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NATIONAL SECURITY PLANNING GONE LOONEY?

The continuing momentum of the Soviet strategic buildup seems to have the Defense Department running too scared to think—at just the time it most needs to be deliberate and cautious in order to make each response work.

The diagram below shows the rapid rate at which U.S. land-based missiles are becoming vulnerable. Understandably, the Defense Department wants some kind of more invulnerable replacement. The missile it wants is called the MX, but the core of the problem is how to base it.

Congress early recognized how over-eager the Department was to buy the missile first and to decide, only later, where to deploy it. Congress recognized that it would be absurd to buy a new missile on the assumption that the missile was going to be placed in those same holes whose impending vulnerability was causing the problem. Congress wanted to know where exactly the missile was really going to be based. And it tried to discipline the Department to do what used to be called “fly before buy” but might be here called “basing before buying.” As a result, an unprecedented law was passed precluding the Defense Department from planning to put the new missile into the old Minuteman missile silo.

Congressional Foot-dragging

Congressional foot-dragging has been fully justified by the spectacle of the Department trying 30 different basing methods without finding any satisfactory.

For example, all agree that the shell game method is vulnerable to sufficiently large numbers of Soviet warheads. And all agree that the Soviets will eventually have that number of warheads if their buildup continues. (Indeed, the effect of their confronting our MX is to encourage them to continue that buildup

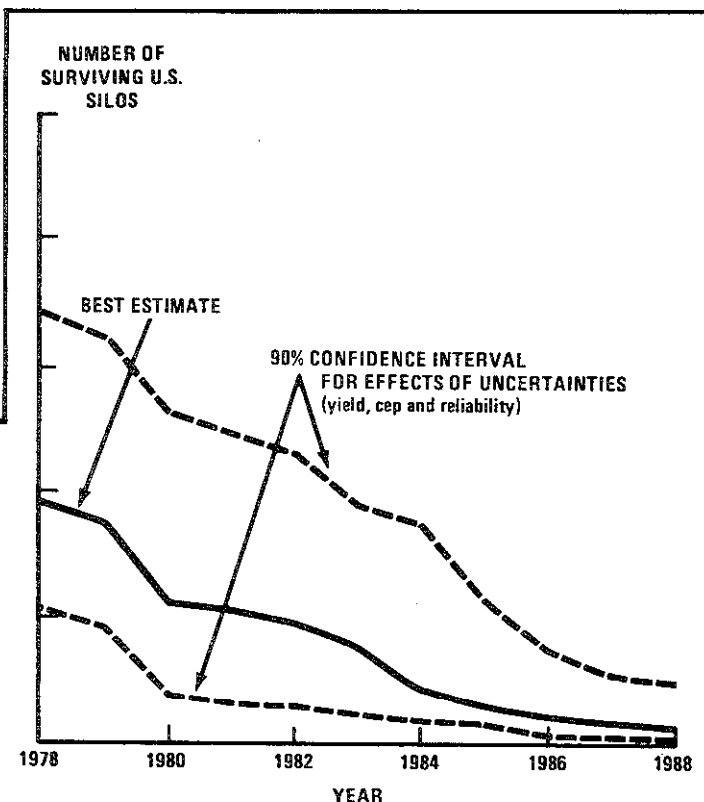
since MX will threaten their force and motivate them to expand it. So why build MX and base it in this ultimately vulnerable shell game configuration?) Would you believe that the Defense Department’s argument is the hope—yes, the hope—that SALT will last for decades, and restrain the Soviet buildup? It is mad to spend big money—and to base important elements of national security—on such hopes. SALT II, if ratified, will run until 1985; MX will not even be fully deployed until the 1990s!

And what of the air mobile form? It assumes that the Soviet attack would permit our bombers to be flushed into the air from their main bases to smaller dispersal or satellite bases. For this maneuver, about 15 minutes’ warning is necessary. But Soviet submarines could, in principle, learn to fire depressed trajectory missiles at the bomber bases and destroy them with only a few minutes’ warning—thereby negating the system. For this reason, Congressman Bob Carr of Michigan has proposed an agreement that neither side will test depressed trajectory firings. Let us hope that

—Continued on page 2

SALT DEBATE HEATING UP

As this newsletter goes to press, responses to an earlier newsletter, “SALT: Pros and Cons for Doves,” are arriving as requested. No doubt, as with the Vladivostok agreement, from which this agreement has been derived, FAS will contain even more than two points of view. All will be vented in the newsletter as space permits, and all members will be asked shortly to contribute. We do, however, ask members to avoid invidious comments about one another.



