventional aircraft.

The UFO moved from my left to in front of me and momentarily hovered there. At this time I grabbed the camera (semi-automatic - Model 101 polaroid), from the seat of the truck and took the first photograph through the windshield of the truck.

Fre E. Kephlin

Oct 18, 1965
Santa Ana, Cal.

I was heading north on Myford Rd at 11:30 A.M. on Aug 3, 1965, and was attempting to make radio contact with the Orange County Road Maintenance Superintendent (Mr. Art Ashcraft) regarding tree limbs growing as to obstruct the view of the crossing sign at the rail crossing nearby. About three miles were received by our base station on East Fruit St. near Fruit and Grand Avenue in Santa Ana, (as told to me later by the Traffic Engineer for Orange County - Mr. Kennel). I proceeded to try contacting the superintendent of maintenance, however this attempt although was unsuccessful. The radio went completely dead, no carrier signal (158,000 Megacycles) or audio of any kind could be heard. At this time I became aware of the UFO, however I thought it was a conventional aircraft.

The UFO moved from my left to in front of me and momentarily, hovered there. At this time I grabbed the camera (semi-automatic - Model 101 Polaroid), from the seat of the truck and took the first photograph through the windshield of the truck.

Phil E. Telford

Sept. 18, 1966
Santa Ana, Ca

The object then moved slowly off to the Northeast. I then snapped the second picture through the right door window (window closed). This is when I saw the rotating beam of light emitting from the center of the UFO on the bottom side. (Light characteristics explained in Figure 2). (24)

The UFO positioned itself ^{to another} angle of view and I snapped the third picture through the same side window as in picture two. (Angle of view means it travelled further Northeast and showed the upper portion of the craft.

As the UFO travelled, it maintained a relatively level altitude (150 Ft.) in relation to the flat terrain, however the UFO acted similar to a gyroscope when losing its stability. The UFO continued moving away slowly gaining altitude, tipped its top toward me slightly. It seemed to gain stability, then it increased its velocity (speed) and altitude more rapidly leaving a deposit of smoke like vapor.

Red E. Hepler

Page 3

Sept. 18, 1965
Santa Ana, Calif.

The smoke like vapor was blue black in color and circular in shape as though it had emitted from the outer ring of the UFO. This doughnut shaped vapor ring remained in the area in excess of thirty seconds. The UFO disappeared in a Northern direction toward Saddleback Mountain (this is known on the maps as Santiago Peak and Woodyska Peak).

At this time I contacted the Santa Ana Base Radio Station and asked them if they could now copy my transmission. They replied the copy was clear.

The preceding statement is true to the best of my knowledge and dictated to Edward J. Evers in my own words as it happened.

Ray E. Thayer

by its
L. E.



TER THAN AIR
U. S. M. C.

EL TOR
U.S.M.C.

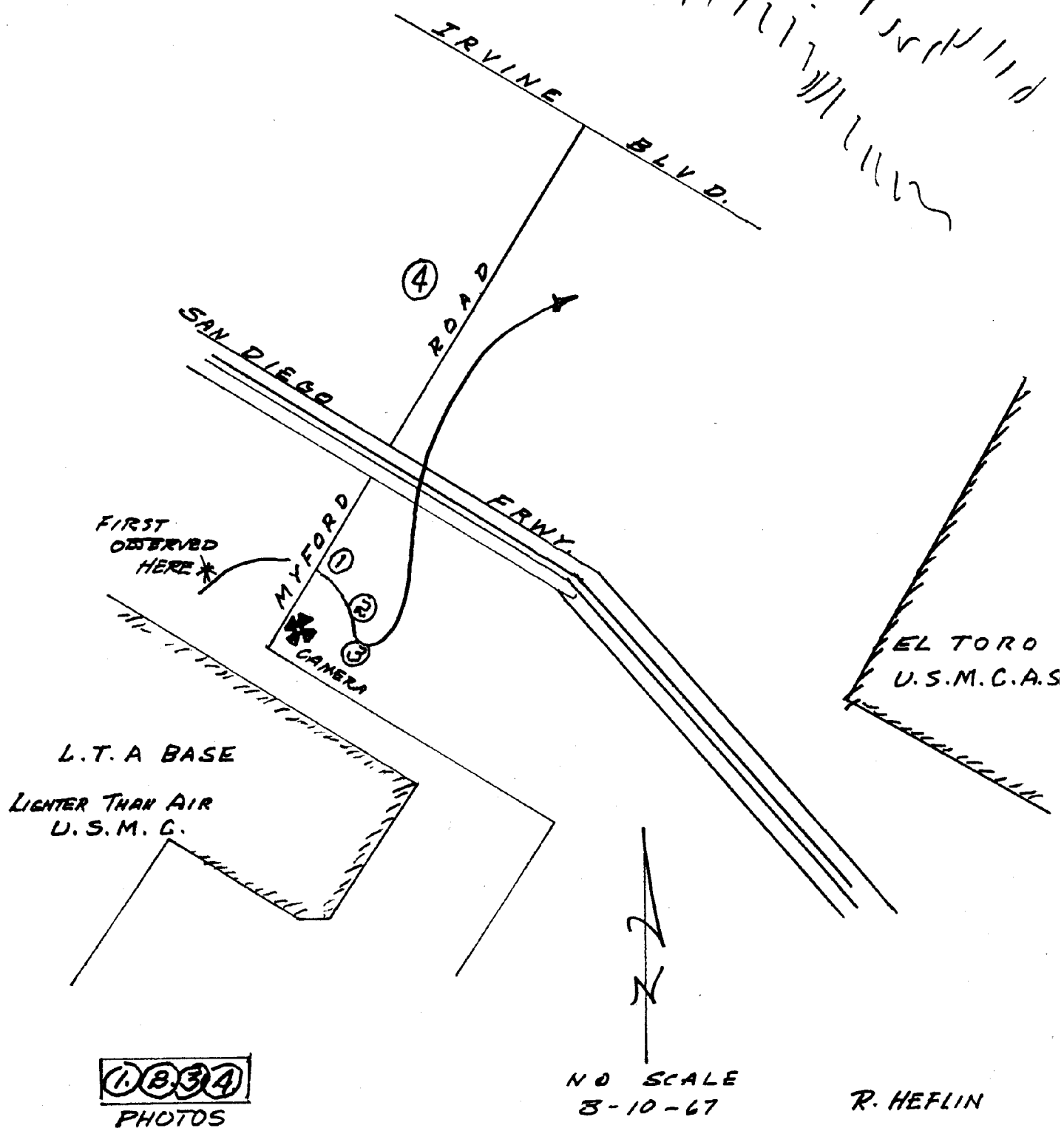
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NO SCALE
2-10-17

R. HEFLIN

① ② ③ ④

3/23/67



*Letter from LANS-NICAP investigator/engineer John Gray,
to McDonald in March 1968.*

Dear Dr. McDonald:

Idabel has been keeping me informed of your thoughts and activities pertaining to Rex's case through copies of your letters and her relating of your telephone conversations; and I confess that I've been a little confused as to just where you stand. Prior to your trip out here in January you expressed confidence in Rex's sincerity only to be followed by expressions of skepticism afterwards. Since then, I've detected some indications of vacillation. Admittedly, we have been at times distressed at the thought of losing your support for this case. That is, all of us except Rex; perhaps understandably, he became disenchanted (he stated he had hoped for some scientific solution for what he had photographed).

The apparent shifts in your appraisal of Rex's character can, I believe, be attributed to your misunderstanding of that character and the consequent misinterpretation of his comments. In short, you took him to be 100 percent serious 100 percent of the time. We who have known him the past 2½ years have learned to differentiate between his facetiousness and his seriousness. Like all humans, he is subject (and entitled) to changes of moods and the burden is upon the rest of us to choose whether or not to tolerate and/or appreciate them. Rex did not seek us; we sought him. It took LANS a full year following the publication of his sighting to obtain his acquiescence to ride to Los Angeles to meet the members (all were impressed with his sincerity). This reluctance does not reflect a person seeking recognition for a perpetration of a hoax, much less suggest any motivation for attempting such a scheme. His good nature has enabled him to tolerate all the probing and inquiring into his background from all quarters. In other words, it has helped him to retain his "cool."

In regards to your perpetual concern for Photo 4, two points lending credence to its authenticity should be emphasized:

1. The most logical theory pertaining to the origin of the black smoke (or dust?) ring is that it is the same as that enveloping the object in Photo 1 discovered by Dr. Nathan from an enlargement, more so than that of an atomic bomb simulator. Where, it could reasonably be asked, in Southern California does one find an atomic bomb simulator or to be permitted to approach so close (as Photo 4 seems to suggest) to take the picture? Scrutinizing Dr. Nathan's enlarged copy of Photo 1, one can perceive a semispherical outline of the upper section above and through the black composition surrounding it. If this half-spherical superstructure is an actuality, two questions immediately arise, specifically: how does one set about enveloping a "model", lens cap, pie pan, hub cap, or whatever within a dust ring? And how would he come to conceive the idea of attempting it? I say "dust ring" since I am disposed to believe it to be composed of a collection of polluted atmospheric particles prevalent to this area (So. Calif.) attracted through ionization to the object. On further examination of Photo 1, one will note the band of polluted particles to be thicker on the left and tapering to the right. I am convinced that this is the effect caused by the slipstream created by the flight of the craft to the right. The existence of this black composition is the one element that makes this sighting unique and is the most plausible result of the nature of our California atmosphere. For nearly two years we were not aware that the black area was not part of the craft. Now, we suspect that it was only incidental to it.

2. Rex demonstrated with his camera on January 16 to your apparent satisfaction that the possibility is very real of maximizing and minimizing the contrast of cloud formations in the same section of the atmosphere through two different photographic angles. An additional point to stress is that the cloud formations depicted in your enlarged copy of Photo 4 (displayed at the January 15 meeting) is considerably darker than that in the polaroid original thereby presenting an ominous or exaggerated appearance. This, of course, is achieved in the process of copying the original.

When you quizzed me at the meeting on details concerning Photo 4 and the exact tree involved, I should have added that we had no reason at the site to disbelieve Rex's identification of the spot. Certainly, the idea of counting the leaves on that section of the branch visible in the picture would have been the last thought to occur in the minds of those present. Had it occurred, the attempt would have been futile due to the difficulty incurred without binoculars and the impossibility of determining the exact part of the branch coinciding with the borderline of the photo. We were satisfied that the shape or outline of the branch matched that of the image in the picture taking into account the lapse of time since the sighting.

We have lived with this case since September of 1965 and were optimistic at the time that it would be solved within a matter of weeks or a few months at most. Such optimism has since been dashed by occasional discoveries of new clues as well as the appearance of new investigators. Despite the intense efforts by individuals of standing such as you and Dr. Nathan and perhaps the Condon Committee, the solution appears not in sight. The biggest stumbling block, I think, is that everyone is seeking complex answers whereas they may be so simple that they're overlooked. Accepting Rex's integrity to be indisputable (as we do out here), consider the following:

1. The scientific community has demanded photographic evidence of aerial phenomena to support the claims of their existence. It has been inevitable that somewhere sometime there would exist some person whose profession would involve considerable driving and require the use of a camera and who would just happen to be at the right spot at the right time to witness an aerial phenomenon. Why couldn't that person have been Rex?

2. The foremost material evidence is Photo 1 depicting the image of an aerial object the apparent configuration of which has not been seen before or since-- in short, the only one of its kind. The explanation is simple: the true shape is not that seen in a cursory glance but that of a conventional "flying saucer" configuration with its superstructure as well as its bottom rim partially concealed by a halo of atmospheric particles peculiar primarily to the greater Los Angeles area. What hoaxer would have dreamed of the idea much less achieve the effect? Such a thought is completely out of the realm of probability. (Perhaps not impossible, given time, effort, and money).

3. If the supposition of paragraph 2 can be considered valid, that is, if the black ring is indeed real, then it follows that it is the most plausible origin of that in Photo 4. That you told Rex of your seeming satisfaction of the results of his camera demonstration regarding the clouds would also tend to authenticate Photo 4.

If Photo 4 is not acceptable evidence to support the sighting, then, its value having not been disproved it should be set aside as questionable evidence considered not relevant to the case. The merits of the case then could be based primarily on the points raised in paragraphs 1 and 2, the latter being the strongest element to substantiate the sighting and possibly more important

Dr. McDonald

than the question of whether or not Rex did display Photo 4 to his colleagues on the day of the sighting.

That the desire for cold hard facts has always been the nature of the scientific community is understandable but it must also be acknowledged that such is not always practicable. A parallel is that of court trials. Many of the decisions reached by trial juries or judges are based not always on proof but rather on evidence and consequently can only be considered as expressions of opinions influenced by that evidence. That being the case, certainly, a jury decision in any court trial is not necessarily proof of the defendant's innocence or guilt; it may be right or it may be wrong but it remains an opinion. With the human element involved in an inexplicable event, science should not expect its explanation to be more than the expression of an opinion. This is the practice you have followed, and rightly so, in your public statements concerning the reality of UFOs. With a person's reputation at stake in a similar circumstance (the inexplicable event), the explanation issued by science must be based on certainty. If his sincerity cannot be disproved or his insincerity cannot be proved, then it behooves science to shelve his case until disclosure of further evidence (preferably proof) rather than run the risk of besmirching his character. This questionable practice should be left to Project Blue Book who seems to be rather adept at it! The members of LANS are in concurrence with Rex that the burden is heavier on the official investigator in attempting to prove him wrong than on us to prove him right.

Dr. McDonald, it was the intent of this letter to impart to you some impressions to which you may not have occasion to give much thought. I attempted to consciously avoid the belaboring of information that Idabel and Marilyn have so ably passed on to you for, after all, one can tire of redundancy. For whatever differences may arise among those involved in the research of this case, none can deny that it has provided much food for thought and many busy hours!

Sincerely yours,



CC: Mrs. Idabel Epperson

TOLEDO BLADE: THURSDAY, AUGUST 7, 1952

They're Homemade 'Flying Saucers'



WASHINGTON, Aug. 7.—Physicist Noel Scott stages a possible answer to widespread "flying saucers" reports in the laboratory at Fort Belvoir, Va. By introducing molecules of ionized air into the partial vacuum of a bell jar he has created miniature masses of illuminated air. The masses have sufficient body to be picked up by radar and could account for some of the mystery "blips" seen on radar screens. "Saucers" in the making were photographed at various stages of development, right.



FLATTOP

Orange-red in color



WHEAT SHEAF

The flattop grows up



MUSHROOM

Saucers made to order

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Expert Makes His 'Saucers' In Glass Jar

Army Says Tests May Explain Some Of Sky Mysteries

WASHINGTON, Aug. 7 (AP)—An army scientist experimenting with a glass jar has succeeded in producing fiery objects that look just like some of those seen shooting through the night skies in recent weeks.

A spokesman for the U.S. Army Corps of Engineers said yesterday these findings of Physicist Noel Scott are being made public because they explain at least some of the many flying-saucer reports the air force has been investigating lately.

By introducing molecules of ionized air into the partial vacuum of his bell jar, Mr. Scott reported, he has created the orange-red balls, discs, mushrooms and "ice cream cones" familiar to hundreds of excited skywatchers.

Could Affect Radar

Mr. Scott said these miniature masses of illuminated air have sufficient body or substance to be picked up by radar.

Thus they may account for the shower of mysterious "blips" seen on radar screens around Washington during a thunderstorm last night. Jet fighters

based at Newcastle, Del., were sent up to investigate. They climbed to 15,000 feet, but reported they could find nothing.

The army engineers' spokesman said the corps did not consider that Scott's findings represented a solution of all flying-saucer reports. But they explain some of them, he said, and may shed light on the mystery generally.

Scott used a jar 3 feet high and 1½ feet in diameter to produce his effects. He pumped air from the jar to create a partial vacuum and simulate conditions in the upper atmosphere. Then he injected several molecules of ionized air into the jar to get his orange-red fireballs. An ionized gas is a conductor of electricity. The use of various gases would produce other colors, Mr. Scott said.

Magnetic Fields Vary

The physicist explained that magnetic fields in the upper atmosphere vary greatly, probably chiefly in the temperate zones. He said it is known that the earth has a highly negative charge compared with the upper atmosphere, and that at times this produces weird electrical effects.

When a magnet, and sometimes even a human hand, is moved outside the jar, Mr. Scott said, the strange lights inside will dart about with fantastic speed, turning erratically, stopping suddenly, hovering or reversing direction instantly.

He said the magnet or a hand containing static electricity breaks up the magnetic fields

to make the objects move at extreme speeds.

That is probably why no airplane has been able to catch up with the lights seen from the ground, Mr. Scott said. An airplane would disturb the magnetic field, so that the objects would always be to the rear or in front of it.

15 N. Butler
Madison, Wis.
Oct. 23, 1967

Dear Mr. Rankow,

I was a little surprised and highly gratified to see the series of pictures of the Belvoir object in your article "The Ring Shaped UFO" (Flying Saucers #4). I was also stationed at Ft. Belvoir at that time and had the good fortune to see the object from the time of its origin and to be able to offer an explanation for it.

While on detail that morning I happened to be in the vicinity of a training area where a device which I believe was called an Atomic Bomb Simulator was being used. This device consists of a small charge of high explosive so contrived that it produces a small black mushroom cloud, similar in shape to the Atomic cloud. This particular morning was dead calm, and the air was quite cold and moist. When the explosive charge was detonated I looked in that direction, watching the smoke cloud rise. At a height of perhaps 40 feet the "can" of the mushroom developed into a perfect smoke ring vortex and detached itself from the main column of smoke. The column, being unstable, stopped rising and slowly dissipated while the vortex continued to rise and grow. At first it had a diameter of perhaps 20 to 30 feet and the ring was fairly thick. As it rose the ring diameter expanded and its thickness was reduced in proportion. I think Mr. "Stone's" estimate of sixty feet may be fairly accurate for its later stages.

At first it was just a giant smoke ring (unusual and interesting enough in itself) but when it had reached an altitude of perhaps 150 ft. it started to gather a cloud about itself. It appeared to me as if, as it rose into the cold, saturated air, the vortex current "swept" the moisture out of the air through which it passed and the smoke particles on the periphery of the vortex provided condensation nuclei for the formation of the visible cloud. At first the cloud was only a faint shell around the vortex itself. The center rapidly filled in, forming the lens-shaped body with the vortex still visible within it. As it continued to rise the cloud increased in density until the smoke vortex could no longer be seen. The ribbing effect you mentioned may well have been due to slight variations in velocity at different points around the periphery of the vortex. At about that point I had to stop watching the cloud, since I was on detail and had other things to do.

I don't know enough about atmospheric physics and the behavior of vortices to advance an explanation of why the center clouded in so rapidly, but I imagine that an explanation may be easily derived, given the conditions. The phenomenon has always been very clear in my memory because it was so striking and unexpected, and I am very happy at last to have a series of pictures of it. I believe the combination of atmospheric conditions which produced it may not be too uncommon, but the presence of a stable ascending vortex containing particles suitable for condensation nuclei must, in connection with such conditions, be very rare.

15 N. Butler
Madison, Wis.
Oct. 23, 1967

Dear Mr. Rankow,

I Was a little surprised and highly gratified to see the series of pictures of the Belvoir object in your article "The Ring Shaped UFO" (Flying Saucers #4). I was also stationed at Ft. Belvoir at that time and had the good fortune to see the object from the time of its origin and to be able to offer an explanation for it.

While on detail that morning I happened to be in the vicinity of a training area where a device which I believe was called an Atomic Bomb Simulator was being used. This device consists of a small charge of high explosive so contrived that it produces a small black mushroom cloud, similar in shape to the Atomic cloud. This particular morning was dead calm, and the air was quite cold and moist. When the explosive charge was detonated I looked in that direction, watching the smoke cloud rise. At a height of perhaps 40 feet the "cap" of the mushroom developed into a perfect smoke ring vortex and detached itself from the main column of smoke. The column, being unstable, stopped rising and slowly dissipated while the vortex continued to rise and grow. At first it had a diameter of perhaps 20 to 30 feet and the ring was fairly thick. As it rose the ring diameter expanded and its thickness was reduced in proportion. I think Mr. "Stone's" estimate of sixty feet may be fairly accurate for its later stages.

At first it was just a giant smoke ring (unusual and interesting enough in itself) but when it had reached an altitude of perhaps 150 ft. it started to gather a cloud about itself. It appeared to me as if, as it rose into the cold, saturated air, the vortex current "swept" the moisture out of the air through which it passed and the smoke particles on the periphery of the vortex provided condensation nuclei for the formation of the visible cloud. At first the cloud was only a faint shell around the vortex itself. The center rapidly filled in, forming the lens-shaped body with the vortex still visible within it. As it continued to rise the cloud increased in density until the smoke vortex could no longer be seen. The ribbing effect you mentioned may well have been due to slight variations in velocity at different points around the periphery of the vortex. At about that point I had to stop watching the cloud, since I was on detail and had other things to do.

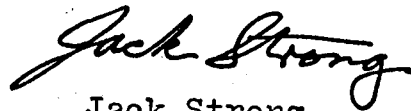
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I'm not surprised that it has caused some degree of puzzlement among experts who have seen the pictures. Without knowing the origin and nature of the smoke vortex and the meteorological conditions pertaining at the time it would be very difficult to arrive at a plausible explanation. (I must confess that I don't see how this explanation could be extended to cover the instances of double rings described in your article. That two vortices should maintain their relative position while undergoing rapid lateral displacement would seem to indicate forces of a kind and magnitude quite different from those in the situation I just described. Perhaps someone well versed in the theory and behavior of vortices may be able to shed some light on these phenomena.)

I have written in the hope that this may clarify the origin of the Belvoir sighting and possibly shed some light on possible explanations for similar sightings. When such sightings can be explained in familiar physical terms it will free the investigator's attention for a more detailed appraisal of the numerous sightings which still defy explanation. Publications such as "Flying Saucers" perform a real service in presenting details of such sightings to a large audience and providing the opportunity for readers to offer corroborative evidence or information which may lead to their clarification or explanation.

I would appreciate it if you would forward copies of this letter to Mr. "Stone", to the editor of "Flying Saucers" and to any other persons or agencies who you feel may be interested in the material I've presented here. I have given substantially all that I know about the Belvoir phenomenon but will be happy to try to answer any questions which you or other interested parties may wish to ask.

Sincerely,

A handwritten signature in cursive script that reads "Jack Strong". The signature is written in dark ink and is positioned above the typed name and address.

Jack Strong
15 N. Butler
Madison, Wis.

Dr. William K. Hartmann

Ft. Belvoir Photos

Following our phone discussion of January 12 concerning your recent findings at Ft. Belvoir, I continued to think about some of these points that we considered.

On thinking over the whole picture that emerged from your discussions at Belvoir, I continue to feel uncomfortable about that explanation. I think you ought to secure some further details from the Army people to back up the explanation towards which your analysis is now pointing. When a UFO is being "shot down", I like to see it shot down rather more thoroughly than seems yet to be the case with the Belvoir photos.

I'd like to urge that you write to the officer with whom you spoke and request that he put down in writing answers to a number of specific questions. I suggest certain questions, and, doubtless, as you think it over, you might have still others to add. One advantage of getting it in writing is that it can be either included in your report or at least referred to as somewhat more documentary evidence than the verbal discussions on which you would have to rest the matter now.

Here are some of the points that I would like to see the Army make some very definite written statements upon:

1. Whereas Jack Strong in his letter to Rankow described this as a "training device", you were told that it was a "demonstration device" for visiting firemen, if I understood you correctly. I must say that I do not find either of those very convincing. Certainly one would not simulate any battlefield situation at all realistically by exploding charges (as Strong described it) to make vortex rings ascend over the heads of troops engaged in battlefield maneuvers. Explosions, yes; but not vortex rings, in my opinion.

And, on the other hand, I really wonder if Congressmen and visiting generals wouldn't regard it as child's play to come to Ft. Belvoir, in this age of multi-megaton H-bombs and be shown a demonstration of an "atomic bomb", the most

Dr. William K. Hartmann
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striking feature of which was not a fireball but a residual black vortex ring, the like of which has never been seen in any real atomic detonation. After years of public discussion, on an international scale, of the horrors of atomic weaponry, an important visitor who arrived at Belvoir and found the Army playing around with such a device should, as I see it, ask some rather biting questions. Even if some clever chemical warfare people had succeeded in developing a device or system that gave an explosion of conventional type which had a mushroom cloud strongly resembling an H-bomb, I cannot see anything but criticism and ridicule emerging from the Army's use of it as a demonstration for "visiting firemen." In fact, what you seem to have been told by the Belvoir people to whom you spoke is that they developed a device that doesn't even do that but rather blows smoke rings.

On reflection, don't you think there is a rather serious question here of whether the two hypotheses that we have now heard of ("training device" and "demonstration device") make sense? I think that, before you accept the Belvoir "explanation", you ought to get a very definite statement in writing about this and ask some other questions relating to it.

