
Chapter 5

ASAT Arms Control: History

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ASAT Arms Control: History

INTRODUCTION

This chapter discusses the constraints on ASAT development imposed by the treaties and agreements currently in force. It also briefly examines the history of ASAT weapons development and deployment, and describes the previous attempt by the United States and the Soviet Union to conclude a treaty further restricting such weapons. The issue of ASAT weapons and ASAT arms control, a politically volatile topic, has stimulated considerable interest in the U.S. Congress over the last several years; this chapter also discusses the history of the major pieces of legislation in the 97th, 98th, and 99th Congresses (1981-85) which concerned ASAT negotiations and weapons development.

Chapter 4 examined how certain passive and active ASAT countermeasures might contribute to U.S. national security and provide protection for critical space assets. Building on the historical background presented in this chapter, chapter 6 will examine the contribution that ASAT arms control might make to these same goals, analyzing a number of potential ASAT arms control regimes and identifying those which might be appropriate for the United States to pursue. The interaction between technical countermeasures and arms control is examined in chapter 7.

CONSTRAINTS IMPOSED BY TREATIES AND AGREEMENTS IN FORCE

To evaluate future space arms control measures it is first necessary to understand the constraints that existing treaties and other international agreements place on military space activities. No single treaty fully specifies which space activities are allowed and which prohibited, and existing agreements do not apply uniformly to all countries. All nations are presumably bound by the provisions of the Charter of the United Nations,¹ customary international law, and the "general principles of law recognized by civilized nations." States

party to the 1967 Outer Space Treaty² and the Limited Test Ban Treaty³ accept additional restrictions on their space activities. The United States and the Soviet Union agreed bilaterally in the context of SALT I (the ABM Treaty⁴ and the Interim Agreement to limit offensive arms) not to disturb the function of satellites used to verify compliance with those treaties and to forgo the development of space weapons to counter ballistic missiles. The relevant provisions of these instruments are discussed below.

¹ As a general rule, only states party to a treaty are bound by its terms. An exception to this rule appears in Article 2 (6) of the U.N. Charter which provides: "The Organization shall insure that states which are not members of the United Nations act in accordance the Principles (of the Charter) so far as may be necessary for the maintenance of international peace and security." Charter of the United Nations, 1970 Yearbook of the United Nations, p. 1001. See also: Ian Brownlie, *Principles of Public International Law* (3d ed., 1979).

² Statute of the International Court of Justice, Art. 38, 1970 Yearbook of the United Nations, p. 1013.

³ "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies," 18 U.S.T. 2410; T. I.A.S. 6347.

⁴ "Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water," 14 U. S.T. 1313, T. I.A.S. 5433.

⁵ "Treaty Between the United States and the U.S.S.R. on the Limitation of Anti-Ballistic Missile Systems," Oct. 3, 1972, 23 U.S.T. 3435, T. I.A.S. 7503.

Charter of the United Nations⁶

Article 2(3) of the U.N. Charter directs nations to "settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered." Article 2(4) requires that nations "refrain . . . from the threat or use of force . . . in any . . . manner inconsistent with the purposes of the United Nations." It could be argued that these statements and other general principles of customary international law in some ways inhibit the *use* of ASATs.⁷

It is important to note that the responsibilities imposed by Article 2 of the U.N. Charter are modified by Article 51, which states, "Nothing in the present charter shall impair the inherent right of individual or collective self-defense." Taken together, Articles 2 and 51 do indicate general international censure of the use of force, but do not limit specific weapon systems.

Limited Test Ban Treaty⁸

The Limited Test Ban Treaty of 1963 prohibits nuclear weapons tests "or any other nuclear explosion" in outer space, as well as in the atmosphere or under water. The treaty therefore prohibits the testing, in space, of exotic ASAT weapons that would derive their power from a nuclear explosion⁹—a consequence probably not anticipated by the treaty's drafters. The Limited Test Ban Treaty would not limit the development or testing, on Earth

⁶Supra, note 1.

⁷Terrestrial international law is explicitly extended to space by Article III of the 1967 Outer Space Treaty, which states that the exploration and use of outer space shall be conducted "in accordance with international law, including the Charter of the United Nations."

⁸Supra, note 4.

⁹An additional limitation on nuclear-pumped space weapons can be found in the "Threshold Test Ban Treaty" of 1974. Article 1 prohibits tests of nuclear weapons greater than 150 kilotons in yield, banning even underground testing of any nuclear-driven weapon requiring an explosion larger than that. The Threshold Test Ban Treaty was signed by the United States but has yet to be ratified. "Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Underground Nuclear Weapon Tests," reprinted in, *Arms Control and Disarmament Agreements*, U.S. Arms Control and Disarmament Agency (1982 cd.), p. 167.

or in space, of other nonnuclear components for such weapon systems. The power source could be tested underground on Earth,¹⁰ as are other nuclear weapons, and the nonnuclear components could be tested separately in space.

