A New Soviet Missile Angers the White House

The Reagan Administration claims that tests of the SS25 violate SALT II, but others say the violation is not clearcut

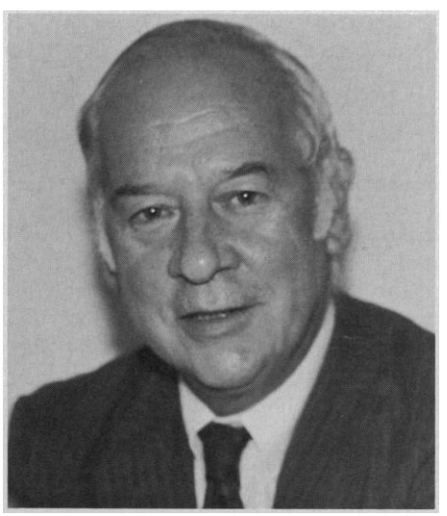
Near the cities of Yurya and Yoshkar Ola, 150 miles west of Moscow, the Soviet Union is constructing a serious diplomatic and military problem for the Reagan Administration. There, concrete bunkers are being erected to house a new intercontinental ballistic missile, known as the SS25. The Administration believes that the Soviets have tested the SS25 more than 15 times in direct violation of the SALT II treaty. But the Soviet Union has dismissed the allegation, and now appears to be preparing for the missile's deployment.

As a result, pressures are building within the Administration to abandon a commitment to abide by the SALT II treaty. An influential group of conservatives, led by assistant secretary of defense Richard Perle, has seized on the SS25 as a symbol of Soviet dishonesty, and a reason for the Administration itself to abrogate those provisions that constrain U.S. weapons developments. Specifically, they want to expand the number of U.S. strategic submarines, build new missile silos, and deploy a new land-based missile similar to the SS25.

Others within the Administration, led by the State Department but including the Joint Chiefs of Staff, oppose this idea on the grounds that mutual abrogation of the treaty will ultimately be to the Soviets' advantage. A final decision must be made by October, when a new Trident submarine, the U.S.S. *Alaska*, is scheduled to begin its official sea trials. Unless older submarines are retired, this would push the number of submarine-launched ballistic missiles above the total allowed under SALT II.

Senior Administration officials know that a decision to ignore the SALT II constraints will be more palatable if key congressmen and independent weapons experts support the allegations of Soviet cheating. Thus far, however, the charges have attracted mixed reviews, largely due to two complicating factors. First, although most independent experts agree that the Soviet Union is violating the spirit, if not the letter, of the SALT II agreement, many believe that the relevant provisions were poorly drafted. Second, because the Administration has refused to submit the treaty to the U.S. Senate for ratification, it has no legal status. As President Reagan acknowledged last August, there is "no legal obligation on either party to refrain from acts which would defeat the object and purpose of the agreement."

The White House, in a report issued on 1 February, charged instead that the Soviet Union has violated a "political commitment to refrain from actions that undercut" the treaty. The commitment, apparently made during a private meeting between former Secretary of State Alexander Haig and Soviet Foreign Minister Andrei Gromyko in June 1982, has never been described in detail. But Gromyko has affirmed, as recently as last January, that "[both] sides proceed from the premise that what is of positive importance in that Agreement should be actually in force." A similar promise has also been made by Reagan.



Paul Warnke

Believes in retrospect that the treaty provisions at issue are somewhat ambiguous.

The first of the Administration's allegations of cheating on SALT II involves a provision that attracted enormous controversy during the treaty's negotiation—a constraint on the encryption, or encoding, of electronic information transmitted during missile tests. Its purpose is to facilitate the verification of compliance with limitations on such missile characteristics as size, weight, and lifting power—features that are deduced in part from the telemetric missile transmissions. Specifically, it states that encryption is legal, except when deliberately used to "impede" treaty verification.

