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Liability for Damage Caused by the Accidental Operation of a Strategic Defense Initiative System

Introduction

Since the Soviet Union tested the first intercontinental ballistic missile ("ICBM")\(^1\) in 1957, the United States and the Soviet Union have pursued various proposals to defeat the threat posed by nuclear armed ICBMs.\(^2\) The U.S.S.R. currently maintains a network of ground-based missiles capable, in theory, of defending Moscow against a limited ICBM attack.\(^3\) The U.S. began operating its only anti-ballistic missile system ("ABM"), "Safeguard," in 1975.\(^4\) Since deactivating the system in 1976, the U.S. has had no capability for defense against ICBMs.\(^5\)

In a national television address on March 23, 1983, President Ronald Reagan introduced a novel plan to defend the United States and its allies against nuclear attack.\(^6\) The plan, a "Strategic Defense Initiative" ("SDI"), envisioned a system of space-based devices designed to detect and destroy nuclear weapons launched against the U.S. Budget constraints, limitations on technical feasibility, and political exigencies have necessitated frequent redirection of the efforts of SDI strategists and scientists.\(^7\) Nonetheless, SDI has become a significant element in both

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3. The 1972 Anti-Ballistic Missile Treaty limits the U.S. and the U.S.S.R. to a force of no more than 200 anti-ballistic missiles. Each State's missiles were to be divided evenly between two sites. In 1974, the U.S. and U.S.S.R. modified the Treaty to permit no more than 100 missiles, all based at one site. N.Y. Times, Oct. 28, 1986, at C3, col. 4. In accordance with the Treaty, the U.S.S.R. maintains a system of GALOSH anti-ballistic missiles deployed around Moscow. See BALLISTIC MISSILE DEFENSE 198-99 (A. Carter & D. Schwartz eds. 1984).
5. Since 1976, however, the United States has developed several prototype ABM weapons. See Cochran, supra note 1, at 103-07.
7. See, e.g., N.Y. Times, July 15, 1986, at A20, col. 3 (key Senators and administration officials dispute whether aspects of an SDI program will violate the 1972 Anti-Ballistic Missile Treaty); N.Y. Times, June 15, 1986, at A1, col. 1 (the explosion of the space shuttle Challenger and other recent setbacks to the U.S. space program cause disarray in the SDI project); N.Y. Times, June 15, 1986, at A12, col. 5 (total budget
the Reagan and Bush Administration platforms. Progress toward an operational SDI system has been rapid enough for some experts to foresee deployment of certain elements of the system by the early 1990s.8

This Note discusses the issue of liability for harm caused by the accidental operation of an SDI system.9 The discussion demonstrates that, although the Convention on International Liability for Damage Caused by Space Objects (the "Convention")10 is the principal source of law, the Convention fails to resolve satisfactorily liability issues concerning an SDI system. This Note then suggests principles and rules to address these issues.

Section I provides a background to the legal instruments addressing liability for space activity. Section IIA concludes that the Convention supersedes earlier documents, constituting the most conclusive statement of current liability law, and analyzes the applicability of the Convention to harm caused by an SDI system. Section IIB proposes new rules to govern the determination and allocation of liability for harm resulting from an SDI system malfunction.

This Note assumes that the destructive elements of an SDI system are based on satellites orbiting the Earth. An inherent problem of such a system is the possibility of an attack on an object the system erroneously identifies as hostile.11 The malfunction could damage or destroy target objects and injure or kill any passengers on board.

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9. Although this Note addresses the proposed U.S. SDI system, its analysis applies to any space-based ABM system.
11. This Note does not focus, except incidentally, on an SDI system that causes damage by behaving in a completely unintended fashion, for example, by colliding with other space objects or by uncontrolled and unintended emission of harmful radiation or chemicals.

It is possible that some components of an SDI system could attack targets on the surface or in the atmosphere of the Earth. See, e.g., N.Y. Times, Feb. 15, 1987, at A1, col. 4; N.Y. Times, Mar. 7, 1985, at A1, col. 3. This Note examines only the issue of liability for harm caused to objects in space.
I. Background

A. Early Liability Law

The Soviet Union launched Sputnik I, the first artificial satellite, on October 4, 1957. The Sputnik launch came early in the International Geophysical Year, an eighteen-month period of cooperative international observation of the Earth and the upper atmosphere. These events focused international attention on space, and prompted the U.N. General Assembly to establish an ad hoc Committee on the Peaceful Uses of Outer Space ("COPUOS").

The General Assembly directed COPUOS to explore, inter alia, "the nature of legal problems which may arise in the carrying out of programs to explore outer space." COPUOS established a Legal Subcommittee, the purpose of which was to identify and recommend means of resolving legal problems associated with space activity. COPUOS's first report to the General Assembly recognized that harm might result from space activity.

COPUOS delivered to the General Assembly a series of progressively more detailed statements of law on liability for space activity. The first statement was the Declaration of Legal Principles Governing Activities in the Exploration and Use of Outer Space ("Declaration"), adopted by the General Assembly on December 13, 1963. The Declaration advanced the principle that a State bears international responsibility for its outer space activities. In 1967, the General Assembly adopted the Treaty on Principles Governing the Activities of States in the Exploration of Outer Space.

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12. In a speech before the U.N. General Assembly, U.S. Secretary of State John Foster Dulles proposed the creation of a committee "to prepare for a fruitful program on international cooperation in the peaceful uses of outer space." C. Chris- tol, THE MODERN INTERNATIONAL LAW OF OUTER SPACE 13 (1982); M. Lachi, THE LAW OF OUTER SPACE 30 (1972); G.A. Res. 1348 (XIII), Dec. 13, 1958. See Reis, Some Reflection on the Liability Convention for Outer Space, 6 J. SPACE L. 125 (1978) ("In 1959 the United States proposed that among the problems arising from space activity which merited prompt attention was the question of international liability for damages caused by the launching, flight and re-entry of payloads and associated launch vehicles"). G.A. Res. 1472 (XIV), Dec. 12, 1959 (established COPUOS as a permanent body).


16. G.A. Res. 1962 (Dec. 13, 1963). The Declaration recites, at art. XVIII, that "[e]ach State which launches or procures the launching of an object into outer space, and each State from whose territory or facility an object is launched is internationally liable for damage to a foreign State or to its natural or juridical persons by such object or its component parts on the earth, in air space, or in outer space." Matte describes a General Assembly resolution as "[legally,] no more than [a] recommendation," as compared to an international treaty, which States pledge individually to observe. SPACE ACTIVITIES AND EMERGING INTERNATIONAL LAW 84 (N. Matte ed. 1984).