The 1967 Outer Space Treaty¹¹

Article III of the Outer Space Treaty states that space activities shall be carried out in accordance with international law "in the interest of maintaining international peace and security and promoting international co-operation and understanding." This Article expresses the sentiment of the drafters that space be used to benefit mankind and contribute to peace.

In contrast to the general language of Article III, Article IV of the Outer Space Treaty establishes a clear prohibition against placing "in orbit around Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction."¹² Orbiting weapons using nuclear explosions for power would presumably be included. This provision does not limit ground-based ASATS or ASATS which use conventional explosives or other means to destroy a target. Neither does it ban nuclear-armed "pop up" ASAT interceptors that ascend directly to their targets without entering into orbit.¹³

¹⁰Subject to other treaty limitations—see previous note.

¹¹Supra, note 3.

¹²According to Ambassador Arthur Goldberg, chief U.S. negotiator of the Outer Space Treaty, weapons of mass destruction include "any type of weapon which could lead to the same type of catastrophe that a nuclear weapon could lead to" (Hearings Before the Senate Foreign Relations Committee on Executive D, 90th Cong., 1st sess., p. 23.) In 1948, the U.N. Commission for Conventional Armaments advised the Security Council that the term 'weapon of mass destruction' would include, "atomic weapons, radio-active material weapons, lethal chemical and biological weapons, and any weapons developed in the future which have characteristics comparable in destructive effect to those of the atomic bomb or other weapons mentioned above." (Resolution adopted by the Commission for Conventional Armaments at its 13th meeting, Aug. 12, 1948. U.N. Security Council, S/C.3/32/Rev. 1, Aug. 18, 1948.)

¹³Testing of such weapons which involved detonating nuclear warheads in space would be banned by the Limited Test Ban Treaty.

Article IX of the Outer Space Treaty directs nations to “undertake appropriate international consultations” before proceeding with any activity that might cause “potentially harmful interference with the activities of other states in the peaceful exploration and use of outer space.” It is possible to argue that states developing ASATS (weapons *intended* to cause “harmful interference”) should do so only after “appropriate international consultations.” Nonetheless, the vague wording of Article IX and the forced nature of such an interpretation reduce the Article’s value as an arms control provision.¹⁴

Taken together, the provisions of the Outer Space Treaty afford satellites some measure of legal protection against attack. The precise nature of this protection is unclear since the treaty was not drafted for the specific purpose of limiting deliberate hostile activities. The treaty clearly does not limit the development, testing, or deployment of nonnuclear weapons capable of interfering with satellites of other nations; moreover, the U.N. Charter provision for self-defense might be taken to permit such interference in some cases.

Strategic Arms Limitation Talks (SALT I & 11)¹⁵

The verification provisions of SALT I and II state that the parties shall use “national technical means” (NTM) of verification to

¹⁴The “Accident- Measures’ Agreement of 1971 requires the United States and the Soviet Union to “notify each other immediately in the event of . . . signs of interference with [missile warning systems] or with related communication facilities.” However, this agreement places no limitations on the development or use of ASAT capabilities. “Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War Between the United States of America and the Union of Soviet Socialist Republics,” reprinted in U.S. Arms Control and Disarmament Agency, *Arms Control and Disarmament Agreements* (Washington, D. C.: U.S. Government Printing Office, 1982), p. 159.

¹⁵Interim Agreement Between the United States of America and the Union of Soviet Socialist Republics on Certain Measures with Respect to the Limitation of Strategic Offensive Arms” (SALT I) reprinted in, *Arms Control and Disarmament Agreements*, U.S. Arms Control and Disarmament Agency (1982 ed.), p. 139.; “Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms” (SALT 11), reprinted in U.S. Arms Control and Disarmament Agency *Arms Control and Dis-*

monitor adherence to the Agreements. NTM is understood, though not explicitly specified, to include certain reconnaissance satellite systems. The SALT Agreements further state that “Each Party undertakes not to interfere with the [NTM] of the other Party” as long as these assets are operated “in a manner consistent with generally recognized principles of international law.” The SALT Agreements implicitly sanction the use of satellites for verification of treaty compliance and provide some measure of protection against peacetime attack on these assets. These Agreements do not, however, restrict the development, testing, or deployment of ASAT systems capable of attacking NTM. In addition, whatever legal protection these Agreements provide is limited to systems used to verify the SALT Agreements. Other space systems used for combat support during hostilities would not be protected under the SALT provisions.

Article IX of SALT II prohibits the development, testing, or deployment of “systems for placing into Earth orbit nuclear weapons or any other kind of weapons of mass destruction, including fractional orbital missiles.” This provision was included to limit the development of Fractional Orbital Bombardment Systems (FOBS), in which missiles enter partial Earth orbit and fly the long way around the Earth rather than taking the much more direct trajectory of normal ICBMS. However, this provision could also be read as expanding the prohibition of Article IV of the Outer Space Treaty. Whereas Article IV prohibits only the act of orbiting nuclear weapons, Article IX of SALT 11 would seem to prohibit in addition the development, testing and deployment of systems (e.g., launchers) to accomplish the orbiting of these weapons. So interpreted, Article IX could create an additional legal barrier to the development of

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armament Agreements (Washington, DC: U.S. Government Printing Office, 1982), p. 246.