2. If, in fact, the Army has used such a device (perhaps its real nature was not very accurately described to you or perhaps its function was somewhat different from the impression I gleaned from our telephone discussion), then somewhere in the files at Ft. Belvoir there must be one or more written reports describing the history of the device and its real nature and function. If it had only been tried one time and discarded, that statement wouldn't apply. But you were evidently told that it was used over a period of many years (used in 1957, allegedly, and I think you said discontinued some four or five years ago, if I heard you right). Any demonstration or training device used that long surely was made the subject of some kind of an official report, even if only an internal report. I strongly urge that you secure a copy of that report for your own inspection, before you accept the account that was given you. It seems to me entirely reasonable for you to write to the office in which you obtained that information and make a request for one or more past reports on it.

3. A corollary objective of getting such a report would be to pin down much more precisely than has yet been done the physics and hydrodynamics of the way in which a half a dozen 55-gallon drums of Diesel fuel were incorporated into some device that could generate, even under the most favorable conceivable conditions, a vortex ring resembling the Stoffko ring. Strong's letter

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spoke of explosives, and you spoke of detonations as the means of triggering the device. It is true that either an ordinary fire or an ordinary detonation tends to develop vortex-ring type of circulations around the ascending column of hot gases. But we have much more than that in the Stoffko ring. We have an extremely orderly, evidently high-vorticity ring that seems to have survived for more than hundreds of feet, evidently thousands of feet. To simply say in your report that a detonation generated it would not be convincing to many readers. There had to be some kind of a shaped orifice on the ground above the detonation and fuel source to yield so well-organized a vortex circulation as one would infer from the Stoffko photos. And if there is such an orifice, then there was much more to that device than the sergeant seems to have elucidated.

The factor setting an upper limit on the distance and time of survival of a vortex ring is turbulence. An explosion in open air not only generates a somewhat organized jet that leads to a tendency to vortex-ring formation, but also generates a large amount of turbulence, both thermally and mechanically generated. How this device could have overcome the innate disadvantages of explosively generated turbulence is something that I think needs to be established. It would have taken more than some casual trial-and-error work to develop a device, and, if they really did achieve this, there must surely be some reports on it. Even after forming a vortex ring and supposing, for the moment, that by careful design of the device they overcame the explosion-turbulence problem, there still remains the difficulty of making the ring propagate upward through an atmosphere with normal amounts of turbulence and vertical wind shear. If you ever saw the Times Square cigarette ad's smoke-ring-blowing device, you will recall that those famous smoke rings seldom made it across the street before ambient turbulence had disrupted their circulations. In the alleged Belvoir device, it appears that we have to think of a system that was able to waft vortex rings to a few thousand feet. And, viewing the Stoffko ring as one of them, even by the time the ring gets to a couple of thousand feet or so, it is not in the dying stages but is still a tightly concentrated vortex ring with remarkable stability. Unlike the Heflin vortex ring, which, within minutes, was being turbulently dissipated, the Belvoir-Stoffko ring is perfectly circular, very tight, and shows no marked evidence of turbulent dissipation. As I did on the phone, I want to emphasize here, that that is very difficult to understand.

To be sure, the Army people with whom you spoke indicated to you that there were some days when it didn't work at all (understandable), but the interesting question from the

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point of view of the physics of the thing is how it ever worked. To develop some empirical know-how, they must have done a lot of experimentation to decide what days they could use this demonstration device for visiting firemen. Again, this must have led to some kind of reports. They must have somewhere summarized the upper limit on horizontal wind speeds and perhaps vertical sheer of the horizontal wind speed. They must have made some study of how variations in atmospheric stability influenced the operation of the demonstration device. Because atmospheric stability varies diurnally in exactly the layer of the atmosphere where this device was supposedly emitting rings (lowest couple of thousand feet), I would visualize quite a difference in the higher-altitude behavior of it, i.e., above four or five hundred feet, say, in early morning vs. late afternoon. And, to say it once again, if they used this thing as a demonstration device for quite a number of years, as they claim, then they must have studied this thing and must have reported on it. I think you ought to have that sort of information at your disposal to back up their claim.

Then there is the matter of the cloud. I think you ought to go back to them with a strong question about the one piece of information they gave you on this, namely, that white phosphorus was used to form the cloud. I think that one point alone shows that you were not getting information from a really knowledgeable person. I think you should query them pointedly on it. I would suggest that you not feed them the alternative answer of condensation of moisture but see how they handle the question. If the cloud-formation was not an exceedingly rare phenomenon, then somebody there ought to be able to give a half-way reasonable accounting of the process. It's a great shame that we don't have the dates, so that we can get radiosonde data to make more specific analysis of that point. However, now that you have the exact orientation of the building which shows in photos nos. 1 and 2, you can at least use the shadow angles to deduce the approximate time of day. From what you told me, I infer that it may be before noon. (My recollection is that you said no. 1 is shot towards the northeast.) The shadow on the left side of that peculiar protrusion on the front of the building seems to rule out a late afternoon time. The fact that it was supposed to be a coffee-break might suggest the middle of the morning. Hence it doesn't seem completely unreasonable to suggest that, if there had been enough moisture in the surface layers of the air to produce condensation of the vortex ring, there ought to be clouds at roughly the same altitude as the vortex ring itself. Instead, one gets the impression that the ring-cloud is distinctly lower than the background deck of clouds. None of this can be pushed very far, of course. Some

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of the moisture condensing in the vortex ring would have been moisture of combustion. However, my guess would be that this would be only a small fraction of the total moisture because entrainment of ambient air on the way up would have diluted out the original charge of moisture. I might add that that process automatically tends to inhibit condensation, so there is a little bit of an additional difficulty implicit in that point.

The last point that I'd raise is perhaps not so easily checked by a single letter to some Belvoir office. The point is this: If they detonated charges that ignited Diesel fuel and made vortex rings, as demonstration devices, over a period of years, there must be many people who have seen that demonstration on the base. A big base like that would have a lot of civilian personnel that has not turned over as rapidly as some of the military personnel. I think it is very desirable to get some backup information from such people to confirm the frequent use of the alleged device. Evidently all one has, at the moment, in this direction, is your report that Klass asked some workmen about it. Their answer (mosquito-spraying) suggests that they weren't aware of frequent use of this intriguing device. I'd be worried about that. I think more checking along those lines is needed before one accepts the word of three military personnel who have described an almost remarkably improbable device.

I hope that I am not being unreasonably suspicious of what you seem to have regarded as a rather sensible clarification of the Stoffko photos. Despite all the questions that I now have, I'd be quite convinced by some real documentation of the existence of the device that was described to you. What I am saying is that, at the moment, the whole story just does not ring true to me. Can't you imagine a *Life* or *Look* photographer hearing of this fascinating device, whipping down there, and getting a series of these beautiful smoke rings? But who has ever heard of such a device before? If they had said they tried it once and gave up the whole thing, that would be different. But you have their word that it was employed for a long time until expense and heavy drain on personnel dictated abandonment. (How, by the way, did they possibly involve 40 men in the operation of such a device?) I do think this needs more checking.

Regards,

James E. McDonald

JEM/msr

January 10, 1968

Mr. Clayton H. Reitan
Department of Meteorology
University of Wisconsin
Madison, Wisconsin, 53700

Dear Clay:

I am still pursuing the UFO problem as energetically as I can, and a problem has arisen in which I wonder if I might ask a bit of assistance from you? Briefly, it involves trying to locate a person in Madison whom I have not been able to run down by telephone.

The person in question is Jack Strong, 15 North Butler, Madison, Wisconsin.

Let me give you a little background of the problem and then point out what information I would like very much to get, if you could possibly stop by Strong's place and talk to him briefly.

About a year ago, a set of very odd photographs was brought to my attention through NICAP channels. I think it is likely that you have seen the photos, which were reportedly made at Ft. Belvoir in about September, 1957. I enclose, from a recent UFO magazine, some poor reproductions of the six photos, along with the accompanying text which will give you more background than I can put down in this letter anyway. The author of that article is Ralph Rankow, a professional photographer in New York City and former NICAP photographic consultant. As a result of his article, he received a letter from Jack Strong, a copy of which I enclose for your information, indicating that Strong was fairly certain what had led to this peculiar condensation phenomenon and vortex ring.

As you will see from Strong's letter of October 23, he describes it as a result of "an atomic bomb simulator" which involved detonation of a charge, formation of a vortex ring, and ultimate condensation of atmospheric moisture. Because there seemed to me to be some difficulties with that explanation, I attempted to contact Strong earlier this month, but no telephone is listed at the address that he gives. I have written to him, hoping that he may contact me; but because

2/1/68 by Rankin



DEPARTMENT OF THE ARMY
HEADQUARTERS

U. S. ARMY ENGINEER CENTER AND FORT BELVOIR
FORT BELVOIR, VIRGINIA 22060

Office of the Deputy Chief of Staff, Operations

13 February 1968

Mr. Ralph Rankow
1145 Broadway
New York, New York 10001

Dear Mr. Rankow:

In response to your letter of February 4, I shall endeavor to answer the questions you have posed.

An atomic bomb simulator device has been used many times at Fort Belvoir and, at the time of this incident, it was being used in field training exercises. Actually, it was used as a miniature simulator for the real bomb. The training device employed looked like an oil drum; however, it was really a large cardboard container, something like a giant firecracker. Sometimes these were immersed in an oil drum, oil placed in the container, and when the device blew upward to give the mushroom-cloud effect, the excess oil gave a burning effect on the ground. There was no hazard to personnel in the area, since the drums were already open on one end; and there was no rupture. In most cases, these charges were set off by an electric cap. I have often seen the ring effect from these simulators. I do not have any pictures of the device.

It might interest you to know that Dr. Hartman, working for the Department of the Air Force, under Air Force Contract Rug. AF 80-17A for the University of Arizona and the University of Colorado, had already been apprised of this incident.

Sincerely,

J. H. JACKSON
Colonel, GS
DCSOPS



Approval, recommendations for new concepts of operation to improve the collection of air intelligence.

Deleted per 5 U.S.C. 552(b)(1)

e. Under policies established by AFCIN-1, coordinates and assists in the operational support of overseas AISO collection activities.

* f. Participates in Project Unidentified Flying Objects (UFO) in accordance with paragraph 6c of AFR 200-2, dated 14 September 1959 and AFCIN-PI Policy Letter 205-10, dated 19 January 1960.

Deleted per 5 U.S.C. 552(b)(1)

h. Performs such other tasks as are directed from time to time by the Director of Collection.

i. The Commander, ATIC (through the 1125th FAG), administers the collection operations of the ATILO system and is responsible for aerospace technical intelligence collection operations in accordance with collection guidance, priorities and requirements as established by the Director of Collection, AFCIN. Specifically, as it relates to the collection of intelligence, the Commander, ATIC:

a. Administers, supports, and directs the activities of the Aerospace Technical Intelligence Center and the ATILO system in accordance with AFR 23-29.

b. Plans and conducts technical intelligence collection operations to satisfy priority technical intelligence requirements of USAF interest in accordance with policy established by the Director of Collection for AFCIN.

c. Prepares and submits to the Director of Collection, AFCIN, for approval, recommendations for new concepts of operation to improve the collection of air intelligence.

Deleted per 5 U.S.C. 552(b)(1)

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NORAD SUPPORT: The 1127th continued its support of NORAD wartime collection requirements. Ten three-man teams (five airborne and five ground) are maintained on an alert roster for the above purpose and for support of ATIC in project "Moon Dust" (recovery of space vehicles).

* CONTINUITY OF OPERATIONS PLAN: The 1127th USAF Fld Actys Gp's Continuity of Operations Plan 1-60 was prepared during the reporting period. The plan describes in detail how the unit's responsibilities will be discharged in time of war. These responsibilities include the rapid deployment of alert teams to various Air Defense Command locations, the recall to active duty of M-Day reservists to man ASPIC and ASDIC, and the manning of 45 spaces at AFCIN, Rear, Maxwell AFB, Alabama. Since conversion to the AFCIN-1E office designation, the COP will be rewritten and issued as an HOI by this unit and will be incorporated in the AFCIN COP.

McDonald's list of Condon's "code numbers", which McDonald identified with specifics such as date, location, type of sighting, and Condon Report "explanation."

CONDON REPORT CASE MATERIAL REFERENCES

Section IV, Chapter 1 - Case Studies Predating Term of Project

Case	Code	Date	Place	Name, etc.	CU Explanation	
* 1	42-B	5/20/50	Flagstaff, Ariz	Hess	Poss airborne debris	
2		8/13/56	Lakenheath, Eng	Radar-vis	Unidentified	
3	4-C	2/5/57	Manhattan Beach, Cal		Radar chaff	
* 4		9/1/57	Ubacuba, Brazil	fragments	Inconclusive	
5	49-C	9/19/57	Ft Worth, Texas area	Chase radar	Unidentified	
* 6	345-B	265	4/22/66	Beverly, Mass	Modugno	Part unid/part ast
7	50-C	273	Summer 65	Provo, Utah - Idaho	photos	Probable hoax
* 8	1-CA	1/3	8/19/66	Donnybrook, ND	Flickinger	Unidentified
* 9	1-CB	1/3	8/24/66	Minot AFB, ND	Nike radar	Poss astro/inconcl
10	8-C	250	12/30/66	Waynesville, La		Unidentified
*11	217-B	280	12/30/66	W of Guayaquil, Peru	Millbank	Poss re-entry
12	9-C	282	1/1/67	New Richmond, Mich	E-M	Unidentified
*13	27-W	285	1/15/67	Grenville, Mass	Godard	Unidentified
*14a	3-CA	287	1/13/67	Joplin, Mo	Hickman	Unidentified
*14b	3-CB	288	1/14/67	Pittsburg, Kans	Finley	Poss astro/inconcl
14c	3-U	288	1/16/67	Coffeyville, Kans		Barium vapor launc
14d	272-P	288	1/17/67	Joplin, Mo		Unidentified
14e		289	1/1/67		E-M	Astronomical
14f		289	1/1/67			Astronomical
15	5-C	290	2/24/67	Bellevue, Colo		Astronomical
*16	7-C	300	3/2/67	Alamogordo, NM	radar-vis	Radar AP/poss seed
17	14-C	300	3/1/67	Dry Creek Basin, Colo	E-M	Inconclusive
*18	12-C	300	4/1/67	Boulder, Colo		Hoax balloons
19	13-C	303	4/15/67	Bonneville Flats, Utah		Non-event
*20	15-C	306	5/2/67	Seattle, Wash area	beep series	Saw what owl
21	21-C	305	5/13/67	Colorado Spgs, Colo	radar	Unidentified
*22	22-C	305	5/20/67	Falcon Lake, Manitoba	Michelak	Inconclusive
*23	23-C	305	5/27/67	Scenic, SD	Driscoll	Aircraft (prank)
*24	26-C	305	6/28/67	New Castle, Pa	photos	Hoax
*25	27-C	305	7/5/67	Coventry, Conn	outage	Arc flashes
*26	31-C	305	7/18/67	Wilmington, Calif	Hill	Hoax
*27	28-C	305	7/10/67	Harrisburg, Pa area	series	Inconclusive
*28a	35-CA	305	7/28/67	Pacheco Pass, Calif	Higgins	Ignored in report
*28b	35-CB	305	8/15/67	Coarsegold, Calif etc	series	Aircraft refueling
*29	34-C	305	8/2/67	Cape Ann, Mass		Aircraft flares
30	41-C	341	9/1/67	Edwards AFB, Calif	X-15 pace	Rumor
*31		342	9/9/67	Winchester, Conn	Ritchie	Unidentified
*32a		344	9/7/67	Alamosa, Colo	Snippy	Inconclusive
32b		345	9/7/67	Alamosa, Colo		No investigation
32c		345	9/7/67	Alamosa, Colo		No investigation
32d		346	Summer 66	Alamosa, Colo		No investigation
32e		346	Fall 1967	Alamosa, Colo	Lewis	No investigation
32f		347	Fall 1967	Alamosa, Colo		No investigation
32g		347	Fall 1967	Alamosa, Colo	cloud cigar	No investigation
*33	42-C	347	9/15/67	Winsted, Conn	Luke	Unreliable

CONDON REPORT CASE MATERIAL REFERENCES

Section IV, Chapter 1 - Case Studies Predating Term of Project

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		248	8/13/56	Lakenheath, Eng	Radar-vis	Unidentified
	4-C	256	2/5/57	Manhattan Beach, Cal		Radar chaff
		257	9/ /57	Ubatuba, Brazil	fragments	Inconclusive
	49-C	260	9/19/57	Ft Worth, Texas area	Chase radar	Unidentified
	346-B	266	4/22/66	Beverly, Mass	Modugno	Part unid/part
	58-C	270	Summer 66	Provo, Utah - Idaho	photos	Probable hoax
	1-CA	273	8/19/66	Donnybrook, ND	Flickinger	Unidentified
	1-CB	274	8/24/66	Minot AFB, ND	Nike radar	Poss astro/inc
	8-C	277	12/30/66	Haynesville, La		Unidentified
	217-B	280	12/30/66	W of Guayaquil, Peru	Millbank	Poss re-entry
	9-C	282	1/ /67	New Richmond, Mich	E-M	Unidentified
	27-W	285	1/15/67	Granville, Mass	Godard	Unidentified
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	3-CB	288	1/14?/67	Pittsburg, Kans	Finley	Poss astro/inc
	1007-U	288	1/16/67	Coffeyville, Kans		Barium vapor 1st
	1272-P?	288	1/17/67?	Joplin, Mo ?		Unidentified
		289	1/ /67		E-M	Astronomical
		289	1/ /67			Astronomical
	5-C	290	2/24/67	Bellevue, Colo		Astronomical
	7-C	291	3/2/67	Alamogordo, NM	radar-vis	Radar AP/poss s
	14-C	295	3/ /67	Dry Creek Basin, Colo	E-M	Inconclusive
	12-C	300	4/1/67	Boulder, Colo		Hoax balloons
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	31-C	331	7/18/67	Wilmington, Calif	Hill	Hoax
	28-C	332	7/10/67&c	Harrisburg, Pa area	series	Inconclusive
	35-Ca	334	7/28/67	Pacheco Pass, Calif	Higgins	Ignored in repo
	35-Cb	334	8/15/67	Coarsegold, Calif etc	series	Aircraft refuel
	34-C	339	8/2/67	Cape Ann, Mass		Aircraft flares
	41-C	341	9/1/67	Edwards AFB, Calif	X-15 pace	Rumor
		342	9/9/67	Winchester, Conn	Ritchie	Unidentified
		344	9/7/67	Alamosa, Colo	Snippy	Inconclusive
		345	Spring 67	Colo		No investigation
		346	9/ /67	Colo		No investigation
		346	Summer 66	Colo		No investigation
		346	Fall 1967	Colo	Lewis	No investigation
		346	Fall 1967	Colo		No investigation
		347	Fall 1967	Colo	cloud cigar	No investigation
	42-C	347	9/15/67	Winsted, Conn	Luke	Unreliable

CASE MATERIAL REFS. (Con't.)

Case	Code	Page	Date	Place	Name, etc.	CU Explanation
*34		351	10/4/67	Shag Harbor, NS		Unidentified
*35		353	10/6/67	Vandenberg AFB, Cal	radar-vis	Inversion/birds/etc
36		365	10/ /67			Meteor
*37a		370	10/20/67	Milledgeville, Ga	Neblett etc	Astronomical
37b		371	10/21/67			Astronomical
*37c		371	10/22/67	Newnan, Ga etc		Astronomical
37d		372	10/23/67	Milledgeville, Ga ?	pilot case	Astronomical
37e		374	10/ /67		photo case	Inconclusive
*38		375	10/24/67	Newfields, NY	series	Planes, stars, etc
*39		380	11/8/67	Elsinore, Calif	E-M	Inconclusive
40		385	11/ /67	Alamosa, Colo	photo	Headlights
41		388	11/2 /67	Charleston, W Va		Burst balloon
*42		389	12/3/67	Ashland, Neb	Schirmer	Psychological
43	55-C	391	12/5/67	Concordia, Kans		Unidentified
*44		394	12/25/67	Nr Ashland, Neb	Lambert	Psychological
*45		395	1/2/68	Castle Rock, Colo	Dietrich	Hoax balloons

Section IV, Chapter 3 - Photographic Case Studies by W K Hartmann

*46	20-C	396	5/11/50	McMinnville, Oreg	Trent	Unidentified
*47	30-C	407	8/15/50	Great Falls, Mont	Mariana	Poss aircraft
*48	16-C	415	5/7/52	Barra da Tijuca, Braz	Martins	Internal inconsist
*49	152-B	418	7/2/52	Tremonton, Utah	Newhouse	Probable birds
*50	19-C	427	9/ /57	Ft Belvoir, Va	Stofko	A-bomb simulation
51	43-C	434	12/5/63	Vandenberg AFB, Cal		Prob Venus
*52	6-C	437	8/3/65	Santa Ana, Calif	Heflin	Inconclusive
*53	18-C	435	8/8/65	Beaver, Pa	Lucci	Prob hoax
*54	24-C	457	3/11/66	Mississippi Valley	Wells	Prob sub-sun
55	36-C	463	4/22/66	Farmington, NM	AAL case	Poss flare test
*56	10-C	467	3/16/67	Salem, Oreg	Baker	Internal inconsist
*57		469	7/3/67	Nr Naton, Alberta	Smith	Inconclusive
*58a		475	11/1/67	Sonora, Calif	Universal	Poss airborne debris
*58b		476	12/27/67	Camarillo, Calif	studios	Poss airborne debris
59	1012-U	478	1/23/67	Lakeville, Conn	Gipstein	Doubtful

* Material in NICAP files

Note: the CU Code numbers were not available for many cases; in several cases, where the C code was not available, the B code number (for Blue Book sources/requests) is given. P codes refer to Personal reports and U codes to UFO Newsletters.

McDonald's alphabetized outline of numerous UFO aspects of the UFO problem, which he planned to address in a comprehensive book he intended to write.

File Index

AMS Notes
 Accidents - Cars and Aircraft
 Airships
 Angel Hair and Gossamer
 Animal Reactions
 Arizona Cases
 Assurances (USAF, etc.)
 Astronomical Sky Surveys
 Astronomer Reports
 Ball Lightning
 Beehive Effect
 Breakup and Merging
 Burns, Irradiation, and Heat Cases
 Cemetery Observations
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 Cloud-Related UFOs
 Coverup vs. Foulup
 Cross-Cultural Evidence
 Depressions, Craters, Rings
 Disappearances - Aircraft
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 Dogfights (A/C vs. UFO)
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 Flying Magazine Notes
 Foo Fighters
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 Ghost Rockets
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 Inexplicability
 "Ionized Layers"

Human Performance

File Index

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Inexplicability *Human Performance*
"Ionized Layers"

Multiple-Witness Cases
 Navy Cases (and USN Relata)
 Ocean and Lake Transits
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White Sands and Holloman
Windage Effects
Windshield Pitting
Zero Defects

UFOs AND THE CONDON REPORT:
A DISSENTING VIEW

James E. McDonald
Institute of Atmospheric Physics
The University of Arizona

(Presented to the Pacific Missile Range Section, American Institute of Aeronautics and Astronautics, Pt. Mugu, Cal., Feb. 18, 1969)

* * *

"Further extensive study of UFOs probably cannot be justified in the expectation that science will be advanced." -- Dr. E. U. Condon, in Scientific Study of Unidentified Flying Objects, Bantam Books, 1965.

* * *

RÉSUMÉ

As a result of more than two years of rather intensive study of the UFO problem, interviewing about five hundred witnesses in selected cases here and abroad, talking to most of the persons who have been concerned with recent aspects of Air Force handling of the UFO problem, exchanges with many of the major independent UFO investigating groups, and repeated discussions of the UFO question with scientific colleagues, including members of the Condon Project, I might summarize my main findings and conclusions as follows:

- 1) The number of substantial reports of entirely unconventional, structured objects exhibiting performance characteristics far beyond the state of any known terrestrial technology seems too great by one or two orders of magnitude to justify further scientific neglect of this body of evidence.
- 2) All evidence points to the global scale of the phenomena; reports from essentially all parts of the world exhibit a sufficient degree of similarity to rule out hypotheses that these are secret test vehicles of any nation. Many other considerations support that conclusion so strongly that it may safely be rejected.
- 3) Despite many superficial efforts to explain away this body of reports on meteorological, astronomical, optical, or psychological grounds, and despite obvious operation of such factors in many reports of low evidential quality, these factors seem quite incapable of resolving the puzzling nature of hundreds to thousands of reports from reliable observers made during the 1947-69 period.
- 4) There is certainly no evidence that any nation has mounted any major scientific program to explore the UFO problem in depth. Nor is there evidence indicating clandestine investigations anywhere in the world.
- 5) With the exception of persons affiliated with the several independent UFO investigatory groups such as NICAP, APRO, etc., who have been checking UFO cases for years,

most members of the public appear to have accepted the periodically reiterated claim that the best scientific talent available to the U. S. Air Force was being used to study UFO reports -- and that the findings indicated nothing unexplainable in terms of existing science and technology.

