

than even the champions of Walden had expected. The judges not only halted the Middlesex County Commissioners in their zealous efforts to turn Thoreau's pond into a community fun spot—all parking lots, scooped out beaches and bath houses—but ordered that changes made in the last four years be undone. Trees must be replaced, the grading restored and the whole sylvan atmosphere recaptured as nearly as possible in what is now a suburban section of Greater Boston.

This decision makes the commissioners look foolish; it is also likely to cost them a good deal of money (public money, to be sure, but they will have to square themselves somehow with the electorate). Thus, public servants elsewhere with a passion for bulldozers may be restrained from making "improvements" until the voices of protest have been satisfied.

We take a personal pleasure in the outcome of the Walden affair. Two years ago *The Nation* published "Walden on Trial" by Truman Nelson, an article which in reprint raised an appreciable part of the \$12,000 war chest amassed by the Save Walden Committee that carried the issue to Massachusetts' supreme court.

Middletown, U. S. A.

Ever since Alphonse Daudet wrote "The Last Class," set pieces have been in order whenever a distinguished academician conducts his last class and retires. But instead of devoting a set piece to the occasion of Dr. Robert S. Lynd's final lecture at Columbia University

on May 12 before his retirement, we would like to quote from Stuart Chase's review of *Middletown*, which appeared in *The Nation* of February 6, 1929:

Our authors lived there for over a year, studying every phase of the town's life, with the same detachment and the same objective thoroughness that a good anthropologist devotes to the habits of natives in the New Hebrides. . . . Nothing like it has ever before been attempted; no such knowledge of how the average community works and plays has ever been packed between the covers of one book; and I warn you that hereafter nobody has any right to make more than the most casual generalizations about the culture levels of this republic, until he has first read and mastered his *Middletown*.

This is still a fair judgment, thirty years later, as Bob Lynd concludes his final seminar and settles down to the uninterrupted task of concluding the study of power on which he has been at work for so many years. Any list of the most widely discussed, reprinted and anthologized *Nation* articles of the last two decades would necessarily include: "Capitalism's Happy New Year," December 28, 1946; "Our 'Racket' Society," August 25, 1951; "Whose Wars?," December 27, 1952, and the review of *The Power Elite*, May 12, 1956—all by Robert S. Lynd, whose *Middletown* provided the emerging American social sciences with a model that has influenced the form and content of a legion of subsequent studies and whose *Knowledge for What?* provided a generation of American social scientists with a yardstick by which to measure their achievements.

OUR MISPLACED MISSILE BASES

CITIES INTO TARGETS . . . by James E. McDonald

OVER \$10 BILLION in defense funds is being committed to fixed-base ICBMs of the Atlas and Titan types. The sole reason for undertaking this costly program is to protect American lives. Yet the question arises as to whether the program is not more of a *threat* to Americans than a *protection* for them.

To appreciate the significance of our ICBM program, the following points must be noted:

1. The American policy of deterrence through the threat of massive retaliation requires that any

enemy attempting a sneak attack must direct an overwhelming first blow at all accessible elements of our retaliatory machinery.

2. Whereas Strategic Air Command (SAC) bomber bases are now our main sources of retaliatory action, completion of the present Atlas-Titan base construction program will create twenty-seven additional retaliatory elements which an enemy must knock out.

3. Introduction of the ICBM into our arsenal of retaliation opened the possibility of decoupling all fixed continental targets from large population centers. But by locating ICBMs at SAC bases near large cities, as is now being done, this great opportunity is being lost.

4. Hardening of our ICBM launchers — i.e., putting them underground — and dispersing them in such a way as to increase the numbers of missiles an enemy must use to knock them out raises by a hundredfold the total megatonnage of enemy nuclear missiles that must be expected to rain down near any city where a nearby SAC base is used as support for surrounding Atlas or Titan sites.

5. When Atlas-Titan sites are put *upwind* of cities, as is true now in a number of cases, the urban populations will be unable to escape the *greatest killing agent* of enemy nuclear weapons — radioactive fallout.

During recent months, I have

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been gathering ICBM siting and related technical information from all available sources. The results are startling:

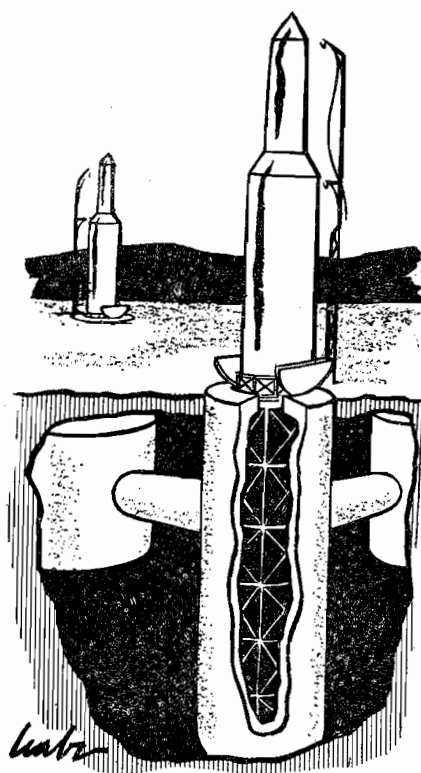
Spokane, Washington, is in the path of prevailing westerly winds. To safeguard Spokane's population from fallout in case of enemy attack on nine neighboring Atlas pads, all the pads should have been constructed east of the city. Instead, six lie on the dangerous *west* side of Spokane!

Cheyenne, Wyoming, is another almost unbelievable example of present siting policies. A total of twenty-four Atlas pads will ring Cheyenne when its large missile complex, based on Warren Air Force Base, is completed. The proper place, meteorologically, for *all* twenty-four was in the open plains to the east. Instead, the sites will so ring Cheyenne that lethal dosages during the first few hours after any attack are almost perfectly guaranteed for the city's civilians, regardless of wind directions.

Topeka, Kansas, is another hot spot. Its Forbes Air Force Base is getting a squadron of nine Atlas missiles — and five of them are being built on the dangerous *west* side of the city. Furthermore, the Topeka missile complex lies less than 100 miles upwind from the populous Kansas City area, creating a hazard for a million Americans.

Plattsburgh, N. Y., scheduled as an ICBM base, presumably will have hardened Atlas sites. Portland and Augusta, Me., will be seriously threatened by the presence of the Plattsburgh base; and even Boston, if the winds were northwest at the time of attack, might be threatened.

RECENTLY Tucson, Arizona, the city in which I and my family live, has been announced as a site for eighteen Titan missile-launchers. The Davis-Monthan Air Force Base will be used for support. Since one SAC B-47 wing was only recently removed from Davis-Monthan, the news of an \$80 million construction project was greeted with elation by Tucsonans not familiar with the finer details of nuclear war. A local TV announcer may have put the matter rather more perceptively



Titan: Underground Pad

when he asked whether the news was "a blessing, or a disaster with fringe benefits."

It is relevant to examine certain details of the Tucson development. Air Force press releases indicated that here, as elsewhere, the Titans will be dispersed in a *ring* around the city. No hint was given, of course, of the tremendous threat of radioactive fallout that would result from enemy attack. Instead, the Air Force argued that since Tucson was already a prime enemy target due to the nearby SAC base, the Titan bases would create no additional danger. This assertion deserves attention.

ICBM accuracies recently attained by both the United States and Russia imply probable circular errors of only one to two miles, even at a 6,000-mile range. As a result of this great improvement in accuracy, only two or three half-megaton warheads of the type planned, say, for the forthcoming Minuteman ICBM could, in enemy hands, fully neutralize all aircraft on an SAC base that were not airborne at the time of attack. By contrast, the eighteen dispersed Titan silos announced for Tucson will draw something like 100 to 200 megatons of enemy fire.

This great increase in megatonnage required to neutralize hardened ICBM bases was stressed by Gen. Thomas Powers, SAC Commander, in a recent New York speech.

How many Tucson citizens will appreciate that their community's target load will go up by a factor of the order of a hundred when the Titans are finally let down into their 160-foot-deep underground tubes? Not many, I fear. And apparently, in other communities similarly threatened, not one. But public ignorance scarcely justifies the failure of the Air Force to speak out forthrightly about the consequences of bringing in fixed-base ICBMs. How, for example, can the Air Force and other federal agencies now set about the urgent task of educating the Tucson citizens in the highly complex civil-defense problems created by the Titans? After all, the Air Force's public attitude all along has been that there is no new danger. The public-relations problem is a vexing one for the Air Force — and a source of grave peril to the citizen.

The Air Force has also been assuring communities getting ICBM bases that they need not worry about "practice firings" of the missiles. That this argument may be part of some kind of do-it-yourself kit for local Air Force public-relations men is more than vaguely suggested by a statement appearing in the January 11 issue of *Missiles and Rockets*:

A major educational task . . . is that of convincing community leaders of the need for making their town a prime target for enemy attack. A telling argument, particularly in communities accustomed to aircraft noise and associated dangers: there will be no take-offs from the missile base except in anger.

Is this not somewhat like putting a pistol-shooting target near a group of playing children and then telling them and their parents that there is little need to worry since the target is made of non-flammable plastic?

IN OCTOBER last year, before the announcement came that our city was to be made a Titan base, I had protested publicly against the ICBM siting policies. Despite the fact that the fallout problem was explicitly the main point of my protest, the

official Air Force reply — distributed by wire to cities all over the country near which ICBM bases are under construction — ignored the fallout question entirely. Why?