The completed SALT 11 agreement was signed by President Carter and General Secretary Brezhnev on June 18, 1979. Although Senate consent to ratification has not been given, Presidents Carter and Reagan both declared that they would do nothing to jeopardize the treaty as long as the Soviet Union abided by it.

orbital, nuclear-pumped, directed-energy weapons.

Anti-Ballistic Missile (ABM) Treaty¹⁶

In the ABM Treaty, the United States and the Soviet Union agreed not to deploy anti-ballistic missiles except under the very limited conditions set forth in the treaty.¹⁷ Each party also undertook not to “develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based.”

The distinction between advanced ASAT and BMD technologies is not always clear. As noted by Secretary of Defense Weinberger in a report to Congress, I^a directed-energy weap-

¹⁶ Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems, ” supra, note 5.

“Article III limits each side to two fixed, ground-based ABM deployment areas (later reduced to one), each of which has limitations on radar facilities and interceptors and launchers. Agreed Statement D provides that should ABM systems based on other physical principles than missile interceptors be developed in the future, these would be subject to discussion and agreement. Unless such systems were explicitly permitted by future agreement, they would continue to be banned.

¹⁷C. Weinberger, *Fiscal Year 1985 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, February 1984), p. 263.

ons “could perform a variety of missions, such as antisatellite or ballistic missile defense.” For the purposes of the ABM Treaty, “an ABM system is a system to counter strategic ballistic missiles or their elements in flight trajectory. “ Therefore, ASAT weapons would be prohibited by the ABM Treaty if they were capable of countering strategic ballistic missiles. * Such systems are banned unless they are fixed, land-based and deployed at permitted sites. The testing of ASAT weapons of lesser capability would not be inhibited by the treaty. If an ASAT weapon became capable of intercepting missiles, it would fall within the terms of the ABM treaty. This capability test includes future systems having components “based on other physical principles” than those of the ABM system components (interceptors, launchers, and radars) described in Article 11 of the treaty. However, the ABM Treaty does not control highly capable ASAT systems lacking ABM capability, and it does not clearly indicate how such capability is to be inferred.

*The ABM Treaty is discussed in greater detail in OTA's report, *Ballistic Missile Defense Technologies*, OTA-ISC-281, app. A.

INTERNATIONAL POLITICAL BARRIERS TO ASAT DEVELOPMENT

Although there are few clear international legal barriers to ASAT development, the desire of the United States to remain in some way responsive to international opinion creates certain inhibitions to the unrestrained pursuit of weapons that are based or operate in space. In the United Nations and other international fora, the United States and, to a lesser extent the Soviet Union, have been criticized for their military activities in space. Some view the “militarization” or “weaponization” of space as breaking a de facto political taboo; others see it as a violation of customary international law. Some of our allies, responding to strong domestic political pres-

ures to limit the arms race, see U.S. and Soviet cooperation in controlling space weapons as one means to reduce international tension. It is important to note, therefore, that there may be a significant political or diplomatic cost to developing space weapons.

Opposition to “space weapons” derives, in part, from the belief that space is a unique environment which must be preserved for “peaceful” activities and should be responsive to international controls. The “uniqueness” of space is seen as deriving from the fact that some space activities, such as remote sensing and satellite communications are inherently

global in effect; i.e., they pass over the territory of other countries and may require international coordination, such as frequency allocation. These characteristics have resulted in the development of a number of successful international institutions such as the International Telecommunication Union (ITU), the International Telecommunication Satellite Organization (INTELSAT), and the International Maritime Satellite Organization (INMARSAT).

The fact that certain space activities have been the subject of international controls has fostered a belief among some that all space activities should somehow require international consent. In this view, an unrestrained arms race between the United States and the Soviet Union in space is seen as threatening the interests of nations not having strong space programs as well as being a threat to peace.

The United Nations, and in particular its Committee on the Peaceful Uses of Outer Space (COPUOS), has been responsible for five international treaties dealing with space. Each of these treaties emphasizes to some degree the necessity that the exploration and use of space be for "peaceful purposes. In addition, many world leaders (including every President of the United States since Eisenhower), scholars, and jurists have, since the beginning of the space age, emphasized the unique nature of space and its ability to contribute to peace and the common good.

Having been nurtured for over 25 years, the idea that space is a unique environment which should be used for peaceful purposes has come to be considered by some to be a principle of customary international law. As a result, the development of weapons which would operate in or through space has met with strong opposition in international fora.