6) Although the UFO studies within Air Force Project Bluebook have repeatedly been officially described as scientific in nature, that is very far from the case. Superficial and often quite incompetent UFO evaluations have issued from Project Bluebook over the past 15 years. Major Air Force laboratories (e.g., AFRL) were never brought actively into an extended study of UFO phenomena, yet it is just such laboratories where the requisite Air Force talent lay.

7) When one examines the 20-year history of Air Force efforts to secure outside scientific advice on the UFO problem, one encounters repeated instances of negative advice, recommendations to downgrade or even to abandon the Air Force UFO studies. In my view, the scientific advice that the Air Force has received, over the years, from the scientific community has been exceedingly poor advice, in almost all instances, and is a major factor in its quite inadequate response to the UFO problem. I have come to regard this, and not some high-level coverup, as the reason USAF has repeatedly failed to react to striking UFO reports coming from their own flight personnel.

8) In the Condon Report, I believe the Air Force and the federal government have now received the largest single piece of bad scientific advice on UFOs that has ever come out of a segment of the scientific community. Despite a great deal of publicity to the contrary, I believe that this Report is not the definitive, exhaustive study it is being made out to be. Rather, I think it is a very weak study, as measured by usual standards of scientific investigation, and that it is characterized by numerous defects of serious nature.

9) The mischief has, in my opinion, been sorely compounded by a quick and almost certainly superficial assessment and strong endorsement of the Condon Report by an *ad hoc* review panel within the National Academy of Sciences. I believe that none of the 11 NAS panelists had any extensive prior investigatory experience in the UFO problem.

10) All of the above appears to indicate that no further significant scientific progress towards elucidation of the 30-year mystery of the UFOs, their nature and origin, will be possible until the serious inadequacies of the Condon Report are exposed to general discussion in scientific and technical channels.

11) The AIAA, through its UFO Subcommittee has (12/68 issue *Aero. & Astro.*) been urged to give serious scientific attention to the UFO problem. I wish to heartily second that excellent suggestion. The AIAA is perhaps the single most appropriate professional

Specimen Copy

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11) The AIAA, through its UFO Subcommittee has (12/68 issue *Aero. & Astro.*) been urged to give serious scientific attention to the UFO problem. I wish to heartily second that excellent suggestion. The AIAA is perhaps the single most appropriate professional

group to examine the UFO problem in some new and independent manner.

The Condon Report (available in unbridged form in a recently-published Bantam Books paperback) and its disturbing array of shortcomings will form the main subject of my talk to the PMR Section, AIAA. I can here only summarize some of the major deficiencies, but will illustrate them with specific examples in the course of the talk. (For brevity I hereafter use CR for Condon Report.)

It is well to stress that the Conclusions and Recommendations section of the CR is signed only by Condon, and, though it is cast in the first person plural, my inquiries among some of the investigating staff who contributed other sections indicate that this all-important summary section was not prepared with unanimous concurrence of the small investigatory staff of the Project. This is a more important point than would be assumed by persons unfamiliar with the unusual history of the Condon Project and with the slight involvement of its director over most of the duration of the Project. (For some insights, read *UFOs? Yes!* by Saunders and Harkins, Signet paperback, 1969.)

Condon recommends that "*further extensive study of UFOs probably cannot be justified in the expectation that science will be advanced thereby*". He writes that not only should no new group or agency be set up to pursue the UFO problem but that such secondary implications as might bear on defense functions can be handled "*without the continuance of a special unit such as Project Bluebook*". Recognizing the possibility that UFO reports might still be submitted in the future to some branches of the government by members of the public, he recommends (to make his earlier point still clearer) "*that nothing should be done with (such reports) in the expectation that they are going to contribute to the advance of science*". He concludes his major recommendations with an admonishment to school teachers that they try to discourage school children from "*absorbing unsound and erroneous material*" from UFO books. UFOs are, by this implication, grouped with astrology, phrenology, and other pseudosciences, one gathers.

But what, in fact, lies within the thick bulk of the Condon Report that supports such conclusions, such recommendations?

As I shall show in my remarks, there is, in fact, relatively little in that Report to warrant such conclusions. Indeed, Condon's recommendations are so similar to public statements of negative tone which he was already making a mere three months after the establishment of the Project (see, e.g., the Saunders-Harkins book), that it seems fair to ask whether Condon has really studied carefully and thoughtfully the actual contents of this Report to alter his earlier views.

One wonders how he can shrug off such Unexplained cases, to be found within the Report, as the 1957 B-47 UFO case in the Louisiana-Texas area. Having quite recently

interviewed all six crew members of that ECM-equipped RB-47, I find it an intensely interesting and baffling case, as I shall explain to you. Condon evidently can somehow ignore it. And how can so involved and well-reported a UFO case as the multiple-radar, multiple-visual, airborne radar-visual incident at Lakenheath RAF Station in 1956 be disregarded by Condon, or such other Condon Report Unexplained cases as Beverly, Mass. (4/66) or Utica, N.Y. (6/55) or Colorado Springs (5/67) or Jackson, Ala. (11/56) or Joplin, Mo. (1/67), plus a number more that are still left in the Unexplained category after the Project's analyses were completed?

Since Condon appears to be author of a review of UFO history in the 1947-68 period constituting one chapter of the Report, he must surely be cognizant of the kind of "classic" cases that led to the very problem he contracted to try to solve for the Air Force. If so, one must ask how he feels satisfied with the inclusion in the Report of so many obviously trivial cases of less than marginal interest at this stage of UFO study? Why, I must ask, are there so many non-significant cases discussed when so few outstanding past UFO cases are confronted?

And, since any physicist capable of the good work for which Condon has been known over the years would have little difficulty mastering all requisite principles of radar-propagation physics and atmospheric physics to assess the inadequacies that run through the Report's discussion of the relatively small sampling of the old "classic" cases it does confront, one must wonder how those deficiencies and errors escaped Condon (let alone the NAS panelists). Illustrative examples will be cited. A detailed discussion on these must be set before scientific readers; I have such a discussion in preparation, and it is growing lengthy.

I urge all of you to secure copies of the Condon Report and to study it carefully. The greater the number of scientists who assess its level of scientific argument, the sooner it may become generally known that we do not yet have "the definitive scientific answer to one of the world's most fascinating riddles", to quote from the book's cover.

The Condon Report has deepened, not solved, the UFO problem. AIAA can and should help to resolve this major scientific mystery. The dimmest possibility that we might be dealing here with some form of extra-terrestrial surveillance should provide significant incentive for close AIAA scrutiny of the evidence for and against that hypothesis. I continue to find it difficult to accept any competing hypothesis.

"Any sufficiently advanced technology will appear indistinguishable from magic."

-- Arthur C. Clarke

ITINERARY - J. E. McDonald, April 15 - April 24, 1967

Sat. 4/15/67 Lv TUS at 8:15 AM on AAL #98, arr DAL at 11:48 AM
Lv DAL at 5:50 PM on Braniff #10, arr Dulles at 9:29 PM

Sat. 4/22/67 Lv Washington National at 5:30 PM on AAL #273, arr
O'Hare at 6:27 PM

Sun. 4/23/67 Lv O'Hare at 10:25 AM on TWA #157, arr ABQ at 1:45 PM
Lv ABQ at 4:45 PM on Carco #25, arr LASL at 5:15 PM

Mon. 4/24/67 Lv LASL at 3:30 PM on Carco #8, arr ABQ at 4:00 PM
Lv ABQ at 4:30 PM on TWA #183, arr TUS at 5:30 PM

In Washington, I'll be at the Francis Scott Key Hotel, 20th & F, Tel National 8-5425. On several of the days, I can best be contacted during the daytime through the office of Mr. James Hughes, Office of Naval Research, Code 412, Tel. 696-6739 (AC 202) or NICAP office, 667-9434 (AC202).

In Chicago, I have been unable to get airport motel accommodations ahead of time.

In Los Alamos, I will be at the Los Alamos Inn. Phone unknown.

Present schedule of talks and briefing sessions:

- * 1. Sat. 4/15/67: Will see Drs. Berkner and Johnson of Southwest Center for Advanced Studies at the North Park Inn, Dallas, 1300-1600.
2. Mon. 4/17/67: At National Science Foundation to brief scientific staff on UFO problem at 1000. Contact Dr. Edward P. Todd, if have to get me there.
3. Mon. 4/17/67: At Secretary of Air Force Office of Information, Pentagon (Col. Stanley, Rm 4C922) to discuss UFO matters with SAFOI and AFOSR staff.
4. Tues. 4/18/67: Confer with Congressman Roush and staff in AM.
5. Tues. 4/18/67: Talk to scientific staff, Office of Naval Research, 1330, RM 0428, Navy Dept.
6. Wed., 4/19/67: Meet with staff of Astronautics and Space Council and others, office of Capt. W. E. Berg, 1815 H St., NW, Federal Bar Bldg, 1000.
7. Wed. 4/19/67: Talk to scientific staff at Naval Research Laboratory, Anacostia, 1330, main auditorium, on atmospheric and optical aspects of UFO observations.

August 9, 1967

Mr. John A. Anderson
Sandia Corporation
Division 1514
Albuquerque, New Mexico

Dear John:

Thanks again for looking after me so considerably on last week's visit to Sandia. It was a very productive and very enjoyable day, thanks in considerable part to your efforts.

I enclose the rough-draft of my expense account and a reproduction of the ticket with appropriate annotation. You might be casually interested to hear that the honorarium which Sandia kindly gave me has already been spent on a new sewing machine for the use of the three of my daughters who are still at home and competing for tightly programmed time on the existing Singer. The girls are delighted with the new "Sandia" sewing machine.

I enclose a carbon of my letter to Georgia Tech, inquiring about the location of Roy Chapman. If I learn anything, I shall let you know.

In a separate package, I have sent over about 20 additional copies of my ASNE talk for distribution to persons who might contact you for that purpose.

The afternoon interviewing session was, I want to say again, quite worthwhile. I am in the process of making follow-up phone calls to secure further information on several of the sightings reported in that session. I spoke last night to Joe Wistor, and secured a more complete account of his extremely interesting sighting (three witnesses) at Naval Ordnance Test Station in late 1947 or early 1948.

I followed up a message that you handed me from Calvin Smith, and am going to get on tape from him a very pertinent piece of information concerning the outstanding sightings at Levelland, Texas, back in 1957. Another message that came in

Mr. John A. Anderson
August 9, 1967
Page Two

during those interviews was from Carl Hawk, and I have called him to see what information he had. It turned out to be an extremely interesting sighting, dating back to 1952, made by him and another Sandia man right on the base in the middle of day. It involved a rather unconventional object moving rapidly across bare skies from east to west and seen, apparently, with rather good detail. Hawk has agreed to send me a taped discussion between himself and the other witness with permission for me to make a reference copy thereof. If you are interested, you will find the paragraph account of the Hawk sighting in the paperback edition of Coral Lorenzon's book *Flying Saucers* on p. 37. I have yet to follow through on the information that Craig Jones gave me concerning that unusual toroidal object which he and two others saw in Larned, Kansas, many years ago, but I am about to get on the phone to try to hunt down the other witnesses. I am also pursuing the sighting that Howard Burgess reported to me. A second witness, Frank Daut (Sandia 1434) is still available, although two other witnesses have since left Sandia. The accounts that I recorded from the interviews with Davis, Brumley, and Hurford, were sufficiently complete that I do not have to make further inquiries in connection with those cases. That very brief exchange with James Campbell (5612) did not involve enough detail for me to know what he has in mind. I gather that he may get in touch with me with his ideas for techniques of monitoring magnetic anomalies. Corry McDonald brought in, you may recall, a note to me concerning that rancher Don Adams, and I checked up on that. I am sending Corry a brief note to indicate that the information that I secured led me to believe that is probably either a fabrication or an intrinsically unreliable report. It is regrettable, since the information at hand indicated that the Adams sighting at Edgewood, New Mexico, in 1964 might have been quite a significant sighting. It may indeed be a real one, but the circumstances lead me to shy away from it, I fear.

I think we got quite a bit accomplished on that day with respect to information exchange flowing in both directions. Again, thanks for all your help. If you should hear any more from the security guards concerning my inquiry as to the August 25, 1951 sighting over Albuquerque, please let me know. And if any other reports from Sandia personnel come your way, I shall certainly appreciate any leads you may be able to send me.

Best regards,

James E. McDonald
Senior Physicist

JEM/msr

Enclosures

- Rough draft copy + copy lettered slab
- Letter re Ray Chabon at D. D. T.

Los Angeles, California
June 24, 1969

Dear Dr. McDonald:

We were tremendously relieved to learn that your luggage had been returned. We have read your letter (6-4-69) over several times -- and studied it carefully. We must agree that the circumstances surrounding the disappearance of your luggage is a "very mysterious mystery." It appears to leave no alternative but to speculate along "cloak and dagger" lines! (And I don't mean the "men in black!") I discussed this matter with Dr. Robert Wood (hope that you don't mind). He, too, thinks the whole thing is extremely curious and mysterious. Well, it gives us something to think about -- and something to try to avoid in the future! I have my own thoughts about all this; sometime when we are together we'll discuss it. It is in the realm of speculation -- but I feel that the evidence does tails too well to be ignored. (Just noted the quote above in line 4 should have been "a very curious mystery.")

Paul Wilson (Douglas Aircraft) has recently left for Red Mountain (near Butte Montana) to spend several weeks studying ball lightning for Douglas. I presume he went in the instrumented van I heard about that Douglas was fitting up for this work. I hear there have been as many as 600 strikes in one day! Which reminds us of the many reports of fire balls during the 1964 flap. That was the year that Marilyn put flags on a map and sometimes there were too many reports of fire balls in exactly the same place (in Montana); it was very interesting to say the least. It is pretty easy to guess that Paul Wilson will keep his eyes open for more things than ball lightning while he is there.

I hear the Lorenzens have a new book out called "UFOs - The Whole Story." Also that they have another in the works to be out soon; this one will have a chapter by a dozen or so scientists. What I mean is that each scientist will write a chapter. She has asked Dr. Seff (Redlands) to write the story of the Redlands sighting. He hasn't time so he gave her permission to write it under his name. Please remember, this is heresay. However, there is more to the story; it seems that Dr. Seff is very disillusioned with the Lorenzens and recently made a comment about Jim before a group where he was giving a talk - and he noticed someone taping his talk and asked them to erase what he had said (about Jim). Next time we are on the phone, remind me and I will tell you the story - it's quite humorous. If he feels the way he does, I wonder why he continues to associate with them. (I gave it up a long time ago!)

I would love to have more copies of the Resume of your talk to the AIRA, Sacramento Section, May 28, 1969. (Ten or 15 if you have them to spare.) It is extremely effective and think I can send them to the right people. ALL of your talks are effective - I really mean it. I can certainly see the results (and I mean good results) from the ones I have sent out already. We wonder if you realize what you have accomplished - and are accomplishing. You must be a serious threat to those who would discourage widespread interest in the UFO problem. Please give this a little thought.

Best regards,

Edabel

University of Queensland

ST. LUCIA, BRISBANE

Department of Botany

February 1969

A Report on Grass Samples from Tully

Two samples of grass, *Hymenachne pseudointerrupta*, from a lagoon at Tully, Queensland were received at the Department of Botany, University of Queensland about 4 p.m. on Tuesday 11 February 1969. One sample, now designated A, was reported to have been taken from an area where the grass had been disturbed and thrown into a circular pattern ("nests"), and the other, now designated B, was reported to be a sample of the undisturbed vegetation in the water. Water depth was reported to be between five and six feet.

Comparison of specimens

Specimen A: Except for one living, green stem the material was dead and in the early stages of decomposition. Some leaves bore disease lesions represented by either diffuse brown areas or well defined black spots. The former are very similar to lesions caused by *Helminthosporium* sp. on other grasses, and the latter were caused by *Phyllachora* sp.

Specimen B: This comprised plants with roots, stems and leaves that appeared to have been growing in normal fashion up to the time of sampling. Some leaves bore lesions similar to those referred to above as possibly being caused by *Helminthosporium* sp. No *Phyllachora* sp. was seen on Specimen B.

Specimen A showed no evidence of heat damage, nor was there any sign that the grass had been squashed or compressed by any heavy object lying on it.

The disease spots on the leaves were localised lesions and the fungal organisms responsible for those lesions belong to well known and widespread pathogenic genera. Neither *Helminthosporium* or *Phyllachora* have been known to kill plants and their effects are restricted to small areas adjacent to their points of penetration. The condition of Specimen A could not be attributed to disease caused by the micro-organisms seen on the leaves.

Conclusions

Specimen B showed that submerged stems tend to root readily and freely at nodes. Grasses which have this capacity can usually exist for some time, or even indefinitely, without being rooted in soil or mud. If Specimen A had been uprooted within a few days of its collection, it would



University of Queensland

ST. LUCIA, BRISBANE

Department of Botany

February 1969

Address reply to Registrar
but in reply please quote:

A Report on Grass Samples from Tully

Two samples of grass, Hymenachne pseudointerrupta, from a lagoon at Tully, Queensland were received at the Department of Botany, University of Queensland about 4 p.m. on Tuesday 11 February 1969. One sample, now designated A, was reported to have been taken from an area where the grass had been disturbed and thrown into a circular pattern ("nests"), and the other, now designated B, was reported to be a sample of the undisturbed vegetation in the water. Water depth was reported to be between five and six feet.

Comparison of specimens

Specimen A: Except for one living, green stem the material was dead and in the early stages of decomposition. Some leaves bore disease lesions represented by either diffuse brown areas or well defined black spots. The former are very similar to lesions caused by Helminthosporium sp. on other grasses, and the latter were caused by Phyllachora sp.

Specimen B: This comprised plants with roots, stems and leaves that appeared to have been growing in normal fashion up to the time of sampling. Some leaves bore lesions similar to those referred to above as possibly being caused by Helminthosporium sp. No Phyllachora sp. was seen on Specimen B.

Specimen A showed no evidence of heat damage, nor was there any sign that the grass had been squashed or compressed by any heavy object lying on it.

The disease spots on the leaves were localised lesions and the fungal organisms responsible for those lesions belong to well known and widespread pathogenic genera. Neither Helminthosporium or Phyllachora have been known to kill plants and their effects are restricted to small areas adjacent to their points of penetration. The condition of Specimen A could not be attributed to disease caused by the micro-organisms seen on the leaves.

Conclusions

Specimen B showed that submerged stems tend to root readily and freely at nodes. Grasses which have this capacity can usually exist for some time, or even indefinitely, without being rooted in soil or mud. If Specimen A had been uprooted within a few days of its collection, it would

be expected that it would still be green and alive. However, nearly all of Specimen A is dead grass which is starting to decompose. There is no botanical evidence to suggest why the grass of Specimen A died or how long ago it died.

There seems little likelihood of there being any botanical explanation for the development of the "nests" in the Tully swamp. If any further biological comment were required I believe it should come from zoologists.



R.N. Langdon
Reader in Botany

- Thursday 6th FEB Lagoon inspected by a Pennai everything normal
- Saturday 8th FEB monitor triggered at ~ 5.30 a.m..
- Saturday 8th Lagoon inspected, fresh 29 foot (measured) nest observed at 6.30 p.m.
- Monday 10th At approx 9.30 a.m. samples, (re above report), both inside and outside nest, removed by A.P. and myself.
- Tuesday 11th Samples delivered to Dr Langdon at Qld Uni. (Botany)
- Tuesday 11th Samples also handed to Gub Taylor (Physics). Tests for radiation were negative
- 27th Feb This report received from Dr Langdon

June 6, 1969

Dr. M. U. Condon
1005 JILA Bldg.
University of Colorado
Boulder, Colo. 80502

Dear Dr. Condon:

Since neither you nor the Air Force are willing to release witness names on cases analysed in your report, I have asked Congressman Ullall of our district to look into this. He has contacted Air Force Secretary Seaman and Congressman Moss in the matter.

Thank you for the copy of your APS draft. The APS office informs me it is slated for December publication. I am surprised at viewpoints therein. If, as seems almost certain, I am the "atmospheric physicist" you cite, you misrepresent my position. So did Branscomb; and the same misrepresentation appears in your Report. It is perhaps not worth trying here to clarify it; but if you wish clarification, let me know.

Enclosed are copies of a number of summaries of recent talks in which I have criticized your Report. Your conclusions do not at all seem to be supported by the Report's contents. The contents of the report argue need for much more careful examination of the UFO problem. And this in spite of what I must view as many gross inadequacies of scientific aspects of the investigations you headed. I am unable to understand how you approached this task as you did. Your Philadelphia and Irvine talks indicate you must have no real awareness of the weakness of the position you have developed. I am in process of preparing discussions of many features of the Report which seem to me to attest to that weakness.

In giving the Academy such a Report, I believe you did science a direct disservice. That the Academy processes could lead to endorsement is disturbing.

Sincerely,

J. E. McDonald

SIGHTING LETTER

Forrest D. Perkins
 TSGT AF15253257
 USAF-RETIRED

Dear Sir:

Reference your UFO Study: you probably already have this item in your file, but, in case you don't, I will briefly outline it and you can contact me for full details if you want them.

I retired (20 years service) 1 April 1967 from the USAF. I have placed my name, rank, and serial number at the top of the page if you want to check on my authenticity. I was an Air Traffic Controller throughout my service career and utilized radar the last 16 years in the control of Air Traffic. I won't bother listing the types and locations, although I could supply all this is needed.

I have never mentioned this incident, as I was pretty sure it is considered (or was) classified, and the only reason I feel free to give you details is because you are an official government agency.

In 1956, sometime between January and September (I can't remember the exact date or month), I was on duty as Watch Supervisor at Lakenheath, RAF Station, England (a USAF base) in the Radar Air Traffic Control Center. It was the 5:00 p.m. to midnight shift. I had either four or five other controllers on my shift. I was sitting at the Supervisor's Coordinating desk and received a call on the direct line (actually, I'm not sure which line it was). Anyway, it was Sculthorpe GCA Unit calling and the radar operator asked me if we had any targets on our scopes travelling at 4,000 mph. They said they had watched a target on their scopes proceed from a point 30 or 40 miles east of Sculthorpe to a point 40 miles west of Sculthorpe. The target passed directly over Sculthorpe, England RAF Station (also an USAF Station). He said the tower reported seeing it go by and just appeared to be a blurry light. A C47 flying over the base at 5,000 feet altitude also reported seeing it as a blurred light that passed under his aircraft. No report as to actual distance below the aircraft. I immediately had all controllers start scanning the radar scopes. I had each scope set on a different range - from 10 miles to 200 miles radius of Lakenheath. At this time I did not contact anyone by telephone as I was rather skeptical of this report. We were using full MTI on our radar, which eliminated entirely all ground returns and stationary targets. There was very little or not traffic or targets on the scopes, as I recall. However, one controller noticed a stationary target on the scopes about 20 to 25 miles southwest. This was unusual as a stationary target should have been eliminated unless it was moving at a speed of at least 40 to 45 knots. And yet we could detect no movement at all. We watched this target on all the different scopes for several minutes and I called the GCA Unit at Lakenheath to see if they had this target on their scopes also. They confirmed the target was on their scope in the same geographical location. As we watched, the stationary target started moving at a speed of 400 to 600 mph in a north, northeast direction until it reached a point about 20 miles north northwest of Lakenheath. There was no slow start or build-up to this speed - it was constant from the second it started to move until it stopped.

I called and reported all the facts to this point, including Sculthorpe GCA's initial report, to the 7th Air Division Command Post at London. They in turn notified 3rd Air Force Command Post and had them hooked into the

Good radar-visual case, R.C.
rec'd early Feb 1968 ~~by~~ personal letter

SIGHTING LETTER

Forrest D. Perkins
TSgt AF15253257
USAF-RETIRED

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Factor, know any thing about this one? any ideas on it?
The fellow doesn't understand security regulations very well, does he? But it would be surprising if this was any classified source, does he?

"C" contribute
should be made

Send copy to Major Quintanilla

Copy to Dr. Baughman, small copy to
the person who filed it in the file

line. I also hooked in my local AFB Commanding Officer and my Unit (AFCS Communications Squadron) Commander on my switchboard. And there could have been others hooked in also that I was not aware of. I repeated all the facts known to this point and continued to give a detailed report on the target's movements and location. The target made several changes in location, always in a straight line, always at about 600 mph and always from a standing or stationary point to his next stop at constant speed - no build-up in speed at all - these changes in location varied from 8 miles to 20 miles in length - no set pattern at any time. Time spent stationary between movements also varied from 30 or 4 minutes to 5 or 6 minutes (possibly even longer as I was busy answering questions - listening to theories, guesses, etc. that the conference line people were saying. This continued for some time. After I imagine about 30 to 45 minutes, it was decided to scramble two RAF interceptors to investigate. This was done I believe by 3rd Air Force calling the RAF and, after hearing what the score was, they scrambled one aircraft. [The second got off after as I will mention later.]