Continued from page 1

this agreement, said to be high on the agenda for SALT III, is indeed negotiated and agreed.

But, even if it is, should we bet the viability of our strategic posture on that agreement being maintained?

The most famous method dispensed with was the buried trench, but it was too costly and too vulnerable to a fusillade of Soviet warheads fired down the trench.

The multiple aimpoint (MAP) method, sometimes called the shell game, in which dummy silos are used to disguise which silo has the real missile, has been renamed multiple protective structure (MPS). (The notion of "aimpoints" was considered too provocative to those American citizens who might see themselves as drawn into the line of fire. Indeed, they did feel so threatened when a Western State's fate was described by an official as that of a "nuclear sponge.")

Now there are reports (*Aviation Week*, February 26, 1979) that the Soviets are objecting to the random vertical silo basing as a deceptive practice inconsistent with SALT II. And, evidently, with this in mind, the Department is hastening to find methods of basing the MX in bombers which would, on tactical warning, fly to more secure position. Recently, an environmental impact statement on such basing was released (see page 8).

What we find disturbing to reflect upon is the dependence of both the shell game, and the air mobile system, on pieces of paper—in this case, on SALT treaties. Our hard-nosed Pentagon, which never "trusts" the Russians, is ready to bet billions of dollars on the viability of agreements (some not yet even made). What if, for one reason or another, the agreement broke down, and such tests began. Would we not be stuck with an MX deployment method that was suddenly seen to have an Achilles' heel?

The already present urge to get the MX approved has been further exacerbated by the desire to have it approved by the time the SALT treaty was concluded to help get hawkish support. ("MX Basing Delay Threatens SALT Ratification," *Aviation Week*, November 20, 1978.) According to *Aviation Week* of August 19, Defense Science Board members were even enjoined to calculate air basing costs for the MX so as to make it competitive with the shell game methods then in some official disfavor.

Worst of all, in the confusion, more and more talk is evident of "firing on warning," which means pretending that land-based missiles are safe because they could be fired on warning of attack. The plain fact of the matter is that the 20-minute warning is not sufficient to fire the missiles unless control methods are reduced to a point where the dangers of undesired war are too great.

Faced with all of this superficial and dangerous analysis mixing SALT with strategic preparations, and encouraging inadvertent war, the FAS Council has distilled and endorsed the following three axioms which it asks the defense community to ponder and adopt.

1. The United States (and the Soviet Union) ought not adopt a policy of firing missiles on warning of

impending attack. Rather, the U.S. should purchase and maintain systems of such kinds and variety that it can ride out any nuclear attack and still respond deliberately and carefully.

2. By the same token, the United States, in its own interest, ought not purchase weapons systems which encourage the Soviet Union to set its missiles to fire on warning of attack. (And the same principle holds in reverse, of course).

3. We ought not procure major U.S. weapons systems, or make major expenditures for such systems, if their viability depends upon pieces of paper, whether SALT treaties or otherwise. □

—Reviewed and approved by the FAS Council

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HAROLD BROWN'S POSTURE STATEMENT "COOL AND RATIONAL"

While DOD explanations for MX decisions are, we think, properly characterized in the FAS editorial as "looney," the tone and style of the Secretary's Posture Statement is quite the reverse. In particular, under the pressure of Soviet superiority in many "static measures," the Posture Statement achieves unprecedented eloquence on the many non-military elements in a nation's security posture.

In effect, the Posture Statement shows the American hare explaining coolly why the unidimensional advance of the Soviet tortoise is not really very important, but why, nevertheless, the hare will be obliged to bolt if any further erosion of its lead occurs. Some excerpts follow.

One of the most puzzling of the Posture Statement rejoinders to dealing in static measures is a new measure called "relative force size," the graphs of which appear on page 4. They appear to be the outcome of a model, rather than a calculable measure. FAS has examined briefly an entire book required to define the concept. The numbers are of uncertain meaning, without knowing how they are defined, but this is what DOD is using and so FAS members may find them interesting.

Even without Minuteman, our surviving second-strike capability would remain large—in the thousands of warheads. Not only could we still destroy a wide range of targets; we could also cause catastrophic damage to the Soviet urban-industrial base. It is difficult, in the circumstances, to see how the Soviets could expect to gain any meaningful advantage from starting such a mortal exchange.