The 1982 General Assembly Resolution on the "Prevention of an Arms Race in Outer Space" reflects this international concern. 'g The Resolution reaffirms the belief of the General Assembly that "space [activities] should be for peaceful purposes and carried on for the benefit of all peoples," and notes "the important and growing contribution of satellites for . . . the verification of disarmament agreements and . . . their use to promote peace, stability and international cooperation." Pointing out the "threat posed by anti-satellite systems and their destabilizing effect for international peace and security," the Resolution urges all states "to contribute actively to the goal of preventing an arms race in outer space and to refrain from any action contrary to that aim." Finally, it requests the U.N. Committee on Disarmament to consider "the question of negotiating effective and verifiable agreements aimed at preventing an arms race in space.

"U. N.G.A. Dec. A 36192, Aug.11.1982.

ASAT NEGOTIATIONS—PAST AND PRESENT

Background

The first test of a weapon against a satellite was conducted by the United States in 1959 when a Bold Orion missile launched from a B-47 aircraft successfully passed within 20 miles of the U.S. Explorer VI satellite as it passed over Cape Canaveral. In 1963 and 1964, the U.S. Army operated a system of nuclear-armed direct-ascent ASAT interceptors on Kwajalein Atoll in the Pacific Ocean.

From 1964 until 1970, another such system was maintained on Johnston Island by the Air Force; this system was formally decommissioned in 1975.²⁰

²⁰(Marcia Smith, " 'Star Wars': Antisatellites and Space-Based BMD" (Washington, DC: Library of Congress, Congressional Research Service, Issue Brief 11381123, Nov. 26, 1984); Paul Stares, "Deja Vu: The ASAT Debate in Historical Context," *Arms Control Today*, December 1983, p. 2.

The Soviet Union initiated a series of ASAT tests in 1968 which continued through 1971.²¹ Although the United States suspected that the Soviets were developing an "inspect and destroy" capability, this system was not seen as posing so significant a threat to U.S. assets that a response was necessary. However, when the Soviets conducted another series of ASAT tests between 1976 and 1978, U.S. officials began to express concern.

The Carter Administration adopted a "two-track" policy. In March 1977, President Carter announced that he had suggested to the Soviets that "we forgo the opportunity to arm satellite bodies and also to forgo the opportunity to destroy observation satellites."²² Also in that month, the Department of Defense announced that U.S. military space programs were being accelerated.²³

1978-79 Negotiations

The Soviets responded positively to Carter's proposal for ASAT negotiations and in March 1978, agreement was reached on an exploratory meeting. Three rounds of the ASAT limitation talks were held: June 8-16, 1978, in Helsinki; January 23-February 16, 1979, in Bern; and April 23-June 15, 1979, in Vienna. The third round of talks ended when the two sides felt they had gone as far as they could without further consultation and study in their respective countries.²⁴ According to Ambassador Robert W. Buchheim, head of the U.S. delegation for most of the 1978-79 ASAT talks, the two delegations agreed that when either decided that it was ready to resume active negotiations, the other party would be so notified through diplomatic channels.²⁵ Al-

²¹ *Soviet Space Programs: 1976-80*, Committee Print, Senate Committee on Commerce Science and Transportation, 97th Cong., 2d sess., December 1982, p. 184.

²² *The Washington Post*, Mar. 10, 1977, p. A4.

²³ *Ibid.*

²⁴ Lynn F. Rusten, "Soviet Policy on Antisatellite (ASAT) Arms Control" (Washington, DC: Library of Congress, Congressional Research Service, 84-670-S, June 22, 1984), p. 1.

²⁵ "Arms Control and the Militarization of Space," Hearings Before the Subcommittee on Arms Control, Oceans, International Operations and Environment of the Committee on Foreign Relations on S.J. Res. 129, U.S. Senate, 97th Cong., 2d sess., Sept. 20, 1982, pp. 54-55.

though neither side formally withdrew from the negotiations, after the Soviet invasion of Afghanistan, the U.S. refusal to ratify the SALT II Treaty, and a general deterioration of U.S.-Soviet relations, discussions never resumed.

The 1978-79 talks did not result in an ASAT arms control agreement; however, they did clarify some of the concerns of the two parties. The talks focused on two main topics: limits on ASAT use, and limits on the development of ASAT capabilities.²⁶

During the 1978-79 negotiations, as now, the different status of the U.S. and Soviet ASAT programs was a substantial impediment to progress. The Soviet ASAT system was considered by the United States to be "operational," whereas the potentially more capable American system had yet to be tested. A limited moratorium or treaty would have given the United States time to conduct ground-based research and development while inhibiting Soviet ASAT weapons tests in space. An indefinite test ban, on the other hand, might have locked the United States into a position of ASAT inferiority.

