

# F. A. S. PUBLIC INTEREST REPORT

Formerly the FAS Newsletter

SPECIAL ISSUE ON  
LIMITED STRATEGIC ATTACKS

Vol. 28, No. 4

April, 1975

## INESSENTIAL EQUIVALENCE, RIGID RESPONSE, FIRING ON WARNING, AND WASTE

Without even a theory as to how any present or foreseen advances could provide military advantage, the Defense Department's call for "essential equivalence" has become strict equivalence in the deployment of those strategic characteristics in which we may happen to be behind. Never has the military content of Defense Department rationalizations for strategic weapons been so low. Who would have predicted that such a ludicrous notion as the perceptions of third parties of arcane strategic parameters could be used by the Department of Defense to maintain the procurement juggernaut? No better formula for open-ended arms race exists.

The Secretary of Defense sees no threat of our being disarmed for the "next several decades". This extraordinary margin of security, which FAS agrees exists, has been bought over the years at the expense of weapons buildups that have made nuclear war potentially ever more catastrophic. The job now is not to make these weapons usable and to learn how to take risks with them—as some Defense Department apologists are saying. The job is not to search for political dangers in falling behind. The problem is to design a political and strategic posture which can withstand shifts in Soviet procurement without enormous expense or the addition of new dangers.

What then should be our approach to the possibility—which cannot be excluded—that the Soviet Union will purchase, over the coming decade, enough warheads with enough accuracy plausibly to threaten a large number of our 1,000 Minuteman land-based missiles? The DOD course seems to be as follows:

- a) consider the matter to be very serious—notwithstanding the invulnerability of Polaris submarines and the fact that some Minutemen would surely survive any conceivable attack—

because it may give the Russians a sense of exhilaration or make third powers think less of us;

- b) try to dissuade the Soviet Union from buying this capability by proceeding to buy the same capability in reverse; and
- c) if the Soviet Union is not dissuaded and/or if the matter cannot be solved by negotiation, first improve Minuteman and then replace it with mobile missiles or something else.

We have a different approach. We do not believe that America should buy a hard target kill capability even if the Soviet Union does; we believe:

- a) that the political dangers of falling behind in this regard are invented notions since—without competing in the threat to land-based missiles—the maintenance of a secure deterrent force can handle all contingencies of whatever kind by utilizing counterattacks on soft military targets, dams, villages, industrial centers or cities in whatever number we deem desirable;
- b) that joining in the competition will provide more dangers to America than it will resolve since it will encourage firing on warning in crises;
- c) that the contest in accuracy and warhead yields being urged to dissuade the Russians is, in fact,

—Continued on page 2

Approved by the FAS Executive Committee, this statement was reviewed and endorsed by the following specialists: John M. Lee, Vice Admiral USN (Ret.), Dr. George W. Rathjens, Dr. Herbert Scoville, Jr., Dr. Jeremy J. Stone and Dr. Herbert F. York.

## POLITICAL THREATS: LAST REFUGE OF PENTAGON STRATEGISTS

We are drifting into a new and unnecessary round of strategic arms race—one that will be dangerous, expensive, and destructive of future arms control. As everyone knows, the existing strategic balance is a grim situation—a cloud hanging over our Nation's existence and that of many other nations. There is, however, still more security to be lost.

Briefly the problem is this. Neither the United States

nor the Soviet Union can disarm the other, for as far ahead as can be foreseen—for the "next several decades" in the view of Secretary Schlesinger.\* But they could, of course, still fire missiles at one another's missiles or cities; they have only to push the button. Are there any

—Continued on page 3

\*Defense Appropriations Subcommittee for 1975, House of Representatives, pg. 347.

Continued from page 1

more likely simply to put the contest beyond negotiation in any case;

- d) that negotiations can be based instead on the fact that future American responses to the situation as it evolves cannot be predicted by the Russians with certainty, and upon the high cost of Soviet capabilities;
- e) that adopting the posture that hard-target kill capability is something which requires competition leads inexorably to the conclusion that Minuteman is in some critical way becoming obsolete when, in fact, it is just as easy to take the view that some of them will always survive, hence to avoid the tens of billions of dollars of expenses associated with replacement; and
- f) that the ultimate solution to the problem of land-based missiles firing at one another is land-based missile disarmament which we proposed in this journal in February, 1974.

We did not match the Soviet Union in 50 megaton bombs, in 25 megaton missiles, in 800 IRBMs, in numbers of ICBMs, or in size of armies. The Russians have not matched us in strategic bombers, payload of submarine based missiles or numbers of warheads. Neither has lost status in this regard because it is not necessary to compete in capabilities that one does not need. But, in the present case, it would be positively dangerous to do so. We have boasted for years of our good sense in building a deterrent that can ride out an attack, and then respond deliberately and only after we are sure what has happened. The road proposed by the Secretary of Defense is one that would unnecessarily throw away this central advantage. Land-based missiles would be fired on warning at the land-based missile silos of the other side—for no real strategic purpose since the Soviet Union has invulnerable submarines. This posture is more likely to lead to war in crisis and by inadvertence.

