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SAGA OF THE MIRV FLIGHT-TEST BAN

An obscure error in parliamentary practice by an inexperienced legislative aide prevented a possibly promising vote on the FAS MIRV flight-test ban. Herein lies a Perils of Pauline tale.

In the third of a century of arms race with the Soviet Union, only three U.S. weapon systems have been the object of broad public and Congressional debate. MX joined the ABM and the B-1 Bomber as the only major weapons program to be hotly debated on the House and Senate floor since 1945.

A key participant in each of the other struggles, FAS saw the debate as an arms control opportunity. Normally America negotiates seriously *abroad* about weapon systems only after they have become controversial at *home*. The doves opposing the weapon are predisposed toward arms control as a solution to the controversy and the hawks declare support of negotiations in the belief that agreement is unlikely and that, in the aftermath of failed talks, the weapon will be built.

Bilateral MIRV Pause Pending Negotiation

The FAS proposal for resolving this controversy was a MIRV flight-test ban in which both the U.S. and the Soviet Union would refrain from flight-testing their new MIRVed ICBMs for a year, during which time intensified negotiations would go forward. Stimulated by both the time limit and the willingness of each side to begin the negotiations with a concrete change in its weapons program—perhaps the first such halt since the ABM Treaty—the negotiators would try for a package deal making MX and other relevant weapon systems unnecessary. If agreement could not be reached, each side could go back to flight-testing (and subsequently producing) its new MIRVed ICBM.

As readers know, the Scowcroft Commission heard this notion in testimony, applauded, and then ignored it. The Commission members assumed that the goal was to deploy at least some MX, not to give the President an arms control option with which to avoid its deployment. It seemed easier to the Commission members to begin matching Soviet ICBM capability than to hope for a deal rolling that back. And they feared that, if no deal were struck, getting the MX program started again would be difficult.

In the Congress, as in the Nation, the notion of an arms control solution ran into fixed positions. As in all hotly contested debates, the debaters represent the most committed, and these wanted MX or no MX respectively. Everyone with some background in the subject seemed to have his own pet proposal: deMIRVing (Congressman Al Gore, (D., Tn.)), builddown (Senator Bill Cohen (R., Me.) and Senator Sam Nunn (D., Ga.)). Others such as Con-

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NOTE TO OUR READERS: Evolution of the Newsletter

After the 1945-1948 initial years of FAS activity on civilian control of the bomb, the then-named FAS Newsletter began to run policy statements adopted by the FAS Council. It also reprinted articles and documents of special interest to its members that had appeared elsewhere. During this period, from 1948 to 1970, FAS had little or no full-time staff, and hence no way to compose an original newsletter. It functioned in quite different ways through chapters and national officials.

After I became FAS's first full-time director in 22 years, in June 1970, I wrote the monthly newsletter myself, in almost every case. I drafted the agreed statements for the Council to endorse and/or to modify, and I also prepared the backup 6,000 words of explanation. I fell into the practice of devoting most issues to a single topic for a number of reasons. They had more penetrating power as instruments of persuasion on Capitol Hill and elsewhere because they were self-contained and, for many busy Government officials, long enough to be considered comprehensive. Above all, from a practical point of view, it was easier to write *more* about one issue than to write about *several* issues. As it was, being a 30-day, 7,000-word wonder on issue after issue became something of a strain.

In-House Staff Now Available

Beginning in the 1980 period, thanks to the help of members and some backers, we began to have in-house staff experts and now enjoy—in order of arrival—Deborah Bleiviss working on energy and environment; Christopher Paine working on arms control; Robert Meriwether working on U.S.—Soviet political exchanges; John Pike working on space policy; and Anne E. Gorsuch (not the same person as Anne M. Gorsuch of EPA fame) working on outreach, grass-roots, and legislative action.

Obviously the newsletter format should evolve to exploit the now-larger pool of in-house talent available to write for it. And I want the readers to get some sense of what it is all of us are actually doing from day to day, to advance your, and our, goals. Something tells me that the *process* of shaping and informing policy in which our staff is engaged is every bit as interesting to the readers as the *analysis* of policy.