Soviet Draft Treaties

In 1981 and again in 1983, the Soviets submitted draft space weapon treaties to the United Nations.²⁷ U.S. experts disagree as to why the Soviets have continued to advocate space weapon arms control. One theory holds that the Soviet interest is not in arms control, but rather in propaganda. Since the Reagan Administration was not actively seeking limitations on space weapons, the Soviets could portray the United States as being responsible for the escalation of the arms race and the

²⁶For a more detailed discussion of the 1978-79 talks, see: Walter Slocombe, "Approaches to an ASAT Treaty," *Space Weapons—The Arms Control Dilemma*. Bhupendra Jasani (ed.) (London: Taylor and Francis, 1984), p. 149; and Lynn F. Rusten, *op. cit.*

²⁷"Draft Treaty on the Prohibition of the Stationing of Weapons of Any Kind in Outer Space, U.N. General Assembly, Dec. A/36/192, August 1981; "Treaty on the Prohibition of the Use of Force in Outer Space and From Space Against the Earth, U.N.Doc.A/38/194, Aug. 26, 1983.

“militarization” of space. Another hypothesis is that the Soviets have a genuine interest in limiting ASAT technology because this is an area where the United States would be able to excel. Since the Soviets have clearly stated their opposition to the Reagan Administration’s plans to develop spacebased BMD technologies, their interest in arms control in space—especially after March 1983—could be intended to inhibit the progress of this program.

The United States refused to participate in multilateral negotiation with the Soviets on either the 1981 or 1983 draft treaties. Whatever the true reason or combination of reasons for Soviet interest in ASAT arms control, the Soviets have used this issue—and the U.S. refusal to negotiate—effectively in their political propaganda. The Soviet position has been, until recently, that their space program has been purely peaceful in nature. Since 1958, according to Soviet Foreign Minister Gromyko, the Soviet Union “invariably stated and continues to state that space should be a sphere of exclusively peaceful cooperation.”²⁸

From an American point of view, the Soviet propaganda seems absurd since the Soviet Union has an “operational” ASAT and a very active military space program. From the point of view of many nonaligned governments, as well as important segments of the populations of our allies, the fact that the Soviet Union was as responsible for the “militarization of space” as the United States, or more so, did not lessen the culpability of the United States for refusing to negotiate. As a result, the Soviet propaganda on the “militarization” of space was initially successful in enhancing the international image of the Soviets while fostering criticism of the United States. More recently, the inability of the United States and the Soviet Union, in the summer of 1984, to come to an agreement regarding ASAT weapon and other arms control negotiations (discussed in detail

²⁸Ibid. However, on May 29, 1985, in an interview by a West German reporter in Geneva, Col. Gen. Nikolai Chervov, a senior department head on the Soviet General Staff, claimed that the U.S.S.R. had successfully developed a direct-ascent satellite interceptor similar to that tested by the United States in the early 1960s and operational until the mid-1970s.

below) served to shift some of the burden of the “militarization” issue back to the Soviets.

Since their introduction at the United Nations, a good deal of attention has been given to the language of the two Soviet draft treaties. It is useful to examine these drafts since they provide valuable insights into how the Soviets have been thinking about arms control in space.

1981 Soviet Draft Treaty

The provisions of the 1981 and 1983 Soviet draft treaties reflect the major issues raised in the 1978-79 negotiations. Articles I and III, the operative provisions of the 1981 Soviet draft treaty, state:

- I. The member states undertake not to put into orbit . . . objects with weapons of any kind, . . . and not to deploy such weapons in outer space in any other way, including also on piloted space vessels of multiple use . . .
- III. Each member shall . . . not destroy, damage, or disturb the normal functioning and not to alter the flight trajectory of space vehicles of other member states where the latter have . . . been put into orbit in strict accordance with . . . Article I.

Because it prohibited only weapons stationed in orbit, the 1981 draft would not have restricted the testing, development, and deployment of ground-based or air-launched ASATS. Accordingly, the United States and the Soviet Union could have kept their current ASAT systems and also pursued future technologies such as ground-based or air-borne directed-energy weapons. The 1981 draft treaty would, however, have prohibited the development of space-based BMD systems.

According to Article III of the 1981 draft, parties would agree not to “destroy, damage, or disturb the normal functioning and not to alter the flight trajectory of space vehicles.” Presumably, signatories to such a treaty could agree as to the meaning of the words “destroy,” “damage,” and “alter the flight trajectory.” It is less clear that a quick consensus

could be reached on what would be inhibited under the injunction against “disturbing the normal functioning.” Would this prohibit interference with ground stations or the use of electronic countermeasures such as jamming or spoofing? Had the treaty been negotiated, these issues would have certainly been the subject of great attention and possible compromise.

Article II of the 1981 proposed treaty states that space vehicles shall be used in “strict accordance with international law. This language seems to reflect the often stated Soviet belief that certain space activities—e.g., the operation of direct-broadcast satellites—are a violation of national sovereignty. However, under the terms of Article III, the only satellites that would be denied the treaty’s protection would be objects carrying “weapons of any kind.”

1983 Soviet Draft Treaty

In August 1983, when then Soviet Chairman Andropov met with several U.S. Senators he made the following statement:

... (T)he Soviet Union considers it necessary to come to an agreement on a complete ban of tests and of deployment of any space-based weapons for striking targets on Earth, in the air and in space.