Minuteman Vulnerability Requires a Response

It is quite conceivable, at some point in the early to mid-1980s, that the Soviets—with a first strike—could eliminate the bulk of our ICBM silos and still retain a large number of warheads in reserve. However, they would have to consider the



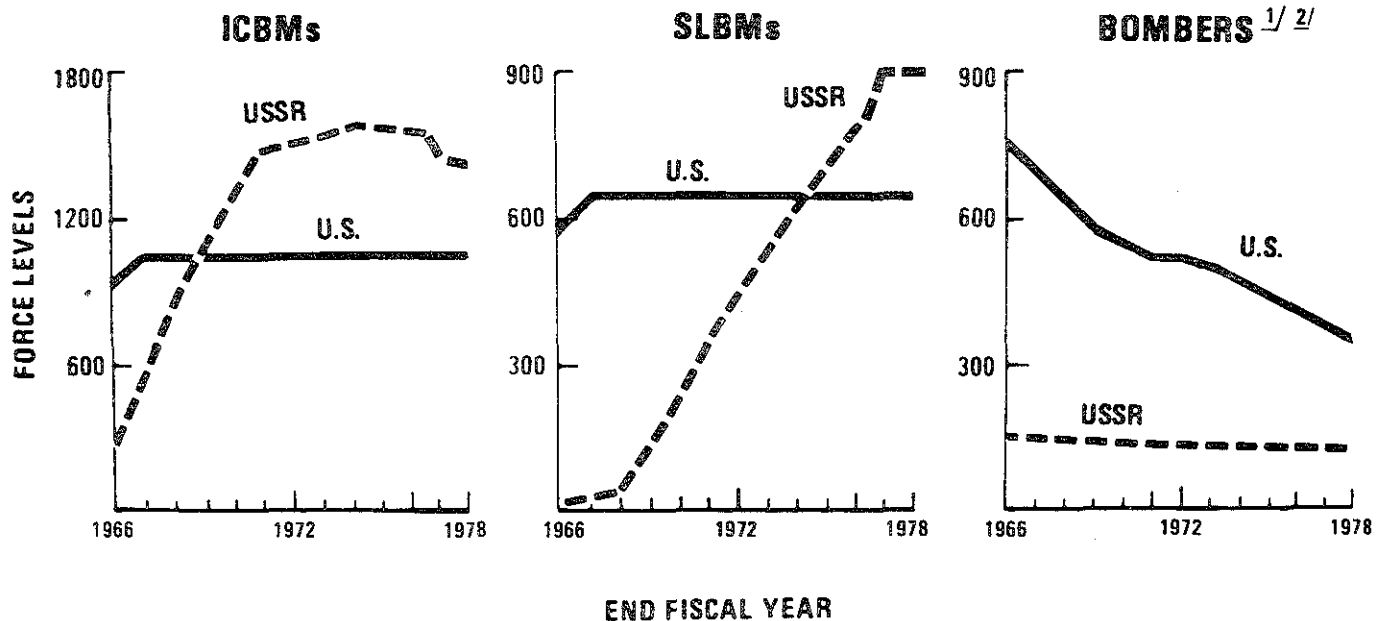
Harold Brown

possibility of our having launched the Minuteman force before their ICBMs arrived, even though we have not made "launch under the attack" a matter of policy for a very good reason: such a decision would be a very grave and difficult one to make, even if our sensors gave clear and unequivocal indications of such an attack.

I make these points in order to correct any notion that Minuteman vulnerability by itself is catastrophic. However, the capability of the Soviets to threaten the prompt destruction of a major portion of our retaliatory force, while that segment of their own force is not subject to such a threat, will be a serious matter in military terms, and, if it were to continue for an extended period, would be a major political problem. I therefore believe we must act to correct it as we modernize our strategic forces.