Accordingly, I have asked each staff member to provide an "op-ed" length piece for this issue that would give our members and readers a bird's-eye view of what it is they are about and/or what they think you would find most interesting. And we plan to do more of this.

We still plan to continue: the editorials, endorsed and otherwise; the issues devoted to a single important subject

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Newsletter (Continued from page 1)

(albeit somewhat less frequently); and the reports on FAS events. But we are going to try to get the staff to let you in on what they are doing—what frustrates them on the one hand and what they feel are their “real” accomplishments.

While various media organs are always telling you that they will take you “behind the news”, our own staff is far better positioned to do that. We are making news! Our staff lives behind the news. If I can wrest from the staff a printed version of a fraction of what they tell me about their daily activities, you will, I think, find the newsletter a great deal more entertaining and, I have to admit, more informative than heretofore.

Do let us know how this experiment is working out, as it unfolds, over the coming months—which articles you like best and what kind of approach you would like us to emphasize.

In arms control, in energy and environment, in space policy, and in the other areas in which we are working, there are, after all, on-going political wars. With this in mind, I have enjoined the staff to think of their contributions to the newsletter as “Dispatches from the Front.” We’ll see if they can fulfill that charge.

—JJS

MIRV (Continued from page 1)

gressman Les Aspin seemed to be playing the role of Alec Guinness in “Bridge Over the River Quai.” Having made a deal to build a bridge in return for better conditions for British prisoners, Guinness loses sight of his goals. When a British commando reinforcements arrive with orders to blow up the bridge, his response is “Not my bridge, you’re not.”

After some false starts (one Senator agreed to play a role but then almost killed the idea by quietly delaying), Senator Carl Levin (D., Mi.) seized the MIRV flight-test ban proposal with some enthusiasm. Shaping the idea to suit his office and others, he joined with Senator Nancy Landon Kassebaum (R., Ks.), and got such centrist co-sponsors as Senators Inouye, Bumpers, Cranston, Huddleston, Mathias, Specter, Pressler, Andrews, Durenberger, and Boren.

With 39 MX opponents in the Senate and a few of these co-sponsors supporting the MX, there seemed to be forty-some Senators supporting flight-test bans. With other MX supporters presumably looking for a way to balance their political tickets, there was, in prospect, some chance for a majority in the Senate. In due course the bill, structured as a Sense of the Senate Resolution, was thrown into Senate Foreign Relations Committee hearings—but seemed likely to emerge in an omnibus arms control bill. At this writing the markup is scheduled for September 12.

It was in the House of Representatives that the notion ran into difficulties. The goal there was more ambitious. The resolution was to be attached to the military authorization bill. It was designed to cut off funds in fiscal 1984 for flight-testing unless the President certified that the Soviet Union had continued flight-testing its new MIRVed ICBM in the same fiscal 1984. (Under SALT II,

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each side has one permitted new ICBM; the Soviet system is the SS-X-24.)

The tough form was meant to attract the left to support the resolution; in effect, it "legislated" arms control and finessed the president's willingness to go along or not. At the same time, those concerned with Presidential prerogatives could be told that the resolution did not tell the President what to negotiate during the one-year pause in flight-tests; it only told him to stop and negotiate if the Russians would also.

But in the House, where the vote was expected to be close, the anti-MX left was worried that the amendment would give wavering Congressmen an option to vote for arms control without voting against MX itself. They urged that no visible preparatory efforts be made and that the amendment be brought up only after the MX vote; we complied with this.

When the MX authorization vote occurred, the margin of passage was cut from 54 votes in an earlier test to 13—but the missile did get through. The "general provisions" of the bill to which our flight-test amendment was to be attached were, happily, coming up later. But a stream of conflicting signals as to when (day after tomorrow? next week? another month?) kept us off balance.