Furthermore, we are ready, in the most radical way, to resolve the issue of anti-satellite weapons—to agree to eliminate anti-satellite systems already in existence and to ban creation of new ones.

At the forthcoming session of the General Assembly of the United Nations, we will introduce proposals developed in detail on all these issues.³⁶

As indicated by Chairman Andropov, on August 22, 1983, Soviet Foreign Minister Gromyko submitted a new draft treaty to the U.N. General Assembly.³⁷ The new draft was more comprehensive than the 1981 draft, and

³⁶“Dangerous Stalemate: Superpower Relations in Autumn 1983, A Report of a Delegation of Eight Senators to the Soviet Union,” Senate Dec. 98-16, Sept. 22, 1983, p. 28.

³⁷“Treaty on the Prohibition of the Use of Force in Outer Space and From Space Against the Earth,” U.N.Doc. A/38/194, Aug. 22, 1983.

in particular went beyond it in calling for a ban on all testing of ASAT systems and the elimination of all existing ASAT systems (see appendix A). However, it also repeats many of the themes of the 1981 draft and of the 1978-79 negotiations.

Article 1 prohibits the “use or threat of force in outer space and the atmosphere and on the Earth through the utilization of . . . space objects” and the “use or threat of force against space objects.” The “use or threat of force” language echoes the language of Article 2 of the U.N. Charter. Since by the terms of Article III of the Outer Space Treaty, the U.N. Charter already applies to space, it is unclear what this provision would add to existing international law. Article I does make it clear that: 1) space objects are not to be used to threaten objects in “outer space and the atmosphere and on the Earth”; and 2) space objects themselves are not to be threatened. This article would prohibit threats from space-based assets—e.g., ASAT or BMD weapons—and threats to space-based assets, whether from ground-, air-, sea-, or space-based systems.

Article 2 has five sections. Section 1 prohibits testing and deploying space-based weapons; this goes well beyond the simple “no-use” provision of the 1981 draft, which is repeated in section 2. Section 3 repeats the prohibition of the 1981 draft against destroying, damaging, disturbing the normal function or changing the flight trajectory of space objects of other states.

Under section 4 of Article 2, parties agree not to “test or create new anti-satellite systems and to destroy any anti-satellite systems that they may already have.” There is no attempt in the treaty to define what constitutes an “anti-satellite system.” Presumably, it would include both the proposed U.S. and current Soviet orbital interceptors. It is unclear how systems, such as the Soviet GALOSH ABM, which might have some ASAT capability, would be dealt with under the draft treaty.

Section 5 of Article 2 prohibits the “test or use of manned spacecraft for military, includ-

ing antisatellite, purposes. " Because of the limitations that this would place on the U.S. Space Shuttle, it is unlikely that the United States would agree to such a provision. In any case, since the SALT agreements allow verification by "national technical means" (NTM) and the Shuttle is the launch vehicle for Government payloads—including satellites used for NTM—this provision would seem to conflict with current Soviet and U.S. agreements.

Congressional Interest in ASAT Arms Control and Executive Response

Following the introduction of the two Soviet draft treaties, the Reagan Administration expressed no interest in negotiating these or any other limitations on ASAT weapons. As time passed, Members of Congress in both Houses began to apply pressure on the Administration to halt ASAT testing and to begin negotiations with the Soviets. This pressure was applied most effectively in amendments to the Department of Defense authorization and appropriations bills.

The following resolutions concerning space weapons were introduced in the 97th Congress (1981 -82)." None of them were reported out of committee or passed by either House:

- Senate Resolution 129 (introduced by Pressler, R-S. Dak.) calling for resumption of ASAT limitations talks.
- Senate Executive Resolution 7 (Pressler), calling for negotiation of a protocol to the 1967 Outer Space Treaty that would provide a complete and verifiable ban on ASAT development, testing, deployment, and use.
- Senate Resolution 488 (Matsunaga, D-Hawaii), calling for talks with the Soviet Union concerning the possibility of establishing a weapons-free international space station.

³¹ For a more detailed history of congressional activity during the 97th and 98th Congresses, see Marcia S. Smith, " 'Star Wars': Antisatellites and SpaceBased BMD" (Washington, DC: Library of Congress. Congressional Research Service. Issue Brief IB81 123, Nov. 26, 1984).

- House Joint Resolution 607 (Moakley, D-Mass. and 29 cosponsors), calling for the immediate negotiations for a ban on space weapons of any kind.

The number of bills and resolutions on space weapons introduced in the 98th Congress (1983-84) rose dramatically, with all but one dying in committee." The exception was S. J.Res. 129 (Pressler and 28 others), which was reported favorably out of the Senate Foreign Relations Committee and significantly modified before being introduced, and later withdrawn, as an amendment to the fiscal year 1985 DOD authorization bill. A resolution suggesting that international cooperation in space be pursued as an alternative to the arms race was passed by Congress and signed into law (S. J.Res. 236; Public Law 98-562), but only after most of the language concerning the arms race had been deleted. The most important actions of the 98th Congress resulted from amendments to the DOD authorization and appropriation bills.

