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The International Law of Outer Space

Carl Q. Christol (Editor)

The thoughts and opinions expressed are those of the authors and not necessarily of the U.S. government, the U.S. Department of the Navy or the Naval War College.
CHAPTER IV

REASONABLE USES OF OUTER SPACE

A. THE NATURE OF REASONABLE USE

Mankind is intent upon exploring and using outer space and celestial bodies. He is, however, still endeavoring to arrive at decisions as to how such areas may be used. From the legal point of view the problem presented is this: Under what conditions may a great variety of uses and exploratory activities be carried on? Further, what, if any, uses or activities may not be engaged in at any time? Finally, what, if any, uses or activities generally permitted may be occasionally prohibited, and, conversely, what, if any, uses generally prohibited may be occasionally permitted? When the problem is posed in this fashion, it becomes immediately clear that the ultimate test of the use and exploration of outer space becomes one of reasonableness, and, more particularly, reasonableness in the specific factual context of a given situation. The principle of reasonable uses implies the importance of control for such uses.

Patterns of reasonableness have already been developing in the international law of outer space. The forces which have contributed to a verbal consensus respecting some uses and activities, like the forces which have contributed to the development of a limited customary international law of outer space, have been based upon practical considerations. This attitude toward reasonable, and therefore legal, conduct has stemmed from the same social complex, including the forces of practice and usage, which has provided man with a customary international law of outer space. Further, the particular consensus achieved in the United Nations concerning the substance of draft proposals is indicative of standards of reasonable conduct in the space age. Illustrative of this point are the several drafts relating to liability for damages caused by space devices, rights available to personnel and space vehicles in the event of an emergency landing, and common basic principles contained in the several draft declarations and international agreements dealt with in Chapter III.¹

¹ Supra, pp. 211-228.
Reasonableness of use of outer space and celestial bodies at this time depends on four major legal factors. The first is the existing customary international law of outer space. The second is the unanimous General Assembly Resolutions 1721 (XVI) of December 20, 1961, 1802 (XVII) of December 19, 1962, and 1962 (XVIII) of December 24, 1963. All have incorporated and promulgated customary international legal principles. The third is the unanimous General Assembly Resolution 1884 (XVIII) of October 17, 1963, which endeavored to forestall the positioning of weapons of mass destruction in outer space. The fourth is the 1963 Moscow Treaty banning nuclear weapons testing. These factors are significantly influenced by wide-ranging international legal discussions and the writings of legal specialists. Furthermore, they have, in an analytical sense, made provision for the free use of outer space for peaceful, i.e., nonaggressive and beneficial, purposes. By direct provision and by implication they place limitations upon the free use of outer space for nonconforming uses. In this manner some limits are placed on national uses of this environment.

However, when the concept of national control enters the picture it brings with it both affirmative and negative aspects. Thus, free-

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2 Supra, p. 44.
3 This Resolution provided: "The General Assembly, Recalling its Resolution 1721 A (XVI) of 20 December 1961, in which it expressed the belief that the exploration and use of outer space should be only for the betterment of mankind, "Determined to take steps to prevent the spread of the arms race to outer space, "1. Welcomes the expressions by the Union of Soviet Socialist Republics and the United States of America of their intention not to station in outer space any objects carrying nuclear weapons or other kinds of weapons of mass destruction; "2. Solemnly calls upon all States: "(a) To refrain from placing in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, installing such weapons on celestial bodies, or stationing such weapons in outer space in any other manner; "(b) To refrain from causing, encouraging or in any way participating in the conduct of the foregoing activities." U.N. Doc. A/5571; A/RES/1884 (XVIII); U.N. Doc. A/C.1/L.324.
5 Compare the writings of Cooper, Gardner, Haley, J. A. Johnson, Lasswell, Lipson, McDougal, Vlasic in Authors' Index.
dom of outer space for peaceful uses means freedom from unilateral control so long as the users conduct their activities in a reasonable manner. Put in other words, the right of free use depends upon reasonableness of that use and imposes a duty upon users not to engage in unreasonable activities. Further, the right of free and reasonable use relieves a state from the duty of not interfering in uses by others when the specific uses by others become so unreasonable—as in the case of the intentional use of outer space or celestial bodies for aggressive military purposes—as to occasion valid concern for international peace, international security, and the requirements of legitimate self-defense.6

We see then, that in the context of reasonableness—including both freedom to use and freedom from uses—control assumes an importance of substantial proportion. Mankind’s interest in the fullest exploitation of the space dimension must not fail to take into account the proper expectation that he will not be made the subject of unreasonable harms emanating from the heavens. This situation has been interpreted by Johnson in the following language:

The area within which the underlying State possesses the right to ‘veto’ the activity of another State must not be permitted to extend to altitudes which would hamper the freedom of space exploration. It is of little value to speak of the freedom of outer space if man cannot travel freely to that realm and freely back to earth.7

In seeking to restrict outer space for reasonable uses, international law may proceed along several paths. None has received final and authoritative approval, and the problems which face the developing law of outer space are those which have long confronted the whole gamut of the law. These separate approaches can best be stated in the form of interrogations. First, is all human activity in outer space permissible pending the imposition of legal restrictions—from whatever source derived? This assumes that any conduct is permissible until valid prohibitions exist and have been generally acknowledged as binding. Or, is no human activity in outer space permissible unless and until sound legal sources provide adequate guidance as to its permissibility? In the first situation an answer—but not necessarily the correct answer—has been that international law’s entire coverage extended into outer space even before the

6 Whether the reaction to unreasonable uses may be collective or individual is not being considered at this point.

launching of the first orbiting satellite and that the general law existing at that time was not violated by that experience. Another answer is that because of the uniqueness of the environment, only some of the existing legal principles could have application in outer space. In the second situation an answer—and again not necessarily the correct answer—has been that man's actual conduct precedes law, whether customary or express. These questions raise false issues by their inclusiveness, e.g., "all" or "no" human activity. Still, the basic issue, as presented to the World Court in the Lotus Case, requires analysis so that doubt concerning legal rights in outer space may be put aside.\(^8\)

It will be recalled that in the Lotus Case, it was argued by France that under international law, France should exercise exclusive jurisdiction over its national because past practices pointed to a valid rule having this legal effect. The government of France also urged that Turkey might exercise jurisdiction only if it were able to point to a then existing and applicable rule of international law permitting a trial in Turkey. The Court held, in effect, that international law was not all encompassing—that there was no existing or applicable rule restricting or denying the exercise of jurisdiction by Turkey. It was concluded that the conduct of Turkey was not violative of international law in the absence of a rule prohibiting Turkey's exercise of jurisdiction, and, finally, that the exercise of jurisdiction by Turkey was appropriate.

However, the holding in the Lotus Case that international law is not all-inclusive and that it has prohibited only that which in fact is so expressed must be applied reasonably and in context to the free and peaceful use of outer space. It must be kept in mind that customary international law is but one part of international law and that its utility generally is to give legal approval to reasonable and measurable past practices of an affirmative type. Thus, its value lies largely in giving approval to existing practices which protect property and commercial values. Yet, at the same time, custom has its other face. By not approving aggressive conduct, it tends to inhibit or negate the legality of such behavior. Although customary international law has lacked the resources to deny, in an express and affirmative manner, the use of outer space for aggressive

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\(^8\) The S.S. Lotus (France v. Turkey), P.C.I.J., Ser. A, No. 10; 2 Hudson, World Court Reports 20 (1935). This case held that a state's wide measure of discretion is subject to existing legal prohibitions and that only where such prohibitions were lacking might "every state remain free to adopt the principles which it regards as best and most suitable."
and nonbeneficial purposes, one may not conclude that such aggressive and nonbeneficial uses are therefore either reasonable or permissible. One must look to the substantive content of international law as contained in its broad principles and rules to support the conclusion that aggressive international conduct is unlawful in all environments. This view is clearly valid and is upheld by both general international law and by such express international agreements as the Charter of the United Nations and by the Kellogg-Briand Pact of 1928.

The Lotus Case does not constitute a precedent in favor of unrestricted national uses and activities in outer space. It is by now much too late to doubt the availability and the applicability of known international legal principles to the use and exploration of outer space and celestial bodies. This was generally regarded to be true prior to the adoption of Resolution 1721 (XVI). The Resolution, in relying on general international law and on the Charter of the United Nations, makes this fact explicit. However, since international law does not consist of a detailed and all-encompassing set of prohibitions, admittedly where this form of law has not yet developed, a state may engage in such specific activities as do not fall within prohibitory principles and rules. As to such specific forms of national conduct, a state may engage in reasonable conduct until inhibited by clearly established principles and rules of international law.

In view of the foregoing, and as related to specific types of space conduct, it is possible to assert in the course of the development of a satisfactory law of outer space that reasonable space activities may be regarded as permissible until prohibited. This is true where such activities are peaceful, e.g., nonaggressive and beneficial. The other presumption, suggested by some, is that in the absence of a detailed and encompassing set of legal prohibitions, all forms of space activity are permissible unless and until the sources of international law indicate the invalidity of such conduct.

This apparent conflict in method of approach, and consequent divergence in the governance of space activities, has, in fact, already been resolved. The key is the developing pattern of reasonableness as to space uses and activities. Thus, if it is contended that free and peaceful uses of outer space are illegal until specifically permitted, it can be stated that the principle of permissibility for peaceful uses has been determined by general customary international law and Resolution 1721 (XVI). On the other hand, if it is

argued that space activity is permissible until prohibited by a specific and express rule of international law, reference may be had to the 1963 Moscow Nuclear Test Ban Treaty and to the General Assembly Resolution 1884 (XVIII). It may also be noted that this view has never been carried to the point where it is assumed that conduct of any and all kinds—in particular, intentionally aggressive activity—was thought to have the approval of international law. In fact, outer space is not a legal vacuum, and general principles of law as a part of international law have been recognized in General Assembly Resolution 1721 (XVI) as applying to conduct in outer space and on celestial bodies.

The contest between permissible and nonpermissible conduct must be resolved in a structured space law regime by the concept of reasonableness. No brief need be filed on behalf of the merits of the concept of reasonableness, except to say that such a doctrine is based upon reciprocal benefits and on a generalized ongoing mutuality of interest. Reasonableness emphasizes the essential values of a world community of interests, and when conditioned by acceptable international tolerances provides the basis for effective and cooperative international relations. One of the greatest virtues of the concept of reasonableness is that it does not seek to provide ultimate answers in advance of constantly modifying problems. In the context of the space age, the value of the concept of reasonableness will be measured against its record of service to the dynamic and continuing needs and aspirations of mankind.

B. INSTANCES OF REASONABLE USE

In view of the fact that space capabilities are properly regarded as elements of national strength and prestige, and in view of the constant competition among and between nations for leadership, power, prestige, and security, it should not be surprising that there is not a complete consensus among nations as to the reasonableness of all uses of space devices. Or, perhaps it is not surprising that there has been quite general agreement that many space uses may be regarded as reasonable. But, this is always subject to the reservation that under certain circumstances uses which might generally be regarded as reasonable may become unreasonable. This is true because the complex qualities of space devices are such as to enable them to be used in many instances for quite varied purposes. The United States has frequently insisted that this fact must be taken into account in the development of space law. Thus, Senator Gore told the First Committee of the United Nations in December 1962,
"There is, in any event no workable dividing-line between military and nonmilitary uses of space. For instance, both American and Russian astronauts are members of the armed forces of their respective countries; but this is no reason to challenge their activities or to deprecate their accomplishments. A navigation satellite in outer space can guide a submarine as well as a merchant ship. The instruments which guide a space vehicle on a scientific mission can also guide a space vehicle on a military mission."

The state exists for a variety of purposes. Among them it seeks to protect its citizens and its ongoing existence, and in order to do so it utilizes the most modern scientific and technological equipment known to man. The manner in which such devices are employed depends upon man's intent, expectations, and the surrounding factual circumstances. Thus, such devices may be used for peaceful purposes. Yet in many situations they may also have utility for the carrying on of war. Nonmilitary uses, it may be assumed, are peaceful ones. On the other hand, it does not follow that military uses need be non-peaceful ones, for the function of a military use may be to provide information or data in such a way as to deter or prevent the outbreak of war. Peaceful, and hence reasonable uses of outer space, may include military uses when the latter are nonaggressive and beneficial in their purpose. Therefore, it may be concluded that the reasonableness of space activity is determined not so much by the possible military uses or capabilities of space devices, but, rather, by the nonexistence of aggressive intent or by the absence of unpeaceful circumstances. Peaceful uses may be converted into unreasonable uses by means of aggressive military employment.11


11 Feldman has traced the early meaning assigned to the term "peaceful," and has concluded that in United States municipal law and in international law it means "nonaggressive" rather than "nonmilitary." Feldman, "The Report of the United Nations Legal Committee on the Peaceful Uses of Outer Space: A Provisional Appraisal," Second Colloquium 23-24 (1960). In his view the foregoing meaning "also appears to be the most reasonable interpretation." Ibid. The problem of defining aggression has been noted by Stone, Aggression and World Order 201-217 (1958) and by the International Law Commission. Compare Sohn, "The Definition of Aggression," 45 Virginia Law Review 697 (1959). Writers on international law have generally regarded peaceful uses to consist of nonaggressive uses. Thus, Meyer has stated that "In my opinion the term 'peaceful' must be understood in the sense of 'nonaggressive.'" Meyer, "Legal Problems of Outer Space," 28 The Journal of Air Law and Commerce 341 (1962). He has also stated "To interpret the term 'peaceful' in the sense of 'nonmilitary' would lead to the consequence that no military action could
The primary test of aggressive purpose is intent. However, the context in which the intent is formulated also materially affects the concept of peacefulness and reasonableness of purpose.