17. G.A. Res. 1962, supra note 16.

B. The Convention on International Liability for Damage Caused by Space Objects

The General Assembly instructed COPUOS to give priority to the negotiation of an agreement that would "elaborate effective international rules and procedures concerning liability for damage caused by space objects and . . . ensure, in particular, the prompt payment under the terms of this Convention of a full and equitable measure of compensation to victims of such damage." The General Assembly considered neither the Declaration nor the Outer Space Treaty to be a satisfactory exposition of rules and procedures concerning liability for space activity. Conflict over the appropriate rules for determining compensation and procedures for the settlement of claims bedeviled COPUOS's attempts to produce an agreement. After protracted negotiations, however, COPUOS presented the Convention.


19. Article VII declares that "[e]ach State Party to the Treaty that launches or procures the launching of an object into outer space . . . and each State Party from whose territory an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts on the Earth, in air space or in outer space . . . ." See Dembling, Cosmos 954 and the Space Treaties, 6 J. SPACE L. 124, 132 (1978) ("[The Convention] codified art. VII of the Outer Space Treaty."); D. ZAFREN, CONVENTION ON INTERNATIONAL LIABILITY FOR DAMAGE CAUSED BY SPACE OBJECTS: ANALYSIS AND BACKGROUND DATA 7, 92d Cong., 2d Sess. (Comm. Print 1972), at 7 ("[Article VII], although identifying the responsibility of launching States, is general in character and does not provide a detailed procedural basis for presenting and considering claims"). President's Message to the Senate Transmitting the Convention on International Liability for Damage Caused by Space Objects (Mar. 29, 1972).

20. Convention, supra note 10, at Preamble. The liability established by art. II of the Convention is sometimes referred to as strict rather than absolute liability, because the Convention provides exculpatory circumstances. BRITISH INSTITUTE OF INTERNATIONAL AND COMPARATIVE LAW, CURRENT PROBLEMS IN SPACE LAW: A SYMPOSIUM 55 (1966) [hereinafter Symposium].

21. See U.N. Res. 2601B [XXIV], Dec. 16, 1969 ("[T]he Convention is intended to establish international rules and procedures concerning liability for damage caused by the launching of objects into outer space and to ensure, in particular, prompt and equitable compensation for damage"); G.A. Res. 2733B [XXV], Dec. 16, 1970, ("[U]ntil an effective convention is concluded an unsatisfactory situation will exist in which the remedies for damage caused by space objects are inadequate for the needs of the nations and peoples of the world"). The Preamble to the Convention states that the imperative for the Convention was the General Assembly's desire "that the rights and obligations pertaining to the liability for damage as laid down in the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies should be elaborated in a separate international instrument." G.A. Res. 2777 (XXVI), Nov. 29, 1971.


23. The negotiations that produced the Convention lasted eight years. See G.A. Res. 1963 (XVIII) (requesting COPUOS "to arrange for the prompt preparation of
The Convention provides rules for determining liability and exculpation from liability. It also contains procedural rules for settling claims brought under the liability provisions. The following sections briefly summarize the contents of the pertinent procedural rules.

1. Liability Provisions

The Convention mandates that a launching State is absolutely liable for damage caused by its space object and sustained either on the surface of the Earth or by an aircraft in flight. For damage inflicted by the launching State’s object upon another State’s space object, the Convention imposes a different standard of fault-based liability. States that cooperate in launching a space object are jointly and severally liable for damage caused to a third State or its nationals.

2. Exculpatory Provisions

A launching State is not liable for damage caused by either the gross negligence or the intentional act or omission of the claimant State or its nationals. The space activity of a launching State must conform with international law to permit exoneration from liability. The Convention does not apply to damage caused to nationals of the launching State.

[a] draft agreement... on liability for damage caused by objects launched into outer space...); G.A. Res. 2130 (XX) (Dec. 21, 1965) (urging COPUOS to “continue with determination” the preparation of a draft agreement on liability); G.A. Res. 2260 (XXII) (Nov. 3, 1967) (calling upon COPUOS to “continue with a sense of urgency” its draft agreement”); G.A. Res. 2601B (XXIV) (Dec. 16, 1969) (regretting COPUOS’s inability to complete a draft agreement). COPUOS presented the draft Convention to the General Assembly on Nov. 4, 1971. On Nov. 29, 1971, the General Assembly adopted the draft agreement, as revised after presentation, by a vote of 93 to 0. D. ZAFREN, supra note 19, at 10 (Canada, Iran, Japan and Sweden abstained from the vote).

24. Convention, supra note 10, at art. II. Article IV declares that an absolute liability regime also applies for damage caused by the space objects of two States to a third State if the damage occurs on the Earth or to an aircraft in flight.

The altitude at which the earth’s atmosphere gives way to outer space is disputed. D. ZAFREN, supra note 19, at 1; Matte, supra note 16, at 357-86. A definition of outer space that enjoys some international acceptance, and which this discussion applies, is the region beyond 110 kilometers above sea level. Id. at 384-86; U.N. Doc. A/AC.105/C.1/L.76 (1976); U.N. Doc. A/AC.105/C.2/L.121 (1979). An aircraft is a vehicle that travels within the earth’s atmosphere, below the level at which outer space begins. A space object is an artificial object launched from earth to fly outside the atmosphere.

25. Convention, supra note 10, at art. III. Under Article IV, the fault based standard also applies to the determination of liability for damage caused by the space objects of two States to a third State when the damage occurs in space.

26. Id. at art. V.
27. Id. at art. VI.
28. Id. at art. VI.
29. Id. at art. X. E.R.C. VAN BOGAERT, ASPECTS OF SPACE LAW 164 (1986) (“The rule that damage to the nationals of the launching State will not be within the scope of the Convention is an application of [the] traditional rule of international law... [that] [t]he relations between a State and its subjects are determined by the national legislation of the State”).
3. Claims Procedures

A State may submit a claim to a launching State without first exhausting all available local remedies. The basic means for resolution of a claim is diplomatic negotiation. Compensation for damage is determined by reference to international law and general principles of justice and equity.

If diplomatic processes fail to resolve a claim, either party may demand the formation of a Claims Commission ("Commission"). The Commission consists of an appointee of the claimant State, an appointee of the launching State, and a Chairman chosen jointly by the parties. The parties may agree to be bound by the Commission's determination of liability and damage. If they do not agree to be bound, the Commission recommends an award, which the parties must consider in good faith.