The Fiscal Year 1984 DOD Authorization Bill

While the House of Representatives was debating the fiscal year 1984 DOD authorization bill (H.R. 2969), two amendments concerning ASAT weapons were introduced. The first, introduced by Representative George Brown (D-Calif.), would have denied procurement funding for the ASAT weapon; the second, introduced by Representative Seiberling (D-Ohio), would have prohibited the flight testing of the ASAT until authorized by Congress. Both amendments were defeated.

In the Senate, an amendment introduced by Senator Tsongas and unanimously passed prohibited the expenditure of funds for tests of

³² Legislation not reported from committee in either House or Senate:

Legislation Opposed to Space Weapons: H.J. Res. 87 (Kastenmeier, D-Wis.); H.J. Res. 120 (Moakley, D-Mass. and 130 others); S. J. Res. 28 (Tsongas, D-Mass. and 8 others); H. J. Res. 523 (Dicks, D-Wash. and 58 others) and 524 (Dicks and 55 others); H.J. Res. 531 (Brown, D-Calif. and 96 others).

Legislation in Favor of Space Weapons: S. Res. 100 (Wallop, R-Wyo. and 14 others); S. 2021 (Armstrong, R-CO10.I; H. Res. 215 (Whitehurst, R-Va.), H. Res. 259 (Bennett, D-Fla. and 17 others); H. R. 3073 (Kramer, R-CO10. and 13 others)

Source: Smith, op.cit.; and Library of Congress SCORPIO database

explosive or inert ASAT weapons (i.e., exempting directed-energy weapons) against objects in space, unless the President determined and certified to Congress that: 1) the United States was endeavoring in good faith to negotiate a treaty with the Soviet Union for a mutual, verifiable, and comprehensive ban on ASATS; and 2) that pending such an agreement, such tests were necessary for the national security.

The Fiscal Year 1984 DOD Appropriation Bill

Following a proposal by Representative McHugh, the House Appropriations Committee deleted the fiscal year 1984 ASAT procurement funds pending a report from the President on his policies regarding arms control in space. The Senate Appropriations Committee took no similar action, but during floor debate, the Senate adopted an amendment introduced by Senator Tsongas requiring the President to submit a report on the national security implications of the Strategic Defense Initiative.

In the course of the House and Senate conference on the appropriations bill, the conferees agree to provide \$19.4 million for advance procurement for the ASAT program as proposed by the Senate, instead of no funds as proposed by the House. However, the conferees direct that these funds not be obligated or expended until 45 days following submission to Congress of a comprehensive report on U.S. policy on arms control. The appropriations bill, as amended, was passed by both Houses and signed into law (Public Law 98-212).

President Reagan's March 1984 Report on ASAT Arms Control

On March 31, 1984, the Reagan Administration issued its "Report to the Congress on U.S. Policy on ASAT Arms Control," thus satisfying the requirements of the fiscal year 1984 DOD appropriation bill. The report stated that the Administration was "studying a range of possible options for space arms control with a view to possible negotiations with the Soviets." However, it concluded that "no arrangements or agreements beyond those already governing military activities in outer

space have been found to date that are judged to be in the overall interest of the United States and its Allies." The report stated that the search for effective ASAT arms control was impeded by the "difficulties of verification, diverse sources of threats to U.S. and Allied satellites and threats posed by Soviet targeting and reconnaissance satellites which undermine conventional and nuclear deterrence," and it emphasized the necessity for the development of a U.S. ASAT weapon.

The Fiscal Year 1985 DOD Authorization Bill

When considering the fiscal year 1985 DOD authorization bill, the House approved an amendment introduced by Representative George Brown. The amendment prohibited the use of funds for ASAT testing against objects in space until the President certified to Congress that the Soviet Union had conducted an ASAT test after the enactment of the bill. The House later accepted an amendment (offered by Representative Gore) to the Brown amendment which limited testing until the President certified that either the Soviet Union *or another* foreign power had conducted such a test.

The Senate Armed Services Committee recommended that the fiscal year 1984 authorization language restricting ASAT tests be relaxed to permit ASAT tests against objects in space provided only that the President certified such tests to be essential for pursuing arms control arrangements. During floor debate, the Senate adopted a compromise amendment offered by Senators Warner and Tsongas that prohibited spending funds for testing ASAT weapons against objects in space until the President certified to Congress:

- that the United States was endeavoring in good faith to negotiate a mutual and verifiable agreement with the strictest possible limitations on ASATS consistent with the national security interests of the United States;
- that pending agreement on such a ban, tests against objects in space were necessary to avert clear and irrevocable harm to the national security;

- that such testing will not constitute an irreversible step which will gravely impair prospects for negotiations; and that testing is fully consistent with U.S. obligations under the ABM Treaty.

With some minor changes, the Warner-Tsongas amendment was adopted in the House and Senate conference report.