Recent discussions at the United Nations have endeavored to make it clear that "peaceful" means "nonaggressive." Thus, the Belgian representative told the legal subcommittee of the Committee on the Peaceful Uses of Outer Space that "the term 'peaceful’ in the Committee’s title was the antonym of 'aggressive' and not of 'military.'" The Japanese representative has also contrasted peaceful with aggressive. He told the subcommittee in April 1963, that "The basic theme of the law of outer space must be that outer space should be used for peaceful purposes only and that its use for aggressive purposes such as nuclear testing or the placing of weapons of mass destruction in orbit should be prohibited." The Italian delegate told the subcommittee at the same time that "the most urgent issue was the banning of all activities of an aggres-
sive nature in outer space.” ¹⁶ During the same period, Mr. Meeker, United States Department of State representative on the subcommittee, stated “For several years the United States has consistently adhered to the view that outer space should be used for peaceful—that is, nonaggressive and beneficial—purposes. However, pending the achievement of disarmament agreements, the test of any space activity cannot be whether it is military or nonmilitary, but whether it is consistent with the United Nations Charter and other obligations of international law.” ¹⁷

Not all of the representatives on the subcommittee agreed. The Czech delegate told the group in April 1963, that his country wished to prohibit the use of outer space for espionage and for the dissemination of war propaganda, but that he had “some doubts regarding the need for a provision prohibiting the use of outer space for war purposes. While it sympathized with the objective, it believed that the question was outside the Sub-Committee’s terms of reference. Moreover, the provisions of Article 2 (4) of the Charter and of operative paragraph 1 (a) of General Assembly Resolution 1721 (XVI) appeared to cover the question that was involved.” ¹⁸ Thus, the Czech delegate, it would appear, was more concerned that outer space should not be used for warlike purposes, for “espionage” as he understood it, or for war propaganda than for its not being used for aggressive purposes.

The general tenor of legal opinion at the United Nations has been to consider that outer space, celestial bodies, and devices positioned there should not be used for aggressive purposes, and that nonaggressive military purposes were within the range of peaceful purposes. At present, nuclear weapons tests in the atmosphere, in outer space, and underwater, and the storing of weapons of mass destruction in

¹⁷ Meeker, “Observation in Space,” Department of State Press Release, No. 191 (Revised), April 12, 1963, p. 6. Senator Gore in December 1962, had stated at the First Committee: “It is the view of the United States that outer space should be used only for peaceful—that is, nonaggressive and beneficial—purposes. The question of military activities in space cannot be divorced from the question of military activities on earth. To banish these activities in both environments we must continue our efforts for general and complete disarmament with adequate safeguards. Until this is achieved, the test of any space activity must be not whether it is military or nonmilitary, but whether or not it is consistent with the United Nations Charter and other obligations of international law.” U.N. Doc. A/C.1/PV.1289, 13.
¹⁸ U.N. Doc. A/AC.105/C.2/SR.20, 9. However, the Hungarian representative has urged that peaceful uses must be both “nonmilitary and nonaggressive” U.N. Doc. A/AC.105/C.2/SR.26, 4.
outer space do not fall within the range of permitted legal uses. The United States has stated on a number of occasions that it has no intent to place weapons of mass destruction in space, and has consistently invited the Soviet Union to conform to the same policy.  

Before turning to a further analysis of reasonable uses of outer space it is necessary to call attention to the problem of gaining access to and of returning from outer space. This involves ingress and egress through airspace. The free use of outer space could be effectively prevented if standards of reasonable use of the airspace on the part of space vehicles—including both rocket propelled and X-15 and X-20 prototypes—are established which depart from the standards applied to such vehicles while they are situated in outer space. It is probable that in the future such vehicles, when returning to earth, will transit for long distances through areas which have been considered as airspace and, as such, subject to the full sovereignty of the subjacent state.

Relatively little attention has been given to the express solution of this essentially legal problem. As has been pointed out previously, no nation has yet protested the orbiting of spacecraft. This has been interpreted to mean that such tacit consent has resulted in the existence of a rule of customary international law on this particular subject.  

The problem of transit through atmospheric areas has been

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19 President Kennedy in his press conference of October 9, 1963, stated that no formal agreement existed between the United States and the Soviet Union to ban nuclear weapons from outer space. He said: “The United States has stated it would not put weapons in outer space. The Soviet Union has stated that it does not intend to do so. Some day they may decide to do so, so we obviously have to take our own precautions. But we don’t intend to, though we intend to protect our security. We are glad to hear the Soviet Union does not intend to. This is a matter, it seems to me, that can best be handled not through any bilateral agreement but as a General Assembly matter, because other countries may some day have the same capability, and I think every country should declare that they are not going to put atomic weapons in the atmosphere which could threaten not only the security of a potential adversary but our own security, if for some reason the weapon should miscalculate and descend on us. I think it is a good idea to keep them out of the atmosphere.” New York Times, October 10, 1963. For U.N. Resolution 1884 (XVIII), October 17, 1963, see supra, p. 264. See generally, infra, p. 462.

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20 The analogy from the law of the sea of innocent passage has been noted by Goedhuis. He has stated that “if the principle that outer space is to be considered as ‘res communis omnium’ is accepted, then as a necessary corollary, freedom of innocent passage (innocent in the sense of it not being prejudicial to the peace, good order or security of the underlying State) through the space which is not considered to be outer space, should be recognized.” “The Question of Freedom of Innocent Passage of Space Vehicles of one State through the Space above the Territory of another State which is
commented on at the U.N. legal subcommittee by the Mexican delegate, who, in referring to the launching of spacecraft and their subsequent transiting through the atmosphere, stated: "In that respect, a conflict with the old laws seemed to have arisen, and the nonspace Powers had accepted new standards in keeping with the general freedom. The implication of those new standards should be considered in greater detail." 

Substantial benefits are still to be realized through the free and peaceful use and exploration of outer space and celestial bodies. Accordingly, it might be argued that all the uses of spacecraft which are now considered to be reasonable in outer space should also be considered reasonable in airspace, at least at such time as spacecraft are engaged in normal launch and return. In order for spacecraft to depart from and return to the earth without disrupting typical operational activities in the airspace and on the surface, it will be necessary to arrive at express and detailed international agreements. However, it is submitted that the legal principles permitting reasonable egress from national territory and return thereto by the same spacecraft for peaceful purposes have been clearly formulated. Additionally, there is need for an express international agreement fixing the upper limits or zones of the atmosphere in which the subjacent state exercises its not unlimited sovereignty. Further, with respect to spacecraft, pending the express formalization of a rule of innocent passage through the airspace of another nation, a state may waive its sovereignty in order that space vehicles may be used for reasonable and peaceful purposes. However, the need for such an express international agreement on innocent passage does not invalidate the existing principle of space law which permits space vehicles, of the

not Outer Space," Second Colloquium 43. Compare, McDougal, Lasswell and Vlasic, supra note 13, at 197-8, 320-350; and Haley, Space Law and Government 69-70 (1963). On the other hand, Machowski, a Polish writer on air and space law, considers the matter to be somewhat academic. He nonetheless calls specific attention to national sovereignty over superjacent airspace. "Certain Aspects of the Right of Innocent Passage of Space Vehicles," Fourth Colloquium 50. Compare Horsford, "Spy Satellites and The Law," 2 International Affairs 310 (1962) who has stated: "It seems that a right of innocent passage will have to be provided through the airspace of adjoining states for outward and returning spacecraft, as there would otherwise be an infringement of sovereignty of these states." See also Williams, "The Law of The Sea: A Parallel for Space Law," Department of the Army, Pam 27-100-22, Military Law Review 168 (October 1963).


22 Infra, pp. 200-253.
type currently in use, to operate peacefully in those areas they have been using since 1957. Within the context of present space practices and activities, this principle has already been established. In short, an express agreement is required to regulate the details of reasonable and peaceful operational activities of spacecraft at low altitudes.

Reasonableness of use may be examined under two basic questions. First, is conduct so inherently destructive of the preferred values of mankind that it cannot be tolerated? Second, is conduct to be deemed unreasonable because of a failure on the part of the resource state to conform to agreed standards which have been designed to modify, and perhaps ameliorate, legitimate national concerns for international peace and security and self-defense?

In view of the hybrid uses of which space vehicles are capable, it is not possible to state categorically that there is complete agreement as to the characteristics of a reasonable use. It is for this reason that the major resource nations are in disagreement as to certain uses. The United States has taken the position that the use of observational satellites is a peaceful, and therefore a reasonable one. The Soviet Union, on the other hand, has contended—with the support of members of the Soviet Bloc—that observation by satellite of adjacent surface areas within the Soviet Union constitutes a form of "espionage." This contention has been based on the groundless assertion that such "espionage" is violative of international law. The legality of engaging in observation from space will be discussed below.23

The United States has also taken the position that the use of communications satellites is a peaceful, and therefore a reasonable one. The Soviet Union has contended—again with the support of members of the Soviet Bloc—that the dissemination of certain ideas which have been described as using outer space for "propagating war, national or racial hatred or enmity between nations is inadmissible."24 This contention has generally been urged under the heading of "war propaganda." Soviet concern has been based on the belief

23 Infra, pp. 277-295.
24 U.N. Doc. A/AC.105/12, Annex 1, 2. This is Paragraph 5 of the Soviet Declaration of the Basic Principles Governing the Activities of States in the Exploration and Use of Outer Space. Infra, pp. 466-468. See pp. 295-300 infra, for a discussion of this contention.

Mr. Fedorenko in a statement of the Committee on Peaceful Uses of Outer Space in September 1963 urged the impermissibility of the use of satellites "for war propaganda and for propaganda connected with national and racial hatred and enmity among peoples." U.N. Doc. A/AC.105/PV 20, 46. See also General Assembly Resolution 1962 (XVIII), infra, p. 450.
that communications satellites will reach a state of perfection whereby there may be direct foreign broadcasts to receivers located within the Soviet Union. In view of the well known Soviet policy of maintaining a closed society, the prospect of having both radio and television broadcasts within the uncontrolled grasp of the Soviet population has probably been the cause for this position. The Soviet passion for secrecy and their concern for inspection of space and military facilities has undoubtedly led to the allegation of "espionage." With respect both to "war propaganda" and to the "collection of intelligence information," the Soviet contentions are merely serious proposals or claims. Their views cannot be considered to be either international law or based on international law.

There is, however, a limited agreement between the two major resource nations that some observational and communications activities carried on in outer space are reasonable. There is also full agreement that meteorological activities are reasonable. As to observational activities, the Dryden-Blagonravov Summary of Understandings of June 8, 1962, called for a world geomagnetic survey, including a joint effort to coordinate the launching of two artificial earth satellites equipped with magnetometers. The representatives of the two countries

Recognized that data obtained in earth magnetic observatories were of particularly great importance for the successful compilation of a map of the magnetic field of the earth with the aid of artificial earth satellites. 25

Operational programs have been established to engage in these scientific observations and assurances have been given for the exchange of independently acquired data.

In regard to communications activities, the same Understanding made provision for cooperation in 1962 and 1963 "in experiments on communication by means of the U.S. satellite 'Echo A-12'." 26 Further, the Understanding announced an intention to "give further consideration to the possibilities of cooperation in joint experiments using active satellites that may be launched by either nation in the future, including the mutual exchange of information on the results of such experiments, and to resume discussions of these possibilities at **" a subsequent series of meetings. 27

On the subject of meteorology, the Understanding called for the exchange of such "data gathered by each nation from its own experi-

26 Ibid., 5.
27 Ibid.
mental meteorological satellites * * * with the understanding that such transfers will include selected cloud-cover pictures, especially related to storms, vo\n\nices, fronts and the generation of these phenomena, with geographical coordinates provided for all pictures selected, together with nephanelyses based upon the data as a whole * * * . The same communication links would be used to exchange weather charts, diagrams, vertical cross-sections, and the material required for solving the problems of world weather, including the extension of prediction periods." 28 In 1964–1965, during the second stage of the joint meteorological satellite program, the Understanding calls for the coordination of launchings by the two nations of a system of operational weather satellites. Such a program necessitates the determination of mutually agreeable launching schedules for the operational satellites, the numbers of such satellites, their orbits, and the comparability (to the degree desirable) of the characteristics of their sensors and the data to be obtained. 29

The Understanding, by its delineation of specific areas of use, has provided a basis upon which to project other uses. Thus, if the agreed uses may be considered to be reasonable—and no nation or person has denied that the aforementioned uses are reasonable uses of outer space—it may be stated that comparable or parallel uses may also be reasonable. This is true even though some of the uses may be hybrid. But the fact of hybridity is not important. The important consideration is that certain uses—even if capable of being variously employed in differing situations—have been and are being applied for the benefit of men and nations. However, even without the consensus contained in the Understanding, it is quite clear that those which are both peaceful and beneficial to men and nations may be considered to be reasonable. The Understanding is merely illustrative of specific reasonable uses.