Signatories have twice invoked the Convention. The United States acknowledged its absolute liability under the Convention for damage caused by Skylab, fragments of which fell in northwestern Australia on July 11, 1979. Canada alleged Soviet liability for the costs of cleaning up debris, including radioactive material, strewn over Canadian territory by Cosmos 954. The Soviet military reconnaissance satellite disintegrated upon re-entry into the atmosphere on January 24, 1979.

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30. Convention, supra note 10, at art. XI. A State may elect to pursue local remedies, but may not simultaneously pursue both a local claim and a Convention claim under the Convention.
31. Id. at art. IX.
32. Id. at art. XII.
33. Id. at art. XIV.
34. Id. at art. XV.
35. Id. at art. XIX. The bald language of the Convention requires a signatory launching State to participate in claims commission proceedings if diplomatic negotiations fail to resolve a claim. The Convention does not indicate what measures, if any, a claimant State could take if the launching State refused to participate in a claims commission.
36. Id. at art. XIX.
38. Canada billed the U.S.S.R. for $6,026,083.56 of the approximately $14 million expended to clean up the Cosmos 954 debris. Christol, International Liability for Damage Caused by Space Objects, 74 AM. J. INT'L L. 346 (1980). See also N.Y. Times, Jan. 24, 1979, at A7, col. 1. Canada's claim was for "those costs in respect of the operations which would not have been incurred had the satellite not entered Canadian territory." Christol, supra, at 346 (citing a communique of the Government of Canada, Department of External Affairs).

Canada ultimately accepted $3 million in settlement of its claim. N.Y. Times, Apr. 26, 1981, at A49, col. 3. It does not appear that the Convention was the ultimate basis for the award. One scholar argued that "[t]he Liability Convention in its turn is inapplicable because of the narrow definition of 'damage' as contained in the Convention . . . 'loss of life, personal injury or other impairment of health; or loss of or damage to property of States or of persons . . . .'" Haanappel, Some Observations on the Crash of the Cosmos 954, 6 J. SPACE L. 147, 148 (1978). Haanappel stated that "no physical or property damage had been suffered by Canadian citizens. It also appeared that no measurable damage had been caused to the Canadian environment by the nuclear debris of the Cosmos." Id. (emphasis in original). Possibly recogniz-
II. Analysis

A. Scope of the Convention

Two analytical frameworks are useful in examining the applicability of the Convention to liability for harm caused by an SDI system. First, a review of the history and mission of COPUOS highlights the limitations on COPUOS's authority to legislate with respect to an SDI system. Second, an interpretation of the language of the Convention in light of its legislative history demonstrates further restrictions on the treaty's scope. Together, the two frameworks reveal that the Convention governs only damage that a space object was not designed to produce, and that the Convention is therefore insufficient to govern liability for SDI malfunction.

I. History and Mission of COPUOS

Both the history and the mission of COPUOS indicates that the organ was under no instruction to consider liability for malfunction of an SDI-type system, and that neither the General Assembly nor COPUOS undertook to identify legal issues peculiar to such a system. The General Assembly, for example, charged the ad hoc COPUOS with reporting on "[t]he nature of legal problems which may arise in the carrying out of programmes to explore outer space." The First Report of the ad hoc COPUOS recognized its mission as defining and delimiting liability for injury or damage which "might result from the launching, flight and return to earth of various kinds of space vehicles or parts thereof."

The use of the words "explore" and "flight" in the quoted passages demonstrates the Convention's focus on accidental harm, versus harm from space objects designed to be destructive. During the period of the Convention's negotiation, the U.S. and the U.S.S.R. concentrated on the development of communications and surveillance satellites under both military and civilian auspices. The threat of damage posed by these

40. Id. at 64 (emphasis added).
41. See Christol, supra note 38, at 368 ("The [C]onvention did not attempt to deal with all of the possible situations in which harm might result from activities in space"). During the Eisenhower Administration, "the need to preserve the principle and later practice of satellite reconnaissance was the overriding concern" shaping the U.S. view of the international law of space. P. Stares, The Militarization of Space 51 (1985). Since 1957, the United States has conducted research on anti-satellite weapons, but has not yet deployed them. Id. at 57-58. "Project Defender," begun in 1958, envisioned a system of space-based devices to detect ICBMs. N.Y. Times, Oct. 28, 1986, at C3, col. 1. The devices would launch homing projectiles to collide with and destroy enemy missiles. Id. The conduct of such a top-secret, high-priority project would have likely discouraged the U.S. from supporting instruments that might impair its ability to pursue research and development.

Henry Cabot Lodge, U.S. Ambassador to the U.N., identified "in the field of disarmament . . . effective steps to explore methods whereby we can assure that outer
space objects during the 1960s and early 1970s was wholly incidental to their mission. 42 Contemporaneous analyses emphasize the risk of unintended collisions of the objects, their parts or their products with vulnerable objects. 43 In contrast to these early satellites, SDI would be composed of a vast array of space objects with an explicitly destructive mission.

Neither the U.S. nor the U.S.S.R. deployed weapons in space, and the threats posed by one space object to another were accordingly limited to either accidental collision or some harmful effect of the object's non-destructive function. 44 Examples of the latter include electrical

space will be used only for peaceful purposes” and “in the field of the peaceful uses of outer space . . . [preparation] for practicable and significant international cooperation” as the U.S.’s goals in supporting the foundation of COPUOS. 39 Dep’t State Bull. 975 (1958). Ambassador Lodge’s statement suggests that the U.S. did not consider the regulation of deployed space armaments to be the mission of COPUOS.

42. Dr. Thomas Wolfe, a RAND Corporation specialist in Soviet military affairs, remarked in 1966 that “there seems to be little evidence that the Soviets have as yet gone beyond what might be called military support types of activity in their overall space program.” Staff of Senate Committee on Aeronautics and Space Science, Soviet Space Programs, 1962-65: Goals and Purposes, Achievements, Plans, and International Implications (Comm. Print 1966). In 1968, the U.S.S.R. first tested a satellite that could destroy other satellites by exploding nearby. Id. at 22. The U.S.S.R. does not maintain such satellites in orbit, and the utility of the Soviet anti-satellite system is disputed. During the 1960s, the U.S. developed an anti-satellite system that used nuclear warheads. Id. The SDI program represents the first dedicated effort to develop a practical space weapons system. Id. at 16.

