

International Law Studies – Volume 55

The International Law of Outer Space

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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.

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ANNEX 1

United Nations General Assembly Resolution 1472 (XIV). International co-operation in the peaceful uses of outer space. December 12, 1959.

A

The General Assembly,

Recognizing the common interest of mankind as a whole in furthering the peaceful use of outer space,

Believing that the exploration and use of outer space should be only for the betterment of mankind and to the benefit of States irrespective of the stage of their economic or scientific development,

Desiring to avoid the extension of present national rivalries into this new field,

Recognizing the great importance of international co-operation in the exploration and exploitation of outer space for peaceful purposes,

Noting the continuing programmes of scientific co-operation in the exploration of outer space being undertaken by the international scientific community,

Believing also that the United Nations should promote international co-operation in the peaceful uses of outer space,

1. *Establishes* a Committee on the Peaceful Uses of Outer Space, consisting of Albania, Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Czechoslovakia, France, Hungary, India, Iran, Italy, Japan, Lebanon, Mexico, Poland, Romania, Sweden, the Union of Soviet Socialist Republics, the United Arab Republic, the United Kingdom of Great Britain and Northern Ireland and the United States of America, whose members will serve for the years 1960 and 1961, and requests the Committee:

(a) To review, as appropriate, the area of international co-operation, and to study practical and feasible means for giving effect to programmes in the peaceful uses of outer space which could

appropriately be undertaken under United Nations auspices, including, *inter alia*:

- (i) Assistance for the continuation on a permanent basis of the research on outer space carried on within the framework of the International Geophysical Year;
 - (ii) Organization of the mutual exchange and dissemination of information on outer space research;
 - (iii) Encouragement of national research programmes for the study of outer space, and the rendering of all possible assistance and help towards their realization;
- (b) To study the nature of legal problems which may arise from the exploration of outer space;

2. *Requests* the Committee to submit reports on its activities to the subsequent sessions of the General Assembly.

*856th plenary meeting,
12 December 1959.*

B

The General Assembly,

Noting with satisfaction the successes of great significance to mankind that have been attained in the exploration of outer space in the form of the recent launching of artificial earth satellites and space rockets,

Attaching great importance to a broad development of international co-operation in the peaceful uses of outer space in the interests of the development of science and the improvement of the well-being of peoples,

1. *Decides* to convene in 1960 or 1961, under the auspices of the United Nations, an international scientific conference of interested Members of the United Nations and members of the specialized agencies for the exchange of experience in the peaceful uses of outer space;

2. *Requests* the Committee on the Peaceful Uses of Outer Space, established in resolution A above, in consultation with the Secretary-General and in co-operation with the appropriate specialized agencies, to work out proposals with regard to the convening of such a conference.

3. *Requests* the Secretary-General, in accordance with the conclusions of the Committee, to make the necessary organizational arrangements for holding the conference.

*856th plenary meeting,
12 December 1959.*

ANNEX 2

United Nations General Assembly Resolution 1721 (XVI). International co-operation in the peaceful uses of outer space. December 20, 1961.

A

The General Assembly,

Recognizing the common interest of mankind in furthering the peaceful uses of outer space and the urgent need to strengthen international co-operation in this important field,

Believing that the exploration and use of outer space should be only for the betterment of mankind and to the benefit of States irrespective of the stage of their economic or scientific development,

1. *Commends* to States for their guidance in the exploration and use of outer space the following principles:

(a) International law, including the Charter of the United Nations, applies to outer space and celestial bodies;

(b) Outer space and celestial bodies are free for exploration and use by all States in conformity with international law and are not subject to national appropriation;

2. *Invites* the Committee on the Peaceful uses of Outer Space to study and report on the legal problems which may arise from the exploration and use of outer space.

*1085th plenary meeting,
20 December 1961.*

B

The General Assembly,

Believing that the United Nations should provide a focal point for international co-operation in the peaceful exploration and use of outer space,

1. *Calls 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;

2. *Requests* the Secretary-General to maintain a public registry of the information furnished in accordance with paragraph 1 above;

3. *Requests* the Committee on the Peaceful Uses of Outer Space, in co-operation with the Secretary-General and making full use of the functions and resources of the Secretariat:

(a) To maintain close contact with governmental and non-governmental organizations concerned with outer space matters;

(b) To provide 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;

(c) To assist in the study of measures for the promotion of international co-operation in outer space activities;

4. *Further requests* the Committee on the Peaceful Uses of Outer Space to report to the General Assembly on the arrangements undertaken for the performance of those functions and on such developments relating to the peaceful uses of outer space as it considers significant.

*1085th plenary meeting,
20 December 1961.*

C

The General Assembly,

Noting with gratification the marked progress for meteorological science and technology opened up by the advances in outer space,

Convinced of the world-wide benefits to be derived from international co-operation in weather research and analysis,

1. *Recommends* to all Member States and to the World Meteorological Organization and other appropriate specialized agencies the early and comprehensive study, in the light of developments in outer space, of measures:

(a) To advance the state of atmospheric science and technology so as to provide greater knowledge of basic physical forces affecting climate and the possibility of large-scale weather modification;

(b) To develop existing weather forecasting capabilities and to help Member States make effective use of such capabilities through regional meteorological centres;

2. *Requests* the World Meteorological Organization, consulting as appropriate with the United Nations Educational, Scientific and Cultural Organization and other specialized agencies and governmental and nongovernmental organizations, such as the International Council of Scientific Unions, to submit a report to the Governments of its Member States and to the Economic and Social Council at its thirty-fourth session regarding appropriate organizational and financial arrangements to achieve those ends, with a view to their further consideration by the General Assembly at its seventeenth session;

3. *Requests* the Committee on the Peaceful uses of Outer Space, as it deems appropriate, to review that report and submit its comments and recommendations to the Economic and Social Council and to the General Assembly.

*1085th plenary meeting,
20 December 1961.*

D

The General Assembly,

Believing that communication by means of satellites should be available to the nations of the world as soon as practicable on a global and non-discriminatory basis,

Convinced of the need to prepare the way for the establishment of effective operational satellite communication,

1. *Notes with satisfaction* that the International Telecommunication Union plans to call a special conference in 1963 to make allocations of radio frequency bands for outer space activities;

2. *Recommends* that the International Telecommunication Union consider at that conference those aspects of space communication in which international co-operation will be required;

3. *Notes* the potential importance of communication satellites for use by the United Nations and its principal organs and specialized agencies for both operational and informational requirements;

4. *Invites* the Special Fund and the Expanded Programme of Technical Assistance, in consultation with the International Telecommunication Union, to give sympathetic consideration to requests from Member States for technical and other assistance for the survey of their communication needs and for the development of their domestic communication facilities so that they may make effective use of space communication;

5. *Requests* the International Telecommunication Union, consulting as appropriate with Member States, the United Nations Educational, Scientific and Cultural Organization and other specialized agencies and governmental and non-governmental organizations, such as the Committee on Space Research of the International Council of Scientific Unions, to submit a report on the implementation of these proposals to the Economic and Social Council at its thirty-fourth session and to the General Assembly at its seventeenth session;

6. *Requests* the Committee on the Peaceful Uses of Outer Space, as it deems appropriate, to review that report and submit its comments and recommendations to the Economic and Social Council and to the General Assembly.

*1085th plenary meeting,
20 December 1961.*

E

The General Assembly,

Recalling its resolution 1472 (XIV) of 12 December 1959,

Noting that the terms of office of the members of the Committee on the Peaceful Uses of Outer Space expire at the end of 1961,

Noting the report of the Committee on the Peaceful Uses of Outer Space,¹

1. *Decides* to continue the membership of the Committee on the Peaceful Uses of Outer Space as set forth in General Assembly resolution 1472 (XIV) and to add Chad, Mongolia, Morocco and Sierra Leone to its membership in recognition of the increased membership of the United Nations since the Committee was established;

2. *Requests* the Committee on the Peaceful Uses of Outer Space to meet not later than 31 March 1962 to carry out its mandate as contained in General Assembly resolution 1472 (XIV), to review the activities provided for in resolutions A, B, C and D above and to make such reports as it may consider appropriate.

*1085th plenary meeting,
20 December 1961.*

ANNEX 3

United Nations General Assembly Resolution 1802 (XVII). International co-operation in the peaceful uses of outer space. December 14, 1962.