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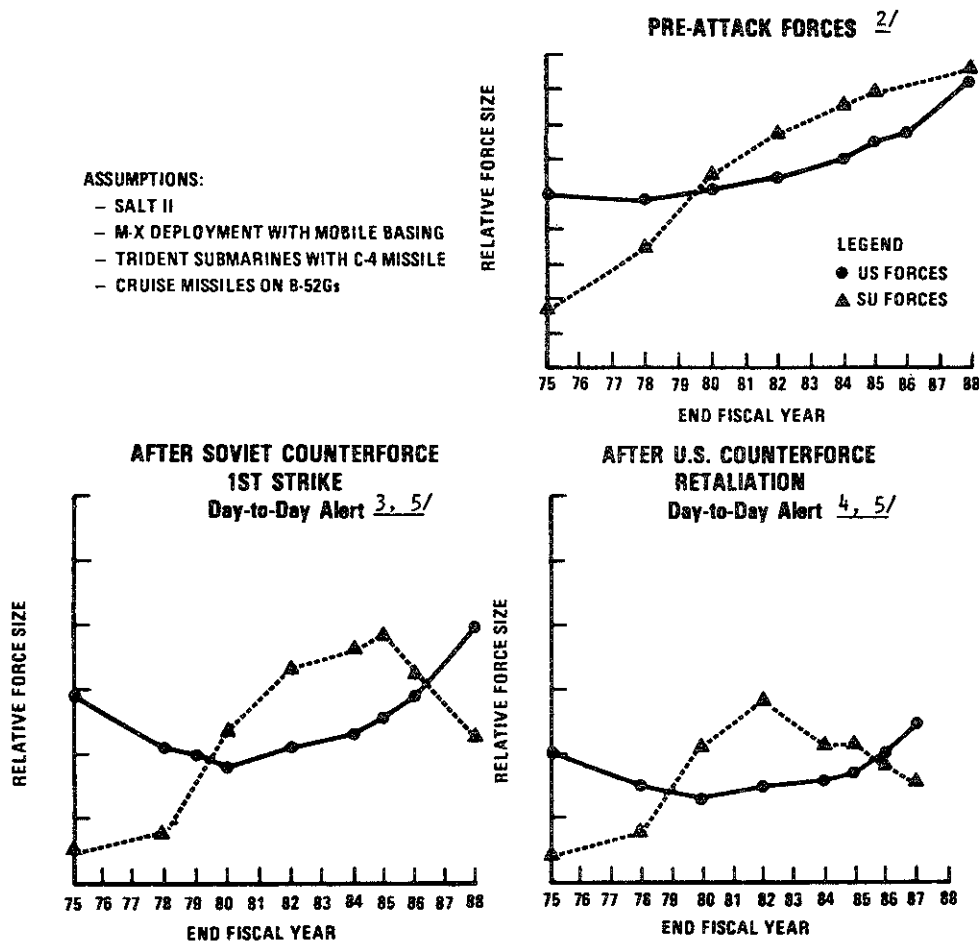
CHANGES IN U.S./U.S.S.R. STRATEGIC LEVELS



1/ FB-111 and BACKFIRE are excluded.

2/ Excludes approximately 220 B-52s in deep storage.

U.S. AND SOVIET STRATEGIC FORCES COMPARISON ^{1/}



Note: These charts reflect only one of several ways to compare forces, although they are more comprehensive than most. They do not reflect the basis on which we plan to use the forces. As is the case with all multi-year force comparisons involving different forces, they do not take into account certain operational refinements on each side such as capabilities of and allowances for theater purposes, range limitations, and uncertainties associated with command and control. It should be emphasized that the data on Soviet forces beyond 1979 are subject to considerable uncertainty, being projections.

- ^{1/} Relative force size is a measure of capability to destroy a given set of military and economic targets.
- ^{2/} These curves represent the forces on each side that could be generated (not counting units in overhaul, repair, conversion, or storage).
- ^{3/} These curves show U.S. day-to-day alert forces that have survived a counterforce attack, and Soviet residual day-to-day alert forces. If the U.S. forces had been on a generated alert prior to the attack, the number of U.S. forces surviving would be higher.
- ^{4/} These curves show U.S. day-to-day alert forces that remain after a U.S. counterforce retaliation. Soviet forces include surviving ICBMs, on-station SLBMs, any alert bombers, and those SLBMs and bombers that the Soviets had been able to generate after their first-strike. If the U.S. forces had been on a generated alert, the number of U.S. forces remaining after this retaliation would be higher.
- ^{5/} Both sides would remain capable of attacking a comprehensive list of "soft" military and non-military targets at this point. For this reason, the hypothetical differences between these forces might or might not be meaningful.

Continued from page 3

Can Equivalence Be Used Against Us?

Even where Soviet strategic nuclear forces are concerned, today's capabilities are so impressive in part because they arose from such a low base. Whether the Soviet efforts in this realm have been worth the cost remains problematic. We ourselves did not find our numerical nuclear superiority particularly useful or usable when we had it. In fact, those were the years of the Berlin blockade and wall, of the North Korean adventure, successive repressions of Czechs, East Germans, Hungarians, and Poles, and the Cuban missile foray. The Soviets, of course, are different. Should they somehow obtain a perceived nuclear superiority, they might mistakenly try to use it for political advantage. But it seems doubtful that they would be any more comforted by nuclear equivalence than we were by nuclear superiority in the past. Despite their vast nuclear superiority to the PRC, the Soviets have deemed it necessary to station as much as a quarter of their ground and tactical air forces in the vicinity of China.