On the negotiating front, we urge a ten year moratorium on the deployment of new missiles with a quota on flight tests that would guarantee the agreement, while permitting some operational tests. This ten year moratorium on deployment would provide time to develop methods of halting the qualitative arms race we see coming.

But whether or not the negotiations succeed, we would commend these principles to Congress: avoid the gold-plating of backup strategic forces; design our forces for deterrence only rather than war fighting—in the sure knowledge that our redundant deterrent forces are ample to handle all contingencies; buy only what we need for military purposes and avoid pointless, politically motivated procurement contests.

In sum, the Secretary of Defense's call for "essential equivalence" is, to our mind, a call for "inessential equivalence". His call for "flexible response" is

a call for "rigid" symmetrical response. His call to pressure the Soviets with counterforce capabilities into negotiations will only foreclose, rather than enhance, those negotiations. The call to strengthen our deterrent capabilities across the spectrum through counterforce will weaken, not strengthen, our security by encouraging firing on warning. And the call for civil defense capabilities in support of counterforce weapons and threats can only produce the divisive debates of the sixties. Meanwhile this program will waste tens of billions of dollars. The Secretary's counterforce program is wrong.

## FAS

Chairman: PHILIP MORRISON

Vice Chairman: CHRISTIAN B. ANFINSEN\*

Secretary: HERBERT SCOVILLE, JR.

Treasurer: HERBERT F. YORK

Director: JEREMY J. STONE

The Federation of American Scientists is a unique, non-profit, civic organization, licensed to lobby in the public interest, and composed of natural and social scientists and engineers who are concerned with problems of science and society. Democratically organized with an elected National Council of 26 members, FAS was first organized in 1946 as the Federation of Atomic Scientists and has functioned as a conscience of the scientific community for more than a quarter century.

### SPONSORS (partial list)

- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| *Kenneth J. Arrow (Economics)     | *S. E. Luria (Biology)            |
| *Julius Axelrod (Biochemistry)    | Roy Menninger (Psychiatry)        |
| Leona Baumgartner (Pub. Health)   | Robert Merton (Sociology)         |
| Paul Beeson (Medicine)            | Matthew S. Meselson (Biology)     |
| *Hans A. Bethe (Physics)          | Karl F. Meyer (Medicine)          |
| *Konrad Bloch (Chemistry)         | Neal E. Miller (Psychology)       |
| *Norman E. Borlaug (Wheat)        | Hans J. Morgenthau (Pol. Science) |
| Anne Pitts Carter (Economics)     | Marston Morse (Mathematics)       |
| *Owen Chamberlain (Physics)       | *Robert S. Mulliken (Chemistry)   |
| Abram Chayes (Law)                | Franklin A. Neva (Medicine)       |
| *Leon N. Cooper (Physics)         | *Marshall Nirenberg (Biochem.)    |
| *Carl F. Cori (Biochemistry)      | *Severo Ochoa (Biochemistry)      |
| Paul B. Corneily (Medicine)       | Charles E. Osgood (Psychology)    |
| *André Cournand (Medicine)        | Max Palevsky (Mathematics)        |
| *Max Delbruck (Biology)           | *Linus Pauling (Chemistry)        |
| John T. Edsall (Biology)          | George Poly (Mathematics)         |
| Paul R. Ehrlich (Biology)         | Oscar Rice (Physical Chemistry)   |
| Adrian Fisher (Law)               | David Riesman, Jr. (Sociology)    |
| Jerome D. Frank (Psychology)      | *J. Robert Schrieffer (Physics)   |
| John Kenneth Galbraith (Econ.)    | *Julian Schwinger (Physics)       |
| Richard L. Garwin (Physics)       | Stanley Sheinbaum (Economics)     |
| Edward L. Ginzton (Engineering)   | Alice Kimball Smith (History)     |
| *Donald A. Glaser (Physics-Biol.) | Cyril S. Smith (Metallurgy)       |
| *H. K. Hartline (Physiology)      | Robert M. Solow (Economics)       |
| Walter W. Heller (Economics)      | *William H. Stein (Chemistry)     |
| *Alfred D. Hershey (Biology)      | *Albert Szent-Györgyi (Biochem.)  |
| Hudson Hoagland (Biology)         | *Edward L. Tatum (Biochemistry)   |
| *Robert W. Holley (Biochemistry)  | James Tobin (Economics)           |
| Marc Kac (Mathematics)            | *Charles H. Townes (Physics)      |
| Henry S. Kaplan (Medicine)        | *Harold C. Urey (Chemistry)       |
| Carl Kaysen (Economics)           | *George Wald (Biology)            |
| *H. Gobind Khorana (Biochemistry) | Myron E. Wegman (Medicine)        |
| George B. Kistiakowsky (Chem.)    | Victor F. Weisskopf (Physics)     |
| *Arthur Kornberg (Biochemistry)   | Jerome B. Wiesner (Engineering)   |
| *Polkarp Kusch (Physics)          | Robert R. Wilson (Physics)        |
| *Willis E. Lamb, Jr. (Physics)    | C. S. Wu (Physics)                |
| *Wassily W. Leontief (Economics)  | Alfred Yankauer (Medicine)        |
| *Fritz Lipmann (Biochemistry)     | Herbert F. York (Physics)         |