The General Assembly,

Recalling its resolution 1721 (XVI) of 20 December 1961 on international co-operation in the peaceful uses of outer space,

Believing that the activities of States in the exploration and use of outer space should be carried out in conformity with international law including the Charter of the United Nations, in the interest of friendly relations among nations,

Stressing the necessity of the progressive development of international law pertaining to the further elaboration of basic legal principles governing the activities of States in the exploration and use of outer space, to liability for space vehicle accidents and to assistance to, and return of, astronauts and space vehicles, as well as to other legal problems,

Bearing in mind that the application of scientific and technological advances in outer space, particularly in the fields of meteorology and communications, can bring great advantages to mankind and contribute to the economic and social progress of the developing countries as envisaged in the United Nations Development Decade programme,

¹ *Official Records of the General Assembly, Sixteenth Session, Annexes, agenda item 21, document A/4987.*

Having considered the report submitted by the Committee on the Peaceful Uses of Outer Space in response to resolution 1721 (XVI),¹

I

1. *Notes with regret* that the Committee on the Peaceful Uses of Outer Space has not yet made recommendations on legal questions connected with the peaceful uses of outer space;

2. *Calls upon* all Member States to co-operate in the further development of law for outer space;

3. *Requests* the Committee on the Peaceful Uses of Outer Space to continue urgently its work on the further elaboration of basic legal principles governing the activities of States in the exploration and use of outer space, on liability for space vehicle accidents and on assistance to, and return of, astronauts and space vehicles, as well as on other legal problems;

4. *Refers* to the Committee on the Peaceful Uses of Outer Space, as a basis for this work, all proposals which have been made thus far, including the draft declaration of the basic principles governing the activities of States pertaining to the exploration and use of outer space submitted by the Union of Soviet Socialist Republics,² the draft international agreement on the rescue of astronauts and space-ships making emergency landings submitted by the Union of Soviet Socialist Republics,³ the draft proposal on assistance to, and return of, space vehicles and personnel submitted by the United States of America,⁴ the draft proposal on liability for space vehicle accidents submitted by the United States of America,⁵ the draft code for international co-operation in the peaceful uses of outer space submitted by the United Arab Republic,⁶ the draft declaration of basic principles governing the activities of States pertaining to the exploration and use of outer space submitted by the United Kingdom of Great Britain and Northern Ireland,⁷ the draft declaration of principles relating to the exploration and use of outer space submitted by the United States of America,⁸ and all other proposals and documents presented to the General Assembly during its debates on this item and the records of those debates;

¹ A/5181.

² *Ibid.*, annex III, A.

³ *Ibid.*, annex III, B.

⁴ *Ibid.*, annex III, C.

⁵ *Ibid.*, annex III, D.

⁶ *Ibid.*, annex III, E.

⁷ A/C.1/879.

⁸ A/C.1/881.

II

1. *Endorses* the recommendations set forth in the report of the Committee on the Peaceful Uses of Outer Space concerning the exchange of information;⁹

2. *Notes with appreciation* that a number of Member States have already on a voluntary basis, provided information on their national space programmes, and urges other States and regional and international organizations to do so;

3. *Urges* all Member States and appropriate specialized agencies to give whole-hearted and effective support to the international programmes mentioned in the report and already under way, including the International Year of the Quiet Sun and the World Magnetic Survey;

4. *Notes* that the Committee on the Peaceful Uses of Outer Space considers that the creation and use of sounding rocket launching facilities under United Nations sponsorship would contribute to the achievement of the objectives of resolution 1721 (XVI) by furthering international collaboration in space research and the advancement of human knowledge, and by providing opportunity for valuable practical training for interested users;

5. *Notes* the recommendation that Member States should consider the establishment under United Nations sponsorship of a sounding rocket facility, or facilities, on the geomagnetic equator, in time for the International Year of the Quiet Sun;

6. *Endorses* the basic principles suggested by the Committee on the Peaceful Uses of Outer Space for the operation of such facilities under United Nations sponsorship;

7. *Affirms* that such facilities when established and operated in accordance with these principles, shall, at the request of the host Member State, be eligible for United Nations sponsorship;

III

1. *Notes with appreciation* the prompt initial response of the World Meteorological Organization to the request of the General Assembly, as embodied in resolution 1721 C (XVI), that it report on a programme to advance atmospheric science research and to develop improved weather forecasting capabilities in the light of developments in outer space;¹⁰

⁹ A/5181, para. 14.

¹⁰ A/5229.

2. *Calls upon* Member States to strengthen weather forecasting services and to encourage their scientific communities to co-operate in the expansion of atmospheric science research;

3. *Recommends* that the World Meteorological Organization, in consultation with other United Nations agencies and governmental and non-governmental organizations, should develop in greater detail its plan for an expanded programme to strengthen meteorological services and research, placing particular emphasis on the use of meteorological satellites and on the expansion of training and educational opportunities in these fields;

4. *Invites* the International Council of Scientific Unions through its member unions and national academies to develop an expanded programme of atmospheric science research which will complement the programmes fostered by the World Meteorological Organization;

5. *Invites* United Nations agencies concerned with the granting of technical and financial assistance, in consultation with the World Meteorological Organization, to give sympathetic consideration to requests from Member States for technical and financial assistance to supplement their own resources for these activities, including the improvement of meteorological networks;

6. *Requests* the World Meteorological Organization, following its Congress in April 1963, to report to the Committee on the Peaceful Uses of Outer Space, and to the Economic and Social Council at its thirty-sixth session, on steps taken relating to these activities;

IV

1. *Notes with appreciation* the prompt initial response of the International Telecommunication Union to the request of the General Assembly, as embodied in resolution 1721 D (XVI), that it report on those aspects of space communications in which international co-operation will be required;¹¹

2. *Believes* that communication by satellite offers great benefits to mankind, as it will permit the expansion of radio, telephone and television transmissions, including the broadcast of United Nations activities, thus facilitating contact among the peoples of the world;

3. *Emphasizes* the importance of international co-operation to achieve effective satellite communications which will be available on a world-wide basis;

4. *Observes* that the Secretary-General of the International Telecommunication Union has invited members to submit information on :

¹¹ A/5237.

(a) Technical progress and developments in space telecommunications;

(b) Subjects which they regard as appropriate for international co-operation in order to achieve the objectives set forth in General Assembly resolution 1721 D (XVI);

(c) Which of those subjects, if any, should be included in the agenda of the Extraordinary Administrative Radio Conference to be held in October 1963;

5. *Notes* that the Secretary-General of the International Telecommunication Union, in the light of the replies, will report on these questions to the next meeting of its Administrative Council in March 1963 in order that the Council may complete the agenda for this Conference;

6. *Considers* it of the utmost importance that this Conference make allocations of radio frequency bands sufficient to meet expected outer space needs;

7. *Requests* the International Telecommunication Union to report to the Committee on the Peaceful Uses of Outer Space, and to the Economic and Social Council at its thirty-sixth session, on progress made relating to its outer space activities.

*1192nd plenary meeting,
14 December 1962.*

ANNEX 4

United Nations General Assembly Resolution 1962 (XVIII). Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space. December 24, 1963.

The General Assembly,

Inspired by the great prospects opening up before mankind as a result of man's entry into outer space,

Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes,

Believing that the exploration and use of outer space should be carried on for the betterment of mankind and for the benefit of States irrespective of their degree of economic or scientific development,

Desiring to contribute to broad international co-operation in the scientific as well as in the legal aspects of exploration and use of outer space for peaceful purposes,

Believing that such co-operation will contribute to the development of mutual understanding and to the strengthening of friendly relations between nations and peoples,

Recalling its resolution 110 (II) of 3 November 1947, which con-

demned 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,

Taking into consideration its resolutions 1721 (XVI) of 20 December 1961 and 1802 (XVII) of 14 December 1962, adopted unanimously by the States Members of the United Nations,

Solemnly declares that in the exploration and use of outer space States should be guided by the following principles:

1. The exploration and use of outer space shall be carried on for the benefit and in the interests of all mankind.

2. Outer space and celestial bodies are free for exploration and use by all States on a basis of equality and in accordance with international law.

3. Outer space and celestial bodies are not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.

4. The activities of States in the exploration and use of outer space shall be carried on in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.

5. States bear international responsibility for national activities in outer space, whether carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried on in conformity with the principles set forth in the present Declaration. The activities of non-governmental entities in outer space shall require authorization and continuing supervision by the State concerned. When activities are carried on in outer space by an international organization, responsibility for compliance with the principles set forth in this Declaration shall be borne by the international organization and by the States participating in it.

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 ex-

periment 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.

7. The State on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and any personnel thereon, while in outer space. Ownership of objects launched into outer space, and of their component parts, is not affected by their passage through outer space or by their return to the earth. Such objects or component parts found beyond the limits of the State of registry shall be returned to that State, which shall furnish identifying data upon request prior to return.

