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THREAT INFLATION: WILL WE EVER LEARN?

The primary justifications currently driving the Strategic Defense Initiative (SDI) are threats arising from the proliferation of ballistic missile and nuclear weapons-related technology or an unauthorized launch from a Soviet nuclear missile submarine. Scenarios are put forward of renegade submarine commanders and of Saddam Hussein or Colonel Qaddafi brandishing nuclear-tipped ICBMs at the United States. Warnings are made of the possibility of Soviet scientists being bought by Third World countries to build deadly weapons.

Unfortunately, the threats that Star Wars is supposed to counter may be the latest in a long series of exaggerated threats that were a tiresome feature of the Cold War. The historical record is filled with intelligence projections distorted for political reasons in presidential campaigns and budgetary and bureaucratic battles.

In general, when the decision-making process goes awry, the relationship between US weapons programs and the threats they are linked to fall into two categories.

Intelligence Failures, Domestic Pressures at Fault

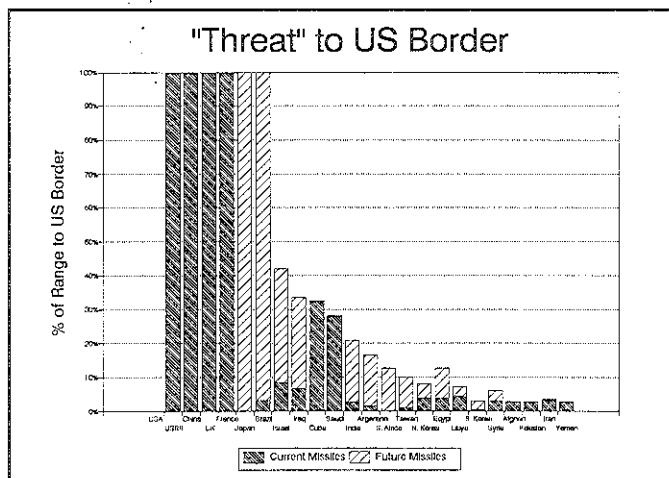
In some cases, intelligence failures regarding an adversary's capabilities led US decision-makers to pursue unnecessary, and even destabilizing, programs in an attempt to maintain superiority. These failures have arisen from such factors as: the willingness to accept uncritically a country's claims of its own strengths, or unrealistic assessments of an opponent's capabilities, based on assessments of research and development that are difficult to quantify.

In other cases, domestic pressures (including electoral positioning), bureaucratic machinations, and fascination with technology have driven weapons development. In these cases, weapons-related ambition searched for a suitable threat. Domestic pressures imputed to the opponent the desired technology, or exaggerated the attributes and functions of an enemy's weapons. Often the weapon developed in response became institutionalized within the bureaucracy and continued under new rationales, even when the original threat allegations were discredited.

What does the past tell us about current efforts to link SDI to a Third World threat? Here are six relevant rules distilled from the Cold War.

Rule 1: Spoofing by an Adversary Leads to Overreaction. When evaluating Third World activities, relevant to SDI, one must keep in mind that adversaries may find it desirable to pretend to greater strength than they actually possess. Thus, for example, the North Korean "reprocessing plant" could be just a fake large building designed to persuade the West to remove its nuclear weapons from South Korea. In the past, such exaggerations have led to irreversible surges in US deployment.

A 1955 Russian Air Show, at which new aircraft were displayed, provided an opportunity for hard-liners to assert that the Russians were building up for a massive strike against the US. The Russians staged a flyover of their new M-4 "Bison" bombers. Western observers who had previously estimated that the Soviet Union had only a few Bisons in their inventory were startled to see not only more of the bombers than expected, but supposedly four times the
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As the graph above shows, only four nations now have missiles 100% capable of reaching US borders and none currently has any political motivation to use them. With few exceptions, missiles possessed by developing countries are both extremely short range and inaccurate. Of all new missile systems thought to be under development throughout the world, only conversion of space-launched vehicles by Japan and Brazil could potentially threaten continental US.

number of B-52s the US had at that time.

Before the deception was uncovered—that the same few planes were merely circling and passing over the reviewing stand again—the Air Force was able to use the impact of the new Russian bombers on public opinion to push its procurement agenda forward.