The interceptor aircraft took off from an RAF Station near London and approached Lakenheath from the southwest. Radio and radar contact was established with the RAF intercept aircraft at a point about 30 to 35 miles southwest of Lakenheath inbound to Lakenheath. On initial contact we gave the interceptor pilot all the background information on the UFO, his (the interceptor) present distance and bearing from Lakenheath, the UFO's (which was stationary at the time) distance and bearing from Lakenheath. We explained we did not know the altitude of the UFO but we could assume his altitude was above 1,500 feet and below 20,000 feet, due to the operational characteristics of the radar (CPS-5 type radar, I believe). Also we mentioned the report from the C47 over Sculthorpe that relayed the story about the light which passed below him. His altitude was 5,000 feet.

We immediately issued headings to the interceptor to guide him to the UFO. The UFO remained stationary throughout. This vectoring of the intercept aircraft continued. We continually gave the intercept aircraft his heading to the UFO and his distance from the UFO at approximately 1 to 2 mile intervals. Shortly after we told the intercept aircraft he was one-half mile from the UFO and it was twelve-o'clock from his position, he said, "Roger, Lakenheath, I've got my guns locked on him." Then he paused and said, "Where did he go? Do you still have him?" We replied, "Roger; it appeared he got behind you and he's still there. [There were now two targets; one behind the other, same speed, very close, but two separate distinct targets.

The first movement by the UFO was so swift (circling behind the interceptor). I missed it entirely, but it was seen by the other controllers. However, the fact that this had occurred was confirmed by the pilot of the interceptor. The pilot of the interceptor told us he would try to shake the UFO and would try it again. He tried everything - he climbed, dived, circled, etc., but the UFO acted like it was glued right behind him, always the same distance, very close, but we always had two distinct targets. [Note: Target resolution on our radar at the range they were from the antenna (about 10 to 30 miles, all in the southerly sectors from Lakenheath) would be between 200 and 600 feet probably. Closer than that we would have got one target from both aircraft and UFO. Most specifications say 500 feet is the minimum, but I

believe it varies and 200 to 600 feet is closer to the truth and, in addition, the tuning of the equipment, atmospheric conditions, etc., also help determine this figure.

The interceptor pilot continued to try and shake the UFO for about ten minutes (approximate - it seemed longer both to him and us). He continued to comment occasionally and we could tell from the tonal quality he was getting worried, excited and also pretty scared.

He finally said, "I'm returning to Station, Lakenheath. Let me know if he follows me. I'm getting low on petrol." The target (UFO) followed him only a short distance, as he headed south southwest, and the UFO stopped and remained stationary. We advised the interceptor that the UFO target had stopped following and was now stationary about 10 miles south of Lakenheath. He rogered this message and almost immediately the second interceptor called us on the same frequency. We replied and told him we would advise him when we had a radar target, so we could establish radar contact with his aircraft. [He was not on radar at this time, probably had just taken off and was too low for us to pick him up, or too far away - we had most of the scopes on short range, so we could watch the UFO closely on the smaller range.] The number two interceptor called the number one interceptor by name (Tom, Frank - whatever his name was) and asked him, "Did you see anything?" Number one replied, "I saw something, but I'll be damned if I know what it was." Number two said, "What happened?" Number one said, "He (or it) got behind me and I did everything I could to get behind him and I couldn't. It's the damndest thing I've ever seen." Number one also made a remark at this time to Number two, that he had his radar locked on whatever it was for just a few seconds so there was something there that was solid. Number one then switched frequencies to his home base frequency. We gave Number 2 the location of the UFO and advised him that we still didn't have him on radar, but probably would have shortly. He delayed answering for some seconds and then finally said, "Lakenheath _____ (Identification, aircraft call sign) - can't remember what call sign these aircraft were using. Returning home, my engine is malfunctioning." He then left our frequency.

Throughout this we kept all the agencies, 7th Air Division, 3rd Air Force, etc., advised on every aspect, every word that was said, everything.

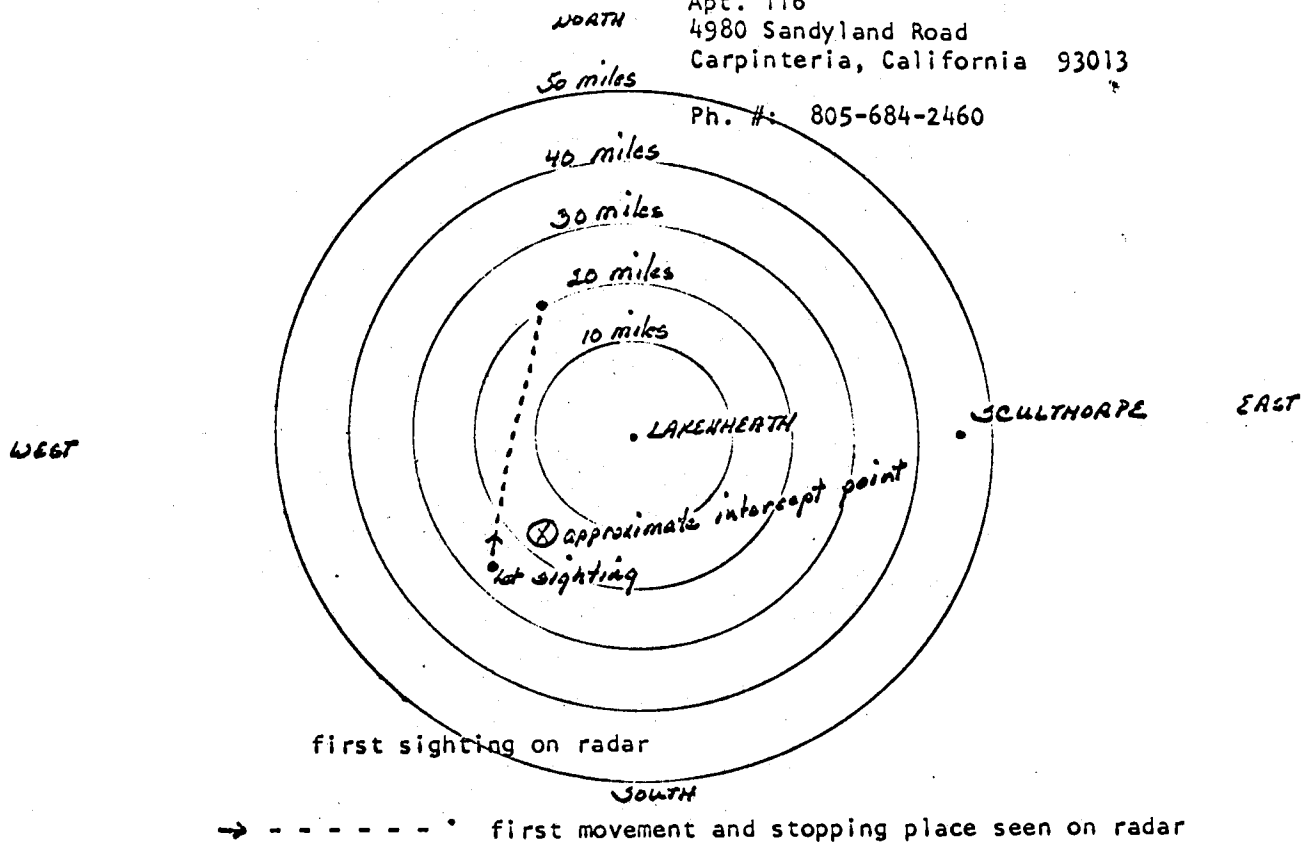
We then inquired what action they wanted to take. They had no more suggestions and finally they told us to just keep watching the target and let them know if anything else happened. The target made a couple more short moves, then left our radar coverage in a northerly direction - speed still about 600 mph. We lost target outbound to the north at about 50 to 60 miles, which is normal if aircraft or target is at an altitude below 5,000 feet (because of the radiation lobe of that type radar). We notified 7th Air Division Command Post and they said they'd tell everybody for us.

I made out a written report on all this, in detail for the offices in charge of my facility, and was told that unless I was contacted later for any further information, he would take care of it. I don't know if a CERVIS report was submitted on this or not - I heard no more about it.

All speeds in this report were calculated speeds based on time and distance covered on radar. This speed was calculated many times that evening and although this happened quite awhile ago, the basic elements are correct.

Hope this helps in some small way to assist in your UFO investigation.

Forrest D. Perkins
Apt. 116
4980 Sandyland Road
Carpinteria, California 93013
Ph. #: 805-684-2460



⊗ Intercept point by RAF interceptor - point also at which
RAF pilot reported radar gunsight locked on UFO.

APPENDIX - ITEM D
CHAPTER 16

(Reproduction of a telex included in Project Blue Book's report on the Lakenheath-Bentwaters sightings of August 13-14, 1956. Deletions (...) indicate unreadable letters or numbers, while blanks (____) indicate censored words and phrases. The text is in lower case instead of caps, and additional paragraphs are inserted at appropriate places, to make for easier reading.)

"MHAS...S...LGC... .. 4GAB615
PP RJEDEN RJD LGB RJEDWP
DE RJD LGA 44
P

FM COMAEGRU 3S18 RAF LAKENHEATH ENGLAND
TC RJEDF/COMDR ADC ENT AFB COLO SPRINGS COLO
RJEDWP/COMDR ATIC WRIGHT-PATTERSON AFB OHIO
ZEN/DIRECTOR OF INTELLIGENCE HQ USAF WASH DC
BT

/_____/FROM BOI 435. SECTION TWO OF TWO.
Pilot advised he had a bright white light in sight and would investigate. At thirteen (13) miles west he reported loss of target and white light. Lakenheath RATCC vectored him to a target 10 miles east of Lakenheath and pilot advised target was on radar and he was "locking on". Pilot reported he had lost target on his radar. Lakenheath RATCC reports that as the Venom passed the target on radar, the target began a tail chase of the friendly fighter.

RATCC requested pilot acknowledge this chase. Pilot acknowledged and stated he would try to circle and get behind the target. Pilot

PAGE TWO RJD LGA 44

advised he was unable to "shake" the target off his tail and requested assistance. One additional Venom was scrambled from the RAF station. Original pilot stated: "Clearest target I've ever seen on radar." Target disappeared and second aircraft did not establish contact. First aircraft returned to home station due to being low on fuel.

Second Venom was vectored to other radar targets but was unable to make contact. Shortly second fighter returned to home station due to malfunctions. No further interception activities were undertaken. All targets disappeared from scopes at approximately 0333 [3:33 a.m.].

10. Other aircraft in the area were properly identified by radar and flight logs as being friendly: 11. _____ CWPT, USAF, intelligence officer, 3910th ABGCU (SAC). RWF station Lakenheath [sic] Suffolk, England. All personnel interviewed and logs of RA ICCC lend reality to the existence [sic] of some unexplainable flying phenomena near this air field on this occasion. No air base; however, the controllers are experienced and technical skills were used in attempts to determine just what the objects were. When the target would stop on the scope, the MFI was used. However, the target would still appear on the scope. All ground

PAGE THREE RJD LGA 44

observers and reports from observers at Bentwaters agree on color, maneuvers and shape of object. My analysis of the sightings is that they were real and not figments of the imagination.

The fact that three radar sets picked up the targets simultaneously is certainly conclusive that a target or object was in the air. The maneuvers of the object were extraordinary; however, the fact that radar and ground visual observations were made of its rapid acceleration and abrupt stops certainly lend credence [sic] to the report. It is not believed these sightings were of any meteorological or astronomical origins. 12. Negative.

BT...

16/1635Z AUG RJD LGA

NNNN

**"Lakenheath-Bentwaters August 13-14, 1956 case report
issued from the 4602nd AISS."**

1. DATE: 13-14 August 56		2. LOCATION: Bentwaters-Lakenheath, England		3. CASE NO.: 4602-405	
4. DATE-TIME: 2100G-0700G (13 Aug) 0700G-0730G (14 Aug)		5. TYPE OF OBSERVATION: a. Ground Visual b. Air Visual c. Intercept Radar		6. WEATHER: a. Clouds: Partly cloudy b. Visibility: 10 miles c. Wind: Light	
7. PHOTOS: None		8. NUMBER OF OBSERVERS: Ground observers - Ground observers, AF pilots		9. NUMBER OF SUBJECTS: 2. Colored	
10. LENGTH OF OBSERVATION: 1 hour		11. SUMMARY OF SIGHTING: On 13 August, between 2100-2200 ZI Bentwaters radar reported 3 separate UFO tracks suddenly appearing and disappearing on their screen, within 2 hr period. Bentwaters station alerted RAF radar unit at Lakenheath. On 14 Aug, the RAF unit reported obj's were observed intermittently from 0100H to 0330G, going from W to SW, stopping for 5 minutes, thence NW, disappearing from scope at 0330G.		12. COMMENTS (ATTC): At first glance, the 2 messages (TT Mags 001-405, 10 Aug 56 and 100-7335, 21 Aug 56) reporting this sighting may give the impression that observations, radar, ground and air, were simultaneous. A review of detailed report 100-1-56, dtd 31 Aug 56, indicates that, although the observations took place within the periods given, they cannot be considered as concurrent.	

ATTC FORM 121 (REV 28 SEP 52)

10. (Continued)

3. An amber-colored object was observed visually with 7 X 50 binoculars near the horizon towards E. 40. This object, the apparent size of a pinhead, remained in sight for approximately 1 hour.

4. Two pilots of a local AF interceptor squadron who were vectored to the area returned after a 45 minute search. Nothing found. Both stated, however, that there was a bright star in the northern part of Bentwaters, that could have been mistaken for a UFO by visual observers.

5. Ground observers reported an unusual amount of "shooting stars" in the sky during this period.

11. (Continued)

This is confirmed by the original report 501-405, which states that the radar sightings occurred at a later time than the ground sightings. Comments, on the basis of specific aspects of each sighting:

Radar: The widely divergent tracks and speeds observed on the scopes (NW to NE, E to W, SE to NW, and W to 4000 MFM), the sudden appearing, disappearing, intermittent stopping, starting and remaining stationary and other erratic behavior of obj's, characteristic of weather returns and improving atmospheric conditions. This can be confusing to trained operators, and does not imply lack of capability of reporting personnel.

Visual Ground: It should be noted that the visual sighting by the control tower chief, using 7 X 50 binoculars, was of an amber-colored object between 10 to 40 degrees above the horizon towards the W. The observer further stated that this object remained in sight for approximately

(CONTINUED)

APPENDIX - ITEM E
CHAPTER 16

2

has been from a set of 100 8 X 8 film have been taken from the case. The data from the film was available at the time of the report.

PROJECT 10073 RECON DOG

40000 AIBS

1. DATE 14-13 August 56	2. LOCATION Bentwaters-Lakenheath, England	12. DISCUSSIONS <input type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon <input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft <input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical <input type="checkbox"/> Other Anom. Propagation <input type="checkbox"/> Insufficient Data for Evaluation <input type="checkbox"/> Unknown
3. DATE-TIME GROUP Local 21200-2220 (13 Aug) GMT 0010-0330 (14 Aug)	4. TYPE OF OBSERVATION <input checked="" type="checkbox"/> Ground-Visual <input checked="" type="checkbox"/> Ground-Radar <input checked="" type="checkbox"/> Air-Visual <input type="checkbox"/> Air-Intercept Radar	
5. PHOTOS C Yes X No	6. SOURCE Radar observers - Ground observers, AF pilots	
7. LENGTH OF OBSERVATION Total: Approx 5 hrs	8. NUMBER OF OBJECTS Varied	9. COURSE Varied
10. BRIEF SUMMARY OF SIGHTING 1. On 14 August, between 2120-2220 ZI Bentwaters radar reported 3 separate UFO tracks suddenly appearing and disappearing on their screens, with a 2 hr period. 2. Bentwaters station alerted RAF radar unit at Lakenheath. On 14 Aug the RAF unit reported obj's were observed intermittantly from 0010Z to 0330Z, going from W to SW, stopping for 5 minutes, thence NW, disappearing from scope at 0330Z.		11. COMMENTS (ATIC) At first glance, the 2 messages (TT Msgs BOI-485, 16 Aug 56 and IDO-7335, 21 Aug 56) reporting this sighting may give the impression that observations, radar, ground and air, were simultaneous. A review of detailed report IR-1-56, dtd 31 Aug 56, indicates that, although the observations took place within the periods given, they cannot be considered as concurrent.

ATIC FORM 329 (REV 26 SEP 52)

10. Continued)

3. An amber-colored object was observed visually with 7 X 50 binoculars near the horizon towards E. SE. This object, the apparent size of a pinhead, remained in sight for approximately 1 hour.

4. Two pilots of a local AF interceptor squadron who were vectored to the area returned after a 45 minute search. Nothing found. Both stated, however, that there was a bright star in the horizon East of Bentwaters, that could have been mistaken for a UFO by visual observers.

5. Ground observers reported an unusual amount of "shooting stars" in the sky during this period.

11. Continued

This is confirmed by the original report BOI-485, which states that the radar sightings occurred at a later time than the ground sightings. Comments, on the basis of specific aspects of each sighting:

Radar: The widely divergent tracks and speeds observed on the scopes (SW to NE, E to W, SE to NW, and 80 to 4000 MPH), the sudden appearing, disappearing intermittent stopping, starting and remaining motionless; and other erratic behavior of blips is characteristic of weather returns and changing atmospheric conditions. This can often be confusing to trained operators, and does not imply lack of capability of reporting personnel.

Visual Ground: It should be noted that the visual sighting by the control-tower chief, using 7 X 50 binoculars, was of an amber-colored object between 10 to 40 degrees above the horizon towards the SE. The observer further stated that this object remained in sight for approximately

(CONTINUED)

2

These copies from a set of blue 5x8 file cards slipped behind main file card. Not dated. Some ink on white file was anachronistic. See message of Nov. 51/7/70

UNITED STATES GOVERNMENT

Memorandum

CONFIDENTIAL

DATE: 6-24-60

TO :

FROM :

SUBJECT :

DONALD E. KEYHOS

MERCURY ENTERPRISES, INC. WASHINGTON, D.C.
UNAUTHORIZED DISCLOSURE OF CLASSIFIED INFORMATION
ESPIONAGE - X

Tolson	
DeLoach	
Mohr	
Bishop	
Casper	
Callahan	
Conrad	
Felt	
Gale	
Rosen	
Sullivan	
Tavel	
Trotter	
Tele. Room	
Holmes	
Gandy	

On 6-23-60 Captain William H. Sullivan, OSI, Air Force, furnished Liaison Agent Fields the attached letterhead memorandum relating allegations by one [redacted] that Top Secret and Secret documents relating to unidentified flying objects (UFO), were being surreptitiously removed from the Pentagon long enough to be reproduced and then returned.

[redacted] exhibited to him photostats of documents marked Secret and Top Secret which they said were obtained from sources at the Pentagon. Major Donald E. Keyhos, U.S. Marine Corps, Retired, was alleged to have been present when such documents were displayed by [redacted].

Sullivan noted several persons contacted at Air Force Intelligence (AFCIN) which handles UFO activities, knew of no Top Secret UFO documents at the Pentagon. He stated AFCIN has been requested to determine whether there appears to be any plausibility to the allegations. Sullivan stated in the interim OSI felt details of the matter should be passed along to the Bureau for information or any action desired. He added in light of statements of AFCIN personnel re paucity of UFO documents at Pentagon other than unclassified or "confidential" papers, it appears doubtful the allegations are credible, but OSI will advise Bureau of results of AFCIN's evaluation.

Nationalities Intelligence Section has been advised of allegations herein.

ACTION: Refer to the attention of the Nationalities Intelligence Section. Liaison will follow with Air Force for any additional pertinent data.

1 - [redacted]
1 - [redacted]
1 - Liaison
1 - [redacted]

Enclosure

CONFIDENTIAL

12 JUL 1 1960

UNITED STATES GOVERNMENT

Memorandum

~~CONFIDENTIAL~~

TO

DATE: 6-24-60

FROM

SUBJECTS

EXTENDED DATA FIG. 10

MERCURY ENTERPRISES, INC. WASHINGTON, D.C.

UNAUTHORIZED DISCLOSURE OF CLASSIFIED INFORMATION
ESPIONAGE - R

ESPIONAGE - X

On 6-23-60 Captain William H. Sullivan, OSI, Air Force, furnished Liaison Agent Fields the attached letterhead memorandum relating allegations by one [redacted] that Top Secret and Secret documents relating to unidentified Flying Objects (UFO), were being surreptitiously removed from the Pentagon long enough to be reproduced and then returned. [redacted]

documents marked Secret and Top Secret which they said were obtained from sources at the Pentagon. Major Donald B. Keyhoe, U.S. Marine Corps, Retired, was alleged to have been present when such documents were displayed by [redacted] exhibited to him photostats of [redacted]

Sullivan noted several persons contacted at Air Force Intelligence (AFCIN) which handles UFO activities, knew of no Top Secret UFO documents at the Pentagon. He stated AFCIN has been requested to determine whether there appears to be any plausibility to the allegations. Sullivan stated in the interim OSI felt details of the matter should be passed along to the Bureau for information or any action desired. He added in light of statements of AFCIN personnel re paucity of UFO documents at Pentagon other than unclassified or "confidential" papers, it appears doubtful the allegations are credible, but OSI will advise Bureau of results of AFCIN's evaluation. [S-44] [S-14]

Nationalities Intelligence Section has been advised of allegations herein.

ACTION: Refer to the attention of the Nationalities Intelligence
Section. Liaison will follow with Air Force for any additional
pertinent data.

1-1-1-1

1 - Maison

15 JUL 1 1980

Enclosure

WORTHINGTON

5

~~CONFIDENTIAL~~
67C
DONALD E. KEYHOE
67C

~~CONFIDENTIAL~~
MERCURY ENTERPRISES, INC

1. On 10 June 1960 Major L. J. Tacker, Chief of the Magazine and Book Branch, Secretary of the Air Force, Office of Information (SAFOI 3-D) advised that allegations had been made to him that Top Secret and Secret documents relating to unidentified flying objects (UFO) were being surreptitiously removed from the Pentagon long enough to be reproduced. These allegations, Major Tacker related, were made by a ^{67C} who telephoned him on 7 June 1960 and said that he wanted to talk to him about ^{67C} (two writers known to Major Tacker) and "the dirty business going on at Mercury Inc.". ^{67C} identified himself to Tacker as an American citizen in "industrial relations" with office space next to Mercury Inc. at 1335 Connecticut Avenue. ^{67C} claimed, too, that he was formerly a colonel in the British Army, that in the past he has served with the Australian Government as an Assistant Liaison Officer for North America, and further, that he had at one time served with the British Internal Security. Major Tacker made an appointment for ^{67C} to come in and see him the next day and, in the interim, contacted Captain Leavitt Shertzner of AFCEM-1D and asked him to check on ^{67C}. Captain Shertzner reported to Major Tacker that he had checked out ^{67C}, presumably with the British and Australians, and was told that he is thoroughly reliable. ^{67C} appeared in Tacker's office on Wednesday, the 8th of June and stated that ^{67C} showed him photostats of documents marked Secret and Top Secret which they gloated over and which they said they had obtained from sources in the Pentagon. On several of these occasions when the reproductions were displayed, Major Donald E. Keyhoe, USMC, Ret., who is Director of the National Investigations Committee on Aerial Phenomena (NICAP), ^{DC} but who also has a desk at Mercury Inc., was present. Major Tacker related that, according to ^{67C}, the documents in question were taken from the Pentagon to an unidentified location he referred to as the "listening post", reproduced there and delivered to Mercury Inc., while the originals were presumably returned to the Pentagon. Questioned on the point by Major Tacker, ^{67C} said that he didn't know who procured the documents from the Pentagon.

2. By way of background, Major Tacker advised that about 23 May 1960, ^{67C} presented themselves to Major Ben Fern, Chief of the Magazine and Book Branch, Office of the Secretary of Defense, Public Affairs, and explained that having done an article on UFO for the June issue of

FOI/PA #	
APPEAL #	
CIVIL ACT. #	
E.O. #	12352
DATE	11-29
INITIALS	<i>gld</i>

6-150

~~CONFIDENTIAL~~
ENCLOSURE

1 xerox made
7-9-63

Argosy Magazine, they now wished to do a follow-up article giving the Air Force position on the subject. Fern referred them to Major Tacker who arranged for them to make a trip to Wright-Patterson AFB where they would be given background on the Air Force viewpoint on UFO because hitherto they had only been exposed to the NICAP outlook. Major Tacker said that b7c described Mercury Inc. as a promotional organization set up to exploit information on space exploration and technology with the intention of selling stories, scripts, and articles based on it.