8. Each State which launches or procures the launching of an object into outer space, and each State from whose territory or facility an object is launched, is internationally liable for damage to a foreign State or to its natural or juridical persons by such object or its component parts on the earth, in air space, or in outer space.

9. States shall regard astronauts as envoys of mankind in outer space, and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of a foreign State or on the high seas. Astronauts who make such a landing shall be safely and promptly returned to the State of registry of their space vehicle.

*1280th plenary meeting,
13 December 1963.*

ANNEX 5

United Nations General Assembly Resolution 1963 (XVIII). International co-operation in the peaceful uses of outer space. December 24, 1963.

The General Assembly,

Recalling its resolutions 1721 (XVI) of 20 December 1961 and 1802 (XVII) of 14 December 1962 on international co-operation in the peaceful uses of outer space,

Having considered the report submitted by the Committee on the Peaceful Uses of Outer Space,¹

Mindful of the benefits which all Member States would enjoy by participation in international programmes of co-operation in this field,

¹ A/5549 and Add. 1.

I

1. *Recommends* that consideration should be given to incorporating in international agreement form, in the future as appropriate, legal principles governing the activities of States in the exploration and use of outer space;

2. *Requests* the Committee on the Peaceful Uses of Outer Space to continue to study and report on legal problems which may arise in the exploration and use of outer space, and in particular to arrange for the prompt preparation of draft international agreements on liability for damage caused by objects launched into outer space and on assistance to and return of astronauts and space vehicles;

3. *Further requests* the Committee on the Peaceful Uses of Outer Space to report to the General Assembly at its nineteenth session on the results achieved in preparing these two agreements;

II

1. *Endorses* the recommendations contained in the report of the Committee on the Peaceful Uses of Outer Space concerning exchange of information, encouragement of international programmes, international sounding rocket facilities, education and training and potentially harmful effects of space experiments;

2. *Welcomes* the decision of the Committee on the Peaceful Uses of Outer Space to undertake, in co-operation with the Secretary-General and making full use of the functions and resources of the Secretariat:

(a) The preparation of a working paper on the activities and resources of the United Nations, the specialized agencies and other competent international bodies relating to the peaceful uses of outer space;

(b) The preparation of a summary of national and co-operative international space activities;

(c) The preparation of a list of available bibliographic and abstracting services covering scientific and technical results and publications in space and space-related areas;

(d) The compilation, in co-operation with the United Nations Educational, Scientific and Cultural Organization, of reviews of information on facilities for education and training in basic subjects related to the peaceful uses of outer space in universities and other places of learning;

(e) The establishment, at the request of the Government of India, of a group of six scientists to visit the sounding rocket launching facility at Thumba and to advise the Committee on its eligibility for United Nations sponsorship in accordance with the

basic principles endorsed by the General Assembly in resolution 1802 (XVII);

3. *Notes with appreciation* that, in accordance with General Assembly resolution 1721 (XVI), the Secretary-General is maintaining a public registry of objects launched into orbit or beyond on the basis of information being furnished by Member States;

4. *Notes with appreciation* that certain Member States have, on a voluntary basis, provided information on their national space programmes and invites other Member States to do so;

5. *Invites* Member States to give favourable consideration to requests of countries desirous of participating in the peaceful exploration of outer space for appropriate training and technical assistance on a bilateral basis or on any other basis they see fit;

6. *Notes* the considerable measure of co-operation in the peaceful exploration and use of outer space under way among Member States;

7. *Notes* that the Union of Soviet Socialist Republics and the United States of America have reached an agreement looking towards co-operation in the fields of satellite meteorology, communications and magnetic field mapping;

8. *Encourages* Member States to continue and extend co-operative arrangements so that all Member States can benefit from the peaceful exploration and use of outer space;

9. *Believes* that international co-operation can be beneficial in furthering the exploration of the solar system;

III

1. *Notes with appreciation:*

(a) The second report of the World Meteorological Organization in the advancement of atmospheric sciences and their application in the light of developments in outer space;²

(b) The organizational and financial steps taken by the Fourth Congress of the World Meteorological Organization in response to resolutions 1721 C (XVI) and 1802 (XVII), section III;

2. *Endorses* efforts towards the establishment of a World Weather Watch under the auspices of the World Meteorological Organization to include the use of satellite as well as conventional data, with data centres to facilitate the effectiveness of the system;

3. *Urges* Member States:

(a) To extend their national and regional meteorological efforts to implement the expanded programme of the World Meteorological Organization;

² E/3794.

(b) To co-operate in the establishment of the World Weather Watch;

(c) To increase research and training in the atmospheric sciences;

4. *Invites* the World Meteorological Organization to make a progress report to the Committee on the Peaceful Uses of Outer Space in 1964 relating to its activities in this field;

IV

1. *Notes with appreciation* the second report of the International Telecommunication Union on telecommunication and the peaceful uses of outer space;³

2. *Welcomes* the decisions of the Extraordinary Administrative Radio Conference, held in October and November 1963 under the auspices of the International Telecommunication Union, on the allocation of frequency bands for space communication and procedures for their use as a step in the development of space radio communications;

3. *Invites* the International Telecommunication Union to make a progress report to the Committee on the Peaceful Uses of Outer Space in 1964 relating to its activities in this field;

4. *Recognizes* the potential contribution of communications satellites in the expansion of global telecommunications facilities and the possibilities this offers for increasing the flow of information and for furthering the objectives of the United Nations and its agencies;

V

Requests the Committee on the Peaceful Uses of Outer Space to continue its work as set forth in General Assembly resolutions 1472 (XIV), 1721 (XVI) and 1802 (XVII), as well as in the present resolution, and to report to the Assembly at its nineteenth session on the activities of the Committee.

*1280th plenary meeting,
13 December 1963.*

³ E/3770.

ANNEX 6

United Nations General Assembly Resolution 1148 (XII). Extract relating to the sending of objects through outer space for exclusively peaceful and scientific purposes. November 14, 1957.¹

¹ *Documents on Disarmament, 1945-1959* (Department of State publication 7008; 1960), vol. II, pp. 914-915.

The General Assembly:

* * * * *

1. *Urges* that the States concerned, and particularly those which are members of the Sub-Committee of the Disarmament Commission, give priority to reaching a disarmament agreement which, upon its entry into force will provide for the following:

* * * * *

(f) The joint study of an inspection system designed to ensure that the sending of objects through outer space shall be exclusively for peaceful and scientific purposes.

* * * * *

ANNEX 7

United Nations General Assembly Resolution 1348 (XVIII).
Question of the Peaceful Use of Outer Space. December 13, 1958.¹

The General Assembly,

Recognizing the common interest of mankind in outer space and that it is the common aim that it should be used for peaceful purposes only,

Bearing in mind the provision of Article 2, paragraph 1, of the Charter, which states that "the Organization is based on the principle of the sovereign equality of all its Members,"

Wishing to avoid the extension of present national rivalries into this new field,

Desiring to promote energetically the fullest exploration and exploitation of outer space for the benefit of mankind,

Conscious that recent developments in respect of outer space have added a new dimension to man's existence and opened new possibilities for the increase of his knowledge and the improvement of his life,

Noting the success of the scientific cooperative program of the International Geophysical Year in the exploration of outer space and the decision to continue and expand this type of cooperation,

Recognizing the great importance of international cooperation in the study and utilization of outer space for peaceful purposes,

Considering that such cooperation will promote mutual understanding and the strengthening of friendly relations among peoples,

Believing that the development of programs of international and scientific cooperation in the peaceful uses of outer space should be vigorously pursued,

Believing that progress in this field will materially help to achieve the aim that outer space should be used for peaceful purposes only,

¹ *Documents on Disarmament, 1945-59*, vol. II, p. 1305.