SAC Commanding General Curtis LeMay testified in 1956 that growing Soviet air strength would permit a successful, and devastating, strike against the US by 1960. The National Intelligence Estimate predicted that the Soviets could have 500 bombers with the range to reach the US by the same year. According to LeMay, SAC needed more B-52s, which he said should be produced at a much higher rate than planned at that time. A later, though unsuccessful, suggestion included accelerating the new B-70 bomber program that SAC desperately sought to add to its arsenal.

Rule 2: The Military-Industrial Complex Overreacts to Boasts by Foreign Leaders: In evaluating the future speeches of Kim Il Sung, Qadaffi and others, we (and they) should be wary of how their claims may energize the US.

In the late 1950s, Premier Khrushchev boasted of a “fantastic new weapon” that would make existing weapons obsolete. In late 1964 he again bragged that the Soviets were developing a “monstrous new terrible weapon.”

Speculation arose that the Soviets were developing an orbital bombardment system, in which a warhead could be launched into a low orbit over the earth and then signalled to reenter the atmosphere. It was predicted that the Soviet Union would have a Fractional Orbital Bombardment System (FOBS) satellite fully operational by the summer of 1968. The Soviet FOBS naturally justified US research into an orbiting system of its own—research, however, that determined that orbiting systems have neither the capacity nor the accuracy of a ballistic missile. So, the US scuttled the idea, never deploying such a system.

However, once Khrushchev made his boast, President Kennedy ordered that efforts to counter this threat be initiated as the “highest priority.” This marked the beginning of the antisatellite research program. And, when the fears of orbiting bombs had subsided, new justifications were found for maintaining the American ASAT.

Rule 3: Intelligence Uncertainty Begets Worst Case Analyses. Normally, the intelligence community is genuinely confused by the details of foreign technological progress and is uncertain how much the foreign country can do and how fast. The bureaucracy protects itself by assuming “worst case” conclusions. The political impact of these analyses can be magnified by the two-party system, which encourages each to portray the other as “soft on defense,” or insufficiently vigilant about a foreign danger. Accordingly, we can expect exaggerated expressions of alarm at each discovery of progress in the weapons building programs in the Third World.

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EAST-WEST SOLIDARITY MARKS REVIEW OF BIOLOGICAL WEAPONS CONVENTION

Editor's Note: Barbara Hatch Rosenberg, newly elected FAS Council Member and Coordinator of the FAS Working Group on Biological Weapons Convention (BWC) Verification, represented FAS at the Third Review Conference in Geneva September 7-29 and has provided this report.

The Third Review Conference opened with unprecedented East-West solidarity and with a widely shared sense of the importance of strengthening the BWC regime, especially in light of the fear that Iraq would use biological weapons during the recent war.

There were three major treaty issues on the table at the Conference: broadening the information exchange and strengthening other confidence-building measures (CBMs); considering a verification regime, which the Convention lacks; and establishing an administrative body to oversee the information exchange and propel the process forward until the Fourth Review Conference is held in 1996.

The first task was accomplished admirably; a start was made on the second, and the third failed totally. The outcome of the Conference was tempered by the demise of the developing nations' position as a third force between the East and West and their heightened fear of domination by the newly unified North.

Information Exchange and Other CBMs

The admirable set of CBMs adopted by the Review Conference owes much to the able Peruvian delegate, Felix Calderon. In March 1991 Calderon had asked permission of FAS to formally sponsor many of the proposals contained in the FAS Working Group's first report ("Proposals for the Third Review Conference of the Biological Weapons Convention," October 1990). Acting as "Friend of the Chair" of the Conference, he not only molded a coherent package of proposals but succeeded in lining up political support for them.

The annual information exchange—initiated after the Second Review Conference in 1986—was extended in significant directions, including data on:

1. all ultra-high (bio-safety level 4) containment facilities;
2. all facilities producing vaccines for human use (an activity permitted by the treaty, but also a possible cover for an offensive BW program);
3. national biological defense programs, including information on objectives, funding and personnel (both in-house and contractual), and
4. additional information on all governmental and private facilities that devote a substantial proportion of their resources to the defense program, including information on size, biological containment capabilities, number and training of personnel, funding, types of agents studied, description of work and of any outdoor studies with biolog-



Barbara Rosenberg reported to the Council that the influence of the FAS Working Group soared at the Third BWC Review Conference in Geneva. Not only did the leading Peruvian delegate Felix Calderon sponsor some of the Group's proposed confidence building measures, he also marshalled political support for their adoption.

ical aerosols, and lists of publications.