Staying Cool

To the extent that major military confrontations might occur, they are as likely to arise from instabilities in the East as in the West. A desperate Soviet Union could be even more of a problem than a confidently aggressive one.

If this assessment is correct, it has several implications for our defense posture and the allocation of our resources. First, current conditions do not justify complete sacrifice of the fight against inflation, the battle to improve our energy position, or our most critical domestic programs in order to meet increments of defense demand beyond the gradual buildup proposed in the Administration's program. Second, where defense itself is concerned, stability should remain on a par with deterrence among our objectives.

Arms Race to Nowhere

Both sides understand that restraint is especially important where nuclear forces are concerned. Nuclear weapons represent the only external threat to the survival of the United States and the Soviet Union. Nuclear weapons could destroy in a matter of hours what each nation has built over the course of centuries. Both the United States and the Soviet Union already deploy nuclear forces fully capable of destruction of this magnitude. It is unlikely, moreover, that the situation will change as a result of further buildups by either side, despite the lure of exotic technologies and damage-limiting strategies that entail massive programs of active and passive defense—*provided* always that timely and effective responses (which exist) are undertaken by the other side.

National Security and the Soviet Buildup

National security has always been comprised of a number of strengths, non-military as well as military. The United States, fortunately, is by most measures the strongest nation in the world. No other country—certainly not the Soviet Union—can compete with us in economic power, political stability, and cohesion, technological capability, national will, or appeal as to way of life and international policies.

... Only in military matters has their system been able to rival ours. But the fact that they have put so much of their effort into the production of military power is most troubling. Their failure to compete successfully in other arenas can increase the incentive for the Soviets to use their military power to increase their influence and to gain political advantage, whether by direct

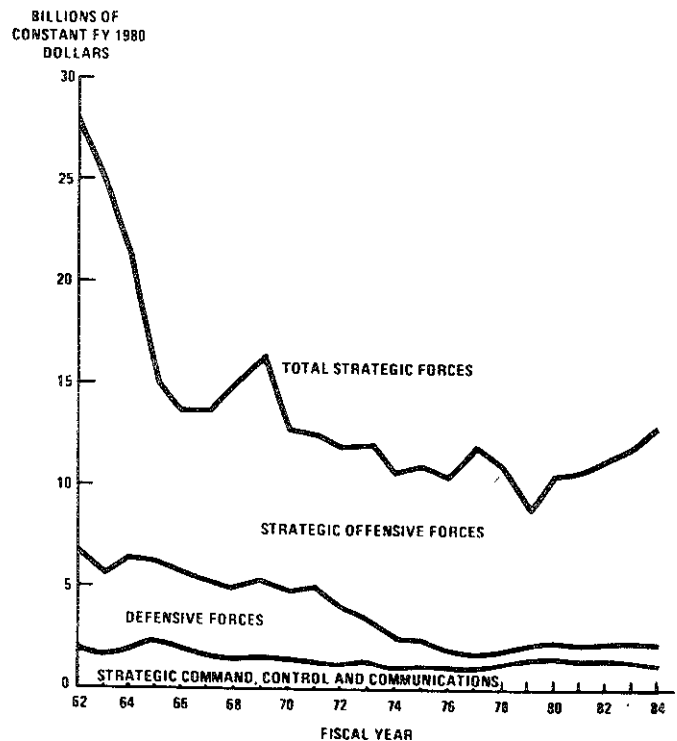
application of military force, through intimidation, through proxies, or through arms transfers.

Such a motivation is one possible explanation for the Soviet military buildup. Another is bureaucratic inertia, or rather—in a less benign formulation—the strength of the military-industrial establishment in the Soviet political structure and resource allocation process. A third may be Soviet fear, however misplaced it might be, of their neighbors—especially NATO and the People's Republic of China.

Maintaining U.S. Interests

At the outset of this review, I indicated that the overriding objective of our foreign policy is to maintain U.S. interests under conditions of international peace and stability. At present, our basic interests remain intact. Perhaps the greatest immediate threat to them comes from economic and monetary forces. It would be a mistake, however, to underestimate the problems created by the military buildup of the Soviet Union. Those problems are real. They are serious. They are continuing. They could become critical—and if they do, we would regret not having started to build up our own military capability now. It may be too late if we wait much longer. . . . While the Soviets seem determined to push on with their armament regardless of what we do, we must keep several other aspects of their policy in mind. First, there are matters on which the Soviet leaders continue to cooperate with us. Second, those leaders have shown due caution about the issues on which they commit their power and prestige. Third, though they may try to create opportunities for influence and control, their successes are most likely to come in areas where profound instabilities already exist. Fourth, while it is evident that the Soviet leadership has authorized and encouraged a major military buildup, it does not appear to be an all-out effort. □