On the promising side, during a Congressional delegation's visit to Moscow, Congressman Thomas Downey (D., N.Y.) had elicited from a high-ranking Soviet marshal that the flight-test ban proposal was a "serious proposal". Quite a few members of Congressman Les Aspin's "gang of nine" had expressed private sympathy for the idea. And McGeorge Bundy had decided to write an op-ed piece in support of the notion.

(There had been nothing else in the press since my own op-ed piece in February in the New York Times.)

Congressman Bill Green (R., N.Y.), who, happily, turned out to be Bundy's Congressman, had agreed to co-sponsor the MX. But he was an MX opponent and, in the few days which ill-fortune provided us between the MX authorization vote and the time for our amendment, we were not able to find the strong pro-MX supporter of flight-test bans that we wanted.

Amendment Must Be In Proper Place

Moving forward therefore with Downey and Green, we found the bill coming up at 6 p.m. on July 26th. At this point, we discovered that a new aide to Congressman Green had misunderstood his instruction to "put the amendment in the record". The Congressman had alluded to the practice of registering planned amendments in the record with a view to guaranteeing at least 10 minutes of debate even if time is later limited by floor agreement. The aide had thought this a general request to give the notion some publicity and had written up a short statement of intention to offer the amendment and inserted this in the section for "extension of remarks".

The Parliamentarians had first assured us that the issue had never come up of an amendment "in the record" but not in the proper place and then decided that the rule required it to be in the "proper place".

Congressman Green felt honor-bound to advise the

House of the dilemma and asked for unanimous consent that his amendment be deemed to be in the proper place. After he stated it, however, the piranhas became more active and, in the end, Congressman Dick Cheney (R., Wy.) objected.

Through the evening, until right up to the midnight limit on time, a number of efforts went forward to have the amendment offered via other mechanisms. The importance of keeping in close touch with the Parliamentarians has never been so clear. In the end, we failed to bring it up.

History Supports Effort

In the religious war precipitated by MX, neither side has much use for arms control although, of course, both sides talk of it. But it can be argued quite forcibly that, in the absence of arms control, there will be no even semi-permanent solution to the issue of land-based missile vulnerability raised by MX.

History shows, nicely, that arms control agreements are needed, in cases like this, to put weapon systems to rest permanently. From a dove's perspective, it is only because the campaign against ABM was closed out in favor of an ABM agreement with the Russians that we do not have ABM today. By contrast, the B-1 bomber, beaten down unilaterally, has risen from the ashes like a Phoenix precisely because we had not nailed down its oblivion with an arms control agreement precluding new manned bombers.

So we still believe that the best use of MX is to precipitate a larger agreement—rather than only to defeat it unilaterally, which we also support. But caught between the reluctance of the Administration to take this or any other arms control seriously, and the anti-MX coalition's unease about diversionary measures, arms control is being squeezed between the millstones.

—Jeremy J. Stone



Congressman Bill Green (R-N.Y.)

ENERGIZING ON ENERGY WHEN NO ONE CARES

Washington is a city that has become used to seeing issues come and go with the times, regardless of their merit. No more clearly has this been the case than with energy.

When I first came to Washington four years ago, this city was obsessed with energy. Driven by a President who had declared "the moral equivalent of war" on the problem, and the humiliation of an energy crisis at the hands of Ayatollah Khomeini, energy independence was the catchword of the day. Congressional committees fought for jurisdiction over energy bills. Congressional careers—e.g., those of Toby Moffett, Bill Bradley, Paul Tsongas—were made on the issue as legislators vied with each other for innovative ideas.

In the public interest community, the Solar Lobby had just been created, and the Energy Conservation Coalition (ECC) was in the process of being formed by those of us most active on the issue; both had the goal of providing the community with an institutional base for weighing in on the energy debates. My phone at FAS rang incessantly with interested queries from people both on and off the Hill: What should our gasoline conservation policy be, how should we design the Solar Energy and Energy Conservation Bank, what kind of energy delivery systems should we legislate?

And all of that drive was not wasted, for out of the Carter years emerged three major pieces of energy legislation designed to stimulate energy conservation and alternative energy development. Not all of the actions taken during this time were wise ones—indeed some were quite worrisome—but the public and its elected officials never lost sight of the importance of energy to the nation's future.