The Air Force reply to my October protest hinted at the great need to save money and time in the ICBM-base program. But the actual nature of the program makes these arguments doubtful. For instance, the announcement concerning Tucson stated that construction would begin in about twelve months, and that completion date would be about three years off; so to argue urgency is less than convincing. And why were ICBM bases being put near SAC air bases? The complex launching silos with their cryogenic plants, power plants and elaborate air-conditioned underground control centers have to be built up from scratch, and hence can make little use of SAC facilities. Moreover, a squadron of nine ICBMs is manned by only 500-600 airmen, so personnel-housing burdens are so light that numerous small non-SAC airbases in sparsely populated parts of the West would have served quite well for support. Since missiles just sit and wait for the next war, with no test flights to wear down countless components, remote base areas would pose no insuperable logistic headaches. But even if millions of dollars were saved by using SAC fields as support bases, the savings should be weighed *publicly* against the risk to the human lives involved. Where have these considerations been clearly pointed out by the Air Force?

MANY PERSONS hint at political pressure as the probable explanation for the base locations. It seems likely that pressure — originating with local business interests — has frequently been applied. But it remains an inescapable responsibility of technically informed Air Force representatives to point out to a Congressman that putting an ICBM complex in his district could spell doom for his constituents in event of attack. Where is the evidence that such clarification has ever been provided by the Air Force? Finally, let's assume that the Air Force has explained the extreme dangers in-

volved, and yet has to bow to some Congressman's pressure. It then remains Air Force duty to place the actual launchers where they will do the least harm to civilian survival chances in the face of fallout hazards. Yet almost the opposite seems to be the case. As one of my colleagues put it, the civilian would have come out better if the sites had been determined by picking names out of a hat.

There have appeared vague allusions to the complex problem of selecting sites in terms of soil and terrain requirements. Again the facts argue otherwise. ICBM sites are now being built on solid rock, in deep soil, in dry ground, and in relatively wet soil. An engineer has pointed out to me that when holes have to be dug in solid rock, the excavation costs are high but shoring and concrete-pouring are simple and cheap. On the other hand, when the sites go into deep soil or sand, excavation is cheap, whereas shoring and pouring then run high. The final cost, he noted, runs about the same either way.

EXPERIENCE IN Tucson shows that many laymen feel that there is no point in questioning the placing of ICBM sites near large cities: "We'll all be gone in a minute, anyway, if the U.S. is ever attacked." The prevalence of this notion is simply another measure of the public's ignorance concerning nuclear war. First of all, as Bertrand Russell noted, instant death will be only for the fortunate few. More important, the kind of nuclear war for which these ICBMs are being built may well involve only (or at least chiefly) attacks on the retaliatory machinery itself, and scarcely at all any metropolitan and industrial areas *that are not in the neighborhood of these special targets*. So survival prospects for populations near ICBM bases are quite definitely being reduced by the siting policies in use. And if, by any chance, the Air Force is predicating its siting policies on the assumption that all Americans have written off hope of survival in event of attack, this should be made known publicly. The resulting debate would be interesting.

Persons concerned by the problem of ICBM-base locations will do well to watch the unfolding of a protest movement currently gathering momentum in Tucson. The protest will do no more than ask that the Titans be located well to the *east* of the city. No similar request, to the writer's knowledge, has been made by any other community. Through petitions, talks to civic groups in Tucson and other ways, an attempt will be made to arouse public concern over a problem which the Air Force has not even hinted at in announcing its intent to place two squadrons of Titans in a twenty-mile radius ring around the city. If the protest is unsuccessful, national pressure for action to change the Air Force siting policies will become indispensable. If it is successful, other communities already ringed by ICBMs will wish to ask some pointed questions.

Indeed, considering the time involved in the preparation of these zeroed-in Atlas and Titan bases, it should be asked at Congressional levels why any more such bases should even be started. The Air Force states that the Tucson complex, for example, will not be finished for about three years. The submarine-launched Polaris, the Hound Dog and Skybolt air-launched ballistic missiles, as well as the Minuteman, will all be operational sooner than, or as soon as, the Atlas-Titan bases. The intrinsically high vulnerability of fixed-base ICBMs will make them long-lingering danger spots, sites which an enemy must always try to knock out if he tries to attack our country. The more of these we still have buried around the country after the build-up of our mobile retaliatory force by about 1963-64, the worse off will be our unprotected civilian population.

Clearly, Congress should explore further the logic of all these points. And it should do so immediately, lest hundreds of millions of defense dollars be spent on bull's-eyes — magnetic bull's-eyes drawing heavy enemy fire to those populous areas in which Air Force site-selection groups are now putting our fixed-base ICBMs for reasons that are difficult to understand.