By all accounts, most of the telemetry transmitted during tests of the SS25 has indeed been encrypted. Thus far, it has had little to no military significance, because the intelligence community has clearly been able to get the data it needs from other sources, such as satellite reconnaissance and ground-based radar. But the Reagan Administration maintains that such encryption nonetheless impedes verification, insofar as intelligence gathering from alternate sources is more awkward or time-consuming. "It is not a situation where they are one inch over the line," explains a senior Pentagon official. "They are giving us nothing of value [from telemetry]."

The Soviet Union has apparently professed a different understanding of "impede." At meetings of the Standing Consultative Commission (SCC), established in 1972 to thrash out treaty compliance disputes, its representatives have asserted that the encryption is permitted so long as the relevant SS25 characteristics can be deduced anyway. Their concern is that telemetric data can be used to deduce key missile characteristics not governed by the SALT II treaty, such as accuracy, fuel consumption, and design—to be used, in short, for intelligence gathering. "On this subject I am like a stone wall," Gromyko is reported to have said in 1978, referring to the Soviet view that open broadcasts of telemetry serve no useful purpose.*

According to Paul Warnke, an attorney who served as the chief U.S. negotiator for SALT II, the present Soviet view is disingenuous because the treaty "doesn't say 'prevent,' it says 'impede' and the negotiating history makes it clear that this was agreed by both sides." The trouble is that the agreement was verbal, and the treaty itself contains no explicit interpretation. "I am not happy with the present situation. The extent of encryption is just not explicable; it's too much," he explains. "But the only requirement that would be unambiguous would be a total ban on encryption; less than that, it's a subjective judgment."

Others who participated in the drafting

*Strobe Talbott, *Endgame. The Inside Story of SALT I* (Harper & Row, New York, 1979), p. 222.

or negotiation of the SALT II treaty also say that the violation is not clearcut. For example, Harold Brown, who served as secretary of defense during the Carter Administration, says that "the Soviets have gone far beyond what we had any reason to expect. It is a serious problem. But the prohibition is written in a vague way." Similarly, Stansfield Turner, the director of the Central Intelligence Agency (CIA) during the negotiations, says that "it is a fuzzy area. So long as they have not encrypted 100 percent, they can argue that they haven't violated the treaty. It is of course a charade, but we have a tough time proving that there is a violation of that provision. I think it's a violation of the spirit, not the letter, of the treaty."

Today, Warnke says that he is "not proud" of the encryption provision, and that in retrospect the United States should have sought an absolute ban on encryption. Turner and others had supported this idea, but the State Department thought it was nonnegotiable and the Pentagon wanted leeway to encrypt some telemetry transmissions of its own.† Although there remains a considerable difference of opinion within the government about the need for access to missile telemetry, U.S. negotiators discussed an encryption ban during the strategic arms reduction talks in 1982–1983, and may do so again in the talks presently under way in Geneva.

The second of the Administration's allegations of Soviet cheating on SALT II involves a complicated provision that was supposed to block the testing of the SS25 in the first place. Like the provision constraining encryption, it was a topic of prolonged negotiation and considerable controversy. Its fundamental goal was to prevent modernization of land-based missile arsenals—a daunting task given the inherent difficulty of banning every potential improvement and distinguishing between major and minor missile modifications. The most that could be agreed upon was to define a new missile as something that differed from an existing missile by more than 5 percent in length, diameter, launch-weight, and maximum payload weight, and to limit each side to one.

Several years ago, the Soviet Union officially notified the United States that the SS24, a multiple-warhead missile comparable in size to the MX, would be its one permitted new type. Consequently, senior Administration officials were surprised and angered in February 1983, when the Soviets began tests of the SS25—a single-warhead missile comparable in size to the Minuteman. They did so with the explanation that it differed less than 5 percent from a missile first tested and deployed in the late 1960's, the SS13, and therefore was permitted under the treaty. Two months ago, however, the Reagan Administration dismissed this explanation and publicly charged that testing of the SS25 had violated the treaty.

In part, the Administration's concern stems from the fact that the SS25 is clearly new, in that it incorporates much more modern missile technology. "Physically, there is hardly a nut or bolt in common between the SS25 and the SS13," says one Pentagon official. "The difference is roughly the difference between, say, a 1965 Ford and a 1982 or '83 Cadillac."