3. Major Tacker related that Major Fern had told him that b7c on the strength of their slight acquaintance, had cashed a \$300.00 check, giving Fern as a reference, and the check had bounced. According to Tacker b7c too, complained that b7c had cashed a \$100.00 check on an account of his. In a conversation with b7c b7c, Major Tacker said, b7c spoke of b7c as a USAF Reserve Officer and b7c assented to this. A review of the files of the Directorate of Special Investigations disclosed that on 4 December 1957 The Inspector General, National Headquarters, Civil Air Patrol (CAP), Bolling AFB advised OSI that a CAP liaison officer reported that one b7c was impersonating a Reserve Officer of the USAF. The matter was referred to the FBI. When interviewed by the FBI, b7c

4. The files of the Directorate of Special Investigations reflect no record of b7c

5. On 13 June 1960, several persons were interviewed at AFCEH in an effort to determine whether, in fact, there are in the Pentagon Secret and Top Secret documents relating to UFO. No one of the several people interviewed could recall ever having seen a Top Secret document relating to this subject, but several had seen Secret documents. It was explained that files relating to the UFO are maintained principally in two places: at AFCEH Headquarters, Wright-Patterson AFB, and at the 1127th Field Activity Group at Ft Belvoir, Va. Apart from these repositories it was noted that cabled report of UFO sightings are received by AFCEH-2, AFCEH-3, and AFCEH-4. These, however, it was pointed out, are usually unclassified and are very rarely classified above Confidential.

6. On 14 June 1960, Lt Col (formerly Major) Tacker advised that he had received from b7c a mimeographed publication entitled "The Little Listening Post" which Tacker made available. Attached to it was a note stating: "Name of Editor b7c who has the contact within P. and from whom (Rtd) obtains (sic) certain documents. Name of contact unknown at present will advise." The signature to the note appears to be a group of

~~CONFIDENTIAL~~


initials, but is illegible. On the envelope in which "The Little Listening Post" and the notes accompanying it were delivered to Col Tacker, is printed the name and return address of one b7C

b7C b7C

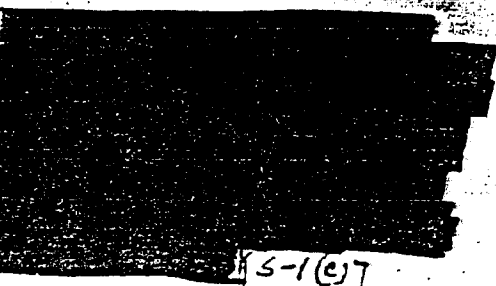
7. The files of the Directorate of Special Investigations were checked regarding Mercury Inc. and Mercury Enterprises, Inc. (in Washington), "The Little Listening Post," b7C and b7C with the following results:

The files reflected no record of Mercury Inc. or Mercury Enterprises, Inc., or of b7C

b7D The files disclosed that 

 It is noted that the CAP IG S-1(2) referred to above (paragraph 3) linked b7C name with one b7C, alleged "former Major, US Army Combat Intelligence," and said both were associated with NICAP.

(Perusal of "The Little Listening Post" discloses it to be devoted in large measure to "flying saucers." The issue provided by Col Tacker (Vol 7, No. 2, Apr, May, Jun 1960) refers to Keyhoe's book, "Flying Saucers: Top Secret" and to Mercury Enterprises, Inc.)

b1 The files also disclosed that 

S-1(2)
DC

CONFIDENTIAL
CONFIDENTIAL

b7C

REC-19

65-0-7663

1 - [REDACTED]
1 - Liaison

SEE REVERSE
SAC, [REDACTED]
COUNSEL, [REDACTED]
ACTION

Date: June 29, 1960

DECLASSIFIED BY SP-1 JF
ON 5-30-90
314,103

To: Office of Special Investigations
Air Force

Attention: Chief, Counterintelligence
Division

From: John Edgar Hoover, Director

Subject: [REDACTED]
DONALD E. KEYHOF

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
EXCEPT WHERE SHOWN
OTHERWISE

ALLEGED UNAUTHORIZED DISCLOSURE
OF CLASSIFIED INFORMATION
ESPIONAGE - X

11-22-89
Classified by SP-1 JF
Declassify on: OADR
314,103

On June 23, 1960, Captain William H. Sullivan, 2nd Lt,
Office of Special Investigations, Department of the
Air Force, furnished this Bureau through Liaison a
memorandum which set forth allegations made by
[REDACTED] to the effect that documents classified
Top Secret and Secret relating to unidentified flying
objects were being surreptitiously removed from the
Pentagon, reproduced, and then returned.
alleged that [REDACTED]

AV COURIER SVC.
54 JUN 30
AF COMM-FBI

[REDACTED] avoided him Photostats
of such documents and alleged they were obtained from
Pentagon sources. Keyhoe, a retired United States Marine
Corps major, allegedly was present when these documents
were displayed. [REDACTED] [REDACTED]

at Air Force Intelligence disclosed no documents
pertaining to unidentified flying objects bearing the
classification Top Secret. According to Captain Sullivan, [REDACTED] [REDACTED]

Tolson _____
Mohr _____
Parsons _____
Belmont _____
Callahan _____
DeLoach _____
Malone _____
McGuire _____
Rosen _____
Tamm _____
Trotter _____
W.C. Sullivan _____
Tele. Room _____
Ingram _____
Gandy _____

CONFIDENTIAL

1 Xerox cc made
7-9-63

SEE NOTE PAGE 2.

CONFIDENTIAL

b7C

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

~~Office of Special Investigations~~
~~Air Force~~

Air Force Intelligence has been requested to determine whether there appears to be any plausibility to these allegations. [S-14] [3-14]

This Bureau is taking no action in this matter in the absence of information indicating a violation of a Federal statute within our jurisdiction.

NOTE: Classified Confidential since it repeats info from an OSI memo so classified.

~~CONFIDENTIAL~~

- 2 -

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

NATIONAL INVESTIGATIONS COMMITTEE ON AERIAL PHENOMENA

MINUTES OF MEETING OF BOARD OF GOVERNORS
EXECUTIVE COMMITTEE
December 3, 1969

A special meeting of the Executive Committee of the Board of Governors of NICAP was held, pursuant to waiver of notice (attached hereto), at the offices of Wald, Harkrader, and Rockefeller, 1225 Nineteenth Street, N. W., Washington, D. C., on Wednesday, December 3, 1969, at 10:30 a.m. Colonel Joseph Bryan, III, and J. B. Hartranft, Jr., were present in person and Major D. J. Fournet was present by proxy (attached hereto), thus constituting all members of the Executive Committee. Also present was Thomas C. Matthews, Jr., NICAP counsel.

Colonel Bryan presided and Mr. Matthews was designated secretary ad hoc for the meeting. The chairman reported on studies and investigations into the operational and fiscal operations of NICAP and on the basis of those studies the following resolutions were duly passed:

244-7337
3337 Comm Ave.

APPENDIX - ITEM B
CHAPTER SEVENTEEN

NATIONAL INVESTIGATIONS COMMITTEE ON AERIAL PHENOMENA

MINUTES OF MEETING OF BOARD OF GOVERNORS
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December 3, 1969

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Colonel Bryan presided and Mr. Matthews was designated secretary ad hoc for the meeting. The chairman reported on studies and investigations into the operational and fiscal operations of NICAP and on the basis of those studies the following resolutions were duly passed:

(1) The term of office of Major Donald E. Keyhoe as president of NICAP is terminated forthwith, and his active participation in the affairs of the corporation are hereby terminated at once.

(2) Major Keyhoe shall be retired as an employee of NICAP as of December 31, 1969; he is to be paid his salary (at the rate of \$7,600 per annum) through December 31, 1969, and all 1969 arrears of such compensation shall be paid to him if and when NICAP has funds that, in the opinion of the Executive Committee, are sufficient for that purpose.

(3) Major Keyhoe may retain indefinitely such title followed by the word "emeritus" as he may choose, subject to the approval of the Executive Committee.

(4) The Executive Committee shall determine in its discretion whether it is advisable to grant Major Keyhoe a lump-sum severance payment if and when NICAP has funds that, in the opinion of the Executive Committee, are sufficient to make such a payment, but in no event shall such payment exceed \$1,600, which represents two months' compensation at the rate of \$7,600 per annum.

(5) Major Keyhoe is to be requested to resign as Governor.

(6) The term of office of Gordon I. R. Lore, Jr., as Vice President and as Secretary-Treasurer of NICAP is terminated forthwith, and his active participation in the affairs of the corporation are hereby terminated at once.

(7) Gordon I. R. Lore shall be placed on an indefinite leave of absence (without pay) as a NICAP employee effective as of December 31, 1969; he is to be paid his salary (at the rate of \$7,600 per annum) through December 31, 1969, and all 1969 arrears of such compensation shall be paid to him if and when NICAP has funds that, in the opinion of the Executive Committee, are sufficient for that purpose.

(8) The Executive Committee shall determine in its discretion whether it is advisable to grant Mr. Lore a lump-sum severance payment if and when NICAP has funds that, in the opinion of the Executive Committee, are sufficient to make such a payment, but in no event shall such payment exceed \$800, which represents one month's compensation at the rate of \$7,600 per annum.

(9) Colonel Bryan is hereby named acting president of NICAP, it being understood that he holds this office temporarily and that a search will be begun immediately for a new president.

(10) Mr. G. Stuart Nixon is hereby appointed acting secretary-treasurer of NICAP. Mr. Nixon is hereby given authority and responsibility as custodian of all papers, records, and all property, tangible and intangible, of NICAP, such custody to be subject to the control of the Board of Governors and the Executive Committee.

(11) NICAP's existing checking account with the Riggs National Bank of Washington, D. C., is to be closed forthwith and all funds in that account are to be deposited in new account number one (as specified below) with the same bank. Two new checking accounts are to be opened with that bank to be designated as new account number one, receipts account, and new account number 2, disbursement account. All receipts of NICAP are to be deposited in account number one and the said bank is hereby authorized and directed to pay checks and other orders for the payment of money drawn in the name of this corporation when signed by J. B. Hartranft, Jr., and Albert H. Baller, Governor, ~~or either~~

of the above, and Thomas C. Matthews, Jr., counsel. With respect to account number two, said bank is hereby authorized and directed to pay checks and other orders for the payment of money drawn in the name of this corporation when signed by G. Stuart Nixon.

All withdrawals from account number one are to be made solely for the purpose of deposit into account number two and all debts of NICAP are to be paid by a check drawn on account number two. With respect to both accounts, said bank shall not be required, in any case, to make inquiry respecting the application of any instrument executed in virtue of this resolution, or of the proceeds therefrom, nor be under any obligation to see to the application of such instrument or proceeds.

(12) The Committee delegates to Mr. Hartranft the following responsibilities:

(a) To conduct a search for a new president of NICAP.

(b) To revise the membership rules of NICAP pursuant to the general outline of his letter of November 24, 1969, to Major D. J. Fournet, copy of which is attached hereto and ~~incorporated herein.~~

(c) With the help of Mr. Richard Lyle or

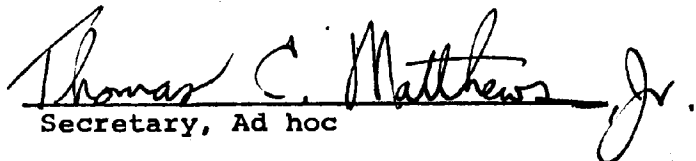
other accountant of his choice to prepare a current balance sheet of all assets and liabilities of NICAP and to report the same to the Board of Governors.

(13) Mr. Stuart Nixon was invited to join the meeting and he did so and he was informed generally of the foregoing actions.

(14) After all the foregoing actions had been taken, a telephone call was made to Major Fournet in Baton Rouge and he was notified of all actions taken by the Executive Committee and concurred in them. Major Fournet agreed to notify Major Keyhoe of the Executive Committee's actions promptly and Colonel Hartranft agreed to notify Mr. Lore after Major Fournet notified him that Major Keyhoe had been informed.

The meeting was duly adjourned at 1:30 p.m.

Respectfully submitted,


Secretary, Ad hoc

Approved: _____
Governor

Dated: _____

PROXY

I, Major D. J. Fournet, do hereby grant my proxy to J. B. Hartranft, Jr., constituting and appointing said Colonel Hartranft to vote and act for me and in my name, place, and stead, at the special meeting of the Executive Committee to be held at the offices of Wald, Harkrader, and Rockefeller, 1225 Nineteenth Street, N. W., Washington, D. C., on December 3, 1969, at 10:30 a.m., hereby granting him power to act as fully as if I personally were present.

Dated: December 2, 1969

Major D. J. Fournet

Reprinted from Proceedings 14th Radar Meteorology Conference, November 17-20, 1970, Tucson, Arizona.

METEOROLOGICAL FACTORS IN UNIDENTIFIED RADAR RETURNS

James E. McDonald

The University of Arizona
Tucson, Arizona

1. INTRODUCTION

Radar meteorology might be said to have its earliest roots in attempts to account for unexplained echoes detected with Navy shipboard CMAV radar on the 1/5/5, Yorktown 450 miles off the southern California coast in the summer of 1940 (Page, 1962). The echoes were demonstrated to be multiple-sweep returns from the distant San Diego Coastal area, seen via the now notorious anomalous propagation (AP) conditions prevalent in that area. Similarly, productive research on what ultimately proved to be a wide variety of types of "radar angels" stemmed from efforts to account for peculiar echoes not identifiable as aircraft or precipitation or ground returns. Lightning echoes went through a similar period of existence as unidentified returns, as did those caused by intense tornado vortices, sea-breeze fronts, etc. Clearly, unidentified radar returns, and the meteorological factors contributing to them, have provided a fruitful source of stimulating new problems in radar meteorology over the past three decades. Perhaps the most recent example thereof is found in current studies of the meteorological implications of the astonishing breaking-wave echoes seen on certain ultrasensitive, ultra-high resolution radars, such as the new CN/DN vertically-pointing set developed at the Naval Electronics Laboratory. The curious scalloped and braided echo-patterns went unidentified for a time after being first noted some years back, but are now reliably attributed to index discontinuities whose shear-generated undulations and refractivity variance must come as a distinct surprise to every meteorologist on first seeing graphic records of these phenomena. In these and other cases of initially unidentified radar returns, experience has shown that close attention to recurrent features of the patterns of puzzling returns has paid off in new and important understanding of the atmosphere and its electromagnetic propagation characteristics.

The present paper will comment upon and cite some examples of a category of unidentified radar returns that do not seem to be well-known to investigators in radar meteorology, despite the fact that the phenomena have frequently been attributed to anomalous propagation and other weather effects. These are a type of returns observed on operational radars, chiefly

military and air traffic radars, intermittently over a period of about twenty years, yet never subjected to any very careful, systematic, and extended scientific scrutiny, as near as I have been able to ascertain.

2. PAST STUDIES

It is to be understood that I exclude from this discussion (a) all areally extensive layer-type returns of the sort now fairly familiar to radar meteorologists from many studies, (b) dot-angles of both wind-independent (insects, birds) and wind-dependent (atmospheric refractive anomalies) types, (c) ring angels, and (d) intense but generally areally extensive and only slowly changing ground returns due to AP. After that elimination, there still remains a class of wind-independent returns, often highly localized and often exhibiting apparent speeds of propagation well above ambient wind speeds and sometimes even well above known aircraft speeds. In Plank's (1956) review of angel phenomena, he appears to have been cognizant of such a residual class, which he labeled Type III Angels ("Echoes, frequently erratic-moving, from localized, non-wind carried sources"). That he had in mind returns of the category here under consideration seems further confirmed by his subsequent treatment (Plank, 1959, p. 23) of what he termed "a type of nonaircraft echo that suddenly appears, moves for a matter of minutes in a semi-straight line path at velocities of some 600-2000 mph, and then disappears." Echoes of this nature were discussed earlier by Borden and Vickers (1953) following two widely publicized episodes at Washington National Airport on July 19 and 26, 1952. (See also Air Weather Service, 1954.) Plank (1958) has also briefly discussed those two episodes and described the prevailing conditions as "exceedingly super-refractive." However, my own computations of the relevant N -gradients in the weak surface-inversion layer present showed a value of only about half the ducting value, and subsequent checks by Plank (personal communication) revealed that a factor of two had been inadvertently omitted from his earlier computations when his estimated gradients were in error by a factor of two, on the high side. Thayer's gradient computations confirm this (he does show a thin duct on 7/26/52, but its elevation of

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military and air traffic radars, intermittently over a period of about twenty years, yet never subjected to any very careful, systematic, and extended scientific scrutiny, as near as I have been able to ascertain.

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It is to be understood that I exclude from this discussion (a) all areally extensive layer-type returns of the sort now fairly familiar to radar meteorologists from many studies, (b) dot-angels of both wind-independent (insects, birds) and wind-dependent (atmospheric refractive anomalies) types, (c) ring angels, and (d) intense but generally areally extensive and only slowly changing ground returns due to AP. After that elimination, there still remains a class of wind-independent returns, often highly localized and often exhibiting apparent speeds of propagation well above ambient wind speeds and sometimes even well above known aircraft speeds. In Plank's (1956) review of angel phenomena, he appears to have been cognizant of such a residual class, which he labeled Type III Angels ("Echoes, frequently erratic-moving, from localized, non-wind carried sources"). That he had in mind returns of the category here under consideration seems further confirmed by his subsequent treatment (Plank, 1959, p. 23) of what he termed *"a type of nonaircraft echo that suddenly appears, moves for a matter of minutes in a semi-straight line path at velocities of some 600-2000 mph, and then disappears."* Echoes of this nature were discussed earlier by Borden and Vickers (1953) following two widely publicized episodes at Washington National Airport on July 19 and 26, 1952. (See also Air Weather Service, 1954.) Plank (1958) has also briefly discussed those two episodes and described the prevailing conditions as "exceedingly super-refractive." However, my own computations of the relevant N-gradients in the weak surface-inversion layer present showed a value of only about half the ducting value, and subsequent checks by Plank (personal communication) revealed that a factor of two had been inadvertently omitted from his earlier computations when his estimated gradients were in error by a factor of two, on the high side. Thayer's gradient computations confirm this (he does show a thin duct on 7/26/52, but its elevation of

1 km essentially rules out trapping), yet he too attributes the episode to AP, which is difficult to understand.

To my present knowledge, the only discussion of any substantial number of cases in the category of unusual radar returns to be considered here is that of Thayer (1969), presented as part of the University of Colorado's study of unidentified flying objects (UFOs). Since Thayer attributes many of his cases to AP, his analyses are of present interest. Blackmer *et al.* (1969) ostensibly addressed themselves to the present category, but in fact do not discuss a single specific instance that falls in the class of interest here; they merely review known propagation anomalies. Hardy (1969) has also described unusual radar echoes in a symposium whose context was that of the long-puzzling UFO problem; but all of his examples, like those touched on by Blackmer *et al.*, were drawn from categories of known types of angels and gravity-wave effects and none from the category here under discussion. In the same symposium, I discussed in considerable detail (McDonald, 1969) four specific cases in the category of present interest, two of which cases Thayer (1969) had attributed to AP effects. I gave reasons for rejecting such an interpretation (McDonald, 1969). For brevity, the category of present interest will be referred to as "radar UFOs" in the remainder of these remarks.

3. SOME ILLUSTRATIVE EXAMPLES OF RADAR UFOs ATTRIBUTED TO ATMOSPHERIC EFFECTS

We do face a semantic problem here as to what shall be understood by the term "radar UFO." I would emphasize, first, as did Plank in describing his "Type III angels", that they must be discrete echoes (often as intense as, or more intense than, conventional aircraft at corresponding ranges); and, second, they must exhibit motions whose kinematic characteristics are quite distinct from those of conventional aircraft or of familiar ground-return effects. I would also add a third stipulation that they must be unlike any of the familiar interference and ECM effects (spoking, running-rabbits, blanking, etc.). Those three stipulations may at least be suggestive of relevant elimination criteria, even if each calls for much more careful specification than is possible within present space-limitations.

Plank stressed "erratic" motion; but, in many instances of radar UFOs, strong targets have moved in straight-line paths from one side of an operational scope to the other at speeds far in excess of aircraft speeds (*i.e.*, several thousands of miles per hour) without any change of apparent course. In other instances, high-speed tracks have exhibited sharp direction-changes, stops, closed one-sweep course-reversals, or closed orbits at extreme g-levels, in fashion quite inexplicable in terms of known aeronautical devices. Plank's term "erratic" is thus somewhat misleading, although there certainly are cases on record where that description would fit rather well. His speed

range, 600-2000 mph, is not acceptable here at either its lower or upper limit. Cases that I have looked into include targets whose speeds have, within a single tracking episode, varied from zero to several times his suggested upper limit. However, I believe that, for initial purposes of discussion, there is probably rough correspondence between what Plank referred to as "Type III angels" and what I shall here term "radar UFOs", though his omission of specific details of cases he had in mind renders that conclusion a bit uncertain. Thayer was definitely concerned with the same general category that I wish to discuss, as will be seen in examples below; Hardy (1969) and Blackmer *et al.* (1969), to repeat, simply were not, in my opinion, treating the present problem.

3.1 Case 1: Kincheloe AFB, Sept. 11-12, 1967

Between 2242E, Sept. 11 and 0001E, Sept. 12, 1967, targets were observed with an MPN-14 radar (S-band, 60-mile range, 20 rpm scan, beam tilt-range 0-10°) at the Rapcon Site, Kincheloe AFB, Michigan. The phenomena to be described below were officially explained as "probable anomalous propagation" by Air Force Project Blue Book; and Thayer (1969, p. 164) concludes that this is a "case of observations of moving AP-echoes produced by unusually well-stratified atmospheric conditions." Thus we confront here a case of some unusual echoes that have been attributed to atmospheric effects by two investigations.

My examination of the episode is based on study of file material in Air Force archives and on direct interviews with TSgt M. Y. Burns, the senior radar operator on duty during the episode. It is relevant to remark that Burns, at that time, had 7 years' experience in radar, 3 of them at Kincheloe AFB working with the equipment involved in this case. Useful information on the case has also been provided by Dr. Norman E. Levine, who was one of two investigators representing the University of Colorado UFO Project in an on-site check carried out approximately three weeks after the incident. Thayer was not at the site, nor did he interview personnel involved. Like most other cases of interest in the category of radar UFOs, this one is too involved to describe in full detail here; but salient features will be noted, in order to suggest the kind of problems that I regard as still unsolved.

A total of 17 targets were followed during the roughly 80 minutes' duration of this episode. On only two occasions were two targets painting on the scope at the same time; the other 13 were singles. At the time of the appearance of the first target, a B-52 which was outbound about 30 mi west was being followed routinely (recounted to me by Levine, confirmed to me by Burns in direct interview, and confirmed in Blue Book case-file in archives), when a second blip was noted heading N to S on a potential collision course with the B-52. The pilot was alerted but never saw any other aircraft or object. He was asked if he was "playing with radar", but no ECM was involved. Burns estimates that the target's initial speed was

somewhat faster than that of the bomber; but then it suddenly slowed to roughly half its initial apparent speed and the B-52 cleared it, the target seeming to pass southward behind the aircraft. The blip then abruptly turned eastward and accelerated to a speed that Burns and other duty personnel estimated at approximately 2000 mph (1.5 mi/sweep, roughly). Burns could not recall if this first target crossed the scope; all of his original notes were given to Levine and hence are presumably in the University of Colorado archives. Burns told me that this target, like most of the subsequent targets, was stronger than the B-52 return, and that he had MTI on and it was taking out all ground clutter. In response to my query, he stated that he had looked for AP all that night but saw none at any time. He contacted Minneapolis ARTC and the ADC SAGE center, but they had nothing on such a target.

Eight minutes later a second target appeared. (Following data from official case-file, and only rather sketchy information is given on most of the targets; but, on directly querying TSgt Burns, I learned that all were hard targets, not diffuse echoes of the sort typical of small elements of ground-return from AP.) This second target was seen at 250° azimuth, heading towards 50° azimuth, speed not specified in case-file.

Then between 2250E and 2330E "nine other UFOs" were observed on the MPN-14: (1) at 270°, tracking towards 90°; (2) at 230°, tracking 30°; (3) at 380°, tracking 100°; (4) at 270°, tracking 90°; (5) at 230°, tracking 30° for 20 miles, then changed course, heading 360°; (6) at 280°, tracking 100° for 20 miles, then turned to 180°. Then these last two targets (5 and 6) "joined at 30 miles due west of Kincheloe AFB and both went eastbound at 2000 mph," passing overhead but not visually observed. (Quote from original TWX from Kincheloe to Project Blue Book, in case-file.) The remaining three UFOs were: (7) at 160°, tracking 360°; (8) at 30°, tracking 200°; and (9) at 30°, tracking 270°.