Many other uses of outer space and celestial bodies by means of space vehicles also fall within the category of reasonable uses. These include, but are not limited to, the following: the gathering of geodetic and navigational information, the gathering of scientific and technological information, the gathering of general information affecting space research, the gathering of information relating to weather forecasting and control, the gathering of information facilitating practical communications services and activities, the gathering of information related to general scientific and technological research, and the gathering of information facilitating security and defensive goals even though of a military nature. Additional reasonable uses

28 Ibid.
29 Ibid., 3–4.
may be said to include: the employment of space vehicles in ways conducive to obtaining experience in operating such vehicles, general exploration and experimentation, facilitation of resource exploitation, development of know-how in the field of transportation, and for the ascertaining of means and processes whereby protection against disease and forms of contamination may be achieved. In addition, outer space may be used in ways reasonably designed to further man's useful social and political activities both on earth and in outer space and on celestial bodies. Man may also engage in such additional activities required to facilitate any or all of the foregoing, including such incidental activities as the recovery of space personnel, vehicles, and equipment. Such reasonable activities have their situs both on the earth, in the atmosphere, and in outer space. As man continues to gain experience in the peaceful use and exploration of outer space and celestial bodies, many uses, in addition to these mentioned, will qualify as reasonable uses.30

C. THE SPECIAL SOVIET VIEW OF OBSERVATIONAL ACTIVITIES

The Soviet social system has produced a national "obsession for secrecy * * *" 31 which has conditioned not only the Soviet policy toward disarmament and arms control, but has also materially affected their views of the legality of space vehicles equipped to scan both earth and the vast inter-stellar reaches of outer space. Secretary of State Rusk has described the Soviet habit of referring to observation—inspection in a disarmament context—as "espionage." He stated in 1962:

I would not try to say whether this is a deep-seated, traditional passion for secrecy on the Russian scene or a consequence of the


belief that secrecy is an important military asset. It is probably a combination of these and many other factors.

But whatever the reasons behind this alleged preoccupation with espionage, three things seem to me to be clear.

One is that the major powers know all that they need to know about each other to inflict devastating damage in the event of war. Espionage in its classical sense is no longer relevant to this great overriding issue.32

Even though in a practical sense the two major resource nations may know enough about each other's military and defense posture to inflict great damage in the event of war, and even though espionage in its classical sense may not be relevant to the space age, it is nonetheless true that the Soviets have asserted that United States observational satellites have been engaged in "espionage" of the Soviet Union from outer space. By injecting this issue into the legal discussions carried on in the committees of the United Nations, the Soviets have contributed to the difficulty of arriving at express agreements on space law principles and rules.

The Soviet attitude toward "espionage" from superjacent areas has been influenced by certain acts of observation or reconnaissance which have taken place in Soviet airspace. Soviet authors, in discussing the problem of sovereignty over the airspace, wrote in 1956, "At the beginning of 1956, large balloons fitted with special apparatus for reconnaissance by aerial photography and launched by U.S. military bodies, began to penetrate into the airspace of the people's Democracies and the U.S.S.R."33 In 1960, the Soviets became aware of reconnaissance carried out via overflights of the U-2 type aircraft, and from over the high seas—as in the case of the RB-47—and in both instances complained of the "real or alleged 'violation' of its 'frontiers' or airspace by American aircraft."34

The observational capabilities of aircraft and spacecraft when directly over a state or when adjacent thereto are unquestionably extensive. At the present time, the observational capabilities of space vehicles are so extensive and their observational techniques are so versatile that they can be very efficient, even though at the time their observational activity is conducted they need not be either over a state

32 Ibid.
33 Kislov and Krylov, "State Sovereignty in Airspace," International Affairs (Moscow) 34 (March 1956); Legal Problems of Space Exploration, A Symposium 1037.
or its territorial waters. In fact, the vehicle may be a long distance both horizontally and laterally from the observed area. Mere "overness" or physical proximity does not impede successful observational results.

These facts bring into focus both the extent of national sovereignty and the extent of national control over superjacent areas, e.g., the airspace and outer space. Lissitzyn and Crane have examined the views of Soviet lawyers, and have independently arrived at the view that the Soviets recognize upper limits to national sovereignty. Thus, Lissitzyn has written that "Since the launching of Sputnik I in October, 1957, Soviet writers have been virtually unanimous in expressing the view that state sovereignty has or should have an upward limit and should not extend infinitely into space, but have not suggested any specific boundary between airspace which is under national sovereignty and outer space which is not."\(^{35}\) The force of U.N. General Assembly Resolution 1721 (XVI) has also been to prevent sovereignty from applying in outer space. However, the freedom of peaceful use and exploration of outer space need not be unlimited. Thus, the Soviet contention that orbiting observational satellites in outer space constitutes a form of "espionage" has served as a means to ascertain that if this assertion is accepted, one form of control over the free and peaceful uses of outer space is created. In short, the problem is to determine whether a specific type of observation by satellite is unreasonable, illegal, and subject to some form of either national or international control.

It should be noted that the Soviet proposed draft declaration of basic principles, which constitutes their official claim regarding "espionage," provides that "9. The use of artificial satellites for the collection of intelligence information in the territory of a foreign State is incompatible with the objectives of mankind in its conquest of outer space."\(^{36}\) Interpreted literally, intelligence information

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\(^{35}\) Lissitzyn, **supra** note 34, at 137. Crane "Communist Viewpoints," *Legal Problems of Space Exploration, A Symposium* 1012-1014.

\(^{36}\) U.N. Doc. A/AC.105/12, Annex 1, 2. The Soviets have displayed no willingness to depart from this viewpoint. *U.N. Doc. A/AC.105/PV.20*, 46 (September 1963). The same position has been advanced in the Soviet Draft International Agreement on the Rescue of Astronauts and Spaceships Making Emergency Landings. Thus, in the second paragraph of Article 7 it has been proposed that "Space vehicles aboard which devices have been discovered for the collection of intelligence information in the territory of another State shall not be returned." *U.N. Doc. A/AC.105/12*, Annex 1, 4. This would create an exception to the prescribed duty to return, provided other conditions had been met.
would not seem to include a great deal of the observational activity carried on by artificial satellites, and, by way of random example, could hardly be construed to deal with such meteorological information gathering as relates to cloud cover, the amount of energy received on earth and in space directly from the sun, the amounts of energy reflected by clouds, ice, snow, and other bright objects, and the amount of energy radiated by earth. Nor could it be thought to inhibit the gathering of navigational and geodetic information. The list of items of information which it is, and would be, reasonable for satellites to collect might be extended indefinitely. 

The Soviet view that the collection of intelligence information in the territory of a state should be considered to be “espionage” is based on the concept of security. The Soviet effort to arrive at specific instances of control over the free use of outer space for peaceful purposes has been clearly demonstrated by Zhukov. He has stated that “each state has a right to use outer space at its own discretion, but without causing harm or damage to other states.” It was his further view that the United States has a national policy and plans to engage in “space espionage directed against the security of the U.S.S.R. and the other Socialist countries [and this policy and plans are] incompatible with the generally recognized principles and rules of international law, designed to protect the security of states against encroachments from outside including outer space. In the past, considerations of state security have been of decisive importance in determining the airspace regime. Today the same considerations must underlie the regime of outer space.”

The Soviets have identified the Midas, Samos, and Tiros type satellites as those, among others, that were intended to reconnoiter their rocket and missile bases. Some Soviet writers have contended that

37 These were mentioned by Dr. Richard W. Porter, Chairman, USNC Technical Panel on the IGY, in his testimony in 1958 to a subcommittee of the House Committee on Appropriations. The peaceful and scientific nature of such information gathering seems obvious. Review of the First Eleven Months of the International Geophysical Year, 85th Cong., 2nd Sess., 146 (1958). 

38 Zhukov, “Space Espionage Plans and International Law,” International Affairs (Moscow) 53-57 (October 1960); Legal Problems of Space Exploration, A Symposium 1099. 


satellite "espionage" was being conducted by the United States in order to facilitate an aggressive, and presumably, surprise attack against the Soviet Union. Thus, the charge has been made that "The United States and other imperialist Powers want to militarize outer space, seeking to turn it into a new theatre of hostilities." 41

Traditional international law has never considered "espionage" to be unlawful. It has, in fact, endeavored to regularize the treatment of captured spies. It is true, however, that espionage as defined in the laws of states constitutes a crime under much municipal legislation. Such laws have taken into account the individual's location when engaged in espionage activities as well as the type of activity in which the individual is engaged. At this time these laws regard espionage as an intentional and prohibited act of an individual. Whether information gathering by a machine, particularly an unmanned machine, constitutes a crime pursuant to most municipal laws as presently written, is doubtful. On the other hand, Goedhuis has taken the view that the invasion of a state's territorial airspace by an information gathering satellite could properly result in summary action. He has suggested that if the space vehicle of one state, while in orbit, were to pass through the airspace of another state—and this, of course, assumes that there is agreement as to the boundary between airspace and outer space—"it is clear that a State has a right to take affirmative measures against these satellites for an infringement of its sovereignty as well as for a breach of municipal law concerning espionage." 42 This view, perhaps, assumes too much. First, if the space vehicle's function is a peaceful one—and it has never been thought that during a nonwarlike situation an information-gathering function of a maritime vessel beyond the territorial seas was other than a peaceful one—then a subjacent state would not be permitted to extend its municipal law to such a function when the space vehicle was in outer space above the nation's territory. Second, while it is clear that sovereignty does not determine the areas in which a state may exercise defensive rights, Goedhuis' view assumes that the information gathering function of the spacecraft is unreasonable in that it is likely to cause serious harm to the national well-being of the subjacent state. Another reason for his view may be that at the present time there does not appear to be any effective way to determine whether the function of the transiting satellite is

41 "Forum: Space Exploration and International Relations," International Affairs (Moscow) 57-63 (June 1961); Soviet Space Programs, op. cit., 306.
dangerous or not to the security of the subjacent state. Third, if it is true that the function of the satellite while in outer space is a peaceful one, the activity by the satellite in the airspace of the subjacent state while temporarily transiting in the process of launch or landing must also be considered to be peaceful. Finally, Goedhuis assumes that municipal laws have clearly defined information gathering, by an unmanned space vehicle while in the airspace, to be municipal espionage. This may be if the statute so provides. International law, however, is not the product of the policy of a single state, and the fact that the Soviet expressions concerning "espionage" in space do not constitute international law has been noted by one distinguished Soviet international lawyer. Koretsky, at the 49th session of the International Law Association, charged that the use of information gathering satellites was violative of the Charter of the United Nations, but that the use of the Discoverer type satellite was "taking advantage of the lack of regulations covering what satellites may or may not do in orbit." 43

In international law, espionage in the traditional sense consists of wartime conduct. Wartime espionage is governed by Articles 29-31 of the Regulations of The Hague 1907 Convention IV. 44 Article 29 defines a spy as a person who engages in spying, who acts clandestinely or on false pretenses, who obtains or endeavors to obtain information, and who performs the prohibited conduct in the zone of operations of a belligerent with the intention of communicating it to the hostile party. The 1907 Regulations place emphasis on the fact that such conduct is individual conduct, and provide, for example, in Article 30, that a spy shall not be punished without trial.

A recent analysis of the law of espionage states "The act of spying is not in violation of international law. Punishment of captured spies is permitted as an act of self-protection, the law equally permitting the one to send spies, the other to punish them if captured." 45

Spying in peacetime has not been defined by treaty. A recent United States Army publication states with regard to the conduct of espionage under such condition that it "is not considered wrong morally, politically, or legally * * *" 46 In such circumstances captured spies are punished under appropriate national laws because "The sole norm in peacetime is the municipal law of each state in the

43 Ibid., note 17. The quoted words are those of Goedhuis.
44 36 Stat. 2277.
absence of a commonly agreed international rule similar to the IV Hague Convention. If the act alleged violates the municipal law of the country in question, that is sufficient for the trial to proceed." 47

The effort by the Soviet Union at the United Nations to make intelligence gathering in a nation by satellite a violation of international law seeks to modify existing international law. In this instance the Soviet Union appears to be following the precept that information gathering by satellites is permitted until it is prohibited. But, by their protests they have given the impression that such information gathering is not an acceptable peaceful, and hence reasonable, use of outer space. Much of their difficulty has arisen from their refusal to recognize that United States observational activities, as well as their own, are exceedingly varied. Furthermore, they have not been willing to admit that the purpose of the United States in gathering Soviet military information has been to obtain facts of prospective Soviet military activity so that defensive planning may be undertaken rather than, as the Soviets have perhaps believed, for engaging in aggressive uses.