The British government, however, blocked the listing of all facilities engaged to any extent in biological defense, fearing that this might upset their academic and commercial contractors.

In addition, new guidelines for reporting on outbreaks of disease were established. Other measures will require information on national legislation, regulations and other measures to implement the BWC, and on past activities in offensive and/or defensive biological research and development conducted since January 1, 1946. Data on planned scientific conferences and other opportunities for expert contacts continues to be exchanged.

US Rejects Visits to Declared Facilities

Left out, however, was an agreement to open declared facilities—with protection of sensitive information—for visits on request. This idea was proposed by both the United States and the Soviet Union prior to the Review Conference but ultimately rejected by the US, apparently wishing to downplay the value of on-site visits, in line with its negative view of biological verification and its reversal of support for "anywhere, anytime" challenge inspections in the Chemical Weapons Convention. Such visits would have been extremely useful in designing verification measures for the treaty.

Although no Party opposed the concept of an information exchange, only about one-third of the States Parties to the BWC have ever participated since it was initiated in 1987. There are a number of reasons for this: more urgent priorities, limited resources and a feeling that their participation is insignificant. But there is also a perception that

any response to the information exchange could raise suspicions, which could hamper access to technology transfer.

To rule out misunderstanding or lack of clarity as an excuse for non-participation, a detailed response form was drawn up that now provides for simplified reporting, including a "nothing to declare" box.

CBM Package Adopted by Consensus

The above package of CBMs was adopted by a consensus of the 78 Parties present (out of 118 that have now ratified the Convention), but not without some difficulty in gaining political acceptance of the technical agreements. The significance of this elaborate confidence-building regime was cast in doubt, however, by the failure of the Conference to establish a between-sessions executive body to oversee the information exchange.

Without some new element of oversight, there is not much reason to expect greater participation than in the past. Funding complications, which plague many UN operations, also doomed an attempt to establish a special UN office in Geneva to compile, computerize and translate the incoming information. Thus, the UN Department of Disarmament Affairs in New York will probably continue—without adequate funding or staffing—to receive and circulate this information, without any processing.

Verification Takes a Tentative Step Forward

A verification regime for the BWC was the big issue at the Review Conference. As it was written in 1972, Article V of the treaty states that in case there is a question of non-compliance, the States Parties should consult and cooperate in resolving the issue. The lack of mechanism for verifying compliance or non-compliance has become increasingly unacceptable, as concern has mounted over the dangers of proliferation as well as the corrosive effect unsubstantiated allegations have on the Convention.

According to the Chairman of Conference's Committee of the Whole, an overwhelming majority of the Parties

BW in the Press

From *Disarmament Times* 11/25/91 interview with Rolf Ekeus, Chairman of the UN Special Commission—
"Some of the safeguard arrangements in the NPT may have an impact on the Biological Weapons Convention and on the negotiations on chemical weapons in Geneva, especially on challenge inspections. You probably need a rather stringent regime to be effective. I don't share the pessimist view that it is impossible. We have demonstrated that it is possible. There are no limits as to what is possible. It's a great message."

From *The New York Times International Edition* 2/10/89 report—Mr. Webster [then Director of Central Intelligence] said that at least 10 countries are working to produce existing and new types of biological weapons. "Any nation with a modestly developed pharmaceutical industry can produce biological warfare agents," he said. ■

present in Geneva favored verification and considered it possible to devise an adequate mechanism.

The influential Ambassador of Australia to the Conference, Paul O'Sullivan, said in his opening statement "Our purpose is to engender confidence in the Convention by making it a verifiable document." O'Sullivan went on to say, "the inherently dual-use nature of biological research means that measures demonstrating openness and transparency in relation to biological research in both military and civil installations must be the basis for any verification regime."

A model protocol based on such measures was developed by the FAS Working Group in a report published in February 1991 ("Implementation of the Proposals for a Verification Protocol to the Biological Weapons Convention").

NGO Activities Praised

From the 9/9/91 opening statement of Ambassador Roberto Garcia Moritan (Argentina), President of the Third Review Conference—" . . . I would like to emphasize the importance of the activities, especially over the past year, of the many non-governmental organizations which devote considerable effort and means towards following up the Convention and towards the tasks of education and informing international public opinion, including diplomats . . . who have been able to approach the subject of biology better equipped and prepared, thanks to various meetings, workshops and publications organized and issued by NGOs in this field." ■

The United States, however, opposed a verification protocol to the treaty. In his initial statement to the Conference, US Ambassador Ronald Lehman said "The Convention is not effectively verifiable and we do not know any way to make it so." Repeating this theme throughout the Conference, he cited the difficulty of distinguishing offensive activities from peaceful ones and the adverse impact of intrusive verification measures on military and business confidentiality as justifications for the US position.