Considering that an important contribution can be made by the establishment within the framework of the United Nations of an appropriate international body for cooperation in the study of outer space for peaceful purposes,

Desiring to obtain the fullest information on the many problems relating to the peaceful uses of outer space before recommending specific programs of international cooperation in this field,

1. *Establishes* an *ad hoc* committee on the peaceful uses of outer space consisting of the representatives of Argentina, Australia, Belgium, Brazil, Canada, Czechoslovakia, France, India, Iran, Italy, Japan, Mexico, Poland, Sweden, the Union of Soviet Socialist Republics, the United Arab Republic, the United Kingdom of Great Britain and Northern Ireland and the United States of America and requests it to report to the General Assembly at its fourteenth session on the following:

(a) The activities and resources of the United Nations, of its specialized agencies and of other international bodies relating to the peaceful uses of outer space;

(b) The area of international cooperation and programs in the peaceful uses of outer space which could appropriately be undertaken under United Nations auspices to the benefit of States irrespective of the state of their economic or scientific development, taking into account the following proposals, among others:

(i) Continuation on a permanent basis of the outer space research now being carried on within the framework of the International Geophysical Year;

(ii) Organization of the mutual exchange and dissemination of information on outer space research; and

(iii) Coordination of national research programs for the study of outer space, and the rendering of all possible assistance and help towards their realization;

(c) The future organizational arrangements to facilitate international cooperation in this field within the framework of the United Nations;

(d) The nature of legal problems which may arise in the carrying out of programs to explore outer space;

2. *Requests* the Secretary-General to render appropriate assistance to the above-named Committee and to recommend any other steps that might be taken within the existing United Nations framework to encourage the fullest international cooperation for the peaceful uses of outer space.

ANNEX 8

United States of America: Draft Proposal on Assistance to and Return of Space Vehicles and Personnel. September 11, 1962.¹

The General Assembly,

Recognizing that the personnel of space vehicles may from time to time be the subject of accident or experience conditions of distress,

Recognizing that there may occur landings of space vehicles, and their personnel in the case of manned vehicles, by reason of accident, distress, or mistake, or otherwise than as planned,

Believing that in such circumstances the action of States should be governed by humanitarian concern and with a due regard for scientific needs,

Commends to States for their guidance the following principles:

1. All possible assistance shall be rendered to the personnel of space vehicles who may be the subject of accident or experience conditions of distress or who may land by reason of accident, distress, or mistake, or otherwise than as planned;

2. Space vehicles and their personnel in the case of manned vehicles, that land by reason of accident, distress, or mistake, or otherwise than as planned, shall be safely and promptly returned to the State or States or international organization responsible for launching.

3. Any expense incurred in providing assistance to or return of space vehicles and their personnel shall be borne by the State or States or international organization responsible for launching.

¹ *U.N. Doc. A/AC.105/L.4; U.N. Doc. A/5181, Annex III.*

ANNEX 9

United States of America: Draft Proposals on Liability for Space Vehicle Accidents. September 11, 1962.¹

The United Nations Committee on the Peaceful Uses of Outer Space,

Recognizing that there may occur personal injury, loss of life, or property damage as a result of space vehicle accidents,

Recognizing that States and international organizations responsible for the launching of space vehicles should be liable internationally for such injury, loss, or damage,

Believing that there should be agreed rules and procedures applicable to such cases,

¹ *U.N. Doc. A/AC.105/L.5; U.N. Doc. A/5181, Annex III.*

1. *Requests* the Secretary-General to constitute a small advisory panel of legal experts drawn from various geographic areas;

2. *Requests* the advisory panel thus constituted to prepare a draft of an international agreement dealing with the liability of States and international organizations for injury, loss, or damage caused by space vehicles;

3. *Commends* to the advisory panel for its guidance the following principles:

(a) States or international organizations responsible for the launching of space vehicles should be liable internationally for personal injury, loss of life, or property damage caused thereby, whether such injury, loss, or damage occurs on land, on the sea, or in the air;

(b) A claim based on personal injury, loss of life, or property damage caused by a space vehicle should not require proof of fault on the part of the State or States or international organization responsible for launching the space vehicle in question, although the degree of care which ought reasonably to have been exercised by the person or entity on whose behalf claim is made might properly be taken into account;

(c) A claim may be presented internationally to the State or States or international organization responsible for the launching of a space vehicle causing injury, loss, or damage without regard to the prior exhaustion of any local remedies that may be available;

(d) The presentation of a claim should be made within a reasonable time after the occurrence of injury, loss, or damage;

(e) The International Court of Justice should have jurisdiction to adjudicate any dispute relating to the interpretation or application of the international agreement on liability in the absence of agreement between the States concerned upon another means of settlement;

4. *Requests* the advisory panel to transmit the draft international agreement to the Legal Sub-Committee at an early date.

ANNEX 10

United States of America: Draft Declaration of Principles Relating to the Exploration and Use of Outer Space. December 8, 1962.¹

The General Assembly,

Recalling its resolution 1721 (XVI), adopted on 20 December 1961,
Recognizing the common interest of all mankind in furthering the peaceful exploration and use of outer space,

¹ U.N. Doc. A/C.1/881, 23.

Believing that the exploration and use of outer space should be for the betterment of mankind and to the benefit of States irrespective of the stage of their economic or scientific development,

Considering the great importance of international co-operation in this field of human activity,

Believing that such co-operation will contribute to the development of mutual understanding and to the strengthening of friendly relations among nations and peoples,

Commends to States for their guidance in the exploration and use of outer space the following declaration of principles:

1. Outer space and celestial bodies are free for exploration and use by all states, on the basis of equal rights, in conformity with international law;

2. In the exploration and use of outer space and celestial bodies, States are bound by the relevant rules of international law and the relevant provisions of international treaties and agreements including the Charter of the United Nations;

3. Outer space and celestial bodies are not subject to national appropriation;

4. States shall render all possible assistance to the personnel of space vehicles who may be the subject of accident or experience conditions of distress, or who may land by reason of accident, distress, or mistake. Space vehicle personnel who make such a landing shall be safely and promptly returned to the launching authority;

5. States shall return to the launching authority any space vehicle or part that has landed by reason of accident, distress, or mistake. Upon request, the launching authority shall furnish identifying data prior to return;

6. A State or international organization from whose territory or with whose assistance or permission a space vehicle is launched bears international responsibility for the launching, and is internationally liable for personal injury, loss of life, or property damage caused by such vehicle on the earth or in air space;

7. Jurisdiction over a space vehicle while it is in outer space shall be retained by the State or international organization which had jurisdiction at the time of launching. Ownership and property rights in a space vehicle and its components remain unaffected in outer space or upon return to the earth.

ANNEX 11

United States of America: Letter from the United States Representative (Lodge) to the U.N. Secretary General, with Attached Explanatory Memorandum. September 2, 1958.¹

¹ General Assembly *Official Records: Thirteenth Session, Annexes, Agenda Item 60*, p. 4.

I have the honour to request the inclusion of the agenda of the thirteenth General Assembly of an item of an important and urgent character entitled:

“Programme for international co-operation in the field of outer space.”

In accordance with rule 20 of the rules of procedure an explanatory memorandum is attached.

(Signed) HENRY CABOT LODGE,
*Permanent Representative of the United States of
 America to the United Nations.*

Explanatory memorandum

1. Perhaps no event in history has caught the imagination of all mankind more than the development of the new universal frontier through the launching of earth satellites by the Soviet Union and the United States as part of the programme for the International Geophysical Year. The United States is pleased that these first steps to project man's life and knowledge into outer space have been taken under the auspices of this co-operative scientific programme.

2. Outer-space developments are a matter of international concern, because the exploration and eventual exploitation of outer space will affect the life of every human being. Moreover, the nature and immensity of the challenge facing us and the interest it holds for scientists make it clear that activities in outer space can and must be carried out with the appropriate international co-operation and co-ordination within the framework of the United Nations.

3. It is clear that the potentialities for good or evil that will arise from the exploration of outer space are enormous. The potential uses of outer space for destructive purposes are only too apparent. On the other hand, the potential uses of outer space for peaceful purposes in science and engineering, in medicine, in meteorology, in communications, in transportation, etc., can enrich the lives of all men. Urgent steps are therefore needed to lay a solid basis for international co-operation in development of the peaceful uses of outer space. Such steps can be taken while parallel efforts are being made to conclude meaningful agreements on the disarmament aspects of outer space.

4. The General Assembly, as the body most representative of the interests of mankind, should begin to make the necessary steps to further those interests by declaring itself on the separability of the question of the peaceful uses of outer space from that of disarmament; by giving its support to the principle of the peaceful utilization of outer space; by expressing itself in principle to be in favour of the establishment of appropriate international machinery; and by

preparing for further careful consideration of this vital but complex matter through the establishment of a representative *ad hoc* committee to make the necessary detailed studies and recommendations as to what specific steps the Assembly might take to further man's progress in this field and to assure that outer space will be used solely for the benefit of all mankind.

5. To this end the United States requests that the item "Programme for international co-operation in the field of outer space" be placed upon the agenda of the thirteenth session of the General Assembly as an important and urgent matter and will submit a draft resolution to the General Assembly for its consideration.