Beyond seeking an end to the tests, the Reagan Administration has not proposed any solution to the SS25 problem.

But there is much less agreement that the SS25 is "new" according to the peculiar vernacular of the treaty. Only one out of the four relevant missile characteristics—maximum payload weight—is thought by the intelligence community to be conclusively outside the 5 percent limit. During Senate hearings on the treaty in 1979, Brown and others acknowledged that verification of compliance with this requirement at the 5 percent level would be extremely difficult. Even now, the intelligence community can only provide rough estimates of the two missiles' payload carrying capability, and well-informed officials say that those estimates overlap, albeit by a small amount. There is, in short, some chance that it falls within the constraint.

The allegation is further complicated by a disagreement with the Soviets over the precise definition of a missile's maximum payload weight. In the treaty, it is defined as the sum of the weight of the warhead, any spoofing devices such as decoy warheads, and any "appropriate device" for releasing the warhead or the spoofing devices. At the SCC, the Soviets have insisted that the SS13 has an "appropriate device" that remains attached to the missile's third stage, and that this device must be included in any estimate of total throwweight. But the United States refuses, in part because the operation of the device has never been observed and in part because, even if such a device exists, it properly should separate from the third stage to facilitate verification. Unfortunately, the treaty language itself is a bit vague on this point, and the Administration's position again depends on recollections of a verbal Soviet commitment.‡

In what some experts consider a tacit acknowledgment that the evidence is not clearcut, the Administration has publicly spelled out a fall-back position. Even if "we were to accept the Soviet argument that the [SS25] is not a prohibited new type of ICBM," the February White House report says, the tests of the SS25 have clearly violated another provision of the treaty aimed at blocking deployment of multiple warheads atop an ostensibly single-warhead missile. Specifically, the provision requires that the missile be tested with a "reentry vehicle" that weighs more than half the maximum payload weight (if it weighed less, in theory more than one could be packed onboard).

According to U.S. intelligence estimates, the weight of the SS25 reentry vehicle has been slightly less than half the maximum payload weight during more than one test. The Soviets assert, however, that the maximum payload weight has been overestimated, due to the inclusion of an unusually heavy package of test instruments. They also say that when the test program is further along, the United States will see that the maximum operational payload capability is much less, and that the reentry vehicle clearly weighs more than half.

To many experts, this is an irrelevant distinction designed to circumvent a significant constraint. "It's the kind of stuff that can drive you up the wall," says Michael Krepon, a former government arms control official who has written extensively about treaty compliance for the Carnegie Endowment. "It's not straightforward, and it's not what you would expect from a reliable partner. Not only that, by making such arguments the Soviets essentially throw red meat to those in the United States who are opposed to further arms control."

Nevertheless, there is fairly wide-

†The Pentagon has encrypted some telemetry transmissions during tests of the MX missile, for example, partly in retaliation for Soviet encryption. But assistant secretary of defense Richard Perle last year assured the Senate Armed Services Committee that "the United States has never employed any means of denying information necessary for arms control compliance verification," and the Soviets have never complained about U.S. encryption at the SCC.

‡Specifically, the Administration maintains that U.S. negotiators displayed a representative missile sketch in which an "appropriate device" had separated from the third stage, which the Soviets accepted.

spread recognition that ambiguities in the treaty language facilitate such claims. Warnke, for example, says that he is "troubled because the SS25 obviously pushes the treaty pretty hard. The provision is not a masterpiece of clarity, however." Similarly, Spurgeon Keeny, director of the Arms Control Association, believes that "it's not a definitive case." And Turner also says that he is "skeptical—it's simply not that precise."

Thus far, the Reagan Administration has demanded only that the SS25 tests be stopped until the dispute can be resolved through negotiation, a demand that the Soviets have obviously ignored. Beyond this, various parts of the bureaucracy have been unable to come to an agreement. Ironically, at the Pentagon, where the violations have been bitterly denounced, many officials actually favor deployment of the SS25, so long as the United States can test and deploy a prohibited new missile of its own in response, the single-warhead Midgetman.