Then, at 2338E another target was picked up at 200°, tracking 360°. At 2358E, another at 280°, tracking 120° from 60 miles out until 20 miles out, then turned and headed towards 270°.

At 0000E (on the 12th), Burns logged the second of two instances in which two unidentified targets were on-scope concurrently. One was at azimuth 200°, tracking 90° but then turned to a heading of 360°, slowed down over an interval of 8 miles, turned to a 270° heading, and "disappeared from scope" (sic). The second of the two was at 250° initially, and tracking 90°, but then turned towards a heading of 360° and left the scope.

Finally, the seventeenth observed anomalous target, detected at 0001E, was first picked up at 270°, tracking 30°, but turned to a 360° heading, slowed down, turned to 270°, then turned again to a 360° heading, and speeded up again.

The case-file includes further comments and

clarifications by Lt. T. E. Leaman at Kincheloe and Lt. W. B. Stoecker, ADC (SAGE) Duluth, as well as by Blue Book officers. These include the statement noting that the sergeant who reported the sighting *"is very experienced and would probably know what it was if it was anomalous propagation,"* and statements that no interceptor scramble from Kincheloe was called because no scramble capability existed there, while none was called from SAGE Duluth because their remoted scopes did not show the unknowns (with single exception of a strobe seen from the 753rd AC&Wron near Sault Ste. Marie). Stoecker suggested that the objects may have been too low over Kincheloe to be seen from the SAGE sites; on the other hand, as the file states (and as Burns stressed to me), tower personnel at Kincheloe saw nothing visually despite good visibility and only scattered high clouds, which is puzzling, though by no means unprecedented. Burns tried beam-tilting and tended to get stronger returns at high than at low tilt. No RHI equipment was locally available, unfortunately. The case-file states that TSgt Burns tried switching channels, as a cross-check against possible ECM, but got no change in target intensity, tending to discount that possibility. I asked Burns if he tried IFF, and he said he did but got no IFF, just skin-return. He pointed out that the 752d AC&Wron at Empire, Mich., queried him at one point during this episode, asking if he was getting a return at about 100 mi SE, heading his way. But his MPN-14 had only 60-mi range and could not then detect it; nor did a target subsequently enter his scope from that sector. The only target that he carried which he knew to be concurrently carried by another radar was one at a bearing of about 250° from Kincheloe that was also seen at least briefly by radar at the 753d at Sault Ste. Marie. Burns recalled that the 753d had a height on that target, but they did not release it to him. There is no indication in the case-file that this important point was checked by anyone.

Because targets in the radar UFO category have often been reported to stop for variable periods of time, I asked Burns what he felt the slowest speed had been. He replied that in several instances some of these targets hovered motionless for a time of the order of 10-15 seconds (3-5 scans). The MTI was set to function out to approximately 15 miles; whether the hovering targets lay within or beyond the MTI limit is not now clear.

What interpretation is to be put on a radar episode such as the above? At Project Blue Book, the considerable experience of the senior man on duty and his specific yet unsuccessful search for AP symptoms were rather casually ignored in the following evaluative comment by V. D. Bryant, dated 15 January 1968 and included in the official case-file: *"The obvious 'excuse' or 'explanation' for the sightings appears to be temperature inversion. The erratic courses taken by the 'objects', their wide variations in speed (150 to 2000 mph), and the fact that no noise was heard, even at the low altitudes assumed, all point toward*

anomalous propagation due to temperature inversions." And, on that basis, the Kincheloe sighting is so carried in the official files. This is a representative Blue Book radar evaluation, I have found.

Thayer (1969), reviewing this case in the Condon Report, states: "This is a good example of moving radar targets that cannot be seen visually, where there is a 'forbidden cone' over the radar site. Some of the returns were even seen to approach within 5-15 mi of the radar and disappear, apparently subsequently reappearing on the other side of the radar scope at about the same range that they disappeared. This sort of behavior is symptomatic of AP-echoes." [That gross misinterpretation of the blind spot overhead in all search-type radars is made by Thayer in other cases he analyzes in the Condon Report, including the extremely significant Lakenheath case of 1956 in England (Thayer, 1969, p. 163).]

Thayer displays refractivity profiles for the time and general vicinity of the Kincheloe episode and, on the basis of an elevated duct in the 300-500m layer, suggests that "strong partial reflections would be expected," and that "moving AP-echoes, produced in the manner described by Borden and Vickers (1953), could be expected to appear at apparent heights of between 2000-3000 ft and 7000-9000 ft." Confusingly, those heights do not match either of the diagrams he displays, one of which is, in fact, labeled 9 Nov. 1967, a month and a half after this episode. Also, Thayer systematically plots his index profiles on A-Z coordinates, yet always labels the superrefractive layers in terms of the vertical N-gradient, not the A-gradient. This is more than merely confusing; it promotes the misinterpretation that ducting is present in cases (numerical value between about -115 km^{-1} and -157 km^{-1}), where it really is not.

A basic difficulty in examining the validity of Thayer's assertion concerning "strong partial reflection" is that he does not define his usage of that term. In usual practice, it has acquired two distinct meanings: (1) Partial direct reflection, i.e., back-scatter, to put it more precisely, or (2) partial forward-scatter. Neither of those interpretations offers any hope of accounting for the kinematics of the reported Kincheloe targets, and certainly the former could not conceivably yield apparent radar cross-sections rather greater than that of a B-52, as TSgt. Burns characterized the intensities of these unidentified returns.

Nor does Thayer clarify his position by seeming to equate "strong partial reflections" with the ideas proposed by Borden and Vickers (1953). Their discussion postulates essentially specular reflection from moving waves on an inversion surface, the propagation speeds being of the order of the wind speed and the apparent targets thus being assigned roughly twice the wind speed at inversion level, for reasons of simple reflection-geometry. First, it must be remarked that, although the Borden and Vickers report has often been cited as if

it settled the July, 1952 Washington radar UFO episodes, I find that view unsupported by the very sketchy and entirely qualitative model they propose. Secondly, the upper-level winds at Kincheloe that night were less than 10 kts up to the 850 mb level (below which lay the only index gradients of any significance), which would scarcely account for the reported target speeds on anything remotely like the Borden-Vickers hypothesis. And third, the Borden-Vickers hypothesis of "glint" reflections from favorably disposed undulations on an inversion surface could scarcely be invoked to account for apparent target movements whose directional variability matched that seen on the Kincheloe MPN-14 during this episode; nor could it possibly account for sudden turns, hovering, and accelerations described in the official case-file. Other slightly subtler objections could easily be raised, but those simple ones seem sufficient to reject Thayer's loose explanation (let alone the still less meaningful one contained in the official case-file).

One might ask how Thayer would suggest that any form of propagation anomaly or "partial reflection" could explain the complex kinematics reported by the Kincheloe Rapcon Site for this night. One partial answer may be that he offers that suggestion in a mere 4-paragraph account of this intriguing case, an account that gives the reader no hint that 17 distinct targets were seen, that says nothing about turns, hovering periods, or accelerations, that omits any mention of speeds of the order of 2000 mph, and that gives no suggestion that in one instance two such targets converged from opposite directions, turned eastward together, and then moved across the scope side-by-side at about Mach 3, passing over and beyond Kincheloe AFB. Unfortunately, I must add that my detailed checking of the discussions of the 35 "optical and radar analyses" in the Condon Report has established that such omissions of crucial sighting details are typical, not exceptional in that Report.

Plank (1958, 1959) has suggested that perhaps some of the "erratically moving angels" (his Type III) might be caused by "shock waves, echo being the product of direct back scatter or diversion of energy to the ground." He then notes that shock waves are thin, of the order of microns, yet can have refractive index differences across them of "several hundred N-units." The high speeds exhibited by some of the targets in this Kincheloe episode (and in many others of interest) might vaguely suggest shock phenomena, so perhaps a few remarks negating that hypothesis are in order. First, Plank really does not offer any geometric model to support the kind of kinematics found in interesting radar UFO cases. (Quite possibly he is unaware of the content of most such cases.) Only extremely simple paths would be possible; certainly his emphasis upon erratic movements goes wholly unexplained on any such model. But the greater objections are the quantitative objections. He mentions N-changes of several hundred units; but this is quite

unreasonable. First, only temperature jumps and not humidity jumps could accompany shock-wave passage. Secondly, in the lower atmosphere, one N-unit change is associated with approximately 1°C of temperature change. Third, the Rankine-Hugoniot equations permit one to relate shock-front temperature changes to concomitant peak overpressures; and an overpressure of, say, 5 psi, is found to lead to a transient shock-heating of only about 30°C (hence about 30 N-units jump across shock-front), yet this is an overpressure not only great enough to take out all nearby windows but to level weak structures and collapse roofs. In brief, the only shock waves capable of giving significant radar-reflecting characteristics would be of rather severely damaging nature, would leave unmistakable after-effects, and yet could influence a radar beam for only fractions of a second. The shock-wave suggestion seems unpromising for explaining radar UFOs, in general, and the Kincheloe targets in particular. Indeed, one of the characteristic puzzles of high-speed radar UFOs (and the Kincheloe UFOs in particular) is that no discernible sonic boom is associated with cases where the radar-deduced speeds are markedly supersonic.

In summary, it is by no means clear that one can accept any known kind of anomalous propagation for targets in the class exemplified by the Kincheloe targets. However, we are doubtless still unaware of certain types of propagation anomalies in our atmosphere, and the breaking-wave echoes may attest to interesting surprises yet to come. But there seems to exist so large a margin of separation between any of the now-suspected atmospheric effects and the characteristics of what I am terming radar UFOs that I do find it difficult to understand how AP and "weather effects" have so long been casually employed to explain radar unidentified targets within Project Blue Book, and how they have more recently been invoked in the Condon Report by Thayer in essentially similar manner.

Perhaps a clue to the latter is found in a curious introductory definition of what Thayer (1969, p. 117) terms "blip-like" radar returns: "*Cases where the radar target (or targets) showed characteristics similar to the return from a solid object (such as an aircraft, etc.) and where the target did not display erratic or discontinuous behavior. Acceleration or velocity in excess of known aircraft capabilities, or periods of immobility, were not considered to be contrary to normal target behavior.*" I fear that this definition might be paraphrased fairly by saying that Thayer adopted at the outset explicatory rules by which completely abnormal radar returns were agreed to be quite normal. Many examples in support of such a paraphrase have come to my attention in followup investigations of the Condon Report, whose handling of the radar UFO cases I find almost wholly uncritical, generally tendentious, and often absurd -- and, more than that, disturbingly incomplete with respect to the scientifically most puzzling features of many of the cases (cf McDonald, 1969). If we

are to learn anything meteorologically interesting from radar UFOs, it will come only from much more discriminating and more thorough analyses than any now at hand.

3.2 Case 2: U. S. Naval Air Station, North Island, San Diego, Calif., Oct. 14, 1957

As another illustration of past radar UFO cases that have been officially explained in terms of meteorological effects, we might consider one that, unlike the preceding case, involves visual as well as radar observations, and for which the radar observations were made from the air rather than from the ground. Cases of both the latter types are scattered through the Air Force archives, and some, like this one, emanated from another service. I have not interviewed any of the observers in this particular case, so, in order to fulfill written agreements with the Air Force, I cannot cite witness-names. Instead, I shall be forced to use merely initials of the Navy personnel involved. (I am currently challenging Air Force strictures against citation of names of military and government-agency witnesses in past UFO cases, contending that they are blocking full and credible scientific discussion of case details and arguing that these strictures stand in violation of P.L. 552. It is the present Air Force position (SAFOI letter, 7 Aug 1970) that scientific citation of witness names would constitute an "invasion of privacy", despite the fact that these were personnel of the military, FAA, USWB, etc., whose observations and official reports were made in regular line of duty. At this writing, my efforts to get the Air Force to rescind these strictures have not yet proved successful, so unfortunately I am obliged to omit all names from this account of my checks on this scientifically significant case. No strictures against citation of names of investigative and evaluative personnel have ever been imposed in the course of my investigations, so I do cite certain names in those categories, since they, too, are of obvious documentary relevance.)

Slightly before 1900 PST, on October 14, 1957, at NAS North Island, AC/3 VEE (initials of enlisted Navy tower controller) noted "*a bright, round, white light, about the size of a dime, bearing 210°T from the tower and approximately 300 ft above the Point Loma land mass,*" according to a 17 October 1957 report to the Air Force Office of Special Investigations from the District Intelligence Officer, Eleventh Naval District. VEE observed the object remain stationary for about 2 minutes and then fade out. One or two minutes later a similar light, presumably the same, suddenly reappeared slightly farther north and a bit lower than before, and now somewhat brighter. After remaining stationary about two minutes, it again faded away, the report notes. Somewhere in this sequence, VEE alerted two other enlisted personnel, DC and MD, also on duty in the tower, and all used binoculars in the later portions of the visual observations, according to the intelligence summary. It soon reappeared once more, again farther north and again lower; it seemed now to wobble slightly and exhibited a half-halo on its upper portion, with a bluish tint on one side. No

angular estimate is given.

Concurrently, a Navy S2F Tracker (anti-submarine search aircraft), attached to VS-21 at NAS North Island, moved into position for take-off, and AC/3 VEE had to divide his attentions between the unexplained light over Pt. Loma and the S2F ready for takeoff. In the process of controlling the takeoff and vectoring the aircraft to attempt a search, VEE lost the object, the reasons becoming clearer below.

According to Air Intelligence Information Report OI-03-57, dated 23 October 1957, prepared by Maj. L. W. Bruner, 27th Air Division, Norton AFB, Calif., based on a signed summary statement by the S2F pilot, Lt. ALR (initials), the aircrew, during engine warmup, had heard the tower operator make three radio calls to an "unidentified aircraft", requesting identity and intentions, but getting no reply. On requesting and getting takeoff clearance, Lt. ALR was asked by the tower operator to maintain 200 ft altitude after liftoff and proceed to Pt. Loma to identify a stationary light source apparently hovering at that estimated altitude. Lt. ALR notes that both the copilot, Lt. (jg) GTC, and he observed the light, while still on the runway, before starting their run.

"After take-off, I turned outbound over the channel," Lt. ALR wrote in VS-21 msg 152348Z of Oct 1957, "and climbed to 200 feet, all the while keeping the light in view. My intentions were to proceed seaward of the light so as to silhouette its airframe against the lights of San Diego. However, when we drew abreast of it off our right wingtip, we observed it undergoing a rapid acceleration away from us and to the west. I noted relative motion between it and the lights of San Diego. As our range opened the light began to alternately vary in color and intensity. The extremes were bright red and a blue white, with no regular period of change from one to the other.

"I turned west and assumed a heading of 230 mag. with the light then dead ahead. In about four or five minutes (warm-up time) our radar operator reported a target dead ahead at seventeen miles and above us. The weather was clear ahead and above, with a discernible horizon and low clouds 30 miles west. The stars were bright and clear but small and dim compared with the light we were following. During the chase there was always evident a relative motion between this object and the background of stars.

"From Pt. Loma on out the object climbed steadily and I followed in a gradual ascent at 140 knots IAS, closing irregularly. At 4500 ft the object leveled off 12 miles ahead, and then drifted right 10 degrees in about five seconds. I turned right to 240 mag., leveled off and increased speed to 160 knots. The range closed to 10 miles and stabilized. After following for about three minutes at 10 miles I decreased speed to 120 knots but observed no range-rate on radar. I then advanced speed to 180 knots IAS and still observed no range-rate.

"The object in the meantime drifted

20 degrees to the left (220 mag.) in no more than 10 seconds, and then closed range to 8 miles in one rotation of the radar antenna (7.5 seconds). The range stabilized again at 8 miles and we began another gradual climb. At 8000 ft and about 40 miles from Pt. Loma the object leveled off and shortly after disappeared visually and on radar. Fifteen seconds later it reappeared visually but not on radar although the operator switched to sector-scan and searched continuously."

Lt. ALR concluded his summary with the comment that they maintained visual contact until the S2F was 50 miles from Pt. Loma, at which time they lost visual contact, too (fadeout), terminating the incident. His statement notes that all four aircrewmembers saw it and can substantiate his descriptions. (The two enlisted men aboard were WES and WPC.)

This is only one more of many radar UFO cases I have recently been studying as a result of extensive searches through the Air Force archives and only one of many hundreds of UFO cases I have checked during the past four years. Each case has certain unique features, but many have the common feature that it is exceedingly difficult to propose for them conventional explanations. Yet, here as in almost all the rest that have received the Project Blue Book evaluations, a conventional explanation has been assigned by Blue Book.

I quote from that explanation, extracted from Air Force archives, since it invokes atmospheric phenomena of potential interest to radar meteorologists and atmospheric physicists:

"Distortion of light and changing colors attributed to probable inversion off coast. That Arcturus was the object is...indicated by the fact that the pilots could not close on the object. Its jumping around and the spurious radar returns caused by inversion or other weather conditions conclusive to distortion of atmospheric optics. Sighting was of short duration and Arcturus set at about the time of object's disappearance."

(Actually, I must note that there is a slight confusion on the official evaluation of this case. Although the above case-summary explains the sighting in terms of Arcturus and some form of anomalous propagation, the case-card in the archives shows it as "Possible Balloon." There is no evidence of any real analysis of either hypothesis, no weather data, no computations of positions, or other quantitative assessment; but the original teletype message from AIRASRON-21 to Wright-Patterson AFB, which notes how the object "drifted across chase plane's course at speeds est by pilot to be in excess of 1000 mph," has a pencil-sketch of a top-view of an aircraft flying past a sphere, with arrows and lines evidently intended to depict the viewpoint contained in evaluating annotations that nearly obliterate parts of the TWX: "Tests have shown that when a/c slipstream from wing tip hits balloons it sends it rapidly sideways." The sketch and pencilled

evaluative comments, typical of many documents in the UFO archives, are signed by Capt. George T. Gregory, who was Project Blue Book officer in the 1957-59 period. Many such UFO reports were processed in about this way over the years.)

But this one has the alternative (and evidently officially preferred) explanation of suggested inversion effects on Arcturus and the S2F's radar. Consider certain difficulties with that explanation: (1) The tower observers reported to Navy intelligence interrogators that the light shifted three times, from its azimuth of first appearance at 210°T. At about 1900 PST on this date, Arcturus was nearing the horizon at about 290°T. This light over Pt. Loma was seen by the cockpit crew from the runway and held in sight until they drew nearly abreast of it, viewing it off the right wingtip, whereupon it suddenly accelerated westward and started climbing. (2) The subsequent air chase involved a sequence of pursuit headings stated to be 230° mag, then 240° mag, then 220° mag, the source finally pulling away and fading out at 230° mag, after an approximately 20-minute visual-radar chase, at about 230° mag. The magnetic variation off the San Diego coast is about 15°E, whence the bearing to Arcturus would have been about 275° mag, some 35 to 50° from the luminous object's reported azimuth, far in excess of uncertainties that would affect observations under these conditions. (3) Viewed from the S2F, the object appeared to climb, then level out, on two occasions. And it executed fast lateral shifts to both left and right, through arcs stated by the Navy pilot to approximate 10° and 20° of relative azimuth. (4) The aircraft was flying, after the first few minutes, at altitudes well above the coastal subsidence inversion whose refractive effects are adduced in the official explanation to account for angular image-excursions whose amplitudes dwarf the 10's of seconds of arc displacement associated with stellar scintillation effects, even under unfavorable viewing conditions at the surface, let alone at 4-8000 ft level. (5) Nor does the official explanation that the "inversion and weather conditions" were responsible make better sense of the reported radar behavior. Ranges opened and closed, angular altitude varied, and azimuths shifted, all this during a 40-mile pursuit, at altitudes ultimately near 8000 ft. (6) The estimated lateral speeds (order of 1000 mph) came from rough calculations based on radar ranges, plus compass-based angular estimates. A target at 10-mile radar range that moves 20° in 10 seconds has exhibited an apparent velocity near 1200 mph.

To suggest that optical refraction effects plus anomalous propagation could cause such extreme behavior, and to suggest it without the slightest supporting argument, is simply not reasonable.

Could there be some truly phenomenal optical and radar-propagational anomalies of the atmosphere that might be capable of yielding visual and radar indications of this sort? The archives have many more such anomalies that will require at least equal extensions of present

scientific knowledge if we are to account for them along the lines of application of atmospheric physics that I have found typical of Project Blue Book UFO explanations over the past two decades.

3.3 Case 3: Gulf of Mexico, B-29, Dec. 6, 1952

With so large a number of previously unknown cases that I could discuss and so little space available here, it is difficult to select a final example. But because of my strong concern over the serious inadequacies of the radar-optical UFO case-analyses in the Condon Report, I choose a last one that exhibits some of those deficiencies, that is explained in terms of alleged atmospheric effects, and that happens to be a rather famous case in UFO annals. I believe that the ad hoc panel that reviewed and endorsed the Condon Report (NAS, 1969) could not possibly have scrutinized carefully the level of analysis of cases such as this in that Report, a point that I have elaborated elsewhere (McDonald, 1969b).

In the early morning hours of December 6, 1952, a B-29, on the return leg of a training flight out of Randolph AFB had turned around over Tampa and taken up a generally westbound course across the Gulf. When about 100 miles south of the Louisiana coast at an altitude of 20,000 ft, visual sighting of oilwell flares on the coast led the Instructor Navigator, 1/Lt WN, to request a student radar operator to turn on his set and try to pick up the coastline on 100 mile range. After the student operator's failure to detect the coast, WN confirmed that no coastline echo was discernible, so called for a set calibration. Some time later he was alerted to presence of some four blips ahead and in rapid closure with the B-29. [Air Intelligence Information Report No. IR-86-52, filed from Randolph AFB by Maj. J. R. Sheffield, Wing Operations Officer, 3510th Flying Training Wing, includes a summary of the events, the sightings, a map, and signed statements by three officers and two enlisted men who figure in the incident. These items, plus the original TWX and other materials in the archived case-file indicate that the B-29 had turned to a heading of 320° at some earlier time, prior to the unsuccessful search for the coastline on the navigational radar, and had reached coordinates of 28°10'N, 92°04'W when the sightings began. I cite these points because they are quite relevant to a point that Thayer (1969) regards as crucial, yet seem to me to be a misinterpretation of the intelligence report. I infer from coordinates and times that inability to pick up the coastline occurred while the B-29 was still just over 100 miles offshore, beyond the set's 100-mile range. Furthermore, the set was then uncalibrated, as the Instructor Navigator makes clear in his signed statement.]

The first 4 targets were sighted at 0525 CST, "with no specific grouping such as a radar beacon transmits apparent on the scope at 330°", Lt. WN stated. The radar had azimuth stabilization; its scan rate was 25 rpm. The navigator, 2/Lt RJE, verified WN's assertion that

these first blips advanced southeastward about 5 mi/scan, and MSgt BRP, the aircraft performance technician, using 1/Lt NK's stopwatch data and the indicated displacements per scan, informed the crew that the computed target speed was about 5000 mph. These targets, viewed on three repeater scopes, passed to the right of the B-29 and moved offscope at a bearing of about 70°.

Then, immediately after a calibration-check, a second group of blips was seen coming in along a similar path. This time the pilot called off relative bearings from his repeater scope, with instructions for the crew to watch on the starboard. SSgt WJD states: *"I immediately looked in that position (3 o'clock bearing called out from cockpit) and saw two flashes of approximately 3 seconds, which did not alter course whatsoever. The flash was of a blue-white nature and did not change brilliance... when it disappeared."* Two objects were also seen by MSgt BRP, and he was evidently forward for he saw them move rearward and disappear under the wing. In 1/Lt WN's account, he confirms that these flashes were seen to *"go from front to rear under our wing."*

The interrogating officer, Maj. J. R. Sheffield, in his intelligence report from Randolph AFB, gives 18,000 ft as the approximate altitude of the objects and 20,000 ft as the B-29's altitude, accepting the crew's statements that the objects came in below the B-29. Despite this, Sheffield states in his report that: *"Visual sightings are indecisive and of little confirmatory value,"* but no explanation of why he discounts the two crewmen's observations is given.

Like many other Blue Book reports, this case-file leaves unanswered a number of pertinent questions. The total number of objects followed on radar is not clearly specified. 1/Lt NK says he observed: *"about twenty objects in all, sometimes as many as two and three on the scope at one time."* Crewmen refer to one radar-observed event involving a merger of targets (a feature that I have now found in a number of reports of radar UFOs). As WN described it: *"Contact was broken off at 0535 after a group of blips merged into a half-inch curved arc about 30 miles from our a/c at 320° and proceeded across the scope and off it at a computed speed of over 9000 mph."* WN also stresses one other significant target-movement: *"One group of blips, after the scope was calibrated, were noted, after moving from 330° to 150° across the scope, to arc about and swing in behind us at approximately 30 miles and maintain speed and distance for approximately 10 seconds and then disappear."*

Given that summary, consider Thayer's (1969) explanation of this case (which Blue Book has carried as "unidentified" since 1953): The *visual sightings were probably Geminid meteors,* he writes. No supporting discussion; just that assertion. In fact, one finds that the radiant of this December shower lay at about 280° azimuth and about 55° elevation angle at 0535C on this date. Hence any Geminids seen to the star-

board of an aircraft on 315-320° heading at 0530C would have been descending almost perpendicular to the NE horizon, a 90° directional mismatch with Thayer's explanation.