### NATIONAL COUNCIL MEMBERS (elected)

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| Ruth S. Adams (Science Policy)   | Franklin A. Long (Chemistry)      |
| David Baltimore (Microbiology)   | Francis E. Low (Physics)          |
| Harrison Brown (Geochemistry)    | Laurence I. Moss (Engineering)    |
| Nina Byers (Physics)             | John R. Platt (Physics)           |
| Barry M. Casper (Physics)        | George W. Rathjens (Pol. Science) |
| Rose E. Frisch (Human Biology)   | Marc J. Roberts (Economics)       |
| Arthur W. Galston (Biology)      | Joseph L. Sax (Environment)       |
| Garrett Hardin (Human Ecology)   | Eugene B. Skolnikoff (Pol. Sci.)  |
| Denis Hayes (Environ. Policy)    | Jeremy J. Stone (Mathematics)     |
| William A. Higinbotham (Physics) | Vigdor Teplitz (Physics)          |
| John P. Holdren (Energy Policy)  | Myron E. Wegman (Medicine)        |
| Raphael Littauer (Physics)       | Quentin D. Young (Medicine)       |

\*Nobel Laureates

The FAS Public Interest Report is published monthly except July and August at 307 Mass. Ave., NE, Washington, D.C. 20002. Annual subscription \$15/year. (However, please note that members of FAS receive the FAS Professional Bulletin and the FAS Public Interest Report as well as other membership benefits for a \$20 annual fee.) Second class postage paid at Washington, D.C.

Continued from page 1

contingencies in which one side might launch such an attack—notwithstanding the fact that the other side would retain the ability to destroy the attacker?

There is only one “scenario” which most strategists would consider even vaguely plausible, and this is a struggle over Western Europe. America has traditionally, explicitly, and repeatedly announced that it would use nuclear weapons first if it were losing in such a struggle, and that events would escalate to general nuclear war through an all out response or a series of ever larger exchanges. There is no comparable scenario in which one can plausibly explain why the Soviet Union might fire isolated missile attacks upon the United States—they have no comparable expectation of an invasion they cannot repulse. Nevertheless, the scenario of Soviet invasion of Western Europe is sometimes turned around to involve Soviet first use of missiles. Thus Secretary Schlesinger testified:

“If you had, for example, an invasion of Western Europe and the Soviet Union under those circumstances is informed by the American Government that we are prepared to use our nuclear capabilities unless it desists, the Soviet Union at that time may conclude that the option for it to pursue would be to wipe out as much of America’s nuclear retaliatory forces as it can and degrade its command control system. In effect, the Soviet Union would be sending a message to the United States that it had badly crippled our military strength and that we had better desist from the war—that the Soviet Union has won its objectives. Those are the kind of circumstances that one could hypothesize.” (pg. 23, Senate Committee on Foreign Relations Briefing on Counterforce Attacks, September 11, 1974)

#### GETTING OUR ATTENTION

Generals have testified that the Soviet Union might, in less well defined scenarios, fire a few missiles at us “to get our attention”. The Secretary’s FY 1976 Posture Statement talks of a nuclear shot-across-the-bow. These possibilities were discussed in the early sixties by a small group of strategists under the title of “limited strategic attacks” explained by such notions as “shows of force.”

The plausibility of such events need not be discussed at length; each reader can decide for himself whether they are politically realistic. But, perhaps in passing, something should be said about the difficulties such attacks would face in being recognized for what they were—limited attacks.

The United States does not have, and the Soviet Union presumably does not either, a system for instantaneous damage assessment in nuclear war. If a missile destroyed a city, or missed a city, or landed near a missile silo, there are not a series of sensors that—before being destroyed—report immediately the extent of the damage. Nor do we now have a method of determining—when missiles in flight are reported—where those missiles are headed and may land. Thus, during the period of warning of enemy attack, the President would not be sure what was happening. True, he might note that only a missile or two had been fired. But perhaps these were

#### SENATOR STENNIS IN 1968

**“Unlikely, but possible, is a limited and controlled Soviet attack on our nuclear offensive force, and other military targets which avoids our cities. Under such a scenario, offensive damage-limiting forces might permit a response in kind. This would require retention of hard target killers in our inventory; otherwise, with no U.S. option except to retaliate against the Soviet urban-industrial complexes, an all-out exchange could not be avoided.”**

*Report of Preparedness Investigating Subcommittee  
of Senate Armed Services Committee;  
Chairman, Senator Stennis.  
“Status of U.S. Strategic Power”.*

#### SENATOR STENNIS IN 1971

**“. . . we do not need this type of improvements in payload and guidance now, the type of improvements that are proposed, in order to have the option of attacking military targets other than cities. Our accuracy is already sufficiently good to enable us to attack any kind of target we want, and to avoid collateral damage to cities. The only reason to undertake the type of program the amendment suggests is to be able to destroy enemy missiles in their silos before they are launched. This means a U.S. strike first, unless the adversary should be so stupid as to partially attack us, and leave many of his ICBM’s in their silos for us to attack in a second strike.”**

*Congressional Record,  
Senate, October 5, 1971*

just the accidentally launched-in-advance forerunners of a larger attack. The warning systems themselves might malfunction; this has happened before. And since only minutes would be available, one can expect only confusion in higher circles.