Energy a Non-issue

Today, in sharp contrast, energy has become a "non-issue". The attitude has become why worry if we are not in a crisis and no one seems to care? When I recently approached some Congressional committee staff about introducing new legislation on energy conservation, I was greeted with a bemused twitter of disbelief that I should even suggest action on such a dead issue.

The oil glut is usually blamed for this indifference, but the real cause is the lack of leadership on the issue. After all, Jimmy Carter entered the White House with an energy situation very similar to what it is today—the energy crisis had become but a distant memory for the public. Nevertheless, he was able to spur the nation to action.

The same cannot be said for the Reagan Administration, which toes a blindly ideological line that refuses to accept the idea of national vulnerability on anything, let alone on energy. And neither reason nor reality can sway them from their beliefs. I have been a participant in innumerable meetings with Administration officials about energy, and the result is always the same. They still tell me that we need not worry about imports because there are vast domestic oil and gas reserves out there, reserves yet to be discovered even as we watch our present domestic supplies dwindle.

They still tell me that we need not worry about conservation and renewables; the "free market", replete with its oil, gas, and nuclear subsidies, will do that. There are even some that claim we need not worry about the effect of energy prices on the poor because the market will take care of them as well.

Today's political indifference towards energy indeed looks bleak, but I do see some embers of hope. First, new voices of concern are being heard, often from unexpected quarters, as recognition grows that we are once again headed toward an energy crisis. For example, Chrysler Corporation has become quite vocal lately in calling for a real national energy policy. Recognizing the importance of such voices of reason from private business, I have become involved in several efforts to establish dialogue and cooperation between the private and public interest sectors on this issue. Last year I joined several colleagues in a cooperative effort with representatives of the homebuilding industry and architects' association to develop a proposal for a comprehensive and workable energy research program for federal buildings.

Second, while there is no leadership on the energy issue presently, the potential is there. Such leadership is unlikely to come from the Reagan White House, although it may temper its energy rhetoric as the Presidential campaign heats up. But leadership could come from Congress and the Democrats, as it did during the Carter years. To foster such a development I have been working with my colleagues in ECC on an energy conservation legislative agenda to serve as a focal point for reawakening the energy debate both in Congress and in the 1984 campaigns.

If we are lucky, the energy issue will come back to Washington by choice and not by the necessity of dealing with a new crisis. Toward that end, in upcoming issues of the *Public Interest Report*, I will be examining the institutions that are weighing in on the energy issue—e.g., the Department of Energy, the Congress, cities and states—to determine what they are doing right and what they are doing wrong.

—Deborah Bleiviss



*Congressman Richard Ottinger—
One of the few remaining voices on
the importance of the energy issue*

SPACE POLICY ISSUES GAIN NEW VISIBILITY

The rapidity with which space policy issues are gaining the attention of the Congress and public interest organizations is truly remarkable. Many of us who have been laboring in this vineyard for some time are amazed at the transformation of the past twelve months. To be frank, this time a year ago, you couldn't give this stuff away. Apart from a small circle of folks who recognized the growing importance of space for military activities, and saw the need for a comprehensive approach to space policy, most people were profoundly indifferent.

Two developments have changed all this, in a remarkably short time. President Reagan's "Star Wars" speech raised the visibility of the issue, literally overnight.

In the days and weeks after the speech, it seemed as though everyone with any pretense at all to being an authority on defense matters felt obligated to put in his two-cents' worth on the Star Wars speech. This had the salutary effect of encouraging all sorts of people to raise their estimation of the importance of space policy questions, and in a few short weeks the news media conducted a national seminar on the arms race in space.

One telling measure of the impact of the speech is to be found in the pages of 'Current News', the Pentagon's daily newspaper clipping service. On a typical day, 'Current News' will run about 15 pages of clips from the New York Times, Washington Post, etc. When an issue is of particular note, Current News will publish a 'Special Edition', such as it does regularly on Terrorism, that may run to 60 or 80 pages. On May 4th the 'Current News Special Edition "Star Wars"' ran 112 pages, and the next day the second part ran another 107 pages.