The above-described multiple radar target events Thayer explains in terms of a strong ducting layer that showed on the 0900C Burwood raob. *"The strange moving targets seen on the radar were probably caused by imperfections in the atmospheric layer forming the radio duct, allowing radio energy to enter the ducting layer at various points. This would create sporadic returns."* The failure to pick up the coastline just prior to the UFO episode he explains as follows: *"A transmitter located above a radio duct and emitting a high enough frequency to be affected, as the radar undoubtedly was, does not excite propagation within the duct. This implies that the coastline below the duct would not be visible to the radar located above the duct."* Thayer's argument is, of course, quite erroneous; he has his argument upside down. And casual suggestion that the complex target behavior reported in this case was the result of *"a series of gravity waves running along the duct"* is mere verbalism.

Thus were radar UFOs discounted in the Condon Report. Perhaps the above examples will give at least some indication that there remains an unsolved scientific problem here, that there exist unidentified radar returns of a category for which atmospheric effects have been proposed as explanations, but on ground that are to date less than satisfactory.

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THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

INSTITUTE OF ATMOSPHERIC PHYSICS

March 8, 1971

Hon. Silvio O. Conte
House of Representatives
Washington, D. C., 20515

Dear Mr. Conte:

The accompanying letter is my formal response to your invitation to add further comments to my remarks made last week, when you asked me about my work on the UFO problem. This note is an informal letter of transmittal.

As you may have guessed, I was taken entirely by surprise by your bringing up the UFO problem, and failed to grasp the essential purpose of your question. For that reason, I probably did not give you very satisfactory answers; I was put too much on the defensive by my misinterpretation of your objectives.

Hence, against the possibility that you still might be able to use a somewhat formal letter in response to your invitation to elaborate on those points, I send you the enclosed letter. It is probably too late to insert it into the published version of last week's hearings, but conceivably it might be of some use to you if you do discuss any of these points on the House floor.

In any event, even if this is of no real use to you in connection with clarifying or evaluating my SST testimony, I am delighted to have this opportunity to underscore to any member of Congress the point that there are responsible scientists who have taken a good look at the UFO problem and conclude that, far from being a lot of nonsense, it is a matter of potentially highest scientific significance. The latter is very much my view, after more than four years of rather detailed studies in that area.

I might note that your own state of Massachusetts, particularly in the spring of 1966 and continuing on into 1967, has been the site of many outstanding UFO reports. I have investigated, in quite a bit of detail, for example, one that occurred in the middle of Beverly, Mass., involving a number of witnesses, including two police officers, and represented a sighting at extremely close range of an object fitting no known technological description. It's a fascinating problem, and one that has been allowed to slip into a most regrettable state. Perhaps at some future time, we might have an opportunity to pursue these matters further.

Sincerely yours,

James E. McDonald
Professor

JEH/msr
Enclosures



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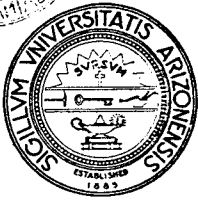
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Dear Mr. Conte:

In the March 2 hearings before the House Transportation Appropriations Subcommittee, you queried me regarding my past work on the long-puzzling UFO problem. At the end of our brief exchange on that topic, you extended to me an invitation to elaborate somewhat on the questions you had raised. As I now understand it, you were attempting to get on record at least a few indications of my serious scientific concern for the UFO problem.

Because I have devoted so much effort in recent years to clarifying the nature of the UFO problem, it would be quite easy to cite a large number of such indications. Should any of your Congressional colleagues raise questions along these general lines, in connection with the probity of my views on SST environmental hazards, perhaps the best source to which they might be referred would be the *Proceedings* of hearings before the House Committee on Science and Astronautics, 90th Congress, 2d session, July 29, 1968, "Symposium on Unidentified Flying Objects." In the 247-page *Proceedings* of those hearings, my testimony and submitted statement will be found to be the most extensive single contribution. It includes a discussion of over 40 selected UFO cases of scientific significance. My material will be found on pages 18-85 of the *Proceedings*. And, with respect to the particular question that you asked me about the curious correlation between power failures and UFO sightings (an interesting, albeit inconclusive, correlation), see pages 31-32 and 79-80. You will find there essentially the answer that I gave you last week, in my reference to Congressman Ryan's queries on the New York blackout of 1965. Incidentally, far more numerous instances of ignition-disturbances in automobiles are on record, in conjunction with close-range UFO sightings of an extremely intriguing type.

As another meaningful indication of the serious nature of my scientific approach to the UFO problem, I enclose a list of the quite extensive number of scientific, technical, and military groups and organizations before which I spoke during the 1966-69 period. You will find many Air Force and Navy groups represented there, many professional societies, and a wide range of university groups. In particular, during the 1968-69 academic year, the American Institute of Aeronautics and Astronautics selected me as one of a half-dozen Distinguished Lecturers for that year. This is why so many AIAA sections appear on the list for that particular period.

The American Society of Newspaper Editors, at their 1966 spring meeting in Washington, asked me to be one of their speakers. I enclose, for your information, a copy of the material that I presented there, which also contains a number of selected UFO case-discussions.

Hon. Silvio O. Conte
March 8, 1971
Page Two

I selected five Air Force radar UFO cases for analysis before a UFO Symposium at the December 1969 meetings in Boston of the American Association for the Advancement of Science. Enclosed is a copy of that material, some of which has since been published elsewhere.

As another of many available examples of the approach I have employed in considering the UFO question, I enclose a copy of material recently published in the *Proceedings* of the 14th Weather Radar Conference. As you will note, I discuss therein three other military-radar UFO cases of significance.

The Condon Report is often cited as having settled the UFO problem, yet I am one of a number of scientists who are entirely unsatisfied with that report and its scientific content. I shall not enclose a copy of an extensive review of the Condon Report which I have written, but it can be found in the November 1969 issue of *Icarus*, a leading publication in the planetary sciences field. However, I do enclose a couple of other summaries of talks that I have given to scientific and technical groups, wherein I have pinpointed some of my many objections to the level of analysis that went into the Condon Report.

As I said above, an extremely large list of indices of my serious scientific consideration of the UFO problem could be assembled, if there really were a point in so doing. It is extremely unfortunate that the entire UFO problem was downgraded to a level where only a very small number of untrained personnel within the Air Force were routinely assigned to handling reports that fed into the Wright Patterson Air Force Base, where Project Blue Book was headquartered. As I said to you in the March 2 hearings, I have recently spent a good deal of time working on the now declassified files that are stored at the Air Historical Division, Maxwell Air Force Base. The implications of the long-filed military reports that I have studied down there would be impossible to describe in a mere paragraph or two. Suffice it to say that those files strongly bear out the conclusion that I reached several years ago, that the UFO problem is one of potentially enormous scientific significance. Yet, despite that, many persons (including the colleagues whose queries you felt obliged to prepare to fend off) are under the misimpression that the UFO problem is all a lot of nonsense. If they had talked to as many airline pilots, military pilots, law-enforcement officers, and other witnesses of high credibility as I have interviewed in the past few years, they would have a markedly different notion of this whole question. However, the ridicule that has been focused on that problem has made it exceedingly difficult to get scientists to take a look at the scattered but impressive evidence that argues its scientific importance. That objective is still one of my major scientific concerns, I might say in closing.

Sincerely yours,

JEM/msr
Enclosures

James E. McDonald
Professor

McDonald's last known scientific paper, addressing a problem in atmospheric physics, but found among his UFO files material.

A VARIATIONAL DERIVATION OF YOUNG'S EQUATION FOR THE CONTACT ANGLE

ABSTRACT

Young's equation for the contact angle in a solid-liquid-vapor system is deduced, by a straightforward variational method, as the minimum surface free energy equilibrium condition for a small mass of liquid resting on a plane insoluble solid surface. Shape variations are subject to the two constraints of uniform internal liquid pressure, to assure mechanical equilibrium, and constancy of liquid volume under the allowed variations of the shape parameters. The analysis includes a proof that the Young contact angle is not simply an extremal condition on free energy but actually a minimal condition, so that it corresponds to stable equilibrium for the case considered.

INTRODUCTION

In analyses of solid-liquid-vapor systems, use is frequently made of the Young equation,

$$\gamma_{23} \cos \theta = \gamma_{13} - \gamma_{12} \quad (1)$$

where γ_{23} is the surface tension of the liquid-vapor interface, θ is the contact angle, γ_{13} is the specific surface free energy of the solid-vapor interface, and γ_{12} is the specific surface free energy of the solid-liquid interface, as shown in Fig. 1a.

¹ Work done with the support of the Office of Naval Research.

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Derivations of (1) are often given in a form in which γ_{12} and γ_{13} are treated as surface tensions, so that (1) is presented as if it were a condition for static mechanical equilibrium of a line-element of the locus of contact of all three phases. There are conceptual difficulties in such an approach, since γ_{12} and γ_{13} are not readily interpreted as simple surface tensions, but details of those familiar difficulties need not be examined here.

Clearly, Young's equation (1) is more comfortably validated when it is made to rest upon a derivation in which the surface energy interpretation is employed in place of surface tension. Gregg (1) displays a derivation framed in this spirit, but he ~~properly~~ takes note of a very obvious deficiency of that derivation (see below) and then cites recent discussions (2) of a curious controversy as to whether Young's relation is even valid for solid-liquid-vapor interfaces of the type shown in Fig. 1a. A proof, developed by Johnson (3) in the very general and very elegant manner of Gibbs (4), is cited by Gregg as the strongest demonstration of the validity of (1).

Johnson follows Gibbs in obtaining (1) from arguments similar to those of the principle of virtual work; but he goes beyond Gibbs to include the possibility that gravitational forces and adsorption effects are important. The purpose of the present discussion is to outline a conceptually simple derivation of (1) which also rests on considerations somewhat analogous to the principle of virtual work but which confines attention to a very specific case of considerable theoretical

interest. Exactly because the following derivation of Young's equation is less general than Johnson's, its essential points are much more readily understood than those underlying his quite elegant analysis. Indeed, the principal virtue of the following may be that it will make somewhat more understandable the almost mysterious manner in which three terms emerge from the variations of three different integrals to group themselves into the integrand from which Johnson's variational argument neatly generates Young's equation.

A derivation somewhat like the one to be given below has been presented by Schwartz and Minor (5), but their method of handling the condition of constant volume seems less clear than the direct variational approach used here. Perhaps this may account for the fact that their quite valid approach has not been incorporated into recent texts like that of Gregg (1) or Davies and Rideal (6). Because the Young equation is of such basic conceptual importance, it seems desirable to have available the clearest possible mathematical derivation resting on easily grasped general principles. It is hoped that the approach developed below may fill that need and also further clarify the basically simple considerations upon which the Young equation actually rests.

The following treatment has one further virtue in that it answers an important question not examined in any of the above references, namely the question of whether the extremal condition which is satisfied by Young's relation characterizes a

stable or unstable equilibrium. It is shown below that the condition is one of stability for the case considered.

AN INADEQUATE DERIVATION

Certain essential features of the derivation to be given in the next section will be better appreciated if we first examine a crucial deficiency of the type of variational derivation exhibited and criticized by Gregg (1, p. 201). In Fig. 1b, we imagine a wedge of liquid to be displaced slightly towards the right so that the liquid-vapor interface takes up the new position indicated by the dashed line BB' preserving the contact angle θ , i.e., BB' is parallel to AA'. This small displacement increases the solid-liquid interface by amount δA_{12} proportional to length AB, and concurrently decreases the solid-vapor interfacial area by that same magnitude. If we now uncritically assert that the increment of liquid-vapor interfacial area δA_{23} is proportional to length CD, so that it is given by $\delta A_{12} \cos \theta$, then we can go through the following argument that appears to constitute a variational derivation of Young's equation.

If θ is the equilibrium value of the contact angle, then a vanishingly small net change δF of total surface free energy F must accompany the above-specified variations as those variations are shrunk to infinitesimal magnitude, inasmuch as a system in equilibrium occupies a state of minimal free energy, i.e., $\delta F = 0$. The stipulation that, at equilibrium, the variation of F shall

vanish requires, if $\delta A_{23} = \delta A_{12} \cos \theta$,

$$\delta F = \gamma_{12} \delta A_{12} - \gamma_{13} \delta A_{12} + \gamma_{23} \delta A_{12} \cos \theta = 0 \quad (2)$$

Since this must be true for any small variation δA_{12} , we may divide through by that factor and thereby we seem to obtain Young's equation (1).

The foregoing is, however, quite unacceptable for the following reason (1): We have simply asserted, without any proof, that the increment of liquid-vapor interfacial area is given by $\delta A_{23} = \delta A_{12} \cos \theta$; that is, δA_{23} is simply declared to be proportional to length BC. But why could we not have said, almost with more apparent justification, that the increment of liquid-vapor interfacial area is proportional to BD? As soon as the latter question is posed, we recognize that we have not put down enough restrictions (constraints) on our problem to warrant any valid assertions as to the magnitude of the increment of liquid-vapor interfacial area. We sense that, in order to specify properly the quantity δA_{23} , we must know what is happening, during our virtual displacement, to parts of the liquid not even exhibited in Fig. 2. Our difficulty arises from what Gray (2) has aptly termed "the fallacy of the semi-infinite interface." Briefly, we must specify much more clearly, and translate into mathematical form, certain additional integral constraints that characterize the specific problem we seek to investigate.

A VARIATIONAL DERIVATION FOR A SPECIAL CASE

In many problems, especially those of heterogeneous nucleation (see, e.g., 7, p. 54), we often deal with a small mass of liquid lying on a plane solid insoluble surface, so it is of interest to submit that important specific case to variational analysis. We shall specify that gravitational effects are negligible. The latter assumption is true to excellent approximation in the nucleation problem, as well as in all other cases where only tiny patches of liquid are involved. The "sessile drop" problem, by contrast, is one in which gravitational flattening is quite significant because of large masses of liquid involved, so we exclude it from present consideration and take comfort in knowing that the generality of Johnson's (3) proof assures us that Young's equation also holds in such circumstances. We also exclude adsorption effects, so that surface tensions become identical in significance with surface free energies (3).

We seek the equilibrium shape and contact angle for this special case. We can assert immediately that, in order that mechanical equilibrium shall exist, one obvious requirement is that (in the assumed absence of gravity) the internal pressure within the fluid mass must be everywhere the same, lest motions develop in non-equilibrium manner. But because we can certainly regard the external pressure as essentially constant over our vapor-liquid interface, and because the increment of pressure in crossing the latter interface from the vapor to the liquid side is controlled by γ_{23} and the local mean interfacial curvature,

according to a familiar relation, we see that uniformity of internal pressure will require that the liquid-vapor interface be a portion of a sphere. (The only exceptions to this conclusion will apply in cases that are not of sufficiently general interest to warrant discussion here.) Thus we now further specify that the liquid always lies as a spherical cap on the solid, with one and the same radius of curvature r for all portions of its liquid-vapor interface. The magnitude of that radius will, of course, be considered to vary as we carry out our virtual variations of cap-shape, but we agree to restrict attention to varied shapes that are in all cases spherical segments, in order that uniform internal pressure is always maintained in keeping with requirements of mechanical equilibrium.

The preceding sphericity stipulation is the first one of our two constraints, the second being that the volume V of the liquid mass shall be invariant as we vary r and θ . Referring to the sketch of Fig. 2, we might start with a cap represented by the solid profile with radius r and contact angle θ , and press it down until its radius became everywhere $r + \delta r$ and its contact angle changed to $\theta + \delta\theta$ (smaller than θ , since here $\delta\theta$ would be negative). During this variation of configuration from one spherical cap form to another, our second constraint dictates simply that $\delta V = 0$. As is readily seen from Fig. 3, such variations will entail some variation δA_{23} of the spherical liquid-vapor interface and concomitant variation δA_{12} of the plane liquid-solid interface.

Our derivation is to be based primarily on the equilibrium principle that small variations about the equilibrium form shall lead to vanishingly small variations of total surface free energy, i.e., $\delta F = 0$, subject to the two constraints of always-spherical liquid-vapor interface and invariant liquid volume. In interests of notational simplification, we now introduce the "contact parameter" m , defined as

$$m = \cos \theta \quad (3)$$

so that we shall hereafter speak of variations of m rather than of θ . To carry through the above-outlined program, we must first find explicit expressions for V , A_{12} , and A_{23} in terms of r and m , and then we must form the variations of each of those three quantities. But because the second of our constraints requires $\delta V = 0$, it is clear that we shall be able to obtain from that condition some general relation joining δr and δm , namely equation (8) below. Use of the latter relation will then permit us to eliminate from our expressions for δA_{12} and δA_{23} either δr or δm (we shall below arbitrarily take δr as our independent variation, eliminating δm). Our basic equilibrium requirement, $\delta F = 0$, which we shall at first express quite generally in terms of the area-variations, can then be put into a form in which every term will contain the factor δr . But δr represents an arbitrary, non-zero variation, so that factor can be divided out of the equation $\delta F = 0$, leaving us with some condition on m that will specify our equilibrium condition (Young's relation, as we shall see).

By straightforward integrations, we can immediately take the first of the above-outlined steps, obtaining the following three

geometric relationships for spherical caps:

$$V = \frac{\pi r^3}{3} (2 + m) (1 - m)^2 \quad (4)$$

$$A_{12} = \pi r^2 (1 - m^2) \quad (5)$$

$$A_{23} = 2\pi r^2 (1 - m) \quad (6)$$

Our first constraint has now been imposed; we limit attention, via (4-6), to variational changes preserving sphericity of the liquid-vapor interface. To impose our second constraint, we form the variation of (4) and equate it to zero to obtain:

$$\delta V = \pi r^2 [(2+m)(1-m)^2] \delta r + \frac{\pi r^3}{3} [(1-m)^2 - 2(2+m)(1-m)] \delta m = 0 \quad (7)$$

But condition (7) permits us now to express δm in terms of δr , yielding:

$$\delta m = \frac{(2 + m)(1 - m) \delta r}{(1 + m)r} \quad (8)$$

as our volume-conserving relation between m - and r -variations.

It is to be noted carefully that (8) constitutes a key relationship in our variational analysis. In absence of any interrelationship like (8), we would be admitting into consideration entirely arbitrary pairs of variations $(\delta m, \delta r)$. But almost all of these would lead to either volume increases or decreases, so they would fail to describe the problem we seek to analyze, namely the problem of the equilibrium shape attained by some given volume of liquid dropped onto a specified plane substrate.

Equation (8) restricts the allowed family of variations (δm , δr) to that desired subset which satisfies our requirement of constancy of V .

Next we form the general expression for the total surface free energy F . (Note that it was characteristic of our previously-outlined inadequate variational derivation that we had such an incompletely specified system that we could not have written down any explicit expression for F ; all we could do was to write down what appeared to be an expression for δF .) Taking as a convenient zero-reference state that in which the solid is everywhere in contact with the vapor in absence of any liquid deposit, we may write:

$$F = \gamma_{23} A_{23} + \gamma_{12} A_{12} - \gamma_{13} A_{12}$$

whence the variation of F is given in general by

$$\delta F = \gamma_{23} \delta A_{23} + (\gamma_{12} - \gamma_{13}) \delta A_{12} . \quad (9)$$

But from (5) and (6) we can form the spherical-cap variations

$$\delta A_{12} = 2\pi r(1 - m^2)\delta r - 2\pi r^2 m \delta m \quad (10)$$

$$\delta A_{23} = 4\pi r(1 - m)\delta r - 2\pi r^2 \delta m , \quad (11)$$

and we next restrict these by introducing the volume-conserving relation (8) between δm and δr , yielding

$$\delta A_{12} = 2\pi r \delta r (1 - m) / (1 + m) \quad (12)$$

$$\delta A_{23} = 2\pi r \delta r m (1 - m) / (1 + m) \quad (13)$$

If we now substitute (12) and (13) into (9), we get for the first variation of F , in our constant-volume spherical-cap case, the expression

$$\delta F = 2\pi r \delta r (1 - m) / (1 + m) \{ m \gamma_{23} + \gamma_{12} - \gamma_{13} \} \quad (14)$$

The particular spherical cap that is the equilibrium configuration must be that which satisfies the necessary, but not sufficient (see below) condition $\delta F = 0$ for arbitrary small variations δr about equilibrium; so imposing this condition we see that (14) implies three possible solutions. Two are of no present interest, namely the meaningless solution $r = 0$ and the quite real and meaningful asymptotic case $m = 1$. But the third solution to the conditional equation $\delta F = 0$ is of obvious interest in our analysis, namely the condition

$$m = (\gamma_{13} - \gamma_{12}) / \gamma_{23} \quad (15)$$

which, in view of definition (3) is seen to be identical to equation (1), Young's relation.

STABILITY ANALYSIS

Inspection of the analysis leading to (15) reveals that it shows only that (15) is a condition for the existence of an extremum (or, still more precisely, existence of a stationary value) of F in the variational neighborhood of the particular spherical-cap configuration satisfying the Young relation. An equilibrium analysis is not complete until it has shown (as above)

not only that the first derivative of F vanishes at the claimed equilibrium configuration, but also that the second derivative of F with respect to the independently varied parameter is positive (i.e., that we are actually at a minimum of F) in the neighborhood of the claimed equilibrium condition.

To establish this, we must form the second derivative, i.e., second variation, of F from the general expression (14), and evaluate it at the equilibrium configuration by substituting into the general form of that second variation the particular condition (15). Care must be taken, in differentiating (14), to recognize that m is there to be treated as an implicit function of r . Keeping this in mind, one obtains:

$$\begin{aligned} \frac{\delta^2 F}{\delta r^2} = & 2\pi \left(\frac{1-m}{1+m} \right) [m\gamma_{23} + \gamma_{12} - \gamma_{13}] + 2\pi r \frac{\delta}{\delta r} \left(\frac{1-m}{1+m} \right) [m\gamma_{23} + \gamma_{12} - \gamma_{13}] \\ & + 2\pi r \left(\frac{1-m}{1+m} \right) \left(\sigma_{23} \frac{\delta m}{\delta r} \right) \end{aligned} \quad (16)$$

But in the neighborhood of our claimed equilibrium configuration, Young's equation in the form (15) imposes the condition that the first two terms on the right of (16) vanish in that neighborhood because the quantity inside the square brackets is zero. (In anticipation of that ^{simplification} ~~obliteration~~, the r -differentiation of the quantity $(1-m)/(1+m)$ is shown in (16) only in indicated operational form, without actually carrying out the somewhat involved and unnecessary operation.) Thus we are left with only the third term on the right. On using (8), we can finally reduce (16) to the form

to the present derivation has no weight. If one wishes to escape the restrictions characteristic of the present derivation, one must turn directly to the highly generalized variational analysis presented by Johnson (3). But, as noted previously, one pays a certain price for the elegant and rigorous generality of Johnson's treatment, for it does not directly convey clear-cut physical meaning in the way that the present type of analysis of a specific case does. In that sense, Johnson's and the present discussions may be regarded as usefully complementing each other.

It will be recalled that the crucial deficiency of the incomplete type of variational analysis exhibited by Gregg and examined briefly above is that it leads to Young's relation only if δA_{23} equals $\delta A_{12} \cos \theta$. We may now ask whether the above analysis can settle that point for the spherical-cap case. We find that it can, for from (12) and (13) we see that, for all volume-conserving variations we shall have $\delta A_{23} = m\delta A_{12} = \delta A_{12} \cos \theta$, the moot relation. What had been uncertain under the inadequate specification of that analysis becomes quite definite when the surface free energy of the entire system is considered, in keeping with the point that Gray (2) has stressed in his comments on the fallacy of the semi-infinite interface.