While the momentum toward verification made it politically unacceptable to oppose the establishment of a group of governmental experts from the States Parties to identify and examine potential verification measures, the United States insisted the study be limited to the scientific and technical—but not political—feasibility of verification, with no drafting of proposals and no pre-determined follow-up mechanism.

The experts' group will first meet March 30-April 10 of this year and complete its work before the end of 1993. If requested by a majority of the States Parties to the Convention, a special conference will then be convened to decide whether or not to begin negotiation of a verification protocol.

The group is to take into account data provided by the States Parties, which were encouraged by the US representative
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sentative to "study on a national level the technical feasibility of effective verification of the BWC." No such studies have ever been reported by any country. The United States has never carried out any trial biological verification inspections, and Michael Moodie, a high-ranking official at the US Arms Control and Disarmament Agency, said in an interview that he did not know of any plans afoot for doing so.

FAS, however, has conducted several visits to high-containment biological labs—academic and military—in its continuing effort to assess on its own the feasibility of BWC verification. The findings of these visits will be presented later this year, in a third report by the FAS Working Group.

Carrots and Sticks

The quest for non-military bio-technology transfer is the grail that leads many of the developing countries to attend the BWC Review Conferences. Article X of the BWC, on scientific and technological cooperation, has always attracted much discussion but unfortunately never generated much action. This year, however, a previous, unimplemented request to the UN Secretary-General was given a 1993 deadline—but no funding—to produce a study on improving UN institutional mechanisms to facilitate bio-technology exchange. The Review Conference also endorsed the concept of an international vaccine development program under the leadership of the World Health Organization, and urged international cooperation and assistance in epidemiological surveillance of human and animal diseases.

Article III of the treaty—prohibiting transfers of relevant material that has no justification for prophylactic, protective or other peaceful purposes—is the flip side of the tech transfer coin and anathema to developing nations. The point of contention is dual-use materials, which have both military and civilian, often humanitarian, uses. In spite of the urgency of the proliferation question, North-South conflicts prevented any meaningful action on export controls. Similarly, no mention of sanctions found its way into the Final Declaration, despite various statements put forth on unilateral or multilateral approaches in response to breaches of the Convention.

Given the antipathy of the developing nations to export controls, it is questionable whether restrictions on transfers of dual-use items to Parties to the BWC may not do more harm than good.

Biological weapons are different from other kinds of weapons, in that most biological material has humanitarian uses and none of the relevant equipment is so high-tech that it could not be home-made in some form by any nation intent on developing a BW capacity. There are potential BW agents to be found pandemically. Many can be obtained commercially. And the tiny quantities needed for start-up can readily be smuggled across borders.

For actually preventing proliferation, the goodwill of the developing countries is likely to be much more valuable than any advantage conferred by controlling exports. □

—Barbara Hatch Rosenberg

Scenes from Annual Meeting



President Jeremy Stone, Fund Trustee Jessica Matthews and Council Member J. David Singer converse informally after lunch.



Council Member Martin Sherwin and Sponsor Charles Price offer suggestions on approaches to current and projected work in a changed world setting.



Council Members Valerie Thomas and Mike Casper (middle and right foreground) and FAS staffers hear reports from project directors.

Threat Inflation

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With the launch of Sputnik in 1957, fear of Russian missiles grew. The National Intelligence Estimate projected in 1957 that the Soviet Union would deploy some ICBMs by the end of 1960, and 1000 by mid-1961, leaving US bomber bases completely vulnerable to attack. In contrast, the US expected to have a mere 30 ICBMs in 1960, and no more than 70 by 1961.

The discrepancy spawned plans for the US to counter by deploying as many as 10,000 American ICBMs. And duplicate programs (Titan and Atlas) were proposed as a hedge against failures in either. Defense planners acted on the basis of projections of possible future enemy strength. And the political process followed suit. Senator John Kennedy campaigned for the presidency on claims that the Republicans had allowed a "Missile Gap" to develop. Indeed, in every election between 1956 and 1980, the "outs" accused the "ins" of being less than vigilant on defense.