Congress Now Cares

The second development is the growth of Congressional concern. In a year not marked by great victories for arms control, we have made substantial progress in mobilizing Congressional opposition to space weapons and are at last beginning to make some headway. The June vote on the Brown Amendment, to delete 1984 procurement funding for the ASAT, was defeated by a narrower margin than such perennial favorites as the B-1 bomber, making the defeat a little easier to accept. The vote on the Seiberling Amendment to limit research and development on the ASAT was a lopsided 2-1 loss, confirming a Hill truism that Congress doesn't like to touch R&D money.

Both votes followed a common pattern. There was considerable uncertainty as to the day that the amendments would come up for consideration, and so we were constantly calling around on the Hill to see how much more time we had to drum up some support. Calls and visits were made to the offices of Members we thought might go with us. As the day of the vote approached, the pace of activity intensified to a really feverish pitch, and finally we would get a few days' warning that the amendment was about to come up. When the big moment arrived, the exhausted staffers gathered in some Hill office to watch the debate on closed-circuit television. When the vote came,

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FAS CONVENES "ARMS RACE IN SPACE: POLICY OPTIONS" CONFERENCE ON CAPITOL HILL

"The Arms Race in Space: Policy Options" was the theme of a one-day conference convened by FAS on Friday, July 29th. Over 140 people gathered in the Gold Room of Rayburn House Office Building, representing over 40 public interest organizations, more than 20 congressional offices, and 5 media outlets.

Recognizing the novelty of the issue for most people, the first panel was the FAS slideshow, "Arms Race in Space", which provided an introduction to military uses of space, anti-satellite (ASAT) weapons, and anti-ballistic missile systems. The show was well received, and after some further work based on audience comments, it will be released in early September.

Attendance peaked during the morning ASAT panel, which was moderated by Rep. George Brown (D., Ca.). Henry Kendall of the Union of Concerned Scientists made the case for an ASAT Treaty, and John Pike of Fas urged an immediate moratorium on ASAT testing. The panel was enlivened by the comments of Philip Morrison, who placed the ASAT issue in the larger context of military uses of new technologies, noting that we have managed effectively to preclude use of bio-technology for weapons, and that perhaps we will be able to do the same with space technology.

The afternoon ABM panel, moderated by Alex Glikzman of the Senate Foreign Relations Committee staff, included in-depth analysis of the history and scope of the 1972 ABM Treaty by Jeremy J. Stone and Ambassador Raymond L. Garthoff, who was intimately involved with the negotiation of the Treaty as Chief of Staff of the delegation. Christopher Paine of FAS discussed emerging questions concerning compliance with the ABM Treaty, suggesting that a number of ongoing US research efforts, such as the Homing Overlay Experiment and the Talon Gold pointing and tracking project, were not clearly allowed under the Treaty. (See pg. 6).

The final panel on alternatives to space arms race included presentations by Gregg Fawkes of the National Chamber Foundation and Daniel Deudney of the Worldwatch Institute. The main points of contention were the extent to which an arms race in space would inhibit commercial ventures and the degree to which corporations could look to commercial activities as an alternative to military contracts. Their presentations were followed by a wide-ranging and intensive question and answer session.

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the TV screen would go blank for 15 minutes as the votes were tallied, showing a running total of the yeas and neas. Watching the votes add up was like watching a horse race where your favored pony gives a good try, but not good enough. Groans and silence when the final vote is announced.