ANNEX 12

United States of America: Address by Secretary of State Dulles to the General Assembly. Extract. September 18, 1958.¹

* * * * *

The United States believes that the United Nations should take immediate steps to prepare for a fruitful program on international cooperation in the peaceful uses of outer space. We suggest that a representative committee be established to make the necessary preparatory studies and recommendations.

The United States is submitting to the Assembly a resolution with the following significant operative paragraph.

The General Assembly—

1. Establishes an Ad Hoc Committee consisting of —— and requests it to report to the Fourteenth General Assembly on the following:

(a) The activities and resources of the United Nations and its specialized agencies relating to outer space;

(b) The nature of specific projects of international cooperation in outer space which could be undertaken under United Nations auspices;

(c) Useful United Nations organizational arrangements to facilitate international cooperation in this field.

* * * * *

ANNEX 13

United Nations General Assembly Resolution 1884 (XVIII). Question of general and complete disarmament. October 17, 1963.

The General Assembly,

¹ *Department of State Bulletin*, Oct. 6, 1958, p. 529.

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.

*1244th plenary meeting,
17 October 1963.*

ANNEX 14

United Arab Republic: Draft Code for International Co-operation in the Peaceful Uses of Outer Space. September 14, 1962.¹

The Committee on the Peaceful Uses of Outer Space,

Having in mind that the Members of the United Nations, according to the Charter, are determined to save succeeding generations from the scourge of war,

Recognizing that it is imperative in the interest of mankind that activities in outer space should be exclusively devoted to the peaceful uses of outer space,

Recognizing further that the General Assembly, in its resolution 1721 (XVI), has urged that the United Nations be a focal point for international co-operation in the peaceful exploration and uses of outer space,

Noting the inter-relationship of the technical and legal aspects of any activity in outer space,

Conscious of the impact of consolidating the efforts of Member States in promoting international co-operation in the peaceful uses of outer space,

Believing that, to reach this end, it is necessary to have as guidance a framework which defines the future of its activities,

¹ U.N. Doc. A/AC.105/L.6; U.N. Doc. A/5181.

I

Decides that the Committee should be guided in its work by the following principles:

1. That the activities of Member States in outer space should be confined solely to the peaceful uses;
2. That in their policies toward outer space Member States should promote international and peaceful co-operation;
3. That Member States bear special responsibility emanating from their obligations to secure the safety of space for astronauts in outer space;
4. That Member States agree to provide every possible assistance to personnel of space vehicles who may be the subject of accident or experience conditions of distress or who may land by reason of accident, distress or mistake;
5. That Member States undertake to return to the State or international organization responsible for launching space vehicles these space vehicles and its personnel;
6. That one of the main objectives in international peaceful co-operation in outer space is to develop special programmes in which the developing countries can participate with a view to promoting world-wide interest in outer space;
7. That Member States agree to make full use of the facilities and experience of all international organizations, specialized agencies and nongovernmental organizations, which have activities in outer space;
8. That Member States will exert every possible effort to provide the United Nations Secretary-General, on a voluntary basis, with all information necessary for the promoting of international co-operation in the peaceful uses of outer space;
9. That Member States undertake to give all possible assistance to the United Nations and its affiliated organizations, to undertake joint programmes of training and research to promote science and technology in outer space.

ANNEX 15

Union of Soviet Socialist Republics: Draft International Agreement on the Rescue of Astronauts and Spaceships Making Emergency Landings. September 10, 1962.¹

The Governments of -----,

Recognizing the common interest of mankind in furthering the peaceful uses of outer space,

¹ *U.N. Doc. A/AC.105/L.3; U.N. Doc. A/5181.*

Wishing to do their utmost to assist the crews of spaceships which may meet with an accident,

Have decided to conclude this Agreement and for this purpose have appointed their representatives who, having exchanged their full powers, found in good and due form, have agreed on the following provisions:

ARTICLE 1

Each Contracting State shall render assistance to the crews of spaceships which have met with an accident and shall take steps to rescue astronauts making an emergency landing; to this end it shall employ every means at its disposal, including electronic and optical equipment, means of communication, and rescue facilities of different kinds.

ARTICLE 2

A Contracting State which discovers that the crew of a spaceship of another Contracting State has met with an accident shall do its utmost to notify the launching State without delay.

ARTICLE 3

In the event of astronauts of a Contracting State making an emergency landing on the territory of another Contracting State, the latter shall immediately inform the launching State of the occurrence and shall take all possible steps to rescue the astronauts making the emergency landing and to render them the necessary assistance.

ARTICLE 4

If the astronauts are presumed to have made an emergency descent on the high seas, a joint search for them shall be made, if necessary, by those Contracting States to which the launching State may make application.

ARTICLE 5

The assistance to be furnished when necessary by one Contracting State to another Contracting State shall in no way differ from the assistance which could be furnished to its own astronauts.

ARTICLE 6

Each Contracting State shall do its utmost to facilitate the early return to their own country of any astronauts of another Contracting State who may make an emergency landing on its territory or who may be rescued on the high seas.

ARTICLE 7

Foreign spaceships, satellites and capsules found by a Contracting State on its territory or salvaged on the high seas shall be returned

without delay to the launching State if they have identification marks showing their national origin and if the launching State has officially announced the launching of the devices found.

Space vehicles aboard which devices have been discovered for the collection of intelligence information in the territory of another State shall not be returned.

ARTICLE 8

The expenses incurred by a State in fulfilling the obligations provided for in articles 6 and 7 of this Agreement shall be reimbursed by the launching State.

ARTICLE 9

This Agreement shall be open for accession to all the States of the world.

ANNEX 16

Union of Soviet Socialist Republics: Draft Declaration of the Basic Principles Governing the Activities of States in the Exploration and Use of Outer Space. April 16, 1963.¹

The Governments of the States whose representatives have signed this Declaration,

Inspired by the great prospects opening up before mankind as a result of penetration into outer space,

Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes,

Believing that the exploration and use of outer space should be for the betterment of mankind and for the benefit of States irrespective of their degree of economic or scientific development,

Desiring to promote broad international co-operation in the exploration and use of outer space for peaceful purposes,

Believing that such co-operation will contribute to the development of mutual understanding and to the strengthening of friendly relations between nations and peoples,

Taking into consideration General Assembly resolutions 1721 (XVI) and 1802 (XVII), approved unanimously by all the States Members of the United Nations,

Noting the interrelationship of the technical and legal aspects of the activities of States in outer space,

Solemnly declare that in the exploration and use of outer space they will be guided by the following principles:

1. The exploration and use of outer space shall be carried out for the benefit and in the interests of the whole of mankind.

¹ U.N. Doc. A/AC.105/C.2/L.6.

2. Outer space and celestial bodies are free for exploration and use by all States; sovereignty over outer space or celestial bodies cannot be acquired by use or occupation or in any other way.

3. All States have equal rights to explore and use outer space.

4. The activities of States pertaining to the conquest of outer space shall be carried out in accordance with the principles of the United Nations Charter and with other generally recognized principles of international law in the interests of developing friendly relations among nations and of maintaining international peace and security.

5. The use of outer space for propagating war, national or racial hatred or enmity between nations is inadmissible.

6. Co-operation and mutual assistance in the conquests 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.

7. All activities of any kind pertaining to the exploration and use of outer space shall be carried out solely by States. If States undertake activities in outer space collectively, either through international organizations or otherwise, each State participating in such activities has a responsibility to comply with the principles set forth in this Declaration.

8. States shall retain their sovereign rights over objects they launch into outer space. Rights of ownership in respect of objects launched into outer space and their components remain unaffected while they are in outer space and upon their return to the earth.

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.

10. States shall regard cosmonauts as envoys of mankind in outer space and shall render all possible assistance to spaceships and their crews which may make an emergency landing on the territory of a foreign State or on the high seas; spaceships, satellites or capsules found beyond the limits of the launching State shall be returned to that State.

11. A State undertaking activities in outer space bears international responsibility for damage done to a foreign State or to its physical or juridical persons as a result of such activities.

The Governments of the States signatories to this Declaration call upon all the States of the world to accede to it.

ANNEX 17

Belgium: Working Paper Submitted by the Belgian Delegation on the Unification of Certain Rules Governing Liability for Damage Caused by Space Vehicles. April 30, 1963.¹

Field of Application

Art. 1(a) The following provisions shall apply to compensation for damage caused to persons or property by one or more space devices except where such damage is caused on the territory of the State where the launching of the device or devices takes place, the State whose flag the device or devices fly or the State or States claiming ownership or co-ownership of the device or devices.

(b) By "damage" shall be understood any loss for which compensation may be claimed under the national law of the injured person, including judicial and legal costs and interest.