In view of the importance of the problem, a short resume of Soviet efforts to put intelligence gathering activities into the category of unreasonable and even nonpeaceful uses will be attempted. Their efforts to employ the language of "espionage" in order to achieve guarantees against "an invasion of privacy" will have substantial impact upon the future of international cooperation in outer space.

As previously pointed out, there is a general consensus that spacecraft ought to be returned to the launching state when it comes down in the territory of another or on the high seas. This view was challenged by the Soviet delegate to the First Committee in December 1962, when he suggested that an exception "would be made in the case of a vehicle aboard which devices have been found for the collection of intelligence data from the territory of another States (sic)." 48 It was argued that such an exception should be based on the view that such gathering of information was incompatible with the Charter and involved the "violation of the sovereignty of another State. It is indubitable that espionage is such a violation, even if it is effected from space." 49

47 Ibid., note 88. at 61. The espionage statute of the United States is 18 U.S.C., 793 and 794. It applies to both wartime and peacetime situations, seems to apply only to individuals, and makes illegal the obtaining of information and the passing of it on to a foreign power. The place in which or from which the information is obtained is not limited in the statute.


49 Ibid.
The division between the United States and the Soviet Union on this point may best be reflected by quoting from Senator Gore's speech to the Committee and the reply of Mr. Morozov. Senator Gore stated that one of the consequences of the hybrid capabilities of space vehicles was that:

Any nation may use space satellites for such purposes as observation and information-gathering. Observation from space is consistent with international law, just as is observation from the high seas. Moreover, it serves many useful purposes. Observation satellites can measure solar and stellar radiation and observe the atmosphere and surfaces of other planets. They can observe cloud formations and weather conditions. They can observe the earth and add to the science of geodesy. Observation satellites obviously have military as well as scientific applications. But this can provide no basis for objection to observation satellites.

With malice toward none, science has decreed that we are to live in an increasingly open world, like it or not, and openness, in the view of my Government, can only serve the cause of peace. The United States, like every other nation represented here in this Committee, is determined to pursue every non-aggressive step which it considers necessary to protect its national security and the security of its friends and allies, until that day arrives when such precautions are no longer necessary.50

Mr. Morozov introduced his remarks by stating that the foregoing constituted an attempt at theoretical justification of illegal observation and information-gathering activities. He said:

We cannot agree with the claim that all observation from space, including observation for the purpose of collecting intelligence data, is in conformity with international law—a conclusion which could be drawn from the statement made this morning by the representative of the United States. Such observation is just as wrong as when intelligence data are obtained by other means, such as by photographs made from the air. The object to which such illegal surveillance is directed constitutes a secret guarded by a sovereign State, and regardless of the means by which such an operation is carried out, it is in all cases an intrusion into something guarded by a sovereign State in conformity with its sovereign prerogative. Thus such observations are in violation of the sovereignty of States, and no analogy exists here with principles applying to the open seas. If it were merely

50 Ibid., 13-15.
a case of observing what happens on the high seas, one could of course accept this analogy; but when it is a case of observation on the high seas for purposes of collecting intelligence information, then we are dealing with an intrusion into the sovereign rights of States, an attempt to penetrate into that which a State tries to protect on its territory. And I should add to this the further fact that, for technical reasons, one cannot find out by observation on the high seas what one can find out from outer space.

Thus this analogy used by the representative of the United States can be considered neither from the factual nor from the legal angle as valid and applying to the situation we are at present discussing. For these reasons we consider that the activities involved are incompatible with the provisions of the United Nations Charter. Such gathering of intelligence data through the use of space vehicles is in violation of the sovereign rights of States, and if outer space is to be used in peaceful cooperation, such operations cannot be regarded as legal or in conformity with international law, and hence there could be no question of the possibility of defending such a position on the basis of international law and generally recognized principles.51

The Soviet representative did not provide any information concerning the content of "intelligence data," and the subsequent discussions have not achieved specificity as to such content. However, the subject has received no little attention in the legal subcommittee of the Committee on the Peaceful Uses of Outer Space, April–May 1963, and again during September 1963.52

The Soviet Union, as the proponent of the view that the gathering of intelligence data in a state by means of a transiting satellite is "espionage" and therefore violative of international law, has assumed the affirmative duty of proving these claims to be both valid and acceptable. In seeking to prove its point it has raised the following arguments. As noted above, it has been asserted that it is wrong to engage in the gathering of intelligence since it is allegedly an invasion of sovereignty, of the UN Charter, international law, and the concept of peaceful cooperation. It is the Soviet view that since it is wrong to gather information by way of aerial photographs made by superjacent aircraft, it is equally wrong to do so from outer space.

51 Ibid., 57. The Soviet argument that the use by the United States of information gathering satellites is illegal has been summarized by Crane in "Soviet Attitude Toward International Space Law," 56 AJIL 704–706 (1962).

Accordingly, neither the altitudes nor the means employed may be considered as significant distinguishing differences.

Nonetheless, the Soviets do not admit that they are limited in their intelligence gathering activities conducted on the high seas or from outer space. The absence of national sovereignty over the high seas is given as their reason for the lawfulness of such conduct. Such reasoning presumably would also apply to intelligence gathering from the airspace above the high seas and outer space above the same air-sea space environment concerning events in such areas. But in the April–May 1963, U.N. debates, the Soviet delegate rejected, as lacking in factual and legal validity, an analogy between intelligence gathering activities within a nation from the high seas and the same activities conducted from outer space. Apparently he drew some significance from the fact that observational equipment, technically capable of obtaining information on or from the high seas, need not serve effectively when used in outer space, and also that the latter dimension was a more favorable observation position.

The Soviet delegate told the legal subcommittee on April 17, 1963, that the altitude from which "espionage" occurred—apparently the same meaning has been attached by the Soviets to this term as that of collecting intelligence information—did not serve to distinguish such activities from comparable ones engaged in at lower altitudes. He again asserted that when such activity was conducted in the territory of a sovereign state, it was incompatible with the objectives of mankind in the conquest of outer space and with the theory and practice of international law. He again argued that since such conduct had been prohibited by national laws, the same principle "should" apply to espionage in outer space. He also urged that the 1907 Hague and the 1944 Chicago Conventions had relevancy, and said that "Provisions of the Hague Convention of 1907 respecting the Laws and Customs of War on Land outlawed spying, and satellites used for the collection of intelligence material would be spies. Article 36 of the Convention on International Civil Aviation signed at Chicago in 1944 stated ‘Each contracting State may prohibit or regulate the use of photographic apparatus in aircraft over its territory.’” The Chicago Convention, however, has no applicability to spacecraft in space.

54 Ibid. Haley appears to be in error when he concludes that it is "accepted international law" that "no man-made object or vehicle may pass over it ["every sovereign nation"] at any height if such passage is for the purpose of acquiring military intelligence." Haley, supra note 21, at 91. Compare, McDougal, Lasswell and Vlasic, Law and Public Order in Space 491–496 (1963).
In contending that the substance of municipal law provisions dealing with espionage "should" be applied to conduct in outer space, the Soviet representative, by implication, admitted that the rule had not been incorporated into international law. In asserting that "espionage" in outer space was incompatible with the practice of international law, one may perhaps conclude that the Soviet representative was acknowledging that as of that time no such conduct had been engaged in, although, as noted above, many private Soviet writers have contended that certain types of United States satellites were engaged in "unlawful" information gathering activities. Finally, the claim by the Soviets concerning the applicability of the 1944 Chicago Convention was made in the face of the fact that the Soviets have never become a party to that agreement. Furthermore, they have never stated that they were not engaged in information gathering activities in other countries. In fact Premier Khrushchev acknowledged in May 1964, that Soviet satellites had photographed military installations at high altitudes.

On April 26, 1963, the Soviet delegate again made reference to the problem of intelligence gathering by means of satellite. On this occasion, emphasis was placed on the contention that such conduct was contrary to the interest of friendly international relations and the immateriality of the altitude from which such observation took place was again asserted. Additionally, the analogy of freedom of observation on the high seas was again rejected, and the Soviet delegate pointed out that there were in fact numerous limitations upon the independence of national ships, namely, nations had established "either temporarily or permanently—warning, danger, restricted or prohibited areas for numerous purposes." 55

It was the Soviet view that the acceptance of a rule respecting the gathering of intelligence information in a state was "simply a confirmation and extension of an accepted principle of international law." 56 The unwillingness of other states, it was charged, to accept such a rule was "evidence of a desire * * * to reserve the possibility of using outer space for espionage purposes." 57

As has been noted, the Soviet draft agreement on emergency landings also suggested that the collection of intelligence information in the territory of a foreign state was wrong and in conflict with the objectives of mankind in the conquest of outer space. 58 In comment-

56 Ibid.
57 Ibid.
58 Supra, pp. 271–286.
ing on this proposal, the Soviet delegate told the subcommittee on April 30, 1963, that “it could not be seriously supposed that a State finding a spy satellite with equipment containing photographs of strategic objects on its territory would return that satellite untouched to the launching State, since the return of the satellite would adversely affect the security of the State in which it had landed.” 59

Before the subcommittee concluded its April-May 1963, session, the delegates endeavored to summarize the achievements of the meetings. The Soviet delegate protested that the United States had declined even to discuss the Soviet contention dealing with the gathering of intelligence in a state by use of an artificial satellite. It was acknowledged, however, that there had been numerous protests against the Soviet proposals, and notice was served by the Soviets that they had not given up their support of the wholly novel view of this phase of international law. It was stated that “All attempts to reconcile the collection of intelligence information by artificial satellites with the principles of international law were completely unfounded. Espionage in any environment was inadmissible and it was prohibited by every system of national law.” 60 However, by September 1963, the Soviet Union’s delegate to the Committee on The Peaceful Uses of Outer Space was content in a long speech merely to say that his country attached “considerable importance to efforts finally to achieve agreement on the question of the impropriety of the use of satellites for collecting intelligence information.” 61 It should also be noted that General Assembly Resolution 1962 (XVIII) fails to take any account of the Soviet point of view.

The Soviet position did receive limited support in the April–May 1963, deliberations of the subcommittee. Thus; some of the states composing the Communist bloc, such as Romania, 62 Hungary, 63 Bulgaria, 64 and Albania, 65 considered the Soviet proposals to be either humanitarian or based on sovereign rights and designed to eliminate conditions inimical to the cause of peace. All, as did the Soviet Union, argued that such proposals should be incorporated into the

63 U.N. Doc. A/AC.105/C.2/SR.21, 4. "Espionage, which was contrary to the principles of international law and was generally prohibited by national legislation, should be specifically prohibited in outer space and the possibility of any violation should be precluded."
body of international law, and that this might be accomplished by the acceptance of the Soviet drafts. None, however, made any effort to offer any detail as to the meaning of "intelligence information."

During the April-May 1963, meetings of the subcommittee, the United States made no effort to debate the Soviet proposal. It preferred to engage in the actual practices followed from 1957 to the present and the position of the United States is well known. In an address delivered on April 13, 1963, Mr. Meeker, Deputy Legal Adviser, Department of State, made it clear that observation from space to space, airspace, and to the earth was governed by the Charter of the United Nations, by international law, and, in particular, by Resolution 1721 (XVI) which commended to the countries of the world the principle that outer space and celestial bodies are free for lawful exploration and use. It was his general proposition that "observation of the earth from outer space is a legitimate and permissible activity in the peaceful exploration and use of space. Observation neither works nor threatens injury or damage to any persons or things on earth." He therefore concluded that "observation from space comes within the freedom which the General Assembly has recognized * * *" in Resolution 1721 A 1 (b).

After pointing to the hybrid uses of space vehicles, Meeker noted their importance in the promotion of international security. He stated that:

Another important potential use of observation in space is the possibility of acquiring information about military preparations, and thus help in maintaining international peace and security. One of the great problems in today's world is the uncertainty generated by the secret development, testing, and deployment of national armaments and by the lack of information on military preparations within closed societies. If in fact a nation is not preparing a surprise attack, observations from space could help us to know this and thereby increase confidence in world security which might otherwise be subject to added and unnecessary doubts.

On this basis he arrived at an important conclusion, and related it to the international law of outer space. He stated:

The fact that observation satellites clearly have military as well as scientific and commercial applications can provide no

67 Ibid., 2.
68 Ibid., 5.
basis for objection to observation satellites. International law imposes no restrictions on observation from outside the limits of national jurisdiction. Observation from outer space, like observation from the high seas or from air space above the high seas, is consistent with international law.\(^69\)

On May 3, 1963, Mr. Meeker summarized before the legal subcommittee the points on which a consensus had been achieved. Specifically, it had been understood that there existed “freedom of outer space for exploration and use by all States, on a basis of equality in accordance with international law; on the immunity of celestial bodies from national appropriation; on the applicability of international law, including the United Nations Charter, to relations among States in outer space; on retention by the launching authority of jurisdiction over the ownership of space vehicles; on assistance to astronauts in distress and return of space vehicles and their personnel, and on liability for injury or damage caused by space vehicle accidents.”\(^70\) It is noteworthy that no direct reference was made to the Soviet proposals relating to the gathering of intelligence data.