True, the attack might be launched with a message announcing that it was a limited attack and with some ultimatum—this is possible. But such a message might be a trick to slow down our reactions. Under these unusual circumstances, military planners will be justified in assuming all sorts of otherwise paranoid theories. And if the possibility is entertained that a massive attack is underway, it will be only a short run to the horrifying thoughts that the Russians, inexplicably, have learned something that we do not know—and may have a plan for attacking our deterrent, as a whole.

In such circumstances, the reactions of the United States to limited attacks cannot be reliably predicted. Indeed, a Soviet planner would not be certain that his own forces would go off as planned. And since, at the least, an American response might be much larger than the attack, only escalation could be reliably predicted and world destruction assumed.

Nevertheless, Secretary of Defense Schlesinger is not talking about attacks that are physically impossible—just attacks that are extraordinarily unlikely. Fortunately,

—Continued on page 4

Continued from page 3

we can plan even for these eventualities without any expensive or dangerous additions to our force. The answer is that we can attack in limited ways whatever we wish: bomber bases, small cities, dams or whatever. If we are threatened with a limited attack, we can threaten to respond with a limited attack. But what is at issue is whether we should plan to respond with an exactly symmetrical attack. If the Soviet Union buys the capability to threaten our forces in some unusual way, need we—should we—buy that same capability to do it in return.

At the moment, this question turns on hard-target kill capability which means, since there are few other hard targets, the capability to destroy land-based missiles. Thus the question is: if the Soviet Union launches an attack upon 1, 2, 100, 500, or 1,000 of our land-based missile silos, should we be prepared and ready to launch the same attack in response?

FAS's answer is no, for two reasons. In the first place, in some of these cases, it would be quite impossible. For example, if all Soviet land-based missiles are fired quickly at all of our land-based missiles, there would be no way to fire our missiles back at their missiles—which would be in the air—even if we fired on warning of attack.

But apart from the question of physical possibility, the option is unnecessary. If the Russians destroy something, we can destroy something in return. So long as we have a secure deterrent, we can destroy anything we want.

#### OPTIONS THEMSELVES COST LITTLE

Secretary Schlesinger did not deny this last year. After explaining that "only conceptually" did we have options to do less than massive damage and that he wanted more, he explained that:

"The change in targeting doctrine can be implemented without the procurement of any additional weapons. Accuracy contributes somewhat to the effectiveness of the new targeting doctrine, but it is not essential for the implementation of that doctrine. We do not have to acquire a single additional weapon. We could have selective responses even if we had a smaller force structure than we presently have, and with no greater yields." (pg. 39 *op. cit.* See also, pg. 461 House Defense Appropriations Subcommittee hearings, FY 75.)

In short, everything that is both possible and necessary to these unusual threats can be had without more weapons, more accuracy, more yield.

Why then, six to nine months after making these statements, is the Department of Defense asking precisely for "more accuracy, more yield and more weapons"?

#### HERE IS WHAT DOD SAYS THIS YEAR

"The third requirement (for a credible strategic nuclear deterrent) is for a force that, in response to Soviet actions, could implement a variety of limited preplanned options and react rapidly to retargeting orders so as to deter any range of further attacks that a potential enemy might contemplate. This force should have *some ability to destroy hard targets*, even though we would prefer to see both sides avoid major counterforce capabilities. We do not propose, however, to

#### OPTIONS ONLY ON NEW CAPABILITIES?

Secretary Schlesinger: "If the only option we had under the circumstances were a massive urban strike against the Soviet Union, they might feel that because of the hundred million fatalities involved on our side, that we would be self-deterred and that they could obtain political benefit, political-military benefit by either threatening or conceivably employing such a limited strike against the United States." Senator Case: "We have always had options. The question is whether it is necessary or desirable to attempt to improve our capacity so to give us a larger number of options with the possible danger that our action in doing so will be construed by the enemy as an attempt, for instance, to achieve a first-strike capability."

—Briefing on Counterforce Attacks,  
September 11, 1974  
Foreign Relations Committee, pg. 27, 29

concede to the Soviets a unilateral advantage in this realm. Accordingly, our programs will depend on how far the Soviets go in developing a counterforce capability of their own. It should also have the *accuracy to attack—with low yield weapons—soft point targets* without causing large-scale collateral damage. And it should be supported by a *program of fallout shelters and population relocation* to offer protection to our population primarily in the event that military targets become the object of attack." (I-13, FY 76 Posture Statement.)