By "person" shall be understood any natural or legal person in public or private law.

By "property" shall be understood any movable or immovable property.

By "territory of a State" shall be understood its land areas, its territorial and adjacent waters, ships flying its flag and aircraft registered by it.

By "space device" shall be understood any device which is intended to move in space, remaining there by means other than the reaction of the air.

States which are liable

Art. 2. The following shall be held liable for damage within the meaning of article 1 at the choice of the plaintiff, there being no joint liability or solidarity:

the State on whose territory the space device was launched, or
the State whose flag the space device flies, or
the State or States claiming ownership or co-ownership of the space device.

By "plaintiff" shall be understood the State which has been injured or whose nationals or residents have been injured.

Nature of the liability

Art. 3. The occurrence of the event causing the damage shall entail an obligation to give compensation once proof has been given that there is a relationship of cause and effect between the damage, on the one hand, and the launching, motion or descent of all or part of the space device, on the other hand.

¹ U.N. Doc. A/AC.105/C.2/L.7; U.N. Doc. A/AC.105/12, Annex I, 10-12.

The presence or absence of a relationship of cause and effect shall be determined in accordance with the national law of the person injured.

Extent of liability

Art. 4. The extent of the obligation to give compensation shall be determined in accordance with the provisions of the ordinary law of the country of the person injured.

Procedure for bringing action for liability

Art. 5.(a) Within twelve months of the occurrence of the damage, the plaintiff State shall submit, through the diplomatic channel, to the State considered liable under article 1 all claims for compensation relating to the State itself or to its nationals or residents.

If the State which is liable does not take a decision considered satisfactory by the plaintiff State within six months, the latter shall be entitled to take the claims for compensation before the International Court of Justice. The plaintiff State must act within six months of being notified of the decision in question.

The States ratifying or acceding to these articles undertake to comply with the judgment given by the International Court of Justice within three months of being notified thereof.

(b) There may be no interruption or suspension of the periods specified in paragraph (a) above.

(c) There shall be joinder of actions when there is more than one plaintiff in respect of damage due to one and the same event or when more than one State is liable if more than one space device was responsible for the damage.

Art. 6. These articles shall enter into force between the Contracting States on the date of the deposit of the instruments of ratification or accession at United Nations Headquarters, irrespective of the number of States which have ratified them or acceded to them.

ANNEX 18

United Kingdom of Great Britain and Northern Ireland: Draft Declaration of Basic Principles Governing the Activities of States Pertaining to the Exploration and Use of Outer Space. December 4, 1962.¹

1. Outer space and celestial bodies are free for exploration and use by all States in conformity with international law. 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

¹ U.N. Doc. A/C.1/879.

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.

2. Outer space and celestial bodies are not capable of appropriation or exclusive use by any State. Accordingly, no State may claim sovereignty over outer space or over any celestial body, nor can such sovereignty be acquired by means of use or occupation or in any other way.

3. In the exploration and use of outer space and celestial bodies States are bound by international law and by the provisions of the United Nations Charter and other international agreements which may be applicable.

4. All States shall, for themselves and for their nationals, have equal rights in the exploration and use of outer space. These rights shall be exercised in accordance with international law and with the principles affirmed in this Declaration.

ANNEX 19

Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water. August 5, 1963.¹ Signed at Moscow August 5, 1963; in force October 10, 1963.

The Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland, and the Union of Soviet Socialist Republics, hereinafter referred to as the "Original Parties",

Proclaiming as their principal aim the speediest possible achievement of an agreement on general and complete disarmament under strict international control in accordance with the objectives of the United Nations which would put an end to the armaments race and eliminate the incentive to the production and testing of all kinds of weapons, including nuclear weapons,

Seeking to achieve the discontinuance of all test explosions of nuclear weapons for all time, determined to continue negotiations to this end, and desiring to put an end to the contamination of man's environment by radioactive substances,

Have agreed as follows:

ARTICLE I

1. Each of the Parties to this Treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or

¹ White House Press Release, July 25, 1963; 49 *Department of State Bulletin* 239 (1963); Sen. Exec. M, 88th Cong., 1st Sess.

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. It is understood in this connection that the provisions of this subparagraph are without prejudice to the conclusion of a treaty resulting in the permanent banning of all nuclear test explosions, including all such explosions underground, the conclusion of which, as the Parties have stated in the Preamble to this Treaty, they seek to achieve.

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.

ARTICLE II

1. Any Party may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Depositary Governments which shall circulate it to all Parties to this Treaty. Thereafter, if requested to do so by one-third or more of the Parties, the Depositary Governments shall convene a conference, to which they shall invite all the Parties, to consider such amendment.

2. Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to this Treaty, including the votes of all of the Original Parties. The amendment shall enter into force for all Parties upon the deposit of instruments of ratification by a majority of all the Parties, including the instruments of ratification of all of the Original Parties.

ARTICLE III

1. This Treaty shall be open to all states for signature. Any state which does not sign this Treaty before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory states. Instruments of ratification and instruments of accession shall be deposited with the Governments of the Original Parties—the United States of America, the United Kingdom of Great Britain and

Northern Ireland, and the Union of Soviet Socialist Republics—which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force after its ratification by all the Original Parties and the deposit of their instruments of ratification.

4. For states whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall promptly inform all signatory and acceding states of the date of each signature, the date of deposit of each instrument of ratification or an accession to this Treaty, the date of its entry into force, and the date of receipt of any requests for conferences or other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

ARTICLE IV

This Treaty shall be of unlimited duration.

Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty three months in advance.

ARTICLE V

This Treaty, of which the English and Russian texts are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

ANNEX 20

United Nations *Ad Hoc* Committee on the Peaceful Uses of Outer Space, Report to the United Nations General Assembly, Fourteenth Session. Extracts. July 14, 1959.¹

I. INTRODUCTION

A. Mandate of the Committee

1. The task of the *Ad Hoc* Committee on the Peaceful Uses of Outer Space under paragraph 1 (*d*) of General Assembly resolution 1348 (XIII) is to report on:

“The nature of legal problems which may arise in the carrying out of programmes to explore outer space.”

¹ U.N. Doc. A/4141, July 14, 1959; *Legal Problems of Space Exploration* 1267-1270 (1961).

2. The scope of the mandate thus given the Committee was the subject of discussion. It was recognized that the terms of reference of the Committee referred exclusively to the peaceful uses of outer space. One view expressed was that the task of the Committee related only to the identification and listing of legal problems which might arise in the carrying out of programmes to explore outer space and that the Committee was not called upon to formulate either general or particular solutions of those problems. Another view was that the Committee, in identifying and listing the problems should give some indication of the significance and implications of each problem and the priority which might be given to its solution. Others stressed the importance of giving attention to certain relevant general principles, such as those contained in the preamble and operative paragraph 1 (*b*) of resolution 1348 (XIII). It was also pointed out that, while paragraph 1 (*d*) of resolution 1348 (XIII) referred only to problems which might arise in the exploration of outer space, it was not always possible in relation to certain activities to differentiate between exploration and exploitation of outer space and that both the exploration and the exploitation of outer space were expressly mentioned in the preamble to the resolution.

3. The Committee recognized that it would be impossible at this stage to identify and define, exhaustively, all the juridical problems which might arise in the exploration of outer space. Recognizing the multiplicity of these juridical problems, the Committee considered that it could most usefully fulfill its mandate from the General Assembly, in view of the complex character of these problems, by: (1) selecting and defining problems that have arisen, or are likely to arise in the near future, in the carrying out of space programmes; (2) dividing the problems into two groups, those which may be amendable to early treatment and those which do not yet appear to be ripe for solution; and (3) indicating, without definite recommendation, various means by which answers to such problems might be pursued. The identification of legal problems entails, of necessity, some consideration of possible approaches to their solution, particularly with a view to presenting the best informed comment that can be made on the matter of priorities.

B. General observations

4. The Committee considered the relevance to space activities of the provisions of the United Nations Charter and of the Statute of the International Court of Justice, which synthesized the idea of cooperation between men and the joint achievement of great projects for the benefit of all mankind; it observed that as a matter of princi-

ple those instruments were not limited in their operation to the confines of the earth. It considered as a worthy standard for international co-operation and programmes in the peaceful uses of outer space which could appropriately be undertaken under United Nations auspices, to the benefit of States irrespective of the state of their economic or scientific development, the principles set forth in the operative paragraph 1 (b) and the preamble of resolution 1348 (XIII), in which the General Assembly called attention to Article 2, paragraph 1, of the Charter which states that the Organization is based on the principle of the sovereign equality of all its Members, recognized the common interest of mankind in outer space and the common aim that it should be used for peaceful purposes only, and expressed the desire of promoting energetically the fullest exploration and exploitation of outer space for the benefit of mankind.