The Soviet proposals have also been rejected by other states participating in the deliberations of the legal subcommittee. Thus, the Italian delegate on April 22, 1963, held that the Soviet proposals fell under the heading of “observation” rather than “that of espionage. [It was his view that] Observation for peaceful and indeed deserving purposes had heretofore been considered to be consistent with international law, as in the practice of observation from the high seas. If the concept of freedom of the high seas was to be extended to outer space, precedent would not support the exclusion of such activity in outer space.”\(^71\) In the same context the Canadian delegate rejected the Soviet contention that the same national rights existed with respect to observational conduct in outer space as are permitted in the airspace by reason of Article 36 of the Chicago Convention.\(^72\) He also supported the general analogy of the law of the sea as applicable to outer space. Other delegates also noted and expressed disagreement with the Soviet proposal.\(^73\)

\(^{69}\) Ibid., 6.


The Soviet position on the gathering of information from outer space has demonstrated a unique inconsistency. There has been a consistent attack on the propriety of United States information gathering satellites while at the same time there has been Soviet support for the legality of their own space flights. More important, however, has been a nonofficial Soviet charge that such United States space flights were unlawful as contrary to Resolution 1721 (XVI). The United States has construed the resolution to mean that outer space is free for peaceful use and exploration, and that all beneficial uses other than activities constituting force or threats of force, i.e., aggression, against another state or states in violation of international law or the Charter of the United Nations, were legally permissible. As to this position one Soviet writer has alleged: "In contravention of the U.N. General Assembly's resolution of December 20, 1961, on the extension of international law to outer space, which is to be used only for the benefit of mankind and in the interests of states, the U.S.A. has stubbornly continued to launch its spies-in-the-sky, secret satellites, military satellites and other satellites carrying secret testing devices." Thus, the Soviet position has been made clear. It is their view that such observational techniques, like those pursued by both unmanned balloons and manned aircraft superjacent to and within close proximity to Soviet land areas, are inherently illegal. However, while mere unauthorized entry by balloons and aircraft into airspace has been deemed to be a violation of the sovereignty of the subjacent state, the Soviets have urged that all intelligence gathering satellites were illegal—being engaged in “espionage”—and would therefore be considered by the Soviets as engaged in “aggressive conduct.”

The Soviets have not made clear their reason for attaching special importance to the collection of intelligence data by means of artificial satellites, although their objection appears to be based on the wide coverage afforded by satellites. However, intelligence information may be acquired by a number of other means, including radio signals,

76 Lissitzyn, supra note 34, at 137.
radar, and other processes when mounted on naval vessels, balloons, rockets and aircraft. Thus, the principal objection to satellites seems to be that they are highly efficient in accomplishing their mission, rather than objection to their location or the fact that they may be manned or unmanned. Their "aggressive" nature, according to the Soviets, has been based principally upon their utility and not at all upon any capability of engaging in overt or forceful conduct. The charge of "espionage" has suggested that Soviet planning was unable to accept, on the basis of mutuality, the challenge of equal observational opportunity.78

It would appear that the Free World for policy considerations is obliged to reject the claim that intelligence gathering satellites are engaged in aggressive conduct. To accept this contention would constitute a capitulation to the principles and assumptions of a closed society, and might ultimately lead to other restrictions on the full and free use of outer space for peaceful, i.e., nonaggressive and beneficial, purposes.

The Soviet claim that the collection of intelligence information in the territory of a sovereign state constitutes "espionage" and that such "espionage" violates the principles of international law has no legal foundation. International law, both customary and conventional, makes no provision for espionage in time of peace. Articles 29-31 of the Regulations of the Fourth Hague Convention, 1907, deal with espionage in time of war. It is clear that the prohibited conduct under those circumstances is that of an individual who is entitled to a trial. This would seem to exclude unmanned satellites. The activity must be clandestine, but here the United States has given full advance publicity to its manned space activities, has made reports to the United Nations of its manned and unmanned launches, and has provided extensive official news releases so that the world public has been made aware of such activities—so much so that Soviet writers have been able to discuss these successes in great detail.

Espionage in wartime, if not carried out in a clandestine manner, to result in punishment, must be undertaken pursuant to false pre-

78 Deutsch, "A World of Moderate Rivals," in Goldsen, ed., International Political Implications of Activities in Outer Space 181 (1960). He has suggested that under conditions of moderate rivalry, space powers may exercise some restraint in space activities, including the toleration of overflights in an area designated as "reconnaissance space." At such a distance a satellite would be able to obtain "relevant military information about objects and activities on the ground." Where the rivalry has gone beyond this condition the opposing states may be induced to "try to shoot down" objectional satellites. Falk, "Space Espionage and World Order," in Stanger, ed., Essays on Espionage and International Law 55 (1962).
tenses. No record has been made of a satellite purporting to be something else. The uniformed wartime occupant, if any—like an aviator or any other military person—(assuming he were to be charged with spying) would be entitled to the protection of the Regulations attached to the Fourth Hague Convention, 1907.

The fact that states have enacted municipal laws prohibiting conduct which has been defined unilaterally as espionage, even when the defined conduct is engaged in beyond jurisdiction of the subject state, need not establish international standards, and even less, international law. Surveillance at approximately 68,000 feet, as in the case of the U-2, has been described by the Secretary of State of the United States as "aerial surveillance by unarmed civilian aircraft." 79 It has been generally conceded that such observation was not espionage in the conventional international sense. 80 Since peacetime international law is remarkably devoid of content relating to conduct, which if engaged in during wartime might legitimately have been regarded as espionage, 81 the Soviet response to the U-2 and RB-47 flights was to assert that such conduct was aggressive. It was the Soviet view that the conduct was a violation of its sovereign frontiers of airspace. 82 The Security Council refused to condemn the U-2 flight as aggressive by a vote of 9-2. 83 Although the Soviet Union shot down the U-2, it did not claim or admit the right to shoot down the RB-47 (United States aircraft), when "over the high seas, even if it is a military aircraft which may be engaged in military reconnaissance." 84

Although international law has not interdicted the collection of intelligence data in a given country when accomplished from the high seas and from the airspace superjacent to the high seas, a state—on security grounds—can punish the invasion of its airspace. Sanctions have been imposed whether the infraction has been accomplished intentionally to obtain intelligence data or has been quite accidental, and not involving the acquisition of data.

It has been sometimes contended that the gathering of intelligence data by satellite violates the basic principle of international law

80 Ibid.
82 Lissitzyn, supra note 34, at 136, 138-140.
84 Lissitzyn, op. cit., 140.
whereby each sovereign state must respect the territorial integrity and political independence of others. Thus, it has been suggested that espionage in peacetime is a form of intervention which cannot be legally justified “on the ground that it is carried on as part of a crusade against communism.” 85 The claim of a state to engage in observational activities may be based on the fundamental doctrine of self-defense or on its right to enjoy the condition of international peace and security. Since the world community possesses a decentralized decisional process, it is clear that such principles may be opposed by Soviet claims based either on the duty of peaceful intercourse, or nonintervention in internal affairs, or on their view of self-defense, peace, and security.

International law does not interdict all activities of a state which are not appreciated by other states. It prohibits only such conduct as has been agreed to be unlawful—either through custom, general principles of law, or through express consent. Until custom or express agreement has been reached, holding nonaggressive observational activities to be unreasonable, it will be permissible for states to employ information gathering satellites.

It has been noted that the Soviet Union and the United States have taken opposing views on the legality under international law of one function of observational satellites. However, both have fashioned their approach to this subject by reliance on, and through, seeking the benefit of the general principles of international law, the Charter of the U.N., and in particular General Assembly Resolution 1721 (XVI). Both have taken into account the concepts of sovereignty, the right to international peace and security, and self-defense. The Soviets have made particular reference to such concepts as territorial integrity, political independence, friendly international relations, and peaceful intercourse. They have also specifically noted the needs of peaceful cooperation and the humanitarian objectives of mankind. It has been suggested, in support of the Soviet position, that observational activities may constitute a form of intervention violative of an alleged right of privacy. The Soviets have charged that “espionage,” at least if engaged in by means of an artificial satellite, is inherently wrong, and have sought, without success, to support their views through reference to the Hague and Chicago Con-

ventions. They have also pointed to the fact that a state in its national legislation may prohibit the municipal crime of espionage.

The United States, on the other hand, has interpreted General Assembly Resolution 1721 as meaning that outer space is open to all for peaceful exploration and use on the basis of equality. It has pointed to the reasonableness of its observational activities and to the inconsistencies of the Soviet claim when compared with the conduct of the latter. The United States has relied on the analogy of the high seas where freedom of observation is accepted. It has noted that with the development of a customary law for outer space, state practice has generally come to regard observational activities as peaceful, and that there have been no national protests on a formal state-to-state basis against a specific instance of space observation. The United States has also been able to rely on the fact that international law—not being all-encompassing—has not arrived at any specific inhibitions against reasonable observational activities. Such activities have been held to be nonaggressive and in the greater interests of both states and mankind. On these facts it may be supposed that such observational activities will be continued since they are both lawful, nonaggressive, and generally beneficial.

D. THE SPECIAL SOVIET VIEW OF COMMUNICATIONS ACTIVITIES

The Soviet draft declaration of basic principles of April 16, 1963, provided "5. The use of outer space for propagating war, national or racial hatred or enmity between nations is inadmissible." Paragraph 7 provided, in part, "All activities of any kind pertaining to the exploration and use of outer space shall be carried out solely by States." 86

The Soviet purpose here, as previously, was to provide an interpretation of the General Assembly Resolution 1721 (XVI), and to impose restrictions upon the free and peaceful use of outer space. Their underlying concern—again based on the expectation of maintaining a closed society—was that privately owned communications facilities in the western world might be used to disseminate ideas unacceptable to communist theory and practice within the Soviet Union. Thus, although the Soviet proposal expressly referred to certain kinds of propaganda, the purpose was to obtain the accept-

87 Ibid.
ance of a principle upon which it might be urged that information emanating from the free world might be legally excluded from the Soviet Union.

The Soviet delegate in explaining the purpose of the proposal took into account what he considered to be the undesirable phenomena resulting from private capitalist competition as well as certain achievements of modern technology. In urging against the promotion and dissemination of "inhuman ideas," he noted that the General Assembly had "envisioned that possibility in 1947, when it had adopted Resolution 110 (II) on measures to be taken against propaganda and the inciters of a new war." 88

When the committee on the Peaceful Uses of Outer Space met in September 1963, the Soviet delegate made only passing reference to the fact that his government attached "considerable importance to efforts finally to achieve agreement on the impermissibility of the use of satellites *** for war propaganda and for propaganda connected with national and racial hatred and enmity among people." 89

The first reaction to the Soviet propaganda principle varied from the belief that it was beyond the competence of the legal subcommittee to discuss it, to the view that it went beyond international law, and also to firm support of it. As with the Soviet proposal dealing with "espionage," the states in the Communist Bloc were its supporters, while the representatives from other states expressed opinions varying from outright rejection to conditional approval. The United States, as with the proposal for prohibiting "espionage" by satellite, expressed no opinion on the subject.

At the April-May 1963, legal subcommittee meeting it was the view of the delegate of the UAR that the propaganda proposal "went beyond international law ***" 90 The Italian delegate thought that

88 U.N. Doc. A/AC.105/C.2/SR.17, 7 Resolution 110 (II) provided: "The General Assembly 1. Condemns all forms of propaganda, in whatsoever country conducted, which is either designed or likely to provoke or encourage any threat to the peace, breach of the peace, or act of aggression; 2. Requests the Government of each Member to take appropriate steps within its constitutional limits: (a) To promote, by all means of publicity and propaganda available to them, friendly relations among nations based upon the Purposes and Principles of the Charter; (b) To encourage the dissemination of all information designed to give expression to the undoubted desire of all peoples for peace." 1947-1948 Yearbook of the United Nations 93 (1949).

