## **Compliance With the 1972 ABM Treaty**

The Reagan Administration's recent public allegations of Soviet non-compliance with arms control agreements have drawn much attention. One of these allegations concerned construction of a radar in Siberia which was said to be almost certainly in violation of the 1972 ABM treaty. This radar was discussed at one point in the workshop, and portions of that discussion are described in this appendix.

## THE SOVIET RADAR NEAR KRASNOYARSK

According to Articles III and IV of the ABM treaty, ABM radars may be located only at agreed ABM sites or test ranges. Article VI notes that early warning radars may not be constructed except on the periphery of the country and looking outward. Agreed Statement F states that phased-array (electronically steered) radars greater than a specified size may not be deployed except as permitted by Articles III, IV, and VI. It goes on to exempt radars used "for the purposes of tracking objects in outer space or for use as national technical means."

The Soviets are constructing a phased-array radar of greater than the specified size near Krasnoyarsk in central Siberia. The location is not near the periphery of the country and it is not oriented outwards. If it is indeed an early warning or ABM battle management radar, the Soviets are in violation of the ABM treaty. The Soviets claim that the radar is allowable under the exemption in Statement F. Since it is geographically poorly sited to be effective for intelligence (national technical means) purposes, it would have to be a space track radar to be permitted under the treaty.

The administration has charged that this radar "almost certainly" violates the ABM treaty. Others find the issue somewhat less clear. The radar "sort of looks like a duck, and it walks a little bit like a duck, but it doesn't look quite like all the other ducks, " in the words of one panelist. "The Soviets say, 'Oh, don't worry. It's not a duck. Notice there are some differences between it and other ducks, and when you hear it later, you'll find out it barks. It doesn't quack. ' "

According to a panelist, the signal from a space track radar (a "dog") would be quite different from that of a radar used for ABM battle management

(a "duck"). Therefore, the question will presumably be resolved when the radar becomes operational. However, some panelists were not willing to wait that long to find out, and they thought that the administration's announcement was proper. "You can't expect me to look at something that looks like a duck and walks like a duck and tell me it's a dog and I'm supposed to take it on faith. . . . You've got to provide more help than that. "They felt that the Soviets were obligated to be more forthcoming about the radar than they had been within diplomatic channels, and that the public announcement served notice that the United States feels the issue has not adequately been resolved. Other panelists felt that existing channels were the appropriate forum and that the public announcement did not serve any constructive purpose.

Some panelists were generally skeptical as to whether the radar is in fact in violation of the ABM treaty. The utility of having such a flagrantly illegal early-warning radar, if it is one, was not felt to be sufficient incentive for the Soviets to unilaterally abrogate the ABM treaty. Others, including some who had access to intelligence data, had little doubt that the radar is indeed optimized for the ABM role. The alternative to being an illegal ABM radar is for the radar to be for tracking satellites, indicating a buildup of the Soviet space monitoring capability and being at least suggestive of an extension of their ASAT program.

## BREAKOUT FROM AND LOOPHOLES IN THE ABM TREATY

The ABM treaty is under a great deal of pressure. In the United States, no ongoing research, development, or deployment contradicts treaty provisions. However, deployment of ballistic missile defense beyond the permitted single site would violate the ABM treaty, as would development, testing, or deployment of any ABM systems or components other than fixed, land-based ones. A panelist estimated that at the time of President Reagan's March 23, 1983 "Star Wars" speech, U.S. research into ground-based BMD components was about three years away from the point at which continuation could have run up against the ABM treaty. In light of the March 23 speech and

ensuing developments, this estimate may be lengthened to about a decade because more futuristic BMD technologies, which are highly immature, presumably will be emphasized at the expense of the older, more developed systems which

were closer to deployment.

The Soviets, according to articles in *Aviation* Week and Space Technology referred to by workshop participants, are building defenses against tactical ballistic missiles. Since the ABM treaty prohibits defenses only against strategic missiles, anti-tactical ballistic missile (ATBM) systems are not covered and are therefore permitted. Anti-tactical ballistic missiles were not included in the ABM treaty at United States insistence in order to protect SAM-D, a surface-to-air missile then under development which was intended to have some capability against short-range tactical ballistic missiles as well as against aircraft. However, according to a panelist, as SAM-D developed (changing its name to 'Patriot'), "it lost not only its capability against missiles, but it lost much of its anti-aircraft capability" as well. At the same time, "the Soviets have essentially designed and deployed the 'SAM-D-ski', which looks a lot like what we were trying to protect.

ATBM systems, and their impact on the continuing viability of the ABM treaty, were a source of considerable concern to many panelists. A panelist felt that "if things are deployed under the rubric of anti-tactical ballistic missiles, they can or will have an impact on the penetrability of our SLBMs and the French deterrent system and the British deterrent system, and the whole ball of wax

can unravel. "The U.S. deployment of Pershing II missiles in Europe could stimulate a particularly troubling Soviet ATBM deployment. The United States has no excuse for deploying anti-tactical ballistic missiles in its homeland," pointed out a participant, "but the Soviet Union does-and we're giving them a better one. We are now deploying an offensive system that says, 'Hey, you know those ATBMs? Come on, bring them out, there's a legitimate use for them now.'

Panelists did note that, even if the Soviets should deploy extensive ATBM systems, it need not change the strategic balance. "We know how to deal with them," said one. "It requires penetration aids. We know how to do that." These aids are not presently deployed in the strategic inventory, which "we ought to do something about," but the United States is not in imminent danger of being effectively

disarmed.

Another cause for concern is the continued miniaturization of components. Those who worry about possible scenarios in which the Soviet Union builds and stockpiles components in preparation for rapid breakout from the ABM treaty are worrying more now because small radars can have enough capability to fulfill some ABM roles. Even so, small radars cannot do so in the absence of large phased-array battle management radars. Since ABM battle management radars and space track radars share at least some characteristics, panelists felt that a radar clause might be required in an ASAT agreement to prevent circumvention of the ABM treaty restrictions on radars.