5. It was unanimously recognized that the principles and procedures developed in the past to govern the use of such areas as the air space and the sea deserved attentive study for possibly fruitful analogies that might be adaptable to the treatment of legal problems arising out of the exploration and use of outer space. On the other hand, it was acknowledged that outer space activities were distinguished by many specific factual conditions, not all of which were now known, that would render many of its legal problems unique.

6. The Committee agreed that some of the legal problems of outer space activities were more urgent and more nearly ripe for positive international agreement than others. It was felt that the progress of activities in outer space and of advances in science and technology would continually pose new problems relevant to the international legal order and modify both the character and the relative importance of existing problems. For example, future arrangements among Governments or private groups of scientists for cooperation in space research or the dissemination of space data may entail legal problems ranging from administrative or procedural arrangements to regulation or control. The Committee noted the indispensable usefulness of close and continuous co-operation between jurists and scientists to take these and other developments into account.

7. The Committee considered that a comprehensive code was not practicable or desirable at the present stage of knowledge and development. Despite the progress already made, it was emphasized that relatively little is so far known about the actual and prospective uses of outer space in all their possible varieties of technical significance, political context, and economic utility. It was pointed out that the rule of law is neither dependent upon, nor assured by, comprehensive codification and that premature codification might preju-

dice subsequent efforts to develop the law based on a more complete understanding of the practical problems involved. Although an attempt at comprehensive codification of space law was thought to be premature, the Committee also recognized the need both to take timely, constructive action and to make the law of space responsive to the facts of space.

8. For these reasons it was agreed that the rough grouping of legal problems according to the priority hereafter suggested should itself be kept under regular review by whatever means the General Assembly should deem fitting.

II. LEGAL PROBLEMS SUSCEPTIBLE OF PRIORITY TREATMENT

A. Question of freedom of outer space for exploration and use

9. During the IGY 1957-1958 and subsequently, countries throughout the world proceeded on the premise of the permissibility of the launching and flight of the space vehicles which were launched, regardless of what territory they passed "over" during the course of their flight through outer space. The Committee, bearing in mind that its terms of reference refer exclusively to the peaceful uses of outer space, believes that, with this practice, there may have been initiated the recognition or establishment of a generally accepted rule to the effect that, in principle, outer space is, on conditions of equality, freely available for exploration and use by all in accordance with existing or future international law or agreements.

B. Liability for injury or damage caused by space vehicles

10. Since injury or damage might result from the launching, flight and return to earth of various kinds of space vehicles or parts thereof, a number of problems exist with respect to defining and delimiting liability of the launching State and other States associated with it in the space activity causing injury or damage. First of all there is the question of the type of interest protected: that is, the kind of injury for which recovery may be had. Second, there is the question of the type of conduct giving rise to liability: should liability be without regard to fault for some or all activities, or should it be based upon fault? Third, should a different principle govern, depending on whether the place of injury is on the surface of the earth, in the air space or in outer space? Fourth, should liability of the launching State be unlimited in amount? Finally, where more than one State participates in a particular activity, is the liability joint or several?

11. What machinery should be utilized for determining liability and ensuring the payment of compensation if due? The Committee considered that early consideration should be given to agreement on submission to the compulsory jurisdiction of the International Court of Justice in disputes between States as to the liability of States for injury or damage caused by space vehicles.

12. When it considered the foregoing questions, the Committee noted that, in so far as concerns liability for surface damage caused by aircraft, there was formulated at Rome in 1952, under the aegis of ICAO, the Convention on damage caused by foreign aircraft to third parties on the surface. In the opinion of the Committee, that Convention and ICAO experience in relation thereto could be taken into account, *inter alia*, in any study that might be carried out in the future concerning liability for injury or damage caused by space vehicles. It was pointed out, however, that no international standards regarding safety and precautionary measures governing the launching and control of space vehicles had yet been formulated, and this fact also could be taken into account in studying analogies based on existing conventions.

C. Allocation of radio frequencies

13. It was recognized that there are stringent technical limits on the availability of radio frequencies for communications. The development of space vehicles will pose new and increasing demands on the radio spectrum. It was emphasized that rational allocation of frequencies for communications with and among space vehicles would be imperative. In this way, what might otherwise come to constitute paralysing interference among radio transmissions could be avoided.

14. Attention was drawn to the fact that there is already in existence and operation an international organization suited to the consideration of problems of radio frequency allocation for outer space uses, namely, the ITU. A technical committee of this organization has already issued a recommendation and a report which bear the following titles: "Selection of Frequencies Used in Telecommunication with and between Artificial Earth Satellites and other Space Vehicles" and "Factors Affecting the Selection of Frequencies for Telecommunication with and between Space Vehicles." The findings contained in these two documents will be presented to the Administrative Radio Conference of the ITU which will open in Geneva on 17 August 1959.

15. Attention should also be given to the desirability of terminating transmissions from space vehicles once these transmissions

have outlived their usefulness. Such a measure would help conserve and make optimum use of the frequencies which are assigned for outer space communications. In considering this problem, it would be necessary to balance this factor against the interest in conserving a means for continuous identification of space vehicles.

D. Avoidance of interference between space vehicles and aircraft

16. As the launchings of space vehicles become more numerous and wide-spread throughout the world, practical problems will clearly arise in regard to the prevention of physical interference between space vehicles, particularly rockets, and conventional aircraft. The latter are already employed in great numbers across the earth and in many areas air traffic is already congested. It was considered that Governments could give early attention to the problem of interference between aircraft and space vehicles and that technical studies could usefully be undertaken, if necessary with the assistance of competent specialized agencies.

E. Identification and registration of space vehicles and co-ordination of launchings

17. It is expected that the number of space vehicles will progressively increase. In the course of time, their numbers may become very large. This indicates the necessity of providing suitable means for identifying individual space vehicles. 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.

18. As part of the problem of identification, there arises the question of placing suitable markings on space vehicles so that, particularly in the event of their return to earth, they may be readily identified.

19. Identification would be facilitated by a system of registration of the launchings of space vehicles, their call-signs, markings and current orbital and transit characteristics. Registration would also serve a number of other useful purposes. For one example, one serious problem is the potential overloading of tracking facilities. Registration of launchings would help to avoid this. 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.

20. A further measure, beyond registration, would be agreement on the co-ordination of launchings.

F. Re-entry and landing of space vehicles

21. Problems of re-entry and landing of space vehicles will exist both with respect to unmanned space vehicles and later with respect to manned vehicles of exploration. Where space vehicles are designed for re-entry and return, it will be appropriate for the launching State to enter into suitable arrangements with the State on whose territory the space vehicle is intended to land and other States whose air space may be entered during descent. Recognizing, moreover, that such landings may occur through accident, mistake or distress, members of the Committee called attention to the desirability of the conclusion of multilateral agreements concerning re-entry and landing, such agreements to contain suitable undertakings on co-operation and appropriate provisions on procedures. Among the subjects that might be covered by such agreements would be the return to the launching State of the vehicle itself and—in the case of a manned vehicle—provision for the speedy return of personnel.

22. It was also considered that certain substantive rules of international law already exist concerning rights and duties with respect to aircraft and airmen landing on foreign territory through accident, mistake or distress. The opinion was expressed that such rules might be applied in the event of similar landings of space vehicles.

III. OTHER PROBLEMS

A. Question of determining where outer space begins

23. Under the terms of existing international conventions and customary international law, States have complete and exclusive sovereignty in the air space above their territories and territorial waters. The concurrent existence of a region in space which is not subject to the same régime raises such questions as where air space ends and where outer space begins. It was noted that these limits do not necessarily coincide. While they have been much discussed in scholarly writing, there is no consensus among publicists concerning the location of these limits.

24. A view was expressed that it might eventually prove essential to determine these limits. The Committee reviewed a number of possibilities in this connexion, including those based upon the physical characteristics of air and of aircraft. The difficulties involved were agreed to be great. An authoritative answer to the problem at this time would require an international agreement, and the opinion

was expressed that such an agreement now, based on current knowledge and experience, would be premature. It was considered that, in the absence of an express agreement, further experience might lead to the acceptance of precise limits through a rule of customary law.

25. In the absence of a precise demarcation, another possible approach would be to set tentatively, on the basis of present experience and knowledge, a range within which the limits of air space and outer space would be assumed to lie. It was suggested that an approach of this kind should avoid a boundary so low as to interfere with existing aviation régimes or so high as unreasonably to fetter activities connected with the use and exploration of outer space.

26. There was also discussion as to whether or not further experience might suggest a different approach, namely, the desirability of basing the legal régime governing outer space activities primarily on the nature and type of particular space activities.

27. One development might be the conclusion of intergovernmental agreements, as necessary, to govern activities sufficiently close to the earth's surface and bearing such a special relationship to particular States as to call for their consent. Each such agreement could contain appropriate provisions as to the permissibility of a given activity by reference not only to altitude and "vertical" position but also to trajectory, flight mission, known or referred instrumentation, and other functional characteristics of the vehicle or object in question.

28. It was generally believed that the determination of precise limits for air space and outer space did not present a legal problem calling for priority consideration at this moment. The Committee noted that the solution of the problems which it had identified as susceptible of priority treatment was not dependent upon the establishment of such limits.

B. Protection of public health and safety: safeguards against contamination of or from outer space

29. The Committee took note of the apprehensions that have been expressed that activities in outer space might bring to those regions, by inadvertence, living or other matter from the earth capable of interfering with orderly scientific research. It was agreed that further study should be encouraged under appropriate auspices to specify the types of risks, the gravity of dangers, and the technical possibility, as well as the cost, of preventive measures. Such a study should also cover safeguards against similar contamination of the earth as a result of space activities as well as protection against other hazards to health and safety that might be created by the

carrying out of programmes to explore outer space. These studies could be undertaken with a view to the possible formulation of appropriate international standards.

C. Questions relating to exploration of celestial bodies

30. The Committee was of the view that serious problems could arise if States claimed, on one ground or another, exclusive rights over all or part of a celestial body. One suggestion was that celestial bodies are incapable of appropriation to national sovereignty. Another suggestion was that the exploration and exploitation of celestial bodies should be carried out exclusively for the benefit of all mankind. It was also suggested that some form of international administration over celestial bodies might be adopted.

31. The Committee noted that, while scientific programmes envisaged relatively early exploration of celestial bodies, human settlement and extensive exploitation of resources were not likely in the near future. For this reason the Committee believed that problems relating to the settlement and exploitation of celestial bodies did not require priority treatment.

D. Avoidance of interference among space vehicles

32. It was agreed that, apart from problems of communications and overloading of tracking facilities, there was for the present little danger of interference of space vehicles with each other. It was pointed out that this situation might change in time, particularly if vehicles in space are used extensively for either global or interplanetary travel. There was discussion about the possible relevance to space travel of rules and experience developed in relation to air traffic. It was decided that more scientific information would be needed before rules could be drafted.

E. Additional questions raising legal problems

33. The Committee recognized that various other technical developments would probably call for legal arrangements and regulation. Particular reference was made in this connexion to meteorological activities in outer space which may require international measures to insure maximum effectiveness.

ANNEX 21

Union of Soviet Socialist Republics: Draft Declaration of the Basic Principles Governing the Activities of States Pertaining to the Exploration and Use of Outer Space. September 10, 1962.¹

¹ *U.N. Doc. A/AC.105/L.2; U.N. Doc. A/5181. Annex III.*

The Governments of the States whose representatives have signed this Declaration,

Inspired by the great prospects opening up before mankind as a result of penetration into outer space,

Recognizing that the peoples of all the countries of the world are interested in the conquest of outer space,

Desiring to promote broad international co-operation in the exploration and use of outer space for peaceful purposes,

Taking into consideration United Nations General Assembly resolution 1721 (XVI) approved unanimously by all the States Members of the United Nations,

Solemnly declare that in the exploration and use of outer space they will be guided by the following principles:

1. The exploration and use of outer space shall be carried out for the benefit and in the interests of the whole of mankind.

2. Outer space and celestial bodies are free for exploration and use by all States; no State may claim sovereignty over outer space and celestial bodies.

3. All States have equal rights to explore and use outer space.

4. The activities of States pertaining to the conquest of outer space shall be carried out in accordance with the principles of the United Nations Charter and with other generally recognized principles of international law in the interests of developing friendly relations among nations and of maintaining international peace and security.

5. Scientific and technological advances shall be applied in outer space in the interests of a better understanding among nations and the promotion of broad international co-operation among States; the use of outer space for propagating war, national or racial hatred or enmity between nations shall be prohibited.

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

7. All activities of any kind pertaining to the exploration and use of outer space shall be carried out solely and exclusively by States; the sovereign rights of States to the objects they launch into outer space shall be retained by them.

8. The use of artificial satellites for the collection of intelligence information in the territory of foreign States is incompatible with the objectives of mankind in its conquest of outer space.

9. States shall regard all astronauts as envoys of mankind in outer space and shall render all possible assistance to spaceships and their crews which may make an emergency landing on the territory of a foreign State or on the high seas; spaceships, satellites and capsules found beyond the limits of the launching State shall be returned to that State.

The Governments of the States signatories to this Declaration call upon all the States of the world to accede to it.

ANNEX 22

Summary of Understandings between A. A. Blagonravov of the Union of Soviet Socialist Republics and Hugh L. Dryden of the United States of America, Geneva, Switzerland, June 8, 1962.¹

Geneva, Switzerland
June 8, 1962

The representatives of the Union of Soviet Socialist Republics and the United States of America have conducted discussions on the question of cooperation in the use of outer space for peaceful purposes during the period 29 May to 8 June, 1962. The agreed upon recommendations are described in the attached documents, the texts of which have been checked by us in both languages and are identical.

A. A. Blagonravov

Hugh L. Dryden

SUMMARY OF UNDERSTANDINGS

Introduction

Following the exchange of views between Nikita S. Khrushchev, Chairman of the Council of Ministers of the Union of Soviet Socialist Republics, and John F. Kennedy, President of the United States of America, regarding cooperation in the exploration and use of space for peaceful purposes, the USSR and U.S. representatives designated for the purpose have discussed in some detail the possibilities of cooperation in meteorology, a world geomagnetic survey, and satellite telecommunications.

In the field of meteorology, it is important that the two satellite launching nations contribute their capabilities toward the establishment of a global weather satellite system for the benefit of other nations.

The compilation of a map of the magnetic field of the earth with the aid of satellites is extremely important both for the further suc-

¹ U.N. Doc. A/C.1/880.

cessful exploration of space and for advancing the science of earth magnetism.

Telecommunications by means of satellites is expected to lead to a considerable improvement of communications facilities all over the world and can be a most important contribution to the extension of contacts and friendship among nations. Communication satellites can also be used for domestic needs within a single country.

The USSR and U.S. representatives have arrived at the following understanding which they agree to refer to their governments for consideration.

Meteorology

It is agreed that this program falls naturally into two stages, an experimental and an operational stage.

The first stage will extend approximately from the present time through 1963-64 during the development of experimental weather satellites by both the USSR and the U.S.

In this first stage, the two countries will arrange for the establishment of communication links adequate for the transfer, from each to the other, of the data gathered by each nation from its own experimental meteorological satellites. These communication links would connect the World Weather Centers at Moscow and Washington. A Joint Working Group of technical experts will meet in October 1962 to decide upon suitable communication links to be established with due regard to the sharing of costs and the interests of other nations.

The Joint Working Group will also establish the criteria for the two-way transfer of satellite data over such links, with the understanding that such transfers will include selected cloud-cover pictures, especially related to storms, vortices, fronts, and the generation of these phenomena, with geographical coordinates provided for all pictures selected, together with nephanalyses based upon the data as a whole. The Joint Working Group will agree upon a date for initiating the two-way transfer of such data, designating this date with due regard for the readiness of the communication links and the readiness of the USSR and the U.S. to provide data of approximately equivalent interest. Data should be exchanged as quickly as possible. 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. Coordinated research efforts should be directed toward these goals.

The second stage of the meteorological satellite program will begin approximately in 1964-65 and will apply to the coordinated launchings by the two nations of a system of operational weather satellites. In order to prepare adequately and in a timely fashion for such coordinated launchings, a second Joint Working Group will meet in March 1963 to determine 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.

These discussions as to satellite characteristics, numbers, and orbits shall be made with due consideration of recommendations of the World Meteorological Organization (WMO) with regard to the objectives of weather-data acquisition by satellites for both operations and research.

The two-way transfer of data during the second stage shall be determined by the two nations and shall be made on a real-time basis. This transfer and the wider dissemination of such data to other nations will proceed with full consideration of the recommendations and procedures of the World Meteorological Organization (WMO). Nephanalyses, pictures of cloud cover, and processed data on radiation fluxes will be exchanged mutually.

World Geomagnetic