89 U.N. Doc. A/AC.105/PV.20, 46. The more subdued positions of the Soviets, in contrast to that expressed in the Spring of 1963, is reflected in the Soviet delegate's statement to the committee. He observed that "Rapprochement on questions which still remain to be settled may be achieved on the basis of reasonable compromise and mutual concessions." Ibid.

the proposal went beyond the competence of the body and that the injection of it would only lead to a conflict of opinion which might limit affirmative progress in other areas. He observed that "Although it was true that the problem of propaganda was related to the use of outer space because a space-ship might be equipped with transmitting gear, the legal aspects of propaganda would not differ if the transmission was received from a radio located on earth or conveyed through a space-ship. The origin of the transmission was not the point at issue." 91 This view was supported by France, 92 Australia, 93 Argentina, 94 and the United Kingdom. 95

Canada and Brazil suggested alternative proposals. The Canadian delegate suggested a principle formulated in positive terms, namely: "States shall endeavor to direct their activities in outer space towards the maintenance of international peace and security and the achievement of international co-operation and understanding." 96 Brazil favored a specific agreement, in accordance with the principles of the Charter, which "should prohibit any State from using global telecommunications systems to intervene in the domestic affairs of another State." 97 The United States simply adhered to its view that international law was applicable to outer space activities. 98

On the other hand, the western bloc countries did not favor the use of outer space as a forum for the dissemination of war propaganda and incitement to national or racial hatred and discrimination. If, as they agreed, the principles and rules of international law which applied elsewhere also applied in outer space, there was no reason to restate acknowledged limitations. 99

The countries favoring the Soviet proposal urged the need for a more positive inhibition upon the uses of outer space. This was the view of Czechoslovakia, 100 and Hungary, 101 which specifically charged that "The conduct of space activities, in any form, by private persons or organizations was therefore inconsistent with the principles of

95 Ibid., 12.
96 U.N. Doc. A/AC.105/C.2/SR.21, 7. The British representative noted that this was an interesting proposal.
99 This was also the view of this Polish representative. U.N. Doc. A/AC.105/C.2/SR.19, 7.
international law * * *." 102 and Bulgaria which supported the Soviet proposal on the ground that it was humanitarian. 103 Albania maintained that the acceptance of the principle would lead to the conclusion of detailed agreements on such specific subjects as assistance to astronauts in distress and liability for damage. 104 Romania upheld the Soviet proposal on the ground that it would help to encourage constructive international cooperation. 105 These debates resulted in the incorporation of the following language into the unanimous General Assembly Resolution 1962 (XVIII) of December 24, 1963: "Resolution 110 (II) of 3 November 1947, which condemned propaganda designed or likely to provoke or encourage any threat to the peace, breach of the peace, or act of aggression, and considering that the aforementioned resolution is applicable to outer space. * * *" 105a Presumably such language has given to the Soviets one additional assurance that outer space is to be used for peaceful, i.e., nonaggressive and beneficial, purposes.

As the subcommittee concluded its April-May 1963 meetings, the representative of the United States stated that if that body were to succeed in bringing forth acceptable recommendations, its members would have to be motivated to "engage in the give and take of international discourse and to make adjustments in their positions in order to achieve a consensus." 106 Concerning the means by which ideas might be disseminated, the answer of the Soviet representative was that "Only States fully cognizant of their responsibilities should be allowed to engage in space activities: to give private companies a free hand in outer space could lead to chaos and anarchy." 107 However, by September 1963, the Soviet Union had modified considerably its views that only national bodies might embark on outer space programs. Thus, the Soviet representative told the Committee on Peaceful Uses of Outer Space that it would be willing to recognize the responsibility of international organizations for material damage caused by them during their space activities. He noted that "in the case of space activity being conducted by an international organization, responsibility for both the implementation of the principles of the declaration and for possible material damage caused on

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105a See Annex 4, infra, pp. 450–452.
107 Ibid., 13.
the earth or in space, will be borne, together with the international organization also by States participants in it.”

Several days later the Soviets also acknowledged the permissibility of private companies engaging in space activities when supervised or controlled by their national governments. The Soviet delegate stated that “it would be possible to consider the question of not excluding from the [Soviet] declaration [of principles] the possibility of activity in outer space by private companies, on the condition that such activity would be subject to the control of the appropriate State, and the State would bear international responsibility for it.”

These more recent views of the Soviets indicate some elasticity in their conception of a suitable declaration of principles for national activity in outer space. This elasticity was reflected in the terms of the unanimously adopted United Nations General Assembly Resolution 1962 (XVIII) of December 24, 1963. It made provision for conducting space activities by both governmental agencies and nongovernmental entities and stated in paragraph five that “the activities of nongovernmental entities in outer space shall require authorization and continuing supervision by the State concerned.”

The foregoing analysis of some of the conditions under which outer space may be used has demonstrated a number of salient positions. It has called attention to the need for an interpretation of the basic principles contained in General Assembly Resolution 1721 (XVI) of December 20, 1961. It has also served to illustrate the problem of moving in the direction of agreement on specific rules. The basic problem, of course, is and will continue to be the extent to which the uses of outer space will be free or limited. This directly affects the substance of reasonable uses and unreasonable or unpermitted uses. The Soviet Union, and the Communist Bloc, have demonstrated their demands for a limitation on the free uses of outer space—going beyond the bounds of practical reasonableness in the eyes of the western world. The negative approach was best illustrated by the statement of the Soviet delegate to the legal subcommittee on May 2, 1963. After charging that the United States had refused to support “the principle of equal rights for all States in the exploration and use of outer space,” although the representative of the United States had previously made it clear that a consensus existed on the principle of “the equality of rights of all States in the exploration

and use of outer space” in accordance with international law, the Soviet delegate concluded: “Nor unfortunately had there been agreement on the principle of the freedom of outer space, since difference of opinion existed as to whether that freedom should be absolute or qualified.” Despite the unacceptability of the Soviet proposals relating to the collection of intelligence data by observational satellite and those relating to limitations upon the substance and means for the dissemination of ideas, there was a strong feeling among the members of the subcommittee that certain uses of outer space were unreasonable and therefore impermissible. Such uses have been characterized as nonpeaceful, i.e., aggressive and nonbeneficial.

E. RESTRICTIONS ON USES OF OUTER SPACE

The range of reasonableness, and therefore of permissibility, extends from such generally accepted practices as the collection of scientific information by satellite through the practice of collecting intelligence data in the territory of a state to the unreasonable, and hence impermissible, use of outer space and space vehicles for aggressive purposes. The United States has adopted the policy of not placing weapons possessing mass destruction capabilities in outer space and as early as the 1962 debates in the Political Committee of the United Nations, invited the Soviet United to conform to the same policy. Efforts to obtain an understanding with the Soviets respecting the presence of weapons of mass destruction stationed in outer space have been influenced by common efforts to interdict, as unreasonable, the testing of nuclear weapons in outer space.

On April 18, 1962, the United States submitted a draft treaty on General and Complete Disarmament to nations endeavoring to reach an accord on this subject. The American draft provided in part D for Stage One that “The Parties to the Treaty would agree not to place in orbit weapons capable of producing mass destruction.” Article 15 of the Soviet proposal of March 28, 1962, for “General and Complete Disarmament under Strict International Control” provided that “Rockets and space devices shall be launched exclusively for peaceful purposes,” and called for control teams from an international agency to be present “at launchings and thoroughly examine

111 Ibid.
112 Ibid.
every rocket or satellite before launching." 115 And, prior to the Soviet proposal, the United States on September 25, 1961, had submitted a plan for general and complete disarmament to the United Nations. In Stage I the proposal called for the prohibition of "the placing into orbit or stationing in outer space of weapons capable of producing mass destruction * * *" 116 The same proposal also called for states to give advance notification to participating states and to the International Disarmament Organization of "launchings of space vehicles and missiles, together with the track of the vehicle." 117

President Kennedy called attention to the American position on September 12, 1962, when he stated that "We have vowed that we shall not see space filled with weapons of mass destruction, but with instruments of knowledge and understanding." 118 Pursuing this goal, and immensely assisted by the conclusion of the Moscow Treaty "banning nuclear weapon tests in the atmosphere, in outer space and under-water," 119 August 1963, Mr. Kennedy in addressing the United Nations on September 12, 1963, again laid emphasis on the need to keep weapons of mass destruction out of outer space. As the 18-member United Nations Disarmament Committee began to turn its attention to drafting a resolution on this subject in October 1963, Mr. Kennedy again made the position of the United States clear when he stated on October 9, 1963, that "The United States has stated it would not put weapons in outer space. We have no military use for doing so and we would not do so." 120 It should also be noted that the Soviet Foreign Minister had placed some emphasis on the

117 Ibid.
119 The operative parts of the Treaty are contained in Article I, which in part provided: "1. Each of the Parties to this Treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control: (a) in the atmosphere; beyond its limits, including outer space; or underwater, including territorial waters or high seas; or (b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted. * * * 2. Each of the Parties to this Treaty undertakes furthermore to refrain from causing, encouraging, or in any way participating in, the carrying out of any nuclear weapon test explosion, or any other nuclear explosion, anywhere which would take place in any of the environments described, or have the effect referred to, in paragraph 1 of this Article." 49 Department of State Bulletin 239 (1963). The Treaty is set forth in Annex 19, infra, pp. 470–472.
need to avoid positioning weapons of mass destruction in outer space in his September 1963, address to the United Nations.

Prior to the unanimous adoption by the Political Committee of the United Nations on October 16, 1963, and the subsequent unanimous adoption of Resolution 1884 (XVIII) by the General Assembly on October 17, 1963, there had been discussions in the legal subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space on the need to avoid the positioning of such weapons in outer space. These discussions were carried on in the context of formally interdicting nonpeaceful, i.e., aggressive and nonbeneficial, uses of outer space. Thus, during the discussions carried out in the legal subcommittee in the Spring of 1963, the representative of the United Arab Republic indicated that peaceful uses would prohibit "the storage of weapons of mass destruction in artificial satellites circling the earth, the placing of missiles on the moon or the establishment of military bases in outer space or on celestial bodies." 122

Among the uses of outer space which are currently under discussion, particularly in terms of the reasonableness of the use, are the West Ford projects of the United States. The second effort in 1963 succeeded in distributing a vast quantity of copper needles in a circular orbit around the earth at an elevation of approximately 2,000 miles. Such needles serve to transmit radio signals carrying voice, teletype, and high speed data. They have been designed to provide an invulnerable communications system which would be almost impervious even to nuclear explosions.

The use of outer space as a dimension for the testing of nuclear devices has also been much debated in terms of reasonableness and hence permissibility. In all pre-Moscow treaty discussions the problem of occasional—as opposed to frequent or continual—use had been raised, and it has been urged that an occasional use of an otherwise unpermitted form of conduct could fall within the range of reasonableness. Many factors, of course, have to be weighed in arriving at a conclusion as to the reasonableness, and hence permissible status, of such uses. 124

124 Infra, pp. 332–349. It is clear that a unilateral breach of the terms of the Moscow Treaty would absolve other signatories from the further obligation to conform to it.
In seeking a policy as to the type of restrictions which ought to be imposed with respect to the uses of outer space, the United States has been guided by man's vast experience in the use of the seas. The law of outer space, by way of partial analogy with the law of the high seas, has adopted the principle that such space is free for peaceful and reasonable uses. The United States has supported this result on the ground that it permits the use of outer space free of any restraints except those of exclusive use and illegal activity, such as aggression. This position was stated in large part by the Deputy Assistant Secretary of State for International Organizational Affairs on March 12, 1962, when, in referring to General Assembly Resolution 1721 (XVI), he stated that "Mankind would thus be free to use space on the same basis as it uses the high seas—free of any restraint except those on illegal activity, such as aggression and exclusive use. This formula is designed to promote the maximum exploitation of space technology in the service of human needs." Thus, the purpose underlying the use of outer space has a direct bearing on whether such uses or activities in outer space are to be considered peaceful, reasonable, and lawful. The practical consequences of certain uses will prove whether space activities serve human needs.

One of the most important considerations to be weighed in ascertaining the reasonableness of space conduct is whether it is carried on openly after suitable advance notice to the world. President Kennedy, in addressing the National Academy of Sciences on October 22, 1963, announced a policy for the conducting of outer space experiments involving potential risk to the space environment. Apparently with the West Ford project and perhaps high-altitude nuclear tests conducted in the Pacific in mind he stated:

The government has the clear responsibility to weigh the importance of large-scale experiments to the advance of knowledge or to national security against the possibility of adverse and destructive effects.

To deal with this problem, we have worked out formal procedures within the government to assure expert review before potentially risky experiments are undertaken.

And we will make every effort to publish the data needed to

permit open discussion of proposed experiments by the scientific community before they are authorized.\textsuperscript{126}

From these remarks it is clear that the United States proposes to publish the reasons for large-scale scientific experiments in outer space before they are finally authorized. This will permit open examination and discussion of the proposed activities. However, the President’s remarks left open the possibility that such procedures were not necessarily to be exclusive, and that in reality such procedures would not be followed if the intended experiment involved measures of significant importance to national security. To the extent that the world scientific community will be consulted prior to embarking upon new and different experiments, it is indeed likely that the body of scientific opinion comprising COSPAR will be taken into careful account. In the formulation of this policy it is also clear that the United States has opened the way for other nations to conform to comparable practices. The establishment of an international scientific consensus as to appropriate scientific practices will unquestionably materially affect the substance of reasonable uses.