43. See H. Safavi, The Problem of Applying Territorial Law in Outer Space, in Proceedings of the Third Colloquium on the Law of Outer Space 131, 137-38 (1961) (the author apparently contemplates damage by accidental collision in observing the difficulty of determining the applicable law: “[I]n the case of a collision between two spacecraft of different nationalities in outer space. . . . There has been no international agreement yet concerning the problem of responsibilities in the case of damage caused by spacecraft. . . . [W]hen damage has been caused on the ground or in the air space of a state, it means that the spacecraft that caused it, or the object that came loose from the spacecraft, first penetrated into the air space of the country in which damage was caused”); I.H. Diedericks-Verschoor, The Convention on International Liability for Damage Caused by Space Objects, in Proceedings 15th International Colloquium on the Law of Outer Space 96, 102 n.3 (1972) (“A good example of the damage caused by spacecraft had been [advanced] in the [COPUOS Legal] Sub-Committee . . . .” in U.N. Doc. A/AC.105/C.2/SR. 131. The document states that a Japanese cargo boat had been struck and five of its crewmen injured by fragments from a space object); Symposium, supra note 20, at 37-38, 45, 49-50 (1966) (analyzing the draft Conventions submitted to COPUOS by Belgium, Hungary and the United States and concluding that the drafts apply to damage caused by accidental collisions and to “chemical, biological and radiological contamination [emitted] by returning space objects”).

There is apparently no analysis during the period of the Convention negotiation suggesting that COPUOS accounted for the possibility of destruction by accidental operation of a space object designed to attack other space objects.

44. See U.N. Doc. A/AC.105/85, Annex I (comments of the Italian delegation to COPUOS) (“[I]t is obvious that . . . two space objects can cause damage to each other only by (accidental) collision . . . . It is difficult, if not impossible, to conceive of another cause.”); D. Zafren, supra note 19, at 27 (“[A]rticle III of the Convention appears to be primarily concerned with a possible collision with space objects, although damage sustained by a space object on the Moon or other celestial body would also fall within its purview.”). Christol, supra note 38, at 356, 359:
interference, or physical damage resulting from the microwave emissions of a radar reconnaissance satellite. In sum, the character of space activity, both at the time COPUOS was founded and throughout the period of negotiation of the Convention, suggests that COPUOS's mission did not include the formulation of liability law to govern destructive military systems.45

2. Language and Legislative History of the Convention

The language and history of the Convention provide further evidence that COPUOS did not address the possibility of SDI system malfunction. Although the Convention does not explicitly exclude from its ambit liability for damage caused by an SDI system, it is clear that COPUOS did not intend for the Convention to apply to SDI systems. An examination of the principles which shaped the Convention further demonstrates that extension of the Convention to an SDI system is inappropriate.

The Convention Preamble states that the document responds to “the need to elaborate effective international rules and procedures concerning liability for damage caused by space objects....”46 Article I of the Convention defines “damage” as “loss of life, personal injury or other impairment of health; or loss of or damage to property of States or of persons, natural or juridical, or property of intergovernmental organizations.”47 Additionally, Article I defines a “space object” as “component parts of a space object as well as its launch vehicle and parts thereof.”48 The language of the Convention might be reasonably interpreted to cover an SDI system. A close analysis, however, reveals that this interpretation is incorrect.

a. The Definition of “Peaceful Uses and Purposes”

The General Assembly established COPUOS to consider issues sur-

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45. See supra note 41.
46. See Convention, supra note 10, at Preamble.
47. Id. at art. I.
48. Id.
rounding the peaceful uses of space.\textsuperscript{49} The COPUOS member states appear to have entered the Convention with the understanding that COPUOS would not attempt to substantially restrict their military space programs.\textsuperscript{50} The U.S. and the U.S.S.R., the states most active in space during the late 1950s and early 1960s, supported COPUOS with the understanding that the Committee would not constrain the military space programs that each nation conducted and planned to undertake in the future.\textsuperscript{51}

COPUOS's practice of specifying the military activities it sought to regulate reinforces the perception of the signatory states that the Convention did not address weaponry. Article IV of the Outer Space Treaty, for example, contains a prohibition on basing weapons of mass destruction in outer space.\textsuperscript{52} By contrast, the Convention does not mention any sort of military activity.\textsuperscript{53} This omission suggests that COPUOS did not intend the Convention to dictate the legal implications of a military system designed to destroy space objects. Such a conclusion is consistent, moreover, with evidence that the focus of COPUOS was on accidents involving ordinarily harmless objects. If COPUOS had intended to address the implications of an SDI-type system, the Committee's prior practice in document drafting suggests that the Convention would have contained language explicitly including such a system.

COPUOS's inclusion in the Convention of the phrases "peaceful uses of space" and "peaceful purposes" reinforces the impression that COPUOS did not address destructive military systems. One scholar suggests that the use of these phrases indicates that the instrument applies only to non-military space activity.\textsuperscript{54} In other conventions drafted by COPUOS, the Committee used the phrase "peaceful uses" to mean non-military uses. In the Outer Space Treaty, for example, Article

\textsuperscript{49} Id. at Preamble. See also supra note 12. Cheng, \textit{The Legal Status of Outer Space and Relevant Issues: Delimitation of Outer Space and Definition of Peaceful Use}, \textit{11 J. SPACE L.} 89, 98 (1983), argues that "the very name given by the United Nations to its organs dealing with space matters is indicative of th[e] pious hope [that outer space should be used only for genuinely peaceful purposes]. Thus in 1958 it set up the \textit{ad hoc} Committee on the \textit{Peaceful Uses of Outer Space}, and the following year the Committee on the \textit{Peaceful Uses of Outer Space}. . . ."

COPUOS did regulate military affairs in Article IV of the Outer Space Treaty, which prohibits stationing weapons of mass destruction in outer space. Consistent with its limited jurisdiction to legislate with respect to military activity, however, COPUOS has specifically indicated its intent to regulate military affairs on the few instances when it has done so. The Convention contains no reference to military activity.

\textsuperscript{50} See supra notes 12, 41.

\textsuperscript{51} Supra note 41. This understanding is implicit in the states' resistance to specific language respecting military activity in the Convention. The U.S. and the U.S.S.R. have agreed to narrowly prescribed limits on military activity in space. An example of such a limit is in art. IV of the Outer Space Treaty. \textit{Supra} note 18. See also supra note 41.

\textsuperscript{52} Supra note 18, at art. IV.

\textsuperscript{53} Convention, \textit{supra} note 10.

\textsuperscript{54} Cheng, \textit{supra} note 49, at 101.
III essentially prohibits *aggressive acts* in outer space.\textsuperscript{55} Article IV of the Treaty allows only *peaceful uses* of the moon and other celestial bodies.\textsuperscript{56} The Treaty defines outer space to include the moon and other celestial bodies.\textsuperscript{57} If “peaceful uses” in Article IV excluded only aggressive uses of space, and not non-aggressive, military uses, Article IV would be redundant with Article III. The only interpretation that preserves the integrity of the treaty’s language is that COPUOS intended “peaceful uses” to exclude military uses.