In addition, there is now a fairly broad consensus in Washington that small missiles of the SS25 type may actually increase global stability, because they threaten fewer military assets and present a somewhat less inviting target. As President Reagan's special Commission on Strategic Forces concluded in April 1983, "over the long run, stability would be fostered by a dual approach toward arms control and ICBM deployments which moves toward encouraging small, single-warhead ICBMs."

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At his most recent press conference, Reagan indicated that a final decision on U.S. abrogation of SALT II would be delayed until the U.S.S. *Alaska* is ready to embark. Earlier, he had promised that the United States would continue to respect the treaty, only to be corrected by some of his appointees at the State Department, who said that any decision would hinge in part on a willingness by the Soviets to accede to U.S. demands in the ongoing Geneva arms talks.

Some officials doubt that the prospect of continued compliance with SALT II will offer much bargaining leverage, however. They believe that the Soviet Union has more to gain if the treaty is abandoned, because it could pack additional warheads atop existing missiles, and deploy a fleet of new Soviet submarines, hundreds of new long-range cruise missiles, and several additional types of land-based missiles, all without retiring existing strategic weapons. The officials also argue that such a decision would outrage U.S. allies. This view is also taken by much of the arms control community—even by those who concede that Soviet behavior has exposed significant defects in SALT II.

It is, in short, one of Washington's most unusual arms control debates. On one side are those who fault the treaty overall, yet firmly believe that two of its key provisions are clear enough to sustain a public claim of Soviet cheating. They want the treaty scrapped. On the other side are those who drafted the treaty and continue to support it, yet firmly believe that the provisions at issue are inherently defective. A reasonable middle ground is that both sides should work to repair the defects, and then continue to respect its limitations. But this is highly improbable, given the generally poor climate engendered by the cheating allegations and the small chance that Reagan would eventually submit even an amended version of the treaty to the Senate for ratification. No real progress is likely for some time.

—R. JEFFREY SMITH

This is the third in a series of articles on United States–Soviet treaty compliance. The next will examine additional allegations of Soviet treaty violations.

Japan and the Economics of Invention

A meeting on innovation was dominated by discussion of how the United States can shore up its international competitiveness

Palo Alto, California. Two hundred business and academic leaders got together at Stanford University last month for a conference on the economics of invention.* That was the official topic, but unofficially, the subject became Japan.

The business speakers came from companies that use a lot of basic research and from investment firms that channel money into high-risk ventures. They talked about inventiveness and worried about Japan's success in high-tech fields. The electronics executives were especially edgy, as many seemed to be searching for survival strategies. Not so long ago they would have been worried about keeping up with clients' orders.

A few speakers argued that competitors like Japan are not to be feared or, in any case, not to be prevented from joining the game. According to this view—articulated by Harvey Brooks, professor of technology and public policy at Harvard—America should avoid seeing the competition as a zero-sum game in which one player's gain is another's loss. Rather, America should welcome an expanding market for high-technology goods and should expect to benefit.

Gordon Moore, founder and now chairman of Intel, the silicon chip maker, warned that high-tech industries will find "no salvation" from foreign competition. "In electronics," he said, "the U.S. trade with Japan last year was minus $15 billion. . . . Our electronic trade deficit with Japan is greater than our automotive trade deficit . . . and it is projected to grow to minus $20 billion this year. Even in leading-edge semiconductor technologies, the balance of trade turned negative in 1980 and was $800 million negative last year. It is increasing rapidly in that direction." He added that electronics manufacturing is "going offshore" (especially to Asia) at an "extremely rapid pace," and that technological leadership will probably go with it.

Stanford economist Masahiko Aoki predicted that Japan will become "the largest capital exporter in the rest of the 1980's." Japan exported $50 billion in 1984 alone and invested $6 billion in U.S. common stock and factories. Aoki re-

*"Symposium on Economics and Technology," 17–19 March 1985, sponsored by the National Academy of Engineering, the Center for Economic Policy Research, and the Departments of Chemistry and Chemical Engineering at Stanford.