The CIA later admitted that its estimate of Soviet ICBMs was "probably too high." Only four Soviet SS-6 ICBMs were deployed and operational in 1961 in contrast to the prediction of 1000. The estimates had been based on the speculation of analysts who assumed that all Soviet factory floor space had been devoted to missile production.

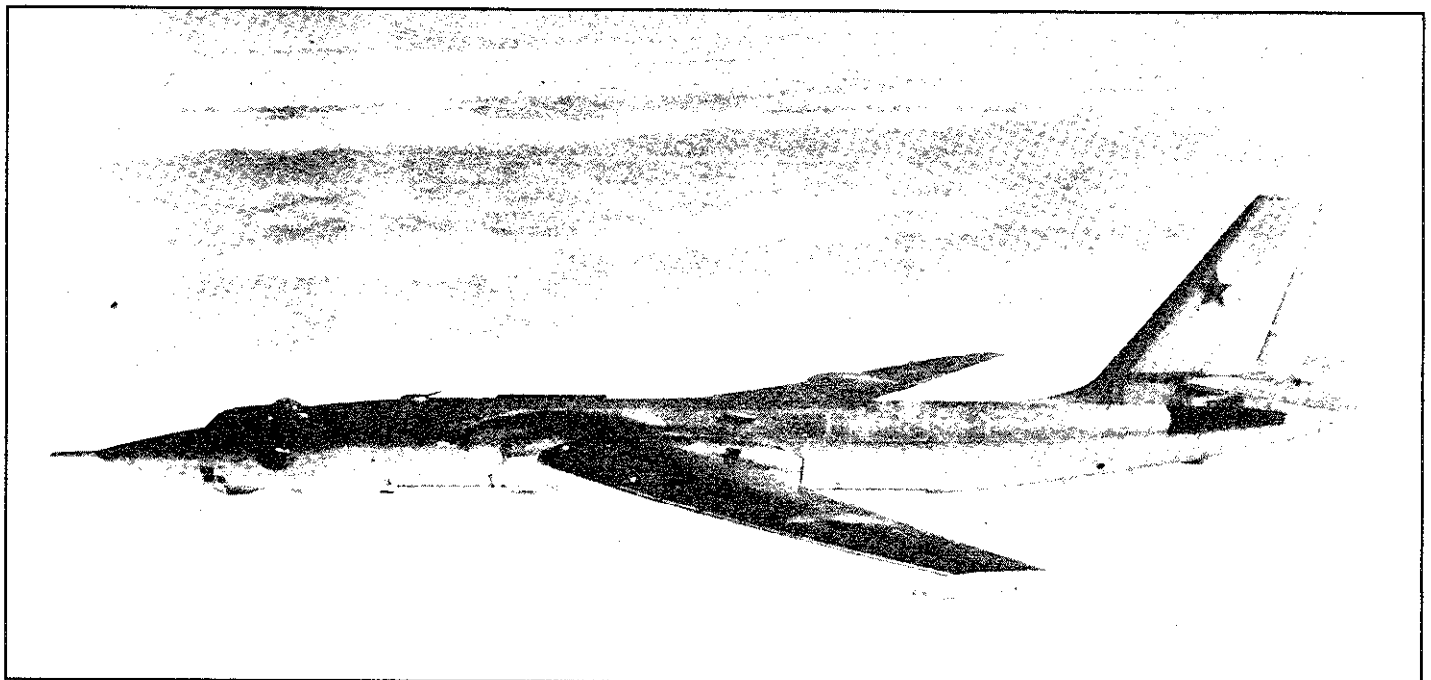
The Republicans had been unable to control their own intelligence estimates, even when it was in their highest political interest to do so! Notwithstanding the Democrats' discovery of the absence of the missile gap, the domestic pressures created were so tangible that the Kennedy Administration nevertheless proceeded to develop three separate ICBM systems—Atlas, Titan and Minuteman. By 1965, the United States had built 854 ICBMs; the Soviet Union had only 270.

Rule 4: Political Pressures Force Defense Spending Compromises. President Bush's "split-the-difference" approach to SDI and its domestic constituency parallels that of Lyndon Johnson. In proposing GPALS, a scaled down approach to SDI, he is following the pattern set by Johnson, who finessed pressures for an anti-Soviet ABM by preemptively agreeing to an anti-China ABM.