The Preamble to the Convention indicates twice that in preparing the Convention COPUOS intended to address issues surrounding the peaceful use of outer space.\textsuperscript{58} This choice of language reflects COPUOS’s intent that the Convention address only non-destructive space objects. This intention explicitly excludes coverage of an SDI system.\textsuperscript{59}

The United States currently interprets “peaceful uses” of space to the contrary, defining the phrase to signify “non-aggressive” rather than “non-military” uses.\textsuperscript{60} “Non-aggressive” uses comprehend military activity consistent “with the United Nations Charter and other obligations of law.”\textsuperscript{61} The United Nations Charter permits member States to act in self-defense.\textsuperscript{62} By this interpretation, one might argue that SDI’s mission is a purely defensive, peaceful use of space. Therefore, an SDI system falls within the Convention’s ambit.

The above analysis fails, however, upon closer examination.\textsuperscript{63} Today, for obvious political reasons, the U.S. desires that SDI be viewed

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\textsuperscript{55} Supra note 18, at art. III (emphasis added).
\textsuperscript{56} Id. at art. IV, para. 1 (emphasis added).
\textsuperscript{57} Id. at art. III.
\textsuperscript{58} Convention, supra note 10, at Preamble.
\textsuperscript{59} The applicability of the Convention to liability for damage produced by non-destructive military systems does not appear to be disputed. Application of the Convention does not appear to interfere with a State’s freedom to operate such systems. Moreover, to exempt non-destructive military systems from the purview of the Convention would diminish the Convention’s effectiveness by encouraging States to insulate themselves from liability by assigning some military function to each of their space objects.

The Cosmos 954 incident is the only case that allegedly involved a military space object. See supra note 38 and accompanying text. The Soviet Union did not admit that Cosmos 954 was a military reconnaissance satellite, although non-Soviet analysts concluded that the satellite’s mission was military. Id. The Soviet Union did not dispute the application of the Convention in resolving the issue of liability for damage caused by the re-entry of Cosmos 954. Id. It is important to note, however, that Cosmos 954 was not designed to be destructive, and that the damage the satellite caused was identical to the sort of damage that a non-military satellite incorporating a nuclear reactor would have caused. The Cosmos incident does not support, therefore, the proposition that the Convention applies to all damage caused by a military space object.

\textsuperscript{60} See Cheng, supra note 49, at 98-100 (surveying the development of the U.S. definition of “peaceful purposes”).
\textsuperscript{61} See supra note 41.
\textsuperscript{63} See supra note 49; Cheng, supra note 49, at 98-108.
as a defensive, peaceful use of space. This contemporary political goal of a single State, however, does not indicate that the COPUOS members intended the Convention to cover military uses of space. Moreover, evidence indicates that the U.S. entered the COPUOS negotiations with the understanding that the Convention would not affect its military space operations. Finally, even if the view that the Convention covers some military objects is correct, “peaceful uses” most likely encompasses only non-destructive military space objects (such as surveillance satellites). The definition of peaceful uses most likely intended when COPUOS promulgated the Convention is “civilian” or “civil” uses.

b. Principle of Liability

The Convention’s substantive principle of liability for damage caused in space is another important indication of its scope. Article III of the Convention requires that a State show fault before it can recover when another State damages its space object. The requirement of proof of fault, however, is inappropriate to an SDI system.

The rationale for a fault regime is that States which launch objects into space impose identical risks on each other. Absolute liability, on the other hand, is appropriate in circumstances in which an activity creates non-reciprocal risks and in which an injured party would find it difficult to prove fault. Substantial evidence and arguments support the inference that the Convention’s use of a fault principle indicates that the

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64. See supra note 41 and accompanying text.
66. See supra note 49.
67. See supra note 25.
68. See supra note 43; infra notes 69, 78, 88 and accompanying text.
69. See Foster, The Convention on International Liability for Damage Caused by Space Objects, in 10 CAN. Y.B. OF INT’L L. 137, 154-55 (1972) (“It is difficult to foresee what concept of liability other than that of fault could be applied to (such) cases. . . . The position of both parties is equal; in undertaking space activities they must implicitly be understood to have accepted the risks involved. Nor is there any reason to favor one launching state over another. . . . Further, states actively engaged in space activities are in the best position to assess the presence of fault and to adduce evidence to that end. . . .”). VAN BOGAERT, supra note 29, at 165-67 (“Absolute liability was especially [accepted in international law] for determined fields of activities which implied important risks and for which the evidence of fault was practically impossible [to acquire]. . . . Fault liability must be considered as justified, because the parties are in a position of equality with regard to their technological capacities. . . .”). G. Schrader, Liability for Damage from Space Activities, in PROCEEDINGS OF THE TWELFTH COLLOQUIUM ON THE LAW OF OUTER SPACE 86 (1970) (“[T]he greatest problem presented by [the adoption of] a theory of other than absolute liability is the difficulty of proof. The complexity of the mechanisms involved, the impossibility in many cases of obtaining the cooperation of investigative bodies, the inadequacies of discovery techniques and the lack of uniformity in national jurisprudence will all negate any theory other than absolute liability”).
70. See generally, D. Zafren, supra note 19, at 26-28.
Constitution was not intended to apply to an SDI system and cannot logically
apply to such a system.\footnote{See infra notes 72-75 and accompanying text.}

\subsection{Difficulty of proof}

The policy rationale behind the principle of absolute liability suggests
that COPUOS would have extended a rule of absolute liability to apply
to an SDI-type system if the Committee intended to address such a sys-
tem.\footnote{Id.} A State asserting United States liability for damage caused by its
SDI system would find it difficult, and perhaps impossible, to gather the
information necessary to prove fault in the design, construction or oper-
ation of the system. This difficulty would result from U.S. reluctance to
divulge information about a sophisticated military system. That the
Committee did not so extend the rule indicates that the Committee did
not intend to legislate with respect to an SDI-type system.