In view of the fact it is difficult to identify the functions of aircraft and spacecraft after they have left the ground, one approach to the peacefulness or reasonableness of their missions has been to suggest the development of registration and inspection procedures for use prior to launch and flight.\textsuperscript{127} The difficulty of ascertaining the intended purposes of space vehicles, after launch, may be compared with the problem of determining the mission of aircraft while in flight. This is particularly true when international tension is high. During the 1962 Cuban crisis between the United States and the Soviet Union, Mr. Khrushchev wrote to President Kennedy with regard to an American reconnaissance plane which appeared over the Chukotka Peninsula on October 28: “Is it not a fact that an intrud-


\textsuperscript{127} The problem of arriving at information concerning nuclear test explosions is not entirely dissimilar. In this connection there has been agreement in principle between the United States and the Soviet Union that on-site inspections, both by means of automatic seismic stations and human inspection, should take place. See the exchange of letters of December 19 and 28, 1962, and of January 7, 1963. “U.S. and U.S.S.R. Exchange Views on Nuclear Test Ban,” 48 \textit{Department of State Bulletin} 198-202 (1963).
ing American plane can be easily taken for a nuclear bomber and this might push us to a fateful step * * *? 128

1. Preliminary Assessment of Factors to be Considered in Determining Whether Outer Space Is Being Used for Reasonable Purposes

Reasonableness of use in the final analysis must depend on at least three considerations, namely, the purpose or intent underlying the use of the space vehicle, the specific factual context of a given international situation, and finally, the nature—including specific capabilities—of the vehicle itself. In some instances the very nature of the vehicle, when, for example, it is an instrument of mass destruction, would characterize its presence in outer space as an unreasonable one. In other instances, intent would have to be linked to the inherent capability of the vehicle in order to determine if it were to be employed for overtly aggressive purposes. In such situations the nature of existing international relationships would have to be taken into account in arriving at a decision as to the reasonableness of space conduct.

The presence of a weapon of mass destruction in outer space may be considered to be both unreasonable and unlawful as well as being destructive of the expectations relating to the peaceful uses of outer space. The fact that the major resource states have abstained from the positioning of such a weapon in outer space suggests that there is an awareness that such an act would be considered by the other as an unpeaceful or aggressive one. Greater certainty would be achieved through the acceptance of an express and formal agreement not to place such weapons in outer space. However, such agreements would serve only as express promulgations of ongoing practices conceived to be in the respective mutual interests of the resource states. If it

128 Text of Message, New York Times, October 29, 1962. Jenks, in 1960, noted that "mutual protection against surprise attack is the key to making effective the exclusive dedication of space to peaceful purposes; the chief danger of activities in space unleashing war on earth may well lie in some inoffensive space vehicle being mistaken in a radar screen at a moment of heightened international tension for an inter-continental ballistic missile which has been launched for a military purpose. Advance notification of launching sites and firing schedules, the filing of flight plans and of descriptions of weight, load and size, and the use of agreed radio codes for the reception of data from space can all play a significant part in eliminating the military element." Jenks, "The International Control of Outer Space," Third Colloquium 10 (1961); Legal Problems of Space Exploration, A Symposium 743; Compare, McDougal, "Artificial Satellites: A Modest Proposal," 51 A.J.I.L. 74-77 (1957).
may be agreed that the presence of instruments of mass destruction in outer space could serve no peaceful purpose, then the illegality of placing such space vehicles in outer space is supported by General Assembly Resolutions 1721 (XVI), 1802 (XVII), 1884 (XVII), and 1962 (XVIII).

2. Prelaunch Factors Affecting Reasonableness of Uses

a. Verification and Inspection

National intent to employ outer space for unreasonable uses may be determined in two ways. First, there may be an explicit claim to engage in an unreasonable use. Second, in the absence of such an explicit claim, and even in the presence of an explicit disclaimer that such activity was not unreasonable, a state through its conduct might engage in unreasonable space activities.

In order to arrive at international assurance that launched space vehicles are not carriers of instruments of mass destruction, and to provide evidence respecting the claim that other space vehicles are designed and intended for reasonable, peaceful, and legal uses, it has often been suggested that such space vehicles and their activities be made the subject of verification and inspection.

Such verification and inspection may take two forms. The first would consist of suitable examination prior to launch. The second, and less effective and less likely to provide an ordered structure for space activity, would be verification and inspection after launch. Prelaunch verification and inspection will be considered here. Postlaunch problems will be discussed in the following chapter.

Proposals for some form of prelaunch inspection, either by nonnationals or by an international agency, have long been advocated. One of the first was that of McDougal, who prior to the IGY and the first Sputnik, urged that each state about to launch a satellite should "register its intent to do so with an international agency, to file a flight plan with such agency, and to file a description of the satellite's load, weight, size, etc. It would of course be impractical and not necessary to the proposal to include details of the launching mechanism, but complete information about the load could be registered and this could be done with respect to both recoverable and nonrecoverable satellites. Beyond registration it might even be desirable as a guarantee of good faith to suggest inspection by the international agency to assure that the load conforms to the description filed. A procedure of inspection need not, of course, include submission to prior approval."\(^{129}\)

\(^{129}\) McDougal, ibid., 77.
The U.N. Ad Hoc Committee on the Peaceful Uses of Outer Space, in its report of July 14, 1959, noted as a matter of priority the need for the identification and registration of space vehicles and co-ordination of launchings. The report suggested the “necessity of providing suitable means for identifying individual space vehicles,” and added that such “identification of space vehicles could be obtained by agreement on an allocation of individual call-signs to these vehicles; the call-signs could be emitted at stipulated regular intervals, at least until identification by other means had been established. Another means of identification is by orbital or transit characteristics of space vehicles.” The report, in addition to favoring registration, also noted the importance of identification. It stated “Registration might also afford a convenient means for the notification of launchings to other States, thus enabling them to make appropriate distinctions between the space vehicles so notified and other objects, and to take appropriate measures to protect their interests if necessary.”

The American Bar Association’s Committee on Law of Outer Space, 1959, noted the importance of “nothing less than foolproof international inspection and enforceable regulation of atomic activities * * *” if there were to be adequate conformity with the needs of peace and security and the right of self-defense. On this basis the Committee recommended that there be developed an “appropriate inspection and control system” for space activities. The need for such a system was based not only on security considerations, but was also related to an orderly peaceful use of space. The latter would, of course, be maximized through the “advance filing of flight plans and coordination of launch times.”

The merit of establishing prelaunch inspection and identification procedures has also been justified in practical terms. It is probable at this time that a more meaningful inspection would be accomplished on the ground than after the vehicle had been placed in orbit. However, the former approach has been resisted by states, particularly the Soviet Union, on the basis that it might carry with it collateral

130 U.N. Doc. A4141; Legal Problems of Space Exploration, A Symposium, 1269.
131 Ibid.
132 Ibid.
134 Ibid., 576.
reconnaissance of launching sites and attendant espionage. It has been pointed out that "With the possible exception of inspecting vehicles at launching sites, inspection in outer space may be less of an invasion of privacy or of national sovereignty than inspection of weapons on the ground." Sovereignty does not extend to outer space.

The serious difficulties attendant upon the verification and inspection of nuclear tests conducted by one state are similar to the problems involved in the launching of space vehicles. Thus, for reasons of sovereignty, security and self-defense, seasoned by the Soviet's large passion for secrecy, it has not been possible to arrive at a process for prelaunch inspection and identification of artificial satellites. It may be suggested, however, that an international agreement requiring international inspection and identification prior to launch would serve many useful purposes. In the first place, such inspection and identification process would quickly ascertain whether the space vehicle were equipped with instruments of mass destruction, and might either forestall the launch or publicize the nature and legality of the satellite. Secondly, by imposing a duty to submit to prelaunch inspection and identification, it would be possible to establish a presumption that vehicles in orbit which had not been inspected and identified prior to launch were being employed for an unreasonable and nonpeaceful purpose. Thirdly, the prelaunch inspection and identification would grant to the launching state the right to contend that the launch was both reasonable and peaceful and thus shift the burden of proof to show the contrary upon those seeking to prove that the use was unreasonable and nonpeaceful. In short, prelaunch inspection and registration would permit the establishment of a prima facie case that the launch was both reasonable and peaceful, and, therefore, legal. Space vehicles in orbit, which could not offer evidence of prelaunch inspection and registration, on the other hand, would presumably be designed for unreasonable and nonpeaceful purposes, and states offended by their presence would be entitled to exercise legal rights to achieve and maintain international peace, security, and self-defense.

Although it might be supposed that a system of prelaunch inspection and registration, particularly when conducted by a suitable international organization, might have much to commend it, there was

137 Infra, pp. 319-331.
no possibility of writing such a provision into General Assembly Resolution 1721 (XVI). However, Part B of that Resolution did contain a provision calling upon states, in order to further the peaceful exploration and use of outer space, to submit information on national launches on a voluntary basis. The Resolution called upon states “launching objects into orbit or beyond to furnish information promptly to the Committee on the Peaceful Uses of Outer Space, through the Secretary-General, for the registration of launchings.”

The Resolution also called upon the Secretary-General to maintain a public registry of the information furnished by member states. This function is being performed by the Secretary-General who after receipt of reports from the United States and the Soviet Union publishes and distributes the data received.

The United States has reported vehicles launched into orbit or beyond under the following headings: international designation, launch vehicle, satellite category, date of launch, nodal period, inclination, apogee and perigee in kilometres. It has also furnished supplemental information relating to vehicles which did not achieve orbit or those which no longer remain in orbit. United States satellite categories have been designated as “A” for development of space flight techniques and technology, “B” for space research and exploration, “C” for practical applications of space based technology, and “D” for nonfunctional objects.

The Soviet Union has made reports concerning launchings of artificial earth satellites and space objects. It has assigned to them serial numbers, names, the purpose of launching, date of launch, perigee, apogee and inclination of orbit. Typical purposes assigned to launches have been the investigation of the upper atmosphere and outer space, physical study of the atmosphere, research in upper atmosphere and in outer space, attainment of escape velocity and exploration of interplanetary space, and medical and biological research under space flight conditions. It is possible that these respective reports constitute opposing claims as to the presence of atmosphere and the existence of a line or lines separating airspace from outer space. Thus, using for illustrative purposes the satellites which have maintained effective perigees at about 100 statute miles—the lowest reported at the time of this writing—the United States has described such space flights as Category A, namely development of

139 These appear as U.N. Doc. A/AC.105/INF.1. et. seq. The United States and the Soviet Union have filed reports periodically since March 7, 1962.
space flight techniques and technology. However, the first manned space flight undertaken by the United States, Mercury-Atlas 6 (1962 Gamma) of February 20, 1962, was described by the United States as one "launched into earth orbit" and "after four hours and 43 minutes the spacecraft re-entered the atmosphere and landed ***". 141

The Soviet reports to the United Nations on manned space flights, Vostok 1 through 4, have been described as spaceship satellites, and the purpose of the launch has been described in scientific terms, such as human functioning under conditions of weightlessness, conduct of scientific observations, and improvement of functional systems. On the other hand, Soviet space vehicles, described by them as "satellites," or "sputniks" of the Cosmos variety, have maintained perigees varying from about 110 to 168 statute miles. Soviet reports to the United Nations have consistently described the purposes of these launchings to be "investigation of the upper atmosphere and outer space." The Soviets have not, however, urged on the basis of this language that in a legal sense there is a boundary between airspace and outer space at such heights. In may be noted, also, that there is a belief that the Cosmos type satellite may be earth, as well as space, oriented in its observational capabilities. 144

b. Exchange of Information Relating to Outer Space Activities

Resolution 1721 B (XVI) also requires a close coordination between the U.N. and governmental and nongovernmental organizations concerned with outer space matters. To the end that there might be every encouragement to international cooperation in the peaceful exploration and use of outer space, the Resolution made provision for the "exchange of such information relating to outer space activities as Governments may supply on a voluntary basis, supplementing but not duplicating existing technical and scientific exchanges." States have regularly submitted such reports, and the materials have been widely distributed. General Assembly Resolution 1802 II (XVII) of December 19, 1962, has taken into account the

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receipt of such data from many states and expressed the view that other states and regional and international organizations having space programs should furnish the U.N. with such information.\footnote{U.N. Doc. A/RES/1802 XVII. Annex 3, infra, pp. 446-450.} Such reports contain descriptions of national space programs and provide numerous examples of reasonable, peaceful and legal uses of outer space. The examples deal almost exclusively with scientific investigations being conducted in outer space.

A Soviet commentator has emphasized the fact that Resolution 1721 B (XVI) is not mandatory and that it deals only with the reporting of postlaunch data. In noting that Part B of the Resolution refers to the need for prompt reporting of launches, Korovin has concluded that this “means subsequent and not advance registration; nor does the article specify the scope of information to be submitted on registration, which is determined by the state voluntarily making the registration.”\footnote{Korovin, “Peaceful Cooperation in Space,” \textit{International Affairs (Moscow)} 63 (March 1962).} The need to provide an orderly regime for the peaceful use of outer space has been considered by many commentators. The following is a representative opinion:

As satellite traffic increases, it will be necessary to arrive at juridico-technical agreements for the creation of a central registration and data processing agency. This will also permit the establishment of the orbital elements which, in turn, will assist in identifying individual satellites.