Thus, having gotten its foot in the door through "options only", the Defense Department now wants to begin buying the counterforce capability to go with them. Of course, it would "prefer to see both sides" avoid such a contest. But there is no thought as to how this might be possible once we buy the accuracy and hard-target capability involved. How will it be known what we have deployed once it is tested? Can you buy half of a counterforce capability? And will you be glad, afterwards, that you bought it?\*

DOD says of its program:

"While it contains some counterforce capability, neither that capability nor the improvements we are proposing for it should raise the specter in the minds of the Soviets that their ICBM force is in jeopardy." (I-15, Posture FY 76)

Why not? We are alarmed that our ICBM force is in jeopardy and it can now, and for the foreseeable future, destroy more of their land-based force than they of ours. This is the ultimate double standard at its most blatant.

—Continued on page 5

\*Meanwhile others jump on the bandwagon that "flexible options" provide. Backers of the cruise missile assert that it has "a unique potential for unambiguous, controlled single-weapon response and an invulnerable reserve force." (V-24 DDR&E *ibid.*) And supporters of penetration aids to overwhelm ABMs—undeterred by the fact that we have achieved an agreement not to build ABMs—assert:

"We must consider the possibility that a flexible response strategy may require penetrating a defense with high confidence yet with a light attack." (V-31 *ibid.*)

### MATCHING FOR POLITICAL PURPOSES

The real problem is not these scenarios but the natural military hesitancy to fall behind in any category. After explaining the throw weight advantages of the Soviet ICBM force—which, if we did nothing, might exceed ours by a factor of six, and might give the Soviet Union a threat to our land-based missiles and bombers—DOD notes, fairly, that this would not give the Soviets a disarming attack since less than 25% of our deterrent warheads are based on land. But it continued:

“But such a development could *bring into question* our ability to respond to attacks in a controlled, selective, and deliberate fashion. It could also give the Soviets *a capability that we ourselves would lack*, and it could *bring into question the sense of equality* that the principles of Vladivostok so explicitly endorse. Worst of all, it could *arouse precisely the fears and suspicions* that our arms control efforts are designed to dispel.” (pg. I-16 FY 76 Posture Statement, italics added.)

Notice that everything in this quotation turns on psychology rather than military capability; even the first line does not argue that we would lose the ability to respond in a controlled and deliberate way. We could do it with submarines.

### DOD GOES POLITICAL

The extent to which psychological and political emphasis now appears in Defense Department statements is extraordinary and quite new. It reflects the bankruptcy of the formerly bottomless pit of military fears of DOD. It is simply very difficult for DOD to find a danger in a world in which one has 10,000 alert nuclear warheads aimed at a country with only 50 large cities—75% of the warheads quite invulnerable to attack.

Look at the emphasis on political factors here:

“An equally essential requirement of deterrence is parity with the Soviet Union in strategic offensive forces, *as perceived by friend and foe alike*. Not only does Public Law 92-448 (the Jackson Amendment) require us to achieve equality with the USSR in central strategic systems but such *equality* is also important for *symbolic purposes*, in large part because the strategic offensive forces have come to be seen by many—however, regrettably—as important to the *status and stature of a major power*.” (II-17)

Naturally, what is important symbolically to Defense Departments—obsessed as they are with military weapons and poised as they are to build new ones—can be far less important in the real political world. To permit this kind of political emphasis to be used in DOD justifications is to allow an entirely new and open-ended dimension to defense procurement.

This emphasis on political justifications for military weapons has moved down to the level of research and development. Here are some quotations from the posture statement of DDR&E chief Malcolm Currie:

“Our efforts are modified and focused by the fact that *strategic capabilities are eroded*, not only by increased adversary capability, but also by *political change . . .*” (I-17, Malcolm Currie DDR&E Posture Statement FY 76)

“The remaining 40% of our efforts are focused in advanced development of technological options to permit

### REASSURING THE SOVIET UNION

“Our planning objectives should . . . leave unchallenged the Soviet capability for deterrence provided that our interests are respected and the traditional norms of international behavior are accepted.”

—(I-10 Posture FY 76)

us to *project equivalence—both actual and perceived*—in the face of a Soviet throw weight advantage.” I-18, *ibid.*)

“We want always to have strategic forces sufficient to deter any nuclear attack—or *coercion by the threat of nuclear attack*—on the United States or its allies.” (V-1, *ibid.*)

Or consider this puerile effort to sell the B-1 bomber:

“As a modern, complex, high performance air vehicle it is the epitome of our technological superiority—a reminder to all that power and influence in the world are not determined by numbers alone”. (V-19, *ibid.*)

America has never before adopted the policy of matching the Soviet Union on every strategic characteristic. We did not test a 50 megaton bomb, for example, or build a missile that could carry 25 megatons such as the Soviet SS-9. But had Dr. Schlesinger been Secretary of Defense at the time, he would have argued that: a) public opinion required that we show we were as tough in these regards as the Soviets and b) that the weapons test might show them something we did not know; and c) that the huge missile might intimidate a President in the eyes of third parties. Would such a policy of follow-the-leader have earned us respect or lost it?

### MATCHING IS NOT NECESSARY

We have not matched the Soviet Union in the 800 IRBMs that threaten Europe. We have not matched them in numbers of ICBMs; instead, by treaty, we conceded them an advantage of 1600 to 1,000. Why now is it so important to match them in overall payload of land-based missiles? And why is nothing ever said of the characteristics in which we are so far ahead: payload of sea-based forces, numbers of bombers, accuracy of missiles, deployed MIRV? And what of the geographical asymmetries that can never be made equal? In short, the road of matching is an open-ended invitation to application of a double standard in which the Defense Department simply emphasizes imbalance in whatever kinds of weapons it wants to purchase.