STRATEGIC FORCES BUDGET TREND



THE MINUTEMAN VULNERABILITY SCENARIO

The standard scenario runs something like this. In a European crisis, the United States, overwhelmed by a conventional attack, is contemplating firing nuclear weapons to show that it is willing to run the risks of going nuclear rather than losing. U.S. officials observe, however, that such a nuclear firing would encourage the Soviet intermediate and medium range missiles in the Western Soviet Union to fire at NATO bases and NATO nuclear depots throughout Western Europe so as to forestall and preempt escalation. They reflect that perhaps these Soviet missiles should be attacked first with our ICBMs.

Indeed, the Russians might well expect us to fire at their IRBMs and MRBMs *first*, or in conjunction with our nuclear show of force. Reasoning backward, if the nuclear balloon did start to go up, the Soviet Union might want, itself, to preemptively attack U.S. Minuteman silos in America during, before, or immediately after, its own medium range missiles were attacked on its soil. What could the United States do, the theorists of escalation dominance ask, about that?

Moreover, as Mr. Paul Nitze has emphasized, the Soviet Union would have destroyed 90% of our land-based missiles with a fraction of its own. It could argue that its strategic situation had been improved and that the war should end there.

One answer by an Administration expert is that the U.S. bombers—were they to get into the air, as planned, in the 15-minute warning time expected—could fly to the Soviet Union with their cruise missiles and, 12 hours later, destroy the Soviet land-based missile silos preventing them from *reuse*. Presumably they would not prevent *use* since the missiles would not be waiting there for the U.S. planes to arrive, but would be

fired long before as warning of bomber attack. It is argued, however, that they could be precluded from firing at major cities even while being induced to fire by the threat that the U.S. Polaris force would fire at major Soviet cities.

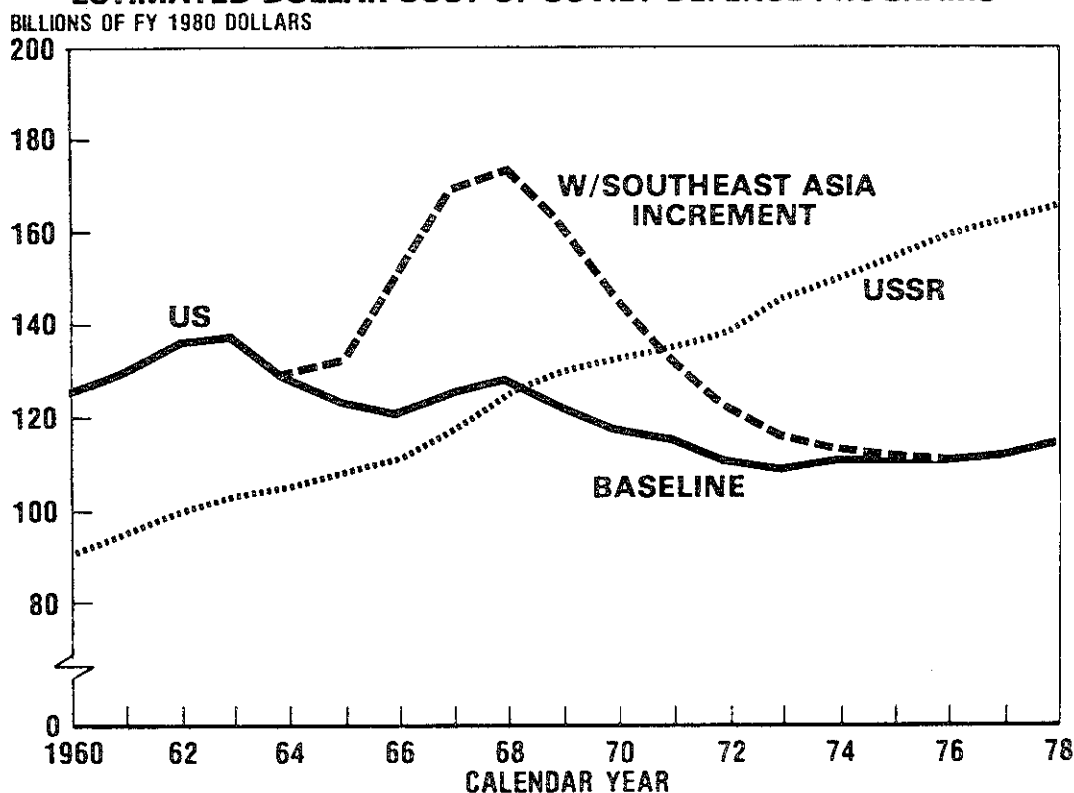
In the end, it is argued, the U.S. would retain a Polaris submarine force superior to the Soviet submarine force and neither side would have much left in the way of land-based missiles or bombers. Little is said about Europe, which would likely, by this time, be in ruins from the preemptive exchanges of forces aimed at it, induced by the intercontinental firings and the "use them or lose them" incentive.