\subsection{Reciprocal risk}

A second indication that COPUOS did not intend the Convention to
apply to an SDI system is that the assumption of reciprocal risks which
underlies a fault principle does not apply to an SDI system. An SDI
system imposes on foreign space objects not only the reciprocal risks of
accidental collision and contamination, but also the unique risk of acci-
dental \footnote{Another argument for absolute liability brought before COPUOS was that the state
or states for whose benefit the risk was created, rather than innocent victims, should
bear the burden of loss that unavoidably accompanies space activity. See Sum. Rec.
91, at 9 (statement of the French delegate).} The non-reciprocal risks imposed by an SDI system
make the application of the Convention's rule of fault-based liability
inappropriate, and buttress the conclusion that COPUOS did not intend
for the Convention to govern liability for damage caused by the accidental
attack of an SDI system.\footnote{See supra note 69.}

\subsection{Joint and several liability}

Article IV of the Convention declares that if a State's space object dam-
ages a second State's space object, and if the interaction in turn causes
damage to a third State, then the first two States shall be jointly and
severally liable to the third State.\footnote{See Convention, supra note 10, at art. IV.}

\footnote{Statements made in COPUOS negotiations by the French delegate, U.N.
Doc. A/AC.105/C.2/SR [hereinafter "Sum. Rec."] 78, at 10; Rumanian delegate,
77, at 4-5 recognize the great difficulties claimants would face in proving fault. The
U.S. delegate adverted specifically to complexity of the evidence and to the possibil-
ity that evidence might be known only to the launching state and be impossible to
secure. Sum. Rec. 77, at 4-5. Several members urged that the extraordinary risk
posed by space activity warrants liability even if the launching State exercises the
highest degree of care. See, e.g., Sum. Rec. 50, at 6 and Sum. Rec. 79, at 5 (statements
of the Austrian delegate); Sum. Rec. 78, at 17 (statement of the Polish delegate).
Another argument for absolute liability brought before COPUOS was that the state
or states for whose benefit the risk was created, rather than innocent victims, should
bear the burden of loss that unavoidably accompanies space activity. See Sum. Rec.
91, at 9 (statement of the French delegate).}
liability is to ease the burden on the injured party by making each misfeasor fully liable for the entire claim, or for any portion thereof, and by allowing the injured party to proceed against any or all of the misfeasors. Article IV further declares that if the damage to the third State occurs on the surface of the Earth or to aircraft in flight, the first two States shall be absolutely liable.  

Joint and several liability assumes that the actors contributing to the harm of another either behaved wrongfully or assumed the risk of liability for harm to innocent third parties. A state assumes the risks of space activity by operating space objects in a manner that imposes reciprocal risks on foreign space objects. For example, a State that orbits a communications satellite assumes the risk that it may collide with a foreign satellite, causing damage to a third State. Both States assume the identical risk of collision. 

This assumption of reciprocal risks is inappropriate to the case of a space object that is attacked by an SDI system and consequently damages a third State. An SDI system imposes non-reciprocal risks on other space objects. Operation of a non-destructive space object, therefore, cannot fairly be termed an assumption of the risk that the object, after attack by a malfunctioning SDI weapon, might damage the object of another State. COPUOS's failure to fashion an exemption from the rule of joint and several liability for a State whose space object is damaged by a malfunctioning SDI system indicates that COPUOS did not intend the Convention to apply to damage caused by an SDI system.

c. Statements of COPUOS and its members

Herbert Reis, former legal advisor to the United States mission to the United Nations and chief U.S. negotiator of the Convention from 1967, has stated that the Convention is not a comprehensive statement of rules and principles of liability for activities in space:

[The] fundamental purpose [of the United States] was to do what could then be done to assure the payment of prompt and fair compensation to United States citizens who might be injured as a result of the re-entry of a foreign man-made space payload or launch vehicle. There remained a number of relatively exotic questions which the liability convention did not try to answer, and which, if a treaty were to be completed in a timely manner, had to be excluded from the negotiations.

76. Id.
78. Reis, supra note 12, at 127; see also Message from the President of the United States Transmitting the Convention on International Liability for Damage Caused by Space Objects v (92d Cong., 2d Sess., 1972) ("The purpose of the Convention is to provide reasonable assurance of the payment of fair and prompt compensation in the event that a space object of a State party causes injury or damage to the citizens of another State party. For the United States, the [Convention] seeks to provide a reliable legal basis for presenting our claims to a country whose space object has caused injury to United States citizens and a guarantee that the other country will consider the claim seriously and in good faith and will make an offer of compensation accordingly").
The statements of other COPUOS member States\(^7\) as well as the Committee speaking as a body\(^8\) indicate that COPUOS did not consider its Convention negotiations to pertain to liability for damage caused by an accidental attack by one space object on another. The history of negotiations on the draft Convention, furthermore, indicates that COPUOS directed its attention mainly toward the possibility of accidental collisions involving space objects and accidental contamination by material issued from space objects.\(^8\) U.S. proposals for Convention language also demonstrate a primary concern with space-based vehicle collisions.\(^8\)

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79. The records of COPUOS negotiations over the Convention do not indicate that any member of the Committee raised the prospect of a space object designed to destroy other objects. This is not surprising given the absence of any such system, or concerted efforts to develop such a system, during the period of negotiations and the proposition that such a system would be beyond COPUOS's power to regulate. Statements of Committee members, to the extent they reflect concern with particular means of damage, refer to the possibility of collision or contamination. See, e.g., U.N. Doc. A/AC.105/C.2/SR.108, June 27, 1968, (Statement of the Indian delegate to COPUOS indicating that negotiations assumed damage caused by the motion of a vehicle or its components, and that “[f]rom the standpoint of the victim, it mattered little whether the space object causing the damage was propelled by a conventional engine or by a nuclear reactor”); U.N. Doc. A/AC.105/C.2/SR.105, June 24, 1968 (Summary of remarks of the Soviet delegate to COPUOS) (“The agreement on liability... would be much broader in scope [than the principle of lex loci delicti commissi] because a space object might fall elsewhere than on the territory of a given state. ... In the case of collision or interference of space objects... it was agreed that the principle of fault should be accepted. ...”); U.N. Doc. A/AC.105/19, Annex II (Working Paper submitted by the Belgian delegation to COPUOS) (impliedly excluding liability for damage by the operation of a space object by suggesting “[a]n obligation to give compensation [accrues] once proof has been given that there is a relationship of cause and effect between the damage... and the launching, motion or descent of all or part of the space device....”).

80. U.N. Doc. A/8420, Annex II, Sept. 1, 1971 (Statement of the Chairman of the Legal Sub-Committee of COPUOS) (“[E]ven the peaceful exploration of space is not free from dangers to active participants in space ventures and to others who might happen to be at a place where an object returning to earth falls”).

81. See supra notes 43-44, 78-79; Foster, supra note 69, at 154-55 (“[I]t is immaterial whether the injuries are suffered through physical impact with a space object or result from biological, chemical or radiological contamination emanating from a space object”).

