

Soviet Attitudes and Efforts

MILITARY EFFORTS

PAST DEVELOPMENT AND PRESENT STATUS

The Soviets have attached a great deal of significance to space activities. Their programs, controlled by the military, are a source of great national pride and have tremendous momentum. They have pursued all of the military support activities in space that the United States has undertaken, often for reasons not clear to American observers. The U.S.S.R. has also exploited options that the United States has forgone.

Development of the current Soviet co-orbital ASAT began in the 1960's for reasons which "really kind of remain something of a mystery" and quite possibly were not thought through in depth. It is not presently a very capable weapon. "I don't think that the orbital intercept system is of great military significance," said a panelist, echoing views which were widely shared at the workshop. "Indeed, it's hard to imagine exactly what threat it does pose." However, the Soviets have been taking the system very seriously. They have maintained it, tested it, and improved it over the years. They have not made major advances or introduced significant variants of the co-orbital ASAT, but instead have been systematically making incremental modifications. A panelist warned against drawing too many conclusions about the lack of major upgrades in the Soviet ASAT. The United States had maintained nuclear-armed ASAT interceptors on islands in the Pacific Ocean for 12 years without upgrades. We chose to develop an entirely new system—the air-launched direct homing interceptor—because that type of system had clear advantages. "There is no reason to suppose that the Russians might not have made a similar decision."

One must be careful in comparing the Soviet and the American space efforts. Many qualifications are required in order to determine true Soviet capabilities or level of effort. When comparing launch rates, for example,

one must recognize that Soviet satellites are much shorter lived than American ones. Although the Soviets had 98 launches (military plus civilian) in 1983 compared to 22 for the United States, during that time the United States had about twice as many active satellites in orbit as the Soviets.

To some extent, the Soviet approach of having more but shorter-lived satellites reflects the Soviets' poorer technology; nevertheless, it does give them some significant strengths. They have replacement satellites and launchers and will be able to reconstitute space systems quickly in case of ASAT attack.

"The Soviets would fare better than we would in an environment in which satellites had an 'enemy-induced lifetime' of two weeks," said a panelist. "They would hardly notice it whereas it would hurt us a lot." However, he noted that if the United States deploys its ASAT, it will be able to destroy Soviet satellites within a few hours of launch. The Soviet ability to replace satellites every few weeks would not be very useful.

At present, the United States is seen by many observers as being more dependent on space systems than the Soviet Union. However, as the Soviets increase their use of space support systems, any asymmetry between Soviet and American reliance on space will lessen. Indeed, one panelist felt that the Soviets are now "fully as hooked on the use of those systems as we are," and that they are clearly using space systems in connection with their Afghan and other military ventures.

SPECULATION ON FUTURE DEVELOPMENTS

Future Soviet space activities are certain to increase and will appear provocative to many observers in the United States no matter what the "real" explanations may be. The Soviets will be undertaking "all sorts of operations at a level substantially higher than we're going

to be involved in." The Soviets are reportedly doing research and development into directed energy weapons, and at least one participant gave "considerable credence" to the notion that the Soviets might launch a space laser later in this decade. Such a device, rather than an incremental refinement of their co-orbital interceptor, would be required to deal with the American target set which has many satellites in very high orbits.

Another panelist cautioned that there has been, at times, considerable misrepresentation of the Soviet space program. "They may be working on lasers," he said, and "they cer-

tainly work on space." However, there has been "no significant, no credible report" of Soviet space-based lasers. "They could put a laser into space, just as we could," he continued, but it would be "militarily insignificant."

One participant questioned the relevance of speculating about Soviet motivations and developments, and of comparing the Soviet and American systems. "Useful as [that process] might be if better answers were available," he felt, it turns out "not to be a particularly illuminating way to go" in the present circumstances. "Maybe it's a diversion that really isn't very helpful at all."

DIPLOMATIC AND POLITICAL

SOVIET PERCEPTIONS

The Soviets currently say they see the U.S. strategic buildup as representing a desire to achieve and maintain a first-strike capability. Looking for means of countering this across-the-board buildup, the Soviets could see development of their ASAT weapons system as being an effective way to put very significant pressure on the United States with very little investment.

A panelist, attempting to view the American strategic rearmament program from the Soviets' "rather paranoid perspective," noted that the MX, the Trident D-5, and the Pershing II missiles are seen as being the "workhorses" of this presumed preemptive attack. Enduring command and control systems and ASAT weapons would fulfill vital support roles. If the United States were to pursue ballistic missile defense, it would be perceived, from this viewpoint, as enhancing a first strike posture by threatening to blunt Soviet retaliation.