Under pressure from Congressional hawks led by Senator "Scoop" Jackson, who argued that a missile defense was necessary, President Johnson decided that some type of ABM system had to be developed. Secretary of Defense McNamara opposed ABM deployment on the grounds that there could be no adequate defense against a Soviet missile attack and deployment carried with it the dangers of a heightened US-Soviet arms race.

Therefore, a rationale was needed that would support deployment of a limited system. Predictions had been made that the Chinese could have an operational ICBM force as early as 1970, and accordingly, McNamara proposed reorienting the program to defend against a hypothetical increased Chinese missile threat. He revealed his real concern by warning that "the danger in developing this relatively light and reliable Chinese-oriented ABM system is going to be that pressures will develop to expand it into a heavy Soviet-oriented ABM system."

Now, once again, the form of a proposed ABM system is the resolvent of political pressures. President Bush has a natural desire to avoid directly confronting the legacy of Star Wars left by his predecessor, Ronald Reagan. But, with the unlikelihood of an attack coming from the former Soviet Union, and increasing budgetary pressures, the ABM system envisioned during the Reagan Administration is no longer politically viable.



US overcounting of the Soviet M-4 "Bison" bombers at an air show helped to start, perhaps inadvertently, the "bomber gap" of the late 1950s, one of the first Cold War threat inflations.

Bush has therefore agreed to defer the more complex and controversial space-based elements of the ABM system, and opt for a thin, ground-based defense rationalized on a Third World threat. Now, an undifferentiated "Third World" has replaced China as an excuse for acquiescing, with a scaled down system, to popular demand for "defense."

Rule 5: Strategic "Realities" Shift to Match Military Missions. We can expect new rationales for SDI and changes in its architecture as earlier rationales continue to fail. If history is a guide, we will someday find policy-makers exaggerating the offensive capabilities of a Third World state to keep a particular SDI program viable.

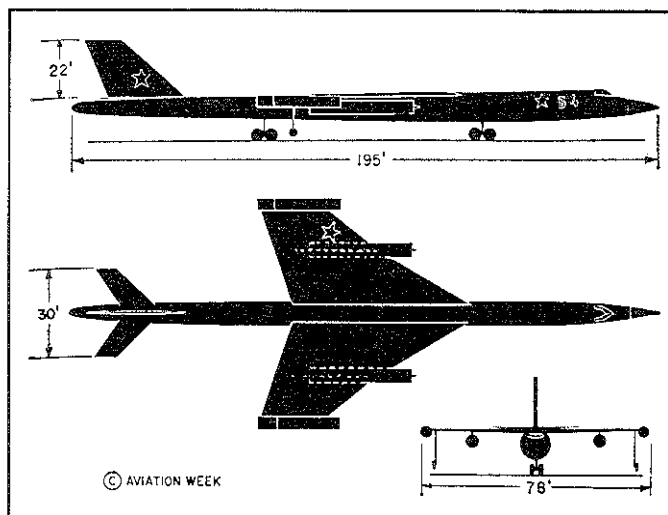
When the light ABM to protect against Chinese ICBMs no longer resonated with the public, the rationale for the ABM was changed, to a Safeguard system that would protect US ICBMs. This required the Pentagon to exaggerate the danger of a surprise first strike by the Soviets by inflating the capabilities of their new multiple-warhead ICBM, the SS-9. Accordingly, the DoD projected that by 1975, the Soviets could have 500 MIRVed SS-9s deployed with 3-10 warheads on each and be able to deal a surprise knockout to all but a handful of America's 1000-missile Minuteman force.

But in 1969, after observing seven flight tests of the SS-9, the CIA concluded that its warheads were not independently guided after separation from the launch vehicle and put them in the category of MRV (multiple re-entry vehicles), a less threatening stage of development.

According to CIA analysis of the system, the Soviet Union was substantially behind the U.S. in the development of this technology. Further study showed that the triple warhead SS-9s were not accurate enough for first-strike capability (*i.e.*, to attack hardened land-based missiles). Alarmed at the effect this information would have on the ABM debate, the White House and the Pentagon pressured the CIA into altering the 1969 National Intelligence Estimates to reflect a greater Soviet nuclear strength and a higher danger of surprise attack.

Rule 6: Our Military-Industrial Complex is Attracted to New High Technology. We can expect a portrayal of Third World efforts to produce weapons of mass destruction that is more sophisticated than it actually is, because this will justify more sophisticated responses.