82. See, e.g., U.N. Doc. A/AC.105/37, Annex II (U.S. Proposed Convention, suggesting an intent to include damage only from the motion, rather than from the operation, of space objects. “The Launching State shall be absolutely liable... for damage... caused by the launching, transit or descent of all or part of a space object”; U.N. Doc. A/AC.105/C.2/L.8/Rev.2, Oct. 20, 1964 (Revised Convention Proposal) (“The launching State shall be absolutely liable... regardless of whether... damage occurs during launching, after the object has gone into orbit, or during the process of re-entry”); U.N. Doc. A/AC.105/C.2/L.8, Mar. 9, 1962 (U.S. Proposed Convention: “If objects launched into outer space collide, there shall be no liability as between states of registry or international organizations involved in the launching of such objects”).
B. Proposed Law on Liability for Damage Caused by Accidental Operation of an SDI System

Although the Convention fails to cover explicitly the scenario of harm caused by an SDI system, it does provide a legal framework adaptable to resolving disputes over such harm. Article VII of the Outer Space Treaty advances a first principle of liability: States must bear responsibility for harm their space activities cause to other States. The large number of nations that have to date ratified the Outer Space Treaty and the Convention testifies to the acceptability of this principle. The United States, by deploying an SDI system, would inevitably impose certain novel risks on other States conducting space activities. The Outer Space Treaty, the Convention, and other legal instruments bind the U.S. to respect the principle of international responsibility for harm caused by space objects. This principle obliges the United States to compensate foreign States and entities harmed by the accidental operation of an SDI system.

Proposals for new law to address harm caused by an SDI system should respond to the same concerns that prompted negotiation of the Convention: the appropriate standard of liability, the criteria for assessing proper compensation, and the mechanism by which parties may resolve claims.

1. The Appropriate Standard of Liability

Holding the United States absolutely liable if its SDI system accidentally damages a foreign State or entity is the rule most consistent with current international law. A rule of absolute liability of the United States best accounts for the unreciprocated risks an SDI system would impose on other States.

The difficulty a claimant State would have in obtaining the proof of the workings of an SDI system necessary to establish the fault of the United States also argues for a regime of absolute liability. It is

83. See supra note 19.
84. Ninety-three States have ratified the Outer Space Treaty; eighty have ratified the Convention. UNITED STATES DEPARTMENT OF STATE, TREATIES IN FORCE: A LIST OF TREATIES AND OTHER INTERNATIONAL AGREEMENTS OF THE UNITED STATES IN FORCE ON JAN. 1, 1986 299-300.
85. See Message of the President, supra note 78, at v.
86. See Christol, supra note 38, at 352-53 (surveying the bases in international common and treaty law for a norm of international responsibility and the development of the fault provisions of the Convention).
87. Supra note 70; Foster, supra note 69 at 150-54 (1972) (citing the obstacles to proof of fault and the high responsibility of a state undertaking a hazardous activity as explanations for a rule of absolute liability). A rule of absolute liability is consistent with United States domestic law, which may be reluctant to conclude that the failure of a technological system incorporating novel and complex mechanisms indicates negligence. Williams v. United States, 218 F.2d 473 (5th Cir. 1955) (rejecting res ipsa loquitur as a basis for a trial court to notice the negligence of the United States in operating a military aircraft that exploded in mid-air).
unlikely that the United States would ever disclose highly classified information on the workings of its SDI system.\textsuperscript{89} An absolute liability rule, therefore, satisfies two potentially conflicting interests. The rule allows the United States to preserve the secrecy of an SDI system, while at the same time relieving the claimant State of the difficult burden of obtaining evidence to prove fault. Absolute liability places the responsibility for harm on the United States, the State that made the initial decision to undertake a novel activity for which no amount of care or foresight may eliminate risks to innocent parties.\textsuperscript{90}

2. Joint and Several Liability

A rule of strict joint and several liability is inappropriate to an SDI system. The United States should be principally responsible for compensating States for harm caused by an SDI system to the States of their citizens. A rule that places the primary responsibility on the United States respects the principle of a State's international liability for harm caused by its space activity and allows for the allocation of responsibility by the party best able to identify the cause of a malfunction. Imposing liability on the United States satisfies the principle that "the State for whose benefit the risk was created should bear the loss unavoidably entailed in space activities rather than the random victims."\textsuperscript{91}

The U.S. would be in the best position to determine the cause of a malfunction. The U.S., by treaty or contract, could bind parties cooperating on an SDI project to indemnify the U.S. for damages paid for harm caused by the conduct of the cooperating States.\textsuperscript{92} It could also conduct indemnification proceedings to preserve the secrecy of information concerning an SDI system.\textsuperscript{93}

\textsuperscript{89} See, e.g., \textit{N.Y. Times}, July 1, 1985, at A1 (Defense Department wishes halt to U.S.-Soviet scientific exchanges that could reveal information on weaponry and state secrets); \textit{N.Y. Times}, Nov. 30, 1985, at A3 (President Reagan's pledge to share space-based ABM system with the Soviet Union opposed by officials who wish to keep technology from Soviets).

\textsuperscript{90} Foster, \textit{supra} note 69, at 151.

\textsuperscript{91} \textit{Id.} The Convention appears to assume that the launching States are the States that benefit from space activity. This assumption may not always be entirely correct. For example, a number of States not involved with the launching of a communications satellite may benefit from the satellite's operation. The extent to which States other than the U.S. will enjoy the protection of an SDI system is currently uncertain. The U.S. may also wish promises of indemnification for liability from States that did not participate in the launching of the SDI system but experience some protection from the system.

\textsuperscript{92} Since allies of the United States participate in SDI research with the expectation that they will enjoy some protection from a deployed SDI system, it seems proper by this reasoning to require allies to share responsibility for damage resulting from imperfections of a system.

\textsuperscript{93} The United States might, in negotiating for the participation of other states in SDI research, require as a condition of participation that the states agree to participate in confidential indemnification negotiations should liability accrue to the United States. \textit{See supra} notes 13, 92.
3. Exculpation from Liability

Consistent with the principles of the Convention, the U.S. should be exonerated from liability for harm caused by the gross negligence or intentional act or omission of a foreign State. For example, it is now customary for the U.S. and the U.S.S.R. to notify one another of planned ICBM test launches. If the Soviet Union were to test a ballistic missile without notifying the United States, the United States could fairly claim that harm caused to the missile by an SDI attack resulted from the Soviet Union's gross negligence. Similarly, if a foreign State "provoked" an attack by an SDI system, perhaps with the goal of testing the system's capabilities, then the United States should not be liable for damage caused to the space object of the foreign State. Consistent with the principles underlying absolute liability, the United States would bear the burden of proving that damage produced by its SDI system was due to the wrongful act of the claimant State.