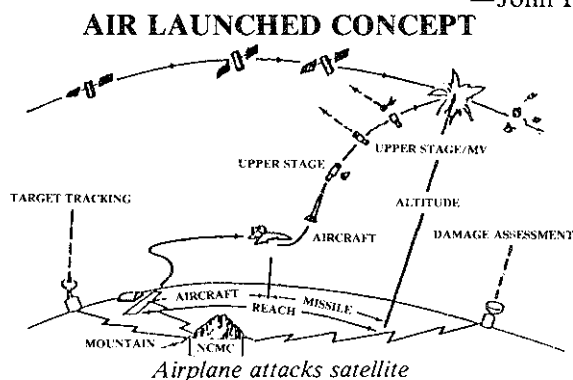
You lose some, and you win some, and after these losses it was time for a victory, which was duly forthcoming. The Tsongas/Moakley Amendment is an important first step toward halting the arms race in space. This amendment to the 1984 Defense Authorization bill requires that: "none of the funds appropriated pursuant to this Act or any other Act may be obligated or expended to test any explosive or inert anti-satellite warheads against objects in space unless the President determines and certifies to Congress: (a) that the United States is endeavoring in good faith, to negotiate with the Soviet Union a mutual and verifiable ban on anti-satellite weapons; and (b) that, pending agreement on such a ban, testing of explosive or inert anti-satellite warheads against objects in space by the United States is necessary to avert clear and irrevocable harm to the national security."

Following Senate approval by 91-0 of the Tsongas Amendment, efforts were made to introduce the same language in the House. However, questions were raised concerning the germaneness of the Amendment, and it was anticipated that if introduced it would be ruled out of order. Failing passage of the Amendment in the House, Congressman Moakley initiated a letter, signed by over 70 House members, urging the House conferees to agree to the Senate language, and on August 4 the House-Senate Conference Committee accepted the amendment.

Although much greater restraints on ASAT testing would clearly be desirable, the recent Supreme Court decision that invalidated the legislative veto has sharply restricted the scope of what the Congress can do to limit the actions of the President.

The ASAT test that the certification refers to is currently scheduled (so the rumor goes) for shortly after January 1984. Most observers expect the Administration to claim that by their continued studies of possible ASAT limits they are "endeavoring in good faith to negotiate," and that the test is of course "necessary to avert clear and irrevocable harm to the national security." But there are whispers that perhaps the Administration will take a different tack, and take some initiatives here that will improve its arms control track record.

—John Pike



ON WATCH AGAINST ABM "BREAKOUT"

I first became concerned about the staying power of the ABM Treaty in 1978, when I read in government documents and the aerospace press that the Pentagon was interested in developing large staring infrared sensors that would have the capacity to track Soviet ballistic missiles, cruise missiles, and aircraft in flight trajectory. This sounded to me like the testing of a prospective space-based component which could substitute for the ground-based radars in some future ABM system. I pulled out my copy of the ABM Treaty and discovered that the testing of such a device appeared to be prohibited under the terms of the Treaty. I began a more thorough investigation but was soon diverted by what seemed to be more pressing issues, namely, the burgeoning race in strategic offensive weapons.

After the President's "Star Wars" speech, FAS rapidly assembled a band of experts to defend the Treaty publicly, and I dipped back into the thousands of pages of government hearings stacked on the shelves in my office to discover what had been happening in the intervening years. Here's a brief summary of what I've found:

One disturbing aspect of the President's March 23 charge to the scientific community to "give us the means of rendering...nuclear weapons impotent and obsolete" was the subsequent revelation that the Administration did not understand the extent of the limitations imposed by the ABM Treaty.

The President was apparently taking his cues from his Defense Secretary, who had informed the press corps in Madrid the day after the speech that "the treaty goes only to block deployment." According to Weinberger, "there is no violation of the treaty involved in the study, the research, the development, the examination of that, and the best evidence of that is that the Soviets themselves are doing it."

Aside from the irony involved in the Reagan Administration holding up an alleged evil empire of habitual cheaters and liars as the standard for U.S. treaty compliance, these statements must be seen either as evidence of an exceptional degree of high-level ignorance, or as part of a deliberate campaign to mislead the press and the public.