It should be remarked that it is not quite proper usage to speak of derivations of the present type as being based on the principle of virtual work, for the argument is not couched in terms of virtual work done by specified forces during specified

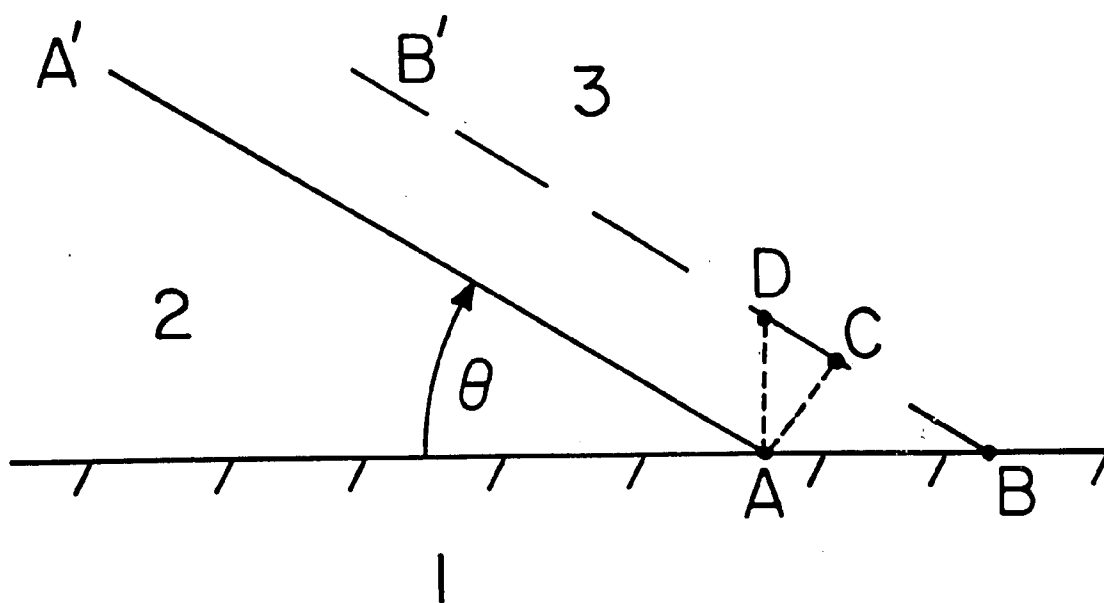
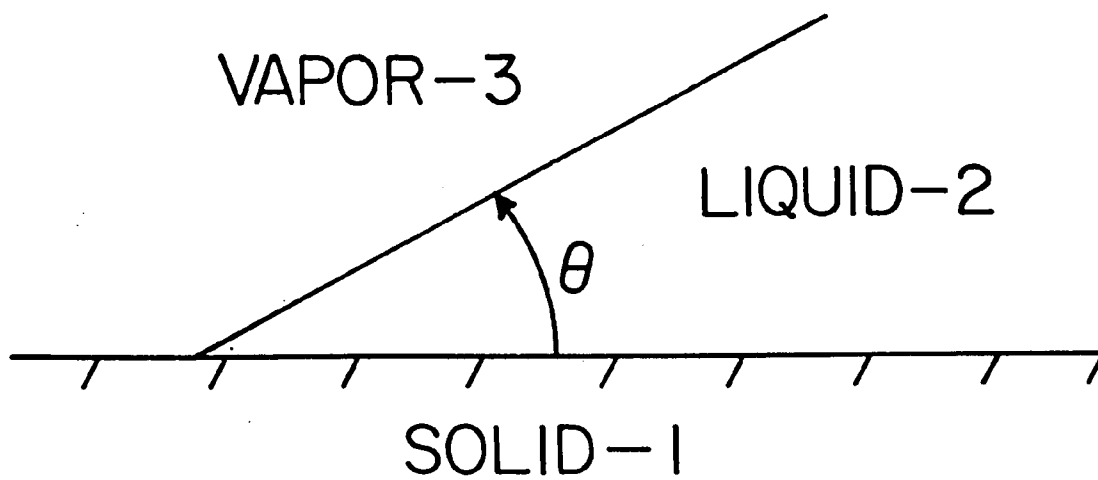
virtual displacements. Indeed, our prime objective in approaching the derivation of the Young equation in the manner illustrated above was to avoid speaking of any surface tension forces and to carry out our entire analysis instead in terms of surface energies. We formed an integral expression for the total surface free energy of our system and demanded that a certain constrained variation of that integral must vanish at equilibrium for energy-minimum reasons. Thus the above is properly termed a variational argument but not an argument resting on the principle of virtual work, despite the obviously close relation of these two approaches.

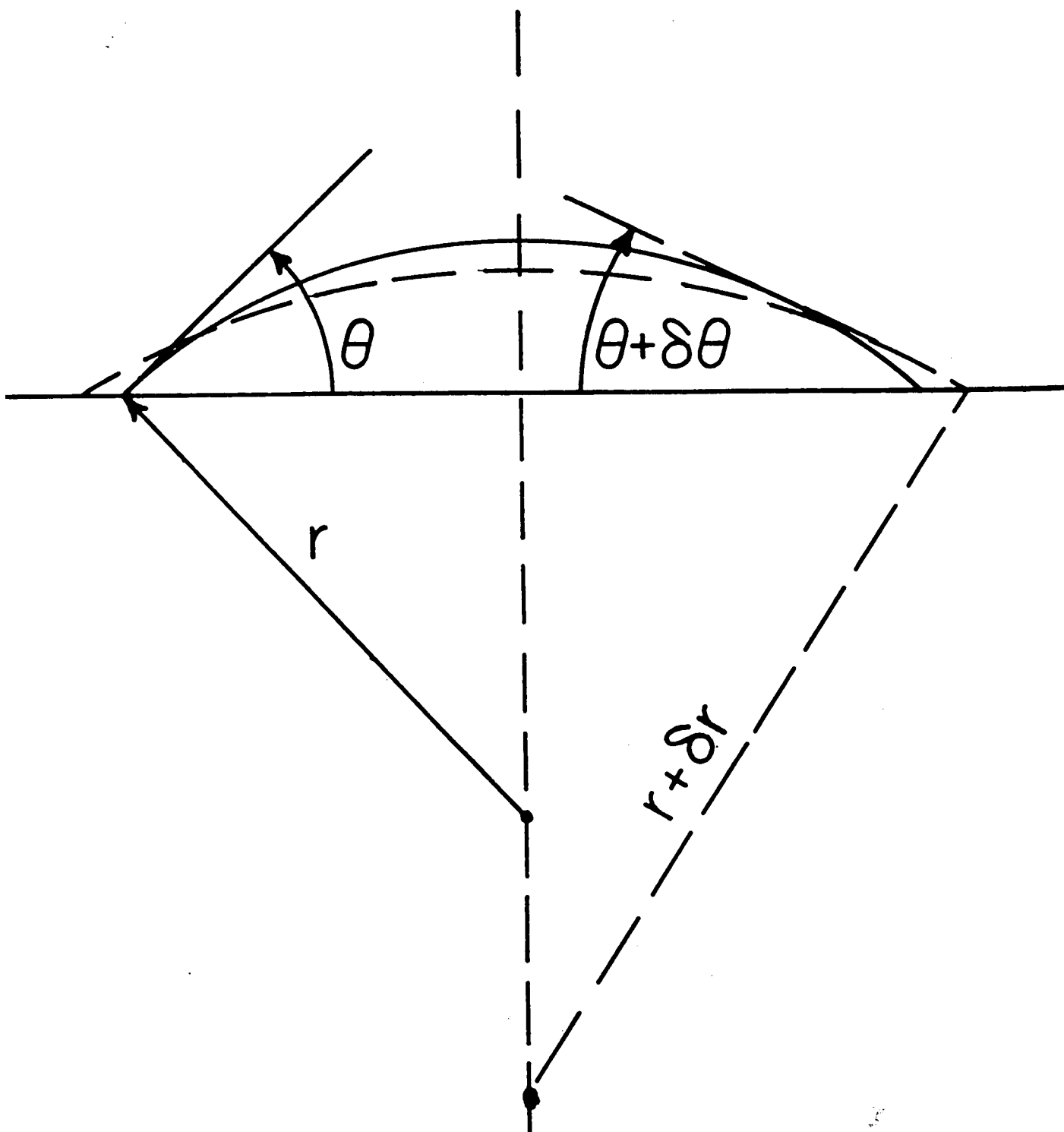
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LIST OF FIGURES AND CAPTIONS

- Fig. 1 a) Definition sketch for contact angle in a
 solid-liquid-vapor system.
- b) Small variation of a liquid wedge on a solid.
- Fig. 2 Volume-preserving shape-variation of a spherical
 cap on a plane substrate.





THE UNIVERSITY OF ARIZONA
APPLICATION FOR SABBATICAL LEAVE
(Submit This Form in Quintuplicate)

Applicant's Name McDonald James E Date: June 8, 1971
 College Liberal Arts Department Meteorology Highest Earned Degree: Ph.D.
 Period Requested for Sabbatical Leave: July 1, 1971 to December 31, 1971

List Below All Positions Held at The University of Arizona. Start with the latest position, and describe all leaves of absence. Each year should be accounted for.

Position	Dates	Full Time or Fraction of Time	Academic (A) or Fiscal (F) Appointment
Senior Physicist	1957 -	Full time	Fiscal
Sabbatical	7-1-63 - 12-31-63		
Scientific Director, IAP	1956 - 1957	Full Time	Fiscal
Associate Director, IAP	1954 - 1956	Full Time	Fiscal

Additional Compensation During Sabbatical Leave:

Granted: Sources and Amounts

Applied for: Sources and Amounts

Description of Sabbatical Leave Project (State purpose briefly here; see instructions below):

To engage in a number of limited studies of new techniques capable of meeting the demands of teaching and research duties with perhaps special attention to the expanding undergraduate field. In addition, the sabbatical leave will be employed in drafting several manuscripts for publication.

Names and Addresses of Persons Competent to Evaluate the Project (Department heads will attach one copy of each letter of evaluation):

Nick Kassander
Lou Batten
George Dawson

On a separate sheet, 8½ x 11, describe in detail the sabbatical project, giving all pertinent information, the goals, and the post-sabbatical benefits to be achieved — publications, teaching methods, etc.

If granted sabbatical leave, I agree to abide by the terms of the Sabbatical Leave Policy, and to submit a final report to the Vice President for Academic Affairs, for referral to the President, during the first semester after returning from sabbatical leave.

James E. McDonald 6-8-71
 (Signature of Applicant) (Date)

(Forms available at the Office of the Vice President For Academic Affairs)

PRESIDENT

THE UNIVERSITY OF ARIZONA

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PRESIDENT



THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

INSTITUTE OF ATMOSPHERIC PHYSICS

Dr. James E. McDonald's Sabbatical Project:

Departmental staff discussions during recent years indicate strong need for a new course within the department which I am interested in attempting to organize. A large fraction of our incoming graduate students have majored in physics or mathematics; almost all of such students have had no previous introduction to meteorology. To present to such students an extensive, yet compressed, summary review of all of the major topics and principles underlying introductory meteorology is regarded by all of our department as a highly desirable step. One of my sabbatical goals will be to explore and develop the optimal content of such a course.

Another sabbatical project will be to begin the development of a manual of course notes in my one-year course in cloud physics and precipitation theory. This will be done on a trial basis with respect to several key chapters.

During the sabbatical period the remaining time will be devoted primarily to manuscript preparation on several studies already largely completed, yet still unpublished. One of these has already been presented as a banquet address before the American Meteorological Society some months ago. It constitutes a critical review of the interaction between weather modification research or operations and an increasingly wide range of public responses thereto.

Another manuscript to be undertaken concerns my investigations of a group of nucleation events occurring in supercooled carbonated liquids. The educational value of a report on my investigations on this topic is believed to be rather substantial, especially for undergraduate meteorology students.

Additionally, a brief paper on a useful variant of the Beer's absorption equation will be prepared and submitted for publication. If time permits, one or two other papers of completed work will be written up for publication during this sabbatical period.

Noted UA Physicist

L. E. McDonald Found Dead

Sheriff's deputies yesterday reported the finding of the body of Dr. James E. McDonald, 51, noted University of Arizona atmospheric physicist.

Sheriff Waldon V. Burr said McDonald's body was discovered about 11 a.m. Sunday by Frank Flores, of 127 E. Lee St., who told detectives he and his children were hiking when they discovered the body near the bridge at Canyon Del Oro, next to Ina Road on Interstate 19.

The deputies said McDonald apparently had committed suicide. They found a .38-caliber revolver next to the body along with a note. "He apparently killed himself for personal reasons," detectives said.



McDonald

They said the body had been lying there "eight to ten hours" before it was discovered. He said investigators learned he left the Veterans Administration Hospital Sunday by taxi.

Tucson police records indicated McDonald was blinded when he shot himself in the head April 9 at his home at 3861 E. 2nd St. He was being treated at the hospital for visual problems. Police records said he also left a note at the time of the first shooting.

McDonald came to the UA in 1954 as the associate director of the school's Institute of Atmospheric Physics.

UA President Richard A. Harvill said of McDonald: "He had been very productive in the amount and quality of research, and he became well-known throughout the United States as a brilliant teacher. He was an exceptionally able teacher and he was well-liked by students."

MCDONALD, James E., 51, of 3461 E. 2nd St., passed away June 13, 1971. Survived by his wife, Betsy Ann; daughters, Nancy Kay McDonald, Gail Ellen McDonald, and Jan Lorraine McDonald, all of Tucson; also Roniyla Louise McDonald, of Los Angeles, Calif.; sons, Lee Hunt McDonald, of Tucson and Kirk T. McDonald, of Pasadena, Calif. Memorial services will be held Thursday, June 17, 1971, 7:30 p.m., Unitarian Church, 4331 E. 23rd St. Private interment. In lieu of flowers, friends may contribute to Books for the Blind of Arizona, 2028 E. 5th St., Tucson, Ariz. Arrangements by Arizona Mortuary, Eastside Chapel, 4001 E. First St. (one block west of Swan Rd.)

McDonald was known worldwide for his theories on unidentified flying objects and also on the health effects of the proposed supersonic transport jet planes.

McDonald testified March 2, 1971, before a House transportation subcommittee in Washington, D.C., about possible environmental hazards of flying a large fleet of SSTs.

The altitude the planes would be flying, he said, would place them in the stratosphere, which he noted is about 100 times more sensitive to technological contamination than the lower regions where current aircraft cruise.

He said the supersonic aircraft could result in the reduction of ozone, which screens out the sun's ultraviolet radiation. This could, he said, increase the U.S. incidence of skin cancer by about 10,000 new cases a year.

He also was highly critical of the U.S. Air Force's Condon Report, which listed the majority of UFO sightings as satellites, balloons, birds and other objects.

He told the House subcommittee that "the problem of UFO's is a very serious scientific problem." He also said "the correlation between UFO sightings and times of solar flaring."

McDonald, in the early 1960s, headed the Committee Against Harming Man with Titans. The group protested the selection of Titan intercontinental missile sites around Tucson.

McDonald received his doctorate from Iowa State and served with the U.S. Navy during World War II as an aerologist.

He was the author of "Physics of Cloud Modification" and served as a contributing editor of "The Glossary of Meteorology."

He is survived by his widow, Betsy; four daughters, Roniyla, Nancy, Gail and Jan, and two sons, Kirk and Lee.

A memorial service will be held Thursday at 7:30 p.m. at the Unitarian Universalist Church, 4331 E. 23rd St.

Funeral arrangements are being handled by the Arizona Mortuary East, 4001 E. 1st St.

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The deputies said McDonald apparently had committed suicide. They found a .38-caliber revolver next to the body along with a note. "He apparently killed himself for personal reasons," detectives said.



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They said the body had been lying there "night or two hours" before it was discovered. He said investigators learned he left the Veterans Administration Hospital Sunday by taxi.

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MEMORIAL RESOLUTION

JAMES EDWARD McDONALD

1920-1971

James E. McDonald, professor of Atmospheric Sciences and Senior Physicist in the Institute of Atmospheric Physics at the University of Arizona died on 13 June 1971. He was born on 7 May 1920 in Duluth, Minnesota, earned the B.A. degree at the University of Omaha in 1942, the M.S. degree at Massachusetts Institute of Technology in 1945 and the Doctor of Philosophy degree at Iowa State University in 1951. During World War II he served in the Navy as an aerologist, was a meteorology instructor at M.I.T. and reached the rank of lieutenant junior grade. Dr. McDonald spent 1953 at the University of Chicago before joining the staff of the Institute of Atmospheric Physics in 1954 as the associate director. He later relinquished this post to devote all his time to teaching and research.

Dr. McDonald worked in many ways to make the University of Arizona a better school. He served on the Faculty Senate from 1959-1962 and 1965-1969 and was a member of the Committee of Eleven for several terms. Many of his suggestions for change, proposed in written memoranda, have now become University policy.

Dr. McDonald was a scientist and a person having most unusual qualities. He was a voracious reader and had an encyclopedic memory. There were few scientific subjects which escaped at least partial scrutiny and in many areas, his knowledge made him an authority. Anyone who encountered Dr. McDonald in the midst of a research endeavor will surely recall his relentless pursuit of knowledge and understanding.

The contributions to the atmospheric sciences by Dr. McDonald extended far beyond the contents of his published papers. He was a brilliant teacher and lecturer who was an inspiration to his students. His courses in cloud and precipitation physics were outstanding in content, challenging in presentation, successful in exciting interest and curiosity, sometimes sprinkled with sarcasm and often lightened with humor. In his lectures, he invariably impressed audiences with his attention to details and his extensive documentation.

One of Dr. McDonald's early important papers published in 1954 dealt with the shape of raindrops. During the fifties and sixties he published a series of articles dealing with problems of cloud physics, particularly nucleation and other aspects of physical meteorology. The subject of radiation and atmospheric optics was one of his favorites. Of particular note was his work in the field of weather modification. In 1958 he wrote a lengthy article entitled "The Physics of Cloud Modification" which serves as a standard reference on this subject.

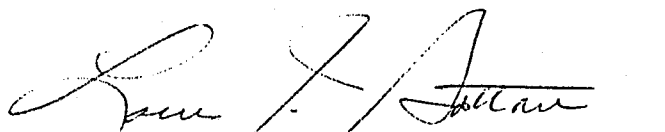
Dr. McDonald had a major impact on the atmospheric sciences as a result of his service on the Panel on Weather and Climate Modification of the National Academy of Sciences. His work with this group tells much about the man. He joined it just after an early preliminary report gave a pessimistic view on the status of the subject. Dr. McDonald tended to share this view with the general community of atmospheric scientists. On the other hand, certain scientists, particularly those associated with commercial cloud seeding organizations, strongly objected to the negative tone of the report. Dr. McDonald agreed to carry out a careful examination of data and reports of a large number of cloud seeding projects particularly those conducted by commercial operators. As a result, he convinced himself and the Panel that there was reason for optimism about the efficacy of procedures for increasing precipitation by means of ice-nuclei seeding. This notion, expressed in the Panel's final report in 1966, had a marked effect on the progress of weather modification in the United States. Subsequent research has supported and extended the earlier optimistic views. During 1970, Dr. McDonald played a crucial role on the Project Stormfury Advisory Panel as it sought to evaluate the results of experiments aimed at reducing the intensity of hurricanes.

Over the last few years, Dr. McDonald gave considerable attention to the analysis of reports of Unidentified Flying Objects. As was his custom, he approached the problem as a scientific one, he studied all available information and evidence, he interviewed hundreds of people and made detailed analyses of possible explanations. He maintained that the pursuit of satisfactory explanations for UFO reports represented an important scientific problem which was not getting adequate attention.

Within his humanistic outlook, Dr. McDonald believed that the scientist should involve himself directly with major problems of society. He entered public debates on such important questions as those dealing with civil rights, racial justice and the influence of the military on civilian life. His 1959 analysis of Air Force missile-siting policy resulted in nationwide news coverage, an award-winning publication of the problem, and ultimately an official acknowledgement from the Department of Defense regarding the validity of his analysis.

Most recently he was deeply committed to the analysis of the effects on the atmosphere of the emission from supersonic transport airplanes. He spent hundreds of hours studying the relevant printed material and consulting with experts in many related disciplines. Having concluded that SST emissions could reduce ozone concentrations, increase ultraviolet radiation reaching the earth and lead to increases in the frequency of skin cancer, he did his utmost to convince other scientists, laymen and public officials that the SST represented a danger to society.

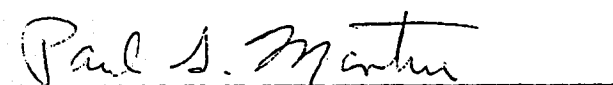
Dr. McDonald was a man of integrity and great courage. He was loved and admired by a great many people, he was respected by everyone who stopped to listen, he made a lasting impact on many facets of the atmospheric sciences and society, and he will be missed much more than we now realize. The Faculty of the University wishes to pay a sincere tribute to our colleague and extend our sympathies to his family.

A handwritten signature in dark ink, appearing to read "Louis J. Battan", written over a horizontal line.

Louis J. Battan

A handwritten signature in dark ink, appearing to read "A. Richard Kassander, Jr.", written over a horizontal line.

A. Richard Kassander, Jr.

A handwritten signature in dark ink, appearing to read "Paul S. Martin", written over a horizontal line.

Paul S. Martin

A handwritten signature in dark ink, appearing to read "Cornelius Steelink", written over a horizontal line.

Cornelius Steelink

Glossary of Acronyms

AAAS: American Association for the Advancement of Science
ADC: Air Defense Command
AEPG: Army Electronic Proving Ground
AFIN: Air Force Intelligence
AFOSR: Air Force Office of Scientific Research
AFSCA: Amalgamated Flying Saucer Clubs of America, Inc.
AFSWC: Armed Forces Special Weapons Control
AIAA: American Institute of Aeronautics and Astronautics
AISS: Air Intelligence Service Squadron
AMC: Air Materiel Command
AMS: American Meteorological Society
ANS: American Nuclear Society
AP: Anomalous Propagation of radar signals
APRO: Aerial Phenomena Research Organization
ASME: American Society of Mechanical Engineers
ASNE: American Society of Newspaper Editors
BMEWS: Ballistic Missile Early Warning System
CAUS: Citizens Against UFO Secrecy
CIC: Counter Intelligence Corps
CNOPS: unknown
CSA: Committee on Science and Astronautics
CSI: Civilian Saucer Intelligence
CSIRO: Commonwealth Scientific Industrial Research Org.
CSM: Christian Science Monitor
CUFOS: Center for UFO Studies
D/F: Direction Finders
DIA: Defense Intelligence Agency
DoD: Department of Defense
DoT: Department of Transportation
ECM: electronic countermeasures
EM: electromagnetic
EPA: Environmental Protection Agency
ESSA: Environmental Space Science Administration
ETH: extraterrestrial hypothesis
F.A.G.: 1127th Field Activities Group
FOIA: Freedom of Information Act
FPC: Federal Power Commission
FSR: Flying Saucer Review
FTD: Foreign Technology Division
FUFOR: Fund for UFO Research

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GCI:Ground Control Interception
GM:General Mills
GOC:Ground Observer Corps
GRCS:Graduate Research Center of the Southwest
GSW:Ground Saucer Watch
IAP:Institute of Atmospheric Physics
IEEE:Insitute of Electrical and Electronic Engineers
IGY:International Geophysical Year
IRPOS:Interdisciplinary Research on Problems of Am. Society
JEM:James E. McDonald
JPL:Jet Propulsion Laboratory
JRDB:Joint Research and Development Board
LANS:Los Angeles NICAP Subcommittee
LAX:Los Angeles International Airport
LEM:lunar exploratory module
MCAS:Marine Corps Air Station
MJ-12:Operation Majestic Twelve
MS:multiple sclerosis
MTI:Moving Target Indication
MUFON:Mutual UFO Network
NAA:National Astronomical Association
NACA:National Advisory Committee on Aeronautics
NAS:National Academy of Sciences
NASC:National Aeronautics and Space Council
NCAR:National Center for Atmospheric Research , 556
NIF: unknown
NL:night light
NMIMT:New Mexico Institute of Mining and Technology
NO+:nitric oxide
NOAA:National Oceanic and Atmospheric Administration
NOTS:Naval Ordnance Training Station
NRC:National Research Council
NRL:Navy Research Lab
NSA:National Security Agency
NSC:National Security Council
NSF:National Science Foundation
NWC:Naval Weapons Center
NZSSR:New Zealand Scientific Space Research
O/SI:Office of Scientific Information, CIA
ONO:Office of Naval Operations
ONR:Office of Naval Research
ORNL:Oak Ridge National Laboratory
OSAF:Office of Special Projects, USAF (uncertain)
OSD:Office of the Secretary of Defense
OSI:Office of Special Investigations, USAF

PIC:Photographic Interpretation Center, USN
PK:psychokinesis
POWACM:Panel on Weather and Climate Modification, NAS
QRA:Quick Reaction Alert
RAAF:Royal Australian Air Force
RAPCON:Radar Approach Control
RESA:Scientific Research Society of America
RTCC:Radar Air Traffic Control Center, Lakenheath
R-V:radar-visual
SAC:Strategic Air Command
SCAS:Southwest Center for Advanced Studies
SRI:Standard Research Institute
SST:Supersonic Transport
TCE:trichloroethylene
UAC:United Aircraft Corporation
UFO:Unidentified Flying Object
UFOIC:Unidentified Flying Object Investigations Centre
USAF:White Sands Missile Range
USC:University of Southern California
USGS:United States Geological Survey
USN: United States Navy
USO:unidentified submarine object
VOA:Voice of America
VUFORS:Victorian UFO Research Society of Melbourne
WSMR:White Sands Missile Range

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