Of course, no war lends itself to calculation as simply as all this anyway. No doubt, the superpowers have, over the last few decades, planned tactics which could make a mockery of the plans of the other side, if they worked. One example is the notion of "pin down" (See *FAS Public Interest Report*, March 1979, page 3.) Here the planned attack might be disrupted by the intervention of a missile fired from a submarine over the missile fields. Such a missile, if it arrived at the right time, might disarm many missiles in their early and vulnerable boost phase.

No doubt also both sides have plans to fire at command and control centers. The dangers associated with this are also evident; they could make a mockery of the implicit scenario assumption that either side could stop the war whenever it wanted.

Still another possibility is the use of obscure weapons effects. □

COMPARISON OF US DEFENSE OUTLAYS AND ESTIMATED DOLLAR COST OF SOVIET DEFENSE PROGRAMS



NOTES: 1) INCLUDES NON-DoD-FUNDED DEFENSE PROGRAMS (e.g., COAST GUARD)
2) EXCLUDES RETIREMENT COSTS

IKLÉ ON LAUNCH ON WARNING

Mr. Chairman, let me sum up the first part of my statement: many people find it hard to imagine a crisis in which the Soviet leadership would want to risk an attack on our Minuteman force, even if that force is utterly vulnerable. But the risk might be shifted onto our shoulders. If NATO, or the United States were about to suffer defeat in a conventional conflict, how credible a back-up deterrent would our vulnerable ICBM forces represent? Calculations about the vulnerability of our ICBMs may seem arcane and unreal today. But during a severe crisis, when American forces may be overextended or threatened by local defeat, the nuclear calculus would suddenly gain a cruel grip on the world.

Is there a cheap fix for the problem? One proposal that keeps raising its ugly head again and again is the idea of a "launch-on-warning posture". As an overall answer for the vulnerability problem, this idea is dreadfully dangerous and inadequate.

Many experts, in analyzing the problems of strategic deterrence, rely on assumptions that are far too narrow and unimaginative. They look at only one or two possible contingencies forgetting how weak our ability is to anticipate the future.

The objective of our strategic forces is not just to deter a calculated first strike, but to prevent nuclear war of any kind and to back up our conventional deterrent as well. A launch-on-warning posture might increase the deterrent against the calculated first strike, but at the price of increasing the risk of accidentally unleashing the destruction of our nation. Moreover, reliance on such an irresponsible and hairtriggered posture, would undermine our flexibility and determination in a crisis.

The possibility of a rapid response is, of course, built into our land-based missile forces. To be opposed to a launch-on-warning posture does not mean going to the other extreme of guaranteeing the aggressor that he could take hours, or days, to destroy our forces one by one, before we would strike back.

But as an over-all solution to the vulnerability of our ICBMs, launch-on-warning would have several compelling defects: *First*, it would, for all practical purposes, eliminate the Presidential decision for the most fateful military action one can imagine. The time would inevitably be too short, particularly if we are considering a surprise attack when the President and his advisors would not be ready and assembled at a command post. Some technicians are bemused with the idea that the decision could be largely pre-programmed. This notion only underlines the folly. The most fateful action in our nation's history would be predetermined years in advance, in almost total ignorance about the future situation that might trigger the decision crisis, predetermined in some computer language which the President and his advisors, of course, could never have checked out.

SECOND, the risk of a dreadful accident is real. Too many specialists are misled by looking at only part of the technical problem. They will tell you, for example, how redundant and safe a warning system they can construct, absolutely guaranteed never to give the President the fateful message by mistake. These specialists forget that this capability, even if true, would solve only a small part of the problem. The decision to launch has to be passed on from the top down to every missile silo. The more certain one wants to be that this process could take place in



Fred Iklé

minutes and under all situations, the more one has to loosen the safeguards against a release signal emanating somewhere by accident.