Treaty Limits Development Testing of ABM Components

But as both defenders of the ABM Treaty and Pentagon officials at the working level are well aware, the real state of affairs is considerably at variance with the Administration's pronouncements. The ABM Treaty, albeit ambiguously in some instances, imposes a number of constraints on the development and testing of ABM systems and their components. A review of current and planned U.S. ballistic missile and space-defense programs supports the conclusion that they are oriented toward a decision to "break-out" of the ABM Treaty in the period following the next five-year review conference, which will occur in 1987. Already a vocal minority in Congress, backed by a burgeoning space weapons constituency in the defense industry, is pushing for an "in-orbit demonstration" of a prototype laser anti-missile system in the late 1980s.

However, the ABM Treaty is, or at least was intended to

be, far more limiting than the current custodians of our national security would like to believe. Each Party agreed:

- "not to provide a base" for a territorial defense
- "not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based"
- not to develop, test, or deploy ABM interceptors with more than one independently guided warhead
- that if ABM components based on new physical principles were substituted for then-existing types of interceptors, launchers, or radars, these would be subject to discussion in the Standing Consultative Commission and control through agreed amendments to the Treaty.

One factor affecting the Treaty's future effectiveness is each side's interpretation of their mutual commitment "not to provide a base" for a territorial defense. Would the Treaty be violated if either party used "new physical principles" to *develop* and *test* a system with regional or *national coverage*, even if the major components were themselves fixed and land-based in conformity with the Treaty?

According to Major General Grayson D. Tate, Jr., Ballistic Missile Defense Program Manager, an ostensibly permitted fixed land-based "exoatmospheric defense" system now under development by the Army "would provide a large defended footprint and thus would provide defense of [deleted]." Such an area defense program might be construed as providing the "base" for a territorial defense capability prohibited by Article I.

MIRVed ABMs Prohibited

The Army is presently finessing the ban on testing of MIRVed interceptors by testing its exoatmospheric multiple kill vehicle concept with only one kill vehicle per booster. Four such tests are being conducted this year in the Homing Overlay Experiment, in which the prototype homing-and-kill vehicle is launched from the Kwajalein Missile Range in the Marshall Islands at a target vehicle launched from Vandenberg Air Force Base in California.

General Tate admitted in testimony that the Treaty does not allow the testing of "interceptors with more than a single kill vehicle on board, or rapidly reloadable launchers." But, he added, "We believe we can work around those issues quite satisfactorily for a long time on our R&D program. I will get into more of the specifics of that in the classified briefing."

Tactical ABMs

Yet another threat to the ABM Treaty is arising from quite a different quarter, that of "anti-tactical" missiles. Each side might conceivably develop the "base" for an area defense capability if it pursued development, testing, and deployment of ABM systems capable of intercepting missiles of lesser reentry velocity, such as the SS-20 or Pershing II, which may or may not be considered "strategic ballistic missiles" as specified in the Treaty. But such a tactical ABM capability presumably would be effective against intermediate-range ballistic missiles launched from submarines, which historically have been counted by both sides as "strategic." And for the Soviet Union, at least, U.S., French, and Chinese land-based intermediate-range

ballistic missiles have an inherent "strategic" character because of the geopolitical situation of the Soviet homeland.

Both sides appear to be trying to upgrade their newest air defense missiles to a tactical, and therefore at least partial strategic, ABM capability. The Soviet Union has reportedly been testing its SA-12 missile against Soviet missiles with a reentry velocity roughly equivalent to U.S. Pershing II missiles. And this year the U.S. Army has launched a program to upgrade the new Patriot surface-to-air missile to give it a tactical ABM capability.

Lt. Gen. James Merryman, the Army's Deputy Chief of Staff for Research and Development, testified in March of this year, "What we would propose to do in this program is upgrade Patriot so that it could protect itself and... also take on the tactical missile to the extent possible. We'll also look at ...what we need in addition to those two things to take care of this threat, which is growing and growing. That, in essence sir, is this program. We are just getting started."

The FY1984 budget request shows that the Reagan Administration is planning to spend some \$720 million on the anti-tactical missile over the next five years—\$600 million on research and development and \$120 million on procurement, beginning in FY1985. These sums would be merely for improvements to the Patriot and Hawk systems, and to support research for a much more extensive system after breakout from the ABM Treaty in the late 1980s.