### SYMMETRY AS A PROTECTION AGAINST STRATEGIC UNCERTAINTY

A third DOD motivation is shown here:

“We must maintain an essential equivalence with the Soviet Union in the basic factors that determine force effectiveness. Because of uncertainty about the future and the shape that the strategic competition could take, we cannot allow major asymmetries to develop in throw-weight, accuracy, yield-to-weight ratios, reliability and other such factors that contribute to the effectiveness of strategic weapons and to the perceptions of the non-superpower nations.” (FY 76 Posture Statement.)

—Continued on page 6

Continued from page 5

But few, if any, strategists would seriously argue that our present forces need fear the strategic consequences of asymmetry in reliability (now already thought to be 80-90%) or yield-to-weight ratios (affecting the yield of warheads already bigger than the Hiroshima bomb), or accuracy (already far better than that necessary to attack cities) or throw-weight (which determines the number of warheads or their size in a force that is already approaching 10,000 warheads, to deter a country with only fifty large cities). This notion that we must keep up with the Russians in every technological category simply because one of them might pay off is quite far-fetched for most categories. It illustrates the absence of real DOD fears. Even in R&D we do not pursue all avenues. Deployment is 10 times more expensive.

Of course, the notion of essential equivalence goes on to put emphasis upon the "perceptions of non-superpower nations". But only in the debased and ludicrous political science of the Pentagon strategists would one try to argue that Germany, Italy, Nepal or some other country will lose their confidence in us because of an "asymmetry" in the reliability, accuracy, throw-weight or yield-to-weight ratios of our weapons versus those of the Soviet Union. Most of these categories would not even be noticed (e.g., yield-to-weight ratios) and many cannot be accurately determined even by ourselves about our own weapons (reliability, accuracy).

#### VLADIVOSTOK AGREEMENT

"We cannot expect, in all candor, that arms control agreements—any more than domestic laws—will solve all problems or close all loopholes. Those who hold such high expectations are doomed to disappointment. Where the possibility of loopholes exists, we should not insist on perfection as the price of agreement. *Rather we should attempt to close the loopholes, by further agreement if possible, by unilateral action if necessary.*" (II-10, italics added.)

Like the approach taken toward limited strategic attacks, the Schlesinger approach toward the treaties is comprehensive, combative, and rigid. It confirms the worst fears of those in the arms control community that international agreements would be used: a) as justification to avoid cutting defense budgets; b) as justification for moving new programs forward rather than relaxing; and c) as justification for buying everything not prohibited in Treaties that inevitably do not cover many things.

Thus these other injunctions are found in the posture statement:

"... in a period of transition and uncertainty, *reductions should result from international agreement* rather than from temporary budgetary exigencies or the impulse to set a good example for the other side."

"... our planning should abide meticulously by the spirit as well as the letter of existing arms control agreements and guidelines; in fact, we should *plan toward* the Vladivostok goals and our desire for other equitable agreements."

"To proceed otherwise—and particularly to engage in unilateral force reductions—will not foster further détente and arms control." (I-9, italics added.)

#### IMPLICATIONS OF THE POLICY

The greatest single danger associated with this new policy lies in what has been termed "reciprocal fear of surprise attack." Here two forces race each other to be the first to strike in the view that a) there are advantages to firing first and b) that the certainty of an attack is rising—a certainty that cycles upward as each recognizes that the other will be thinking of pre-emptive action.

Today, we foresee such a problem between the land-based missile forces of the two sides. For each of the superpowers the choice is, after all, whether the land-based forces should be destroyed over one's own territory or over the other's. By firing first, the missiles—one's own and those of the other side—are both destroyed over the other side's territory. By firing second, it is otherwise. Of course, the issue is made somewhat academic by submarines since the attacked side could still retaliate with its submarine based missile force for whatever damage was achieved.

Nevertheless, whatever danger exists here can be removed if one side avoids procurement of the capability to destroy most of the missiles of the other side. If, for example, the United States announced it would not play tit-for-tat missile games but would retaliate for such attacks by attacking whatever it wanted, the cycle of fears would be broken and there would be no point to hair-trigger responsiveness being built into the forces of each side. This would be a major security advantage for both since hair-trigger responsiveness—or, equivalently, the delegation of authority to lower levels—is something whose control cannot be guaranteed.

#### WAR ON WARNING BY COMPUTER

To give a concrete picture of the kind of thing DOD is considering, one high-placed DOD official explained that they were thinking of methods of doing this:

If Soviet missiles were launched at U.S. missile silos, observations would be taken of them, in flight, to determine at which missiles; the U.S. missiles targeted would then be fired before the Soviet attack could reach them. But before launching them, computers and satellites would determine which Soviet missiles had not been launched and would retarget the U.S. missiles at such silos.

This is a formula for a Stranglovia fantasy of orchestrated missile war. Since it has no particular purpose, one wonders why the risks should be run that something screws it up.