Third, the various risks of catastrophic malfunction cannot be fully anticipated. The entire system of warning, response, and release is too complicated to be checked out against all possible failures, and our imagination is too limited to even think up all the sources of failure: sabotage, an accidental nuclear explosion, a nation-wide power failure in the midst of a crisis, all sorts of human errors, and so forth.

Mr. Chairman, if any witness should come here and tell you that a totally reliable and safe launch-on-warning posture can be designed and implemented—that man is a fool. He does not even know how little he knows. He does not have an understanding of the boundaries of his knowledge—the first requirement to address this kind of an issue. There is no one who understands, in sufficient detail, the entire set of possible interactions, malfunctions and unanticipated events. The witness does not exist who could give you the requisite assurance, because the requisite knowledge does not exist.

Mr. Chairman, it would be a total perversion of the purposes of arms control if some mistaken arms control measures drove us to a launch-on-warning posture. It is the purpose of SALT to move the world away from the brink of nuclear war, not closer to it. □

DISSENT ON FIRING ON WARNING PROHIBITION

Former Chairman Philip Morrison, while supporting two of the resolutions adopted with the editorial, demurred on the resolution concerning firing on warning with this comment: "While there is nothing wrong with elevating so technical a question to the level of a political principle, it is my feeling that here we are entirely premature. There seem to me to be many potential fixes, especially involving a number of steps in the warning hierarchy, which would enable adequately safe use of the idea of launch under attack. It is, after all, a second-strike principle." □

AIR MOBILE ENVIRONMENTAL IMPACT

FAS filed a comment on the environmental impact statement on the air mobile basing of the MX missile. The comments included two recent refrains used before. In the first place, the Administration tries to limit its discussions of impact, in early stages of development programs, to the impact of the development rather than to the impact of the ultimate program. And it never discusses the environmental impact of the program in the event of war.

FAS raised this issue first in the case of the B-1 bomber, observing that a new bomber, coupled with the maintenance of existing B-52s, would substantially increase the deliverable megatonnage that would go off in war with potential world-wide consequences.

In the case of the air mobile basing, the Administration seemed to be dispersing Soviet counterforce attack to parts of the country that might not otherwise be in the line of fire. For example, a DOD study calculated, a few years ago, the number of dead that would result after a counterforce attack on Minuteman missiles—the very attack given such special prominence in the scenario of page 6. What casualties would result from the analogous counterforce attack after air mobile MX basing? The impact statement did not say. This is not an abstract question since basing is likely to be influenced by related grassroots citizen opinion.

From the March 12, 1978 Impact Statement:

“The major environmental impact of the MX missile deployment—regardless of basing mode—is the extent to which it draws, and redirects, enemy fire upon the United States by requiring a retargeting of adversary warheads and by inducing a multiplication of those targeted upon U.S. territory.

The Administration has seen fit, in this and other MX basing impact statements, to completely ignore this dominant impact. In this regard, its behavior is ostrich-like because the public—having been warned by DOD authorities that certain areas might be used as “nuclear sponges”—is ready to make its own environmental assessment. By pretending that such assessments are either unnecessary, or premature, the Administration only denies itself the advance warning it needs to determine which, if any, of these basing schemes might be acceptable to the public. And since public acceptance may well be the decisive issue in MX basing, nothing could be more short-sighted.” □

THE EXPLANATION FOR THE EINSTEIN STATUE

The sculptor-entrepreneur Robert Berks, who persuaded Philip Handler to commission his 12-foot statue of Einstein for \$1.6 million, turns out to be mankind’s only announced cynic on the subject of Einstein’s humility.

In answer to objections that his statue was inappropriately grand of Einstein’s personality, he told the nation-wide audience of NBC Nightly News:

“My answer to that is that if he didn’t want the attention of the world, he would have cut his hair, worn a tie, and not published his papers.”

So now everything is clear. And if you like this statue, you’ll probably love Robert Berks. □

FAS SPONSOR BERN SCHWARTZ DIES

From our point of view, Bern Schwartz was a philanthropist from La Jolla who—through the recommendation of our then Chairman Herbert York—helped FAS weather a financial crisis in the first year of its rejuvenation in 1970. Later, Bern also joined with three others in contributing another \$5,000 that made it possible for FAS to purchase its headquarters building.

Mr. Schwartz died on New Year’s Eve while on his way to a promising second career as a portrait photographer; the extraordinarily sensitive results of his hobby were printed in the *Washington Post Magazine* last month.

An organization like FAS has rather few donors and subsists, by necessity, largely upon the dues of its members. We thus remember Mr. Schwartz’s generous and timely help, on these two occasions, with very special thanks. □

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