The Fiscal Year 1985 DOD Appropriation Bill

Fiscal year 1985 appropriations for the Department of Defense were included in the Continuing Appropriation Bill (Public Law 98-473). The appropriation bill, as enacted, reflects the compromise reached on the DOD authorization bill. The only differences are that no tests against an object in space are permitted before March 1, 1985, or 15 days after the President submits the required certifications, whichever is later, and no more than three tests against objects in space are permitted in fiscal year 1985.

Current Activities in ASAT Arms Control

On June 29, 1984, about 3 months after the President's March 31 report had been released, the official Soviet news agency Tass announced that the Soviet Government had offered to start talks "to prevent the militarization of outer space."³³ "To provide favorable conditions for the achievement of agreement," Tass reported that the Soviet Union was prepared, "to impose on a reciprocal basis a moratorium on the tests and deployment of these weapons, starting with the date of the opening of the talks."³⁴ The Soviets suggested that such meetings should take place in Vienna in September 1984.

In response, the Reagan Administration stated that it was now ready to "discuss and seek agreement on feasible negotiating approaches which could lead to verifiable and effective limitations on antisatellite weapons."³⁵

³³"Soviet and U.S. Statements on Space Weapons Negotiations," *New York Times*, June 30, 1984, p. 4.

³⁴*Ibid.*

³⁵*Ibid.*

The Administration also announced that in addition to discussing space weapons it intended "to discuss and define mutually agreeable arrangements under which negotiations on the reduction of strategic and intermediate range nuclear weapons can be resumed."³⁶ However, the Administration stressed that there were "no preconditions on the U.S. willingness" to discuss the entire range of arms control issues.

The Soviets objected to discussing strategic and intermediate-range missiles at the same time as space weapons. The Soviets proposed that the parties publish a joint public announcement that would define the purposes of the talks as being limited to the subject of space weapons and would endorse the concept of a moratorium on testing. The United States responded that it was prepared to talk about space weapons but that it was not prepared to agree to a moratorium.³⁷ The Soviets rejected the U.S. position and declared that it made the talks "impossible."³⁸ Although the U.S. Administration sent new messages modifying and "clarifying" its initial stand, these too were spurned by the Kremlin.

In the weeks following the initial exchanges there was little communication between the parties. The real argument seemed to be over which side would take the blame for refusing to negotiate. No meeting was held in September although both Washington and Moscow continued to express interest in arms control in space.

Six months later, on January 8, 1985, U.S. Secretary of State George Schultz and Soviet Foreign Minister Andrei Gromyko concluded 2 days of talks concerning the structure of future arms control negotiations. They jointly released a communique indicating that planning would commence on "the forthcoming U.S.-Soviet negotiations on nuclear and space arms" on "a complex of questions concerning space and nuclear arms, both strategic and in-

³⁶*Ibid.*

³⁷"Soviets Say U.S. Makes Talks on Space 'Impossible'," *The Washington Post*, July 28, 1984, p. A1.

³⁸*Ibid.*

intermediate range . . . The objective of the negotiations will be to work out effective agreements aimed at preventing an arms race in space" along with constraining terrestrial arms and increasing strategic stability.^{3g}

Negotiations between the United States and the Soviet Union began in Geneva in March 1985. Throughout these negotiations, the Soviet delegation has insisted that the termination of President Reagan's Strategic Defense Initiative is a necessary first step to any reduction in offensive arms. U.S. negotiators have, for their part, argued that advanced ballistic missile defense systems could provide a means by which both parties could safely negotiate deep reductions in their nuclear arsenals. As a result of this deadlock, both sides appear to remain far from agreement on anti-satellite limitations.

On August 20, 1985, pursuant to the Fiscal Year 1985 DOD Authorization Act (discussed above), the President certified that the four requirements set out by Congress had

^{3g}Statement text from *The Washington Post*, Jan 9, 1985, p. A14.

been fulfilled.⁴⁰ President Reagan's decision to test the U.S. MV ASAT weapon against an object in space has reinvigorated congressional debate on the ASAT issue.

The Soviet response to the U.S. ASAT program has fluctuated. In 1983, President Andropov implied that the U.S.S.R. would rescind its self-imposed moratorium on ASAT testing if the United States *began* its ASAT test program. Then, in May 1985, in an interview with a West German reporter, Col. Gen. Nikolai Chervov, a senior department head of the Soviet General Staff, stated that the U.S.S.R. would rescind its moratorium if the United States *completed* testing the F-15 launched ASAT weapon. Most recently, the official Soviet news agency Tass, said that if the United States "holds tests of antisatellite weapons against a target in outer space," the Soviet Union "will consider itself free of its unilateral commitment not to place antisatellite weapons in space.

⁴⁰Presidential Determination No. 85-19 of August 20, 1985, *Federal Register*, vol. 50, No. 165, Aug. 26, 1985, pp. 34441-34443.

⁴¹*Washington Post*, Sept. 5, 1985, p. A-17.