Besides the risks, the costs are substantial. Only the Defense Department can estimate the costs of improving the accuracy but the R&D costs must be measured in hundreds of millions if not billions. The installation costs of the accuracy and higher yield programs, depending upon whether terminal guidance is involved, could be billions of dollars. And if the Minuteman force is to be changed in some substantial way—replaced by a larger missile (M-X) or moved to mobile missiles—tens of billions of dollars are involved. All of these costs stem not just from assuming that these scenarios are realistic—that costs nothing—but from assuming that our response to such attacks must be symmetrical.

## THE SECRETARY OF DEFENSE DECLINES TO FUNCTION ON A PANEL

Early in March, FAS Director Jeremy J. Stone was sounded out on his willingness to serve in a panel discussion with the Secretary of Defense before the Budget Committee. He agreed but made the request that he should be joined by one other defense analyst with ongoing access to classified material relevant to the counterforce debate, and he made some relevant suggestions. While these suggestions were being explored, the Committee decided that the Secretary of Defense should be confronted with a more senior figure and formally invited Paul Warnke, a former Assistant Secretary of Defense for International Security Affairs (ISA).

The night before the hearing, March 14, Dr. Stone was awakened with the Budget Committee request that he join with Mr. Warnke in view of the fact that the Secretary of Defense had just declined, considering the format inappropriate. The Committee also secured the last minute appearance of Paul Nitze who has been Deputy Secretary of Defense, Secretary of the Navy and Assistant Secretary for International Security Affairs as well as a member of the SALT delegation. The panel turned largely into a debate on counterforce between Stone and Nitze, excerpts of which appear below.

(Later, the Secretary of Defense apparently agreed to sit on a panel with someone of "appropriate stature"; but after former Budget Director Charles L. Shultze was lined up for the hearing on March 21, he apparently changed his mind; he appeared, gave his views and left.)

### EXCERPTS FROM TESTIMONY

*Dr. Stone.* I think to understand this, you have to understand that, since the arms race began, there have always been two schools of thought about where the main danger to the country lies. The first school assumed the main danger was a direct threat from the Russians. This first took the form of surprise attack. Later when surprise attack became less likely and more difficult to explain in terms of any surprise attack scenario, talk began of limited strategic attacks, i.e., isolated shows of force.

In any case, there has been one school of thought that has been dominated by this concern that the Russians are the real problem.

There has also been a second school of thought. While recognizing the problem posed by the Russians, it saw the real danger in a war no one wanted and an arms race out of control; increasing destruction if war occurred, and higher probabilities of war that came through inadvertence, and so on.

This second school, to which I belong, I think, an ever stronger case. The reason is, as everyone knows, that weapons stockpiles have become larger and larger on both sides. The fear of a deliberate surprise attack has therefore waned. Meanwhile the fear that these weapons might get out of control has increased.

In terms of this debate between two schools, we have a posture statement this year that presents a classic example of the struggle between these two perspectives.

It says that we have to have capabilities to respond to that threat. The capabilities that are desired are, first, that we should be able to respond in a symmetric way—not just respond to the contingency, not just deter the

Russians, but be able to do exactly what the Russians might be able to do to us. Thus, if they attack land-based missiles, according to the posture statement, we should be able to attack the same number and kind of their missiles. The posture statement also wants evacuation around missile sites, and it wants also that we buy the accuracy and warhead yields necessary to destroy the Soviet land-based missiles.

[Mr. Nitze] closed his remarks talking about the "pessimistic appraisal". I want to call to your attention the vagueness of his pessimistic appraisal.

Consider what a real danger is. In the missile gap period there was a real scenario how the country might be lost. If we only had bomber bases, the projected Soviet missiles would have attacked the bomber bases and we would have been disarmed.

### SURPRISE ATTACK SCENARIOS VANISH

By the mid-1960s however when we had submarines underwater and land-based missile silos, in order to provide a scenario, one had to assume something that is crazy to assume, that some Russian commander would rely upon an untested (and unbuilt) Soviet ABM to shoot down the sub-launched retaliatory missiles of ours—missiles that could be neutralized in no other way. No sane man would rely on such an anti-ballistic missile.

Nevertheless, this absurd notion became the driving force of our procurement and led to the deployment of MIRV as a way of neutralizing the (still unbuilt) massive Soviet ABM. We negotiated the ABM treaty to remove this "threat".

Now if you look at the posture statement closely, you will see the fears have become even vaguer. The fears are expressed that third parties might have a wrong political view of the situation or that something unexpected might turn up. Today it isn't even clear what physical phenomenon could be used to make the submarines vulnerable.

In the 1960s we talked about the year of maximum danger being two years hence. We have now moved the threshold out beyond the ten to fifteen years of which Mr. Nitze spoke. The Secretary talked about the fear of disarming attack being "several decades" off. . . .

*Mr. Nitze.* Now the advantage of putting the Trident-1 missile in the Poseidon submarines is that this increases the standoff distance from which the Poseidon could be effective, and therefore increases the open ocean operating area in which it could operate. Therefore the Poseidon would be more survivable with the Trident-1 missile than the current one is.