4. Measuring Compensable Damage

Article I of the Convention defines compensable damage as "loss of life, personal injury or other impairment of health, or loss of or damage to property of States or of persons, natural or judicial, or property of international inter-governmental organizations." The definition leaves open the question of whether damage includes harm remotely caused by space activity, such as the costs to an employer of replacing an employee injured by a space object, or non-physical damage, such as damages for

94. See Convention, supra note 10, art. VI. There is some controversy whether development of an SDI system would at some point violate the 1972 Anti-Ballistic Treaty between the U.S. and U.S.S.R. See, e.g., Gallagher, Legal Aspects of the Strategic Defense Initiative, 111 Mil. L. Rev. 11, 28 (Winter, 1986) ("[T]he [Reagan] Administration has concluded that Phase I of the President's Strategic Defense Initiative, which deals with pre-prototype research, does not violate the [ABM] Treaty and that the Treaty would be violated only upon full-scale SDI deployment."); Sherr, Legal Issues of the "Star Wars" Defense Program, 16 U. Tol. L. Rev. 125, 128 (Fall, 1984) (contending that art. V of the ABM Treaty prohibits development and testing, as well as deployment, of a space-based ABM system). The United States may wish to abandon or suitably modify Paragraph 2 of art. VI of the Convention, which prohibits exonerating liability for space activity not in conformity with international law, with respect to an SDI system.

95. Harm caused in this situation may not reflect an imperfection in an SDI system, and so may not be precisely "accidental." The SDI system here identifies an object apparently identical in appearance, and possibly in behavior, to a hostile ICBM. Since the target is not in fact hostile, and since certain characteristics of an ICBM test flight may be observably different from those of an indisputable attack, this Note will treat an attack by an SDI system on a test ICBM as a case of accidental operation.

96. It is common practice for nations to obtain information on foreign weapons systems by provoking the systems to operate. Not unexpectedly, this practice subjects the provocateur to a risk of damage or destruction by the foreign system.

97. Without detailed knowledge about the proclivities of an SDI system, a claimant State could find it difficult to rebut a presumption of its gross negligence or intentional misconduct.

98. See Convention, supra note 10, at art. I.
loss of consortium for the widow of a space accident victim.99

The United States interprets damage narrowly, as "damage traceable directly to the launching, flight and re-entry of a space object... but does not cover what some delegations... called remote or indirect damage and for which there is only a hypothetical causal connection with a particular space activity."100 Under the U.S. interpretation, damage would include injury to an object or to the passengers of an object attacked by an SDI system.101 Damage would also include harm to space objects, aircraft, or persons struck by fragments or harmful substances from an SDI system's target.102 The U.S. interpretation, however, precludes coverage of remote, consequential damages. For example, the U.S. would not consider itself liable for the costs to a foreign State of responding to a military alert triggered by the accidental operation of an SDI system.

5. Claims Procedures

The Convention provides a dispute mechanism available for resolving
SDI damage claims in Articles VII-XI and XIV-XX. The procedure calls for diplomatic negotiations between the U.S. and the claimant State or, if negotiation is unsuccessful, the formation of a Claims Commission charged with recommending a solution. These practices appear to be acceptable to space-faring nations, as evidenced by the number of States that have ratified the Convention. Moreover, such negotiations have successfully resolved the two claims brought under the Convention to date.

The practicability of securing international agreement on a more binding means of resolving claims is doubtful. COPUOS rejected a U.S. provision for an international tribunal able to issue binding orders resolving claims under the Convention. There is little evidence that such a tribunal would be supported today—even by the U.S. The current U.S. interest in keeping details about its SDI system secret makes American cooperation with a nation before an international tribunal unlikely.

Private negotiation, or the submission of claims to a body partly of the United States's choosing, may encourage more candid and just treatment of pertinent issues. Because the claimant would not bear the burden of proving fault under an absolute liability regime, the issues in dispute would ordinarily be causation and damages. Claimants could adduce proof of their allegations without a need for formal discovery procedures if the United States were willing to supply basic information about its SDI system. In situations in which resolution of the claim required discovery of information the U.S. held confidential, the flexibility of private negotiations or of a knowledgeable panel could shape a

103. See Convention, supra note 10, arts. VII-XI, XIV-XX. "Awareness that the different [political and economic] interests [of various States] could in the future develop into acute conflicts, is undoubtedly a convincing reason for being averse to all compulsory procedures and for preferring the freedom of manoeuvre of negotiations and traditional diplomatic intercourse." Van Bogaert, supra note 29, at 177. But see J. Fawcett, supra note 44, at 59 ("[Presentation of claims through diplomatic channels or to an arbitration committee] is not likely to commend itself as a satisfactory mode of settlement").

104. See supra note 84.
105. See supra notes 37-38 and accompanying text.
106. See supra note 85.
107. See supra note 20. The United States in 1964 proposed that the International Court of Justice serve as an arbiter of last resort for claims arising under the Convention. U.N. Doc. A/AC.105/C.2/L.11 (U.S. Draft Convention) (proposed art. X "Any dispute arising from the interpretation or application of this Convention, which is not previously settled by other peaceful means of their own choosing, may be referred by any Contracting Party thereto to the International Court of Justice for decision."). As noted earlier, COPUOS did not incorporate this proposal into the final draft Convention. See Van Bogaert, supra note 29, at 184-87.
108. See, e.g., N.Y. Times, Oct. 8, 1985, at A5, col. 1 (U.S. announces it is ending its policy of automatic compliance with decisions of the International Court of Justice, stating that Court procedures have been abused for policy ends and that most nations do not automatically accept Court jurisdiction).
109. See supra note 89.
110. See text accompanying notes 69-71.
discovery procedure to serve the interests of both the U.S. and the claimant State.

Conclusion
The Convention on International Liability for Damage Caused by Space Objects is an inadequate source of law for resolving issues of liability for harm caused by the accidental operation of an SDI system. The importance SDI has attained in the U.S. military program, and the recent proposals to accelerate the development of certain SDI system components, emphasize the importance of addressing liability for SDI system malfunction. By combining the principles underlying the Convention with new rules reflecting the unique characteristics of an SDI system, the international community can fashion an appropriate legal framework. Four rules would underlie this framework. First, the U.S. would be absolutely liable for harm caused by an SDI malfunction, except to the extent that the claimant caused its own harm through its gross negligence or intentional behavior. Second, the U.S. may request or arrange by agreement for indemnification from States that participate in the development or operation of an SDI system or that benefit from the operation of the SDI system. Third, the U.S. would compensate for all damages except indirect or remote damages. Fourth, diplomatic processes or an international Claims Commission would be the means for resolving claims. In a new era of space-based weaponry, such rules would provide a workable scheme for regulating liability.