In the US-Soviet arms race, this attraction to technology led to seeing others as doing what our experts wanted to do. For example, the "Nuclear Bomber Gap" seems to have been fabricated virtually out of thin air. Melvin Price, Chairman of the House Joint Committee on Atomic Energy, declared in 1959 that the Russians were three to five years ahead of the US in the field of atomic aircraft engines and that they would move even further ahead unless the US pressed forward with its own program. His description of the Soviet aircraft's mission was surprisingly similar to



In 1958, artists at Aviation Week conceived a Soviet nuclear-power bomber that had a length of 195 feet, a delta wingspan of 78 feet and tail height of 22 feet and was powered by two direct air cycle nuclear powerplants performing in the high subsonic or supersonic ranges. There is still no evidence that such a nuclear bomber program ever existed in the USSR.

that of a proposed system being explored by several American defense contractors.

Several years later, a prototype of a Soviet conventionally-powered bomber, NATO code-named "Boulder," which never entered production, was found to closely resemble the schematics given to support the original nuclear airplane revelations. To date there is no indication that the Soviets were actually embarked on an aircraft nuclear propulsion program. But the United States spent several billion dollars on aircraft nuclear propulsion before the program was abandoned as impractical and unneeded.

Now, it is, so far, admitted that Third World threats would not need even GPALS but, in fact, could be handled, if and when they arose, by a single site ABM with some space-based component. The need for several sites in the current scheme derives from the danger of an unauthorized Soviet submarine attack. Someday, when this already attenuated threat disappears completely with the elimination of the Soviet submarine force, US analysts will begin to ascribe to Third World threats much more sophisticated capabilities, such as depressed trajectory launches or maneuverable warheads.

Perceptions of Danger Feed Procurement

No one who is aware of the Cold War lessons listed above can be less than cynical about how the American political system turns transient perceptions of danger into weapon systems. A search is obviously on for potential Third World threats that could provide renewed rationales for the continued procurement of weapons that previously relied on the Soviet threat. As always, vigilance is going to be the price of rational defense planning. □

—Eric Stambler

Editor's Note: Eric Stambler, is a member of the FAS staff, working as a research assistant with the Space Policy Project.

1991 Public Service Award Goes to John E. Pike



John Pike accepts the 1991 Public Service Award from President Jeremy Stone and Council Chairman Andrew Sessler.

At the 46th meeting of the FAS Council on December 14, FAS staffer John E. Pike became the 25th recipient of the FAS Annual Public Service Award.

Accepting a plaque which read *Indefatigable, Creative and Analytic in Servicing the Media and Defending the ABM Treaty*, Pike observed that his work at FAS, directing the Space Policy Project, has provided him "a rare and fortunate opportunity to get paid for doing my hobby."

Citation

Previously lost in southern seas, at FAS John E. Pike found himself. In eight years, using creative techniques and workaholic practices, he has achieved a great deal for FAS goals while becoming, in the process, a media phenomenon.

Employing a pack-rat approach to collection of data and a manic devotion to organized filing, he quickly became a major source of information which he generously shared with all. Armed with an encyclopedic memory and learning

through his fingers by typing key facts into his computer, he attracted thousands of calls from interested reporters, to which he further endeared himself by his patient and round-the-clock availability.

Showing a truly remarkable ability to get to the bottom of issues in ten words or less—and to describe the essence of things in a down-home Tennessee vernacular—he came to be quoted not just as a minor favor for the background he provided but for the punchy quality of his remarks—a quality so pronounced that it precluded editors from deeming him overexposed.

The incredible extent to which he has been quoted—exceeding the creditable references to collegial organizations ten times our size—has been only the most obvious part of his work. He has made over 150 presentations to international conferences, national meetings and university classes, and written over 100 papers and 30 chapters on his favorite issues of space and defense. Thus, he has become influential indeed.

Of all the issues on which this influence has been constructively spent, none has been more important than the maintenance of the ABM Treaty. As the most visible critic of SDI, John has carried a major part of the burden of opposing all those careerists in the defense community who felt obliged to follow President Reagan's dream.

And along the way, among other things, he anchored or inspired debates that achieved moratoria on anti-satellite weapons and halts to procurement of the Stealth bomber.

Of course, no one is perfect. And John is soft on space. He would, if he could, throw everything he might save on defense into any one of a number of space extravaganzas. We are considering how to control this—perhaps with a ten-second delay on his phone line to allow for monitoring and intervention. □

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