But the best analysis I have been able to make indicates that the Trident submarine with Trident II missiles is the most cost-effective system with respect to the figure of merit which I defined.

*Dr. Stone.* I want to explain why it is impossible to talk about the cost-effectiveness of the Trident submarine. It is because the threat to the submarine is not known. Hence the "effectiveness" of a solution to the unknown threat cannot be known.

For example, the submarines started out with a 1200 mile range, with the A-1 missile, and then, to get more

—Continued on page 8

Continued from page 7

sea-room, went to 1500 mile range with the A-2. They then went to 2500 mile range to get more sea-room, and put 3 warheads on each with the A-3. They are now going to 4,000 mile range to get more sea room with the Trident I and now want a new submarine with 6,000 mile range in the Trident submarine. They put ten warheads on these newer missiles. And to further strengthen the certainty that submarines would be effective, we negotiated the ABM treaty that makes each missile sure to impact. This is seven distinct improvements in the effectiveness of our submarines. But, during this time, there is no evidence that we would have a vulnerable submarine based deterrent if we still had only the 1200 mile missiles in the first place.

One could buy anything this way. One could buy things that walk along the ocean bottom, or lots of little submarines, or a few big submarines. We would not have any way of knowing what it is one wants to buy without a threat. That is the situation today. For example, Trident is explained as very good because it is quiet. But no one knows whether it is noise that is going to permit the attacker to capture the Trident submarines.

After we have spent 30 billion dollars, we may discover that we have shot our bolt on a threat against which the Trident can't protect itself. So we are shooting our chips, you see, too far in advance of knowing what the threat is.

Since we don't understand how they could even knock off a few submarines, and there are thirty deployed all the time, and since each of these could fire 150 warheads individually at various targets the force is secure enough. I recall Mr. Nitze's testimony ten years ago, when, as Deputy Secretary of Defense, he said that one of these submarines by itself would be an immense deterrent.

In short, this system analysis approach without threat is wild. If, as the Secretary of Defense said, our deterrent is secure for several decades, then these weapons will be obsolete from old age when the threat comes. What can this be called except mindless modernization?

*Mr. Nitze.* I take it the substance of the argument is

that there is no threat to submarines, and it doesn't matter whether their range is 1200 miles, 2500 miles, 4000 miles, or 6,000 miles.

. . . Frankly my view is: A, that the submarines are not totally without risk today if they are close into the Soviet Union. It does make a difference right today whether you have more operating area. B, that even though it is not possible precisely to define and what the nature of the threat might be in the future, it isn't a mindless exercise.

It is an exercise to which you can put better judgment rather than worse judgment. The third point is, Mr. Stone talks about 30 Trident submarines. The present program, as I understand it, would be 10. If one were to build more than that, the decision would be taken further out into the future. . . .

#### WITH REGARD TO THE B-1 BOMBER

In those days, if you looked at total program costs, then it turned out that you saved money if you could get the B-1 earlier, because then you could cut off the high operating costs of the B-52's and that over a sufficient period of time would more than compensate for the high acquisitions costs. . . .

*Dr. Stone.* It took a 17 year long run before this equivalence took place if I remember the study, which was done on AMSA. I would like to caution the committee about the bomber study which the Defense Department is relying on this year. That bomber study rests on the following assumptions. It is asking the question, if I understand the posture statement correctly, and I believe I do, it is asking the question, "If you wanted to spend as much money as the B-1 bomber force would cost, on what kind of bomber force would this be most effectively spent?"

It reaches the conclusion, not surprisingly, that the Defense Department thinks the B-1 bomber would be the best way to spend the money. But the real question isn't, "If you spend as much as the B-1 bomber force would cost what is the best thing to spend it on."

The real question is, "Do you want to maintain a bomber, and if you do, can you do it much more cheaply?" Of course you can.

**FAS PUBLIC INTEREST REPORT (202) 546-3300**  
307 Mass. Ave., N.E., Washington, D.C. 20002  
April 1975, Vol. 28, No. 4

- I wish to renew membership for calendar year 1975.
- I wish to join FAS and receive both newsletters as a full member. Enclosed is my check for 1975 calendar year dues. ( I am not a natural or social scientist, lawyer, doctor or engineer, but wish to become a non-voting associate member.)
- \$20     \$50     \$100     \$500     \$1000  
Member    Supporting    Patron    Life    Under \$10,000
- Subscription only: I do not wish to become a member but would like a subscription to:
- FAS Public Interest Report — \$15 for calendar year
- FAS Professional Bulletin — \$15 for calendar year
- Please note that members receive both newsletters and Other benefits for \$20 dues.
- Enclosed is my tax deductible contribution of \_\_\_\_\_ to the FAS Fund for its permanent home on Capitol Hill.

NAME AND TITLE \_\_\_\_\_  
Please Print

ADDRESS \_\_\_\_\_

CITY AND STATE \_\_\_\_\_  
Zip

PRIMARY PROFESSIONAL DISCIPLINE: \_\_\_\_\_

Second Class Postage

Paid at

Washington, D. C.

Return Postage  
Guaranteed