Space- and Air-based "Components"

Pertinent questions about U.S. development programs are also posed by the Treaty's prohibition on the development and testing of space-based components of future ABM systems. Consider first the exoatmospheric "overlay" of the Army's proposed "Layered Defense System." We are told that a "probe vehicle" is being developed to be launched into space where it will "...scan a field of view which ICBM's would have to pass...that probe has to be capable of detecting and discriminating which are the RV's and which are not, and predicting the point in CONUS [Continental United States] where those reentry vehicles would impact." Since this probe vehicle would perform in space all the same functions now performed by ground-based ABM radars, would not the radar "component" of the ABM system have become, in effect, "space-based"? If so, testing of the "probe vehicle" could be considered a violation of Article V(1) of the ABM Treaty. According to General Tate, a "Designating Optical Tracker [DOT]" has already successfully demonstrated "the use of optics to perform the [BMD] functions of acquisition, discrimination, designation, and track" in a recently-completed series of five test flights.

In a related development, the Army's recent disclosure that "increased emphasis is being placed on ...expanding the BMD battlespace through Airborne Optical Adjuncts"—long-wavelength infrared sensors for target acquisition—raises questions about compliance with the Treaty's ban on the development of "air-based" ABM components.

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Another category of space-related compliance issues concerns the extent to which space-based components of a future ABM system might be developed and tested as part of space-based surveillance, early-warning, anti-satellite (ASAT) and anti-aircraft systems. For example, Deputy Undersecretary Wade testified in 1981 that technology for "the separate surveillance systems required for aircraft or ballistic missile targets" is under development.

According to Wade's testimony two years later, "Although damage-limiting [BMD] is extremely demanding for a space-based laser system, defense against small numbers of unhardened or lightly-hardened ICBM or SLBM is more readily achieved. Such a mission might include defense against light attacks (e.g., Nth country, accidental launch) or against SLBM attacks on the National Command Authority or Command, Control, Communications. *The requirements for these are generally similar to those for an anti-aircraft system.*" (emphasis added)

George Millburn, Acting Deputy Undersecretary of Defense for Research and Advanced Technology, conceded that "there are restrictions in our treaties on ABM and it might be difficult to persuade an adversary that what we are putting up was limited to an anti-satellite capability and did not have some type of ABM capability." How then should the parties regard the *testing* of space-based anti-satellite and anti-aircraft system *components* which could be incorporated into a future ABM system? When does a "component" become an "ABM system component" whose field testing and development are prohibited under the terms of the Treaty? In the view of the Defense Department, "Development, testing or deployment of an anti-satellite or air-defense space-based laser weapons

system is not prohibited by the ABM Treaty unless it has a distinct capability as an ABM system." But this formulation merely begs the question.

Inevitably, each side's view of the other's longer range objectives plays an important role in making this assessment, and on this score, the President and Secretary Weinberger have left the Soviet Union little room for doubt—the Administration has launched a development program to break out of the ABM Treaty as soon as it becomes technically and politically feasible to do so.

For FY1984, the Administration requested \$709 million for Ballistic Missile Defense and \$270 million for Strategic Directed Energy Weapons, for a total of \$979 million. The Conference Report on the FY1984 Defense Authorization Bill currently awaiting final approval by both Houses contains \$509 million for Ballistic Missile Defense and \$481 million for "a wide range of directed energy programs," for a total of \$990 million for research and development in areas regulated by the ABM Treaty.

In the wake of the President's "Star Wars" speech, a panel consisting of senior-level executive branch officials has been constituted to develop a "comprehensive master plan" for pursuing the objectives laid out by the President in his March address. The report is due in the fall, and it may be accompanied by a request for supplemental funding for FY1984 as well as stepped-up budgets for lasers, particle beams, and non-nuclear kill (NNK) "layered" defense schemes in FY1985.

Let there be little doubt about the real implications of present trends. If they are allowed to continue, the ABM Treaty will disintegrate well before the turn of the century.

—Christopher E. Paine

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