Without precise legal stipulations providing in advance of launching for full information about such items as the nationality of all space vehicles, their anticipated launching dates and orbital paths, their radio codes for transmission and reception of data, their agreed upon equipment and instrumentation, and certain ‘markings’ permitting identification of space vehicles in orbit and after re-entry, the risk of miscalculation and ensuing human disaster will soon be real.\footnote{Schick, “Space Law and National Security,” \textit{International Affairs (Moscow)} 58 (March 1962).}

The Japanese representative to the legal subcommittee of the Committee on the Peaceful Uses of Outer Space has suggested that a non-launching state need not be obliged to return a space vehicle or its parts unless it had been provided with advance information concerning the vehicles in transit or in orbit. He stated that “The obligation of non-launching States to return space vehicles should be conditioned upon the obligation of launching States to provide adequate information in advance. The information might be supplied
through bilateral channels or by other appropriate means. In that connection, the timing and contents of the information provided under the registration system established by General Assembly Resolution 1721 B (XVI) might be improved." 149

c. National Consultation and Cooperation as to Purportedly Undesirable Space Uses

In keeping with the premise contained in Resolutions 1721 (XVI), 1802 (XVII), and 1962 (XVIII) that international cooperation should play a large role in the peaceful use and exploration of outer space, several states have made proposals for consultation and coordination regarding national space programs so that space would not be used for unreasonable purposes. Such suggestions have been advanced to ameliorate the situation created by failure to reach agreement on prelaunch inspection and registration. Thus, the 1963 Soviet Draft Declaration of the Basic Principles Governing the Activities of States in the Exploration and Use of Outer Space, Paragraph 6, called for:

Co-operation and mutual assistance in the conquest of outer space shall be a duty incumbent upon all States; any measures that might in any way hinder the exploration or use of outer space for peaceful purposes by other countries may be implemented only after prior discussion of and agreement upon such measures between the countries concerned. 150

The Soviet representative to the legal subcommittee introduced his remarks on Paragraph 6 by stating that the entire Soviet draft reflected a number of views contained in the 1962 Draft Declaration of Principles Relating to the Exploration and Use of Outer Space previously submitted by the United States. 151 He made specific reference to such principles as "the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes, the use of such exploration for the betterment of mankind and of States, irrespective of their degree of economic or scientific development, and the role of co-operation in the use of outer space in the development of mutual understanding and the strengthening of friendly relations between nations and peoples." 152

The Soviet delegate noted that his country’s draft proclaimed extensive rights for peaceful activities in outer space, but that there was a need to protect states and the international community as a whole against the abuse of such rights. He stated: “The idea of the free access of all States to outer space did not mean that States were free to engage in measures which might hinder other countries in their exploration or use of outer space for peaceful purposes. Outer space might be used for undesirable purposes and Paragraph 6 of the Soviet draft therefore mentioned the principle of prior discussion and agreement between the countries concerned.” He then referred to the role of COSPAR and the work of a subcommittee of the Inter-Parliamentary Union, and in particular to his country’s concern lest experiments in outer space produce harmful effects and thereby interfere with the peaceful use of space.

The Soviet delegate supported his views by referring to the 1962 Draft Declaration of Basic Principles Governing the Activities of States Pertaining to the Exploration and Use of Outer Space of the United Kingdom, which had been previously circulated to the members of the committee. Paragraph 1 of the British draft after noting the principle that “Outer Space and celestial bodies are free for exploration and use by all States in conformity with international law” proceeded to enumerate four specific instances of the peaceful and reasonable use of such areas. The draft included within this category the provision:

This freedom shall include free navigation by means of space vehicles, the establishment of space stations and other like devices, the conduct of scientific research, and the landing on and exploration of celestial bodies, and shall be exercised by all States with due regard to the interests of other States in the exploration and use of outer space, and to the need for consultation and co-operation between States in relation to such exploration and use.

It has always been difficult to derive acceptable operational rules and procedures from commonly accepted principles. With regard to outer space no disagreement has existed respecting the needs to use outer space for peaceful and beneficial purposes. Neither has there been much doubt as to the need to achieve international cooperation so that national benefits and interests might be maximized. There

155 Ibid.
157 Ibid.
158 Ibid. Italics added.
has been general agreement that nonpeaceful, i.e., aggressive, uses of outer space were not permissible. But there has existed disagreement as to the procedures which would best contribute to the realization of the desired goals. Specifically, by the end of 1964 there was no precise agreement as to how possible future abuses of the peaceful use of outer space could be controlled. The Soviet proposal called for prior discussion and agreement respecting possible misuses of outer space. The British draft called for consultation and cooperation on the part of resource states prior to engaging in launches which might be detrimental to the benefits and interests of mankind. Although the British proposal gathered more support than did that of the Soviets, neither procedure has become mandatory.

The representative of the United States in 1963, noted that there had been a narrowing of differences and a clarification of viewpoints. He cited the fact that the United States, along with other states, had "endorsed the idea of appropriate international consultation on problems of interference and contamination in outer space and of providing for discussion of particular proposed projects." 159 In view of the continual United States support for the principle that "exploration and use of space should be carried out for the benefit and in the interest of all mankind * * *" 160 it recognized the need "for consultation and co-operation between States * * *" to avoid harmful conduct in outer space. 161 In this connection it was recalled that COSPAR in April 1962, had created a consultative group "to study the problem of harmful experiments in outer space and to serve as a means for consultation and discussion. The United States, which was continuing to consult the international scientific community on matters of common interest in the field of space science, welcomed the establishment of the consultative group." 162

162 Ibid. The consultative group is the Committee on Contamination in Extraterrestrial Exploration (CETEX). Jenks has noted that "unless clear rules on these matters exist from the outset and are strictly applied, space research will not yield the fruits which we are entitled to expect from it." Jenks, "The International Control of Outer Space," Third Colloquium 9.

On May 28, 1963, the Soviet Union delivered to the Secretary-General a document entitled "Dangerous United States Activities in Outer Space," in which it was asserted that the West Ford project was impeding the peaceful uses of outer space. U.N. Doc. A/AC.105/13. On June 6, 1963, the United States submitted to the UN a detailed statement relating to the West Ford project in which it was pointed out that it was undertaken only after worldwide scientific opinion had been received and only after the United States "was fully confident that it would not have an adverse effect on any other activity." U.N. Doc. A/AC.105/15, 7; United States Mission to the United Nations, Press Release No. 4219, June 6, 1963.
This position had been explained in December 1962, to the First Committee of the UN by Senator Gore. He had noted that:

The problems of possible harmful effects of space experiments are difficult at best. They must be studied by competent and objective scientific bodies. To this end we welcome the creation of a consultative group for this purpose by the International Committee on Space Research, COSPAR. The United States will continue to conduct its space programme with a high sense of responsibility in this respect, making available to the world scientific community, both before and after the experiments which it conducts, as much scientific data as is possible. We trust that others will do the same.  

In order to insure that the space program of the United States might be as open and cooperative as possible, it has reported its launchings to the U.N. It has also made an "extensive and factual report on our space programme and plans to COSPAR every year."  

d. Elimination of Potentially Harmful Outer Space Experiments

The Australian representative to the legal subcommittee pointed to general concern for the elimination of harmful experiments in outer space, and noted that the Soviet proposal of prior agreement would give one state "an actual veto on a State's proposed space activities." In view of the unlikelihood that either resource state would be willing to be confined by such a restriction, the Australian representative suggested that a proposed potentially harmful use might be linked explicitly with COSPAR's consultative group. He also noted that the duty of states to "consult in the event of a potentially harmful experiment seemed to be either explicit or implicitly * * *" a common characteristic of the British and Soviet draft proposals. He also held that the 1962 draft of the UAR which called for state activities in outer space to take into account the safety of astronauts and to "be confined solely to the peaceful uses" supported the same conclusion.

During the April-May 1963, U.N. debates, the representative of the UAR, in accepting the principle of the free use of outer space for peaceful purposes, expressed the view that such "freedom should be qualified and limited so as to provide guarantees against abuse."  

164 Ibid., 18-20.  
166 Ibid.  
A form of such abuse would be an unnecessary interference with the safety of outer space. In this connection he stated that "some procedure should be found to prevent further experiments which might have harmful effects and prejudice the sane development of science in space. He referred in particular to the high altitude nuclear tests which had resulted in the disruption of the Van Allen belt and increased the potential danger of manned space flight." This view was supported by the Indian representative, who added, however, the exception that "On rare occasions, a major experiment of such a type might be so important as to be desirable in the interests of science, but it should first be discussed and cleared." Implicit in his remarks was the view that such discussion and clearance would be that of states and not of an international scientific organization, such as the consultative committee of COSPAR. However, he recognized the usefulness of the latter group.

Other representatives had noted during 1962, the possible role of the consultative committee of COSPAR in assisting in determining in advance the potential dangers of space experiments. The Canadian delegate stated that he "welcomed the statement that the United States considered it desirable to have some international agreement on consultation regarding experiments in outer space which might have harmful effects and the suggestion that the consultative group established by COSPAR might serve as an appropriate instrument of consultation." He was joined by the Austrian delegate in stating that the participants had achieved a considerable rapprochement concerning the need for prior consultations relating to experiments affecting outer space.

In commenting on Paragraph 6 of the Soviet proposal, the Polish representative in 1963, noted that some scientists previously had underestimated the harmful result of space experiments. In order to avoid such hazards in the future, he opined that there should be "close cooperation and consultation between the States concerned." He did not, however, advocate the Soviet proposal of prior agreement. The Czechoslovakian representative, on the other hand, supported the Soviet view that there should be prior international consultation and agreement before the introduction of potentially dangerous materials into outer space was permitted. He stated that such a step would "serve to guarantee the principle of national security

169 Ibid., 5.
and the maintenance of equal rights for all States. Any launching or space experiment undertaken without such consultation and agreement should be prohibited. In that connection, his delegation was distressed at reports that space experiments which had been viewed with misgiving in many quarters might be repeated. 174 He also noted, as had the Soviet representative earlier, that the "Inter-Parliamentary Union's sub-commission on the law of outer space had recently voiced disapproval of space projects that did not meet international criteria of acceptability." 175

By the close of 1963, the Soviet Union had not departed from its view that space experiments must depend upon prior discussion of and agreement upon such measures between the countries concerned. In rejecting the proposal of the United Kingdom that such experiments be based on consultation and cooperation, the Soviet delegate in April 1963, referred to the need for a very serious approach to the problem. He urged that it was not enough "merely to require prior consultation concerning such experiments; the essential need was for prior agreement." 176

No effort was made to delineate the meaning of "countries concerned," and it may well be that the Soviet Union, as suggested by the Canadian representative, took the view that one state might veto space experiments. The Soviet position has not been accepted. Clear evidence of this exists in Paragraph 6 of General Assembly Resolution 1962 (XVIII) of December 24, 1963. This paragraph provides:

6. In the exploration and use of outer space, States shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in outer space with due regard for the corresponding interests of other States. If a State has reason to believe that an outer space activity or experiment planned by it or its nationals would cause potentially harmful interference with activities of other States in the peaceful exploration and use of outer space, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State which has reason to believe that an outer space activity or experiment planned by another State would cause potentially harmful interference with activities in the peaceful exploration and use of outer space may request consultation concerning the activity or experiment. 177

175 Ibid.
Even before the unanimous adoption of the foregoing paragraph, the Soviet Union, aware that its effort to obtain a veto over space experiments was not acceptable, called for states to “comply strictly with the provisions of General Assembly Resolution 1721 (XVI) concerning registration of space flights.” Other successful, and impressive, limitations upon the use of outer space for harmful or potentially harmful uses are reflected in the Moscow Treaty, 1963, and the General Assembly Resolution 1884 (XVIII) relating to the positioning of weapons of mass destruction in outer space.

Thus, it will be seen at the present time there is no disagreement respecting the need for peaceful and reasonable uses of outer space. There is no disagreement as to the need for international cooperation in ascertaining the nature of free and reasonable uses of such space. There is, however, no complete agreement as to what constitutes free, peaceful, and reasonable uses. Nor is there complete agreement as to the nature of restrictions which may be reasonably placed on the free and peaceful uses of outer space. There is being developed, however, a consensus both with respect to the meaning of free and peaceful uses. Thus, it is possible to develop, and there is developing, some meaning as to limitations upon the uses of outer space. However, these important goals are handicapped by the failure of states to agree as to the appropriate procedures to be employed in determining in specific instances what activities are beneficial and in the general interest of mankind and what activities are truly harmful. Despite these serious difficulties, it has, nonetheless, been possible for states working through the Committee on Peaceful Uses of Outer Space and other Committees of the United Nations to arrive at important and specific areas of agreement concerning space activities. The Resolutions of the General Assembly have contributed substantially to an understanding of space uses.

After first calling attention to the legal rights possessed by states to maintain international peace, security, and to engage in self-defense in outer space, an analysis will next be made of areas of rapportement and consensus regarding legal uses of outer space.

179 Annex 19, infra, pp. 470–472.
180 Annex 13, infra, pp. 462–463.