American arms control overtures are also seen by the Soviets as supporting a U.S. first-strike capability, explained the panelist. Our proposals, which would have the effect of reducing Soviet force levels while not constraining the types of weapons programs we are

undertaking, would just make it easier for us to undertake a first-strike attack.

POSSIBLE POLICY

The Soviets have stated their interest in resuming ASAT negotiations with the United States. They have been getting diplomatic credit for taking the initiative in promoting space arms control. The Soviets in 1981 and again in 1983 brought draft ASAT treaties before the United Nations. A major factor which seemed to have been a damper on U. S.-U.S.S.R. progress in the 1978 and 1979 ASAT negotiations had been the People's Republic of China's nonaccession to the Outer Space Treaty of 1967. After the OTA workshop had concluded, one of the participants informed OTA that the PRC had indeed acceded to the Outer Space Treaty as of December 1983—an event "of great importance."

Panelists noted that the Soviets have several incentives to negotiate an ASAT treaty with the United States. One is the argument "so frequently employed in American arms control negotiations: 'sure, we can make that proposal because, even though it might not be a good thing if it were accepted, we can count upon the Americans to not accept it simply because we propose it.'" Alternatively, and

contrary to their seeking to engage in an ASAT race to pressure the United States, the Soviets have an interest in limiting ASAT technology because that is an area where the United States might be able to excel. The Soviets are concerned that "we're going to push them into a technological race in areas where we have some advantage."

The Soviets have changed their public position since 1981. At that time, they would have permitted existing ASAT systems to remain under a treaty. Now, they claim that the U.S. weapon is too much more capable than their own to permit such an arrangement, and they will likely seek to ban it or else demand the right to respond with at least as capable a system of their own. A panelist noted that, should the Soviets seek to mirror the U.S. ASAT by deploying an air-launched equivalent, their BACKFIRE bomber would be a "splendid machine" for that purpose. It is large, fast, maneuverable, and can climb to high altitudes; BACKFIRES and their crews and logistical support exist in quantity.

The 1983 Soviet draft ASAT treaty modified or removed many of the features of the 1981 draft which had been considered objectionable from the American point of view. In particular, it did not include explicit objection to the U.S. space shuttle. The Soviets do not find the space shuttle to be an object of "fear and loathing," said a panelist. He dismissed the idea that, using the space shuttle, the United States might "swallow one of their satellites and bring it back to Los Angeles or somewhere and dissect it." "I would strongly suggest that we not try that," he continued. "The first time we try it, we will have three shuttles instead of four."

However, Soviet attitudes concerning the shuttle might very well be modified by use of the shuttle for anti-satellite experiments or tests. *Aviation Week and Space Technology* articles cited at the workshop report that anti-satellite related activity is scheduled for future shuttle missions. Although the Soviets have

indicated an understanding of the importance placed by the United States on protecting shuttle activities, including those involving military support, it was felt at the workshop that their tolerance would not extend to active ASAT experiments. One panelist felt that, in reaction to U.S. ASAT activity (shuttle-related or otherwise), the Soviets may go so far as to challenge such long-established precepts as right of overflight of Soviet territory by military-support space systems.

Other panelists made the observation that it would be "very surprising" if the Soviets, in concluding an ASAT treaty, would be prepared to give up the capability to attack elements of a strategic weapons system based in space. This would apply in particular to space-based elements of a strategic defensive system.

A panelist noted that by vigorously pursuing space activities and at the same time seeking space arms control negotiations with the United States, the Soviets could be indicating that they would like to draw up some rules of behavior which would permit them to expand their space activities in a way that is "reasonably safe and reasonably in concordance with what we want to do." Lack of significant progress on their co-orbital ASAT should not be taken as indicative of a desire for arms control. "I don't think that it's useful or that it's likely to succeed to rest the case for arms control on evidences of Soviet restraint. . . . They will restrain themselves when they see a political purpose to it, and the arms control agreement or other agreements provide the political purpose for it." Without disagreeing, another panelist cautioned against attributing to the Soviets the same policy or operational doctrine concerning ASATs as the United States holds. "We have a notion of what we think ASAT development or ASAT arms control would do within the context of American security policy . . . [but] it is not obvious to me that they are going to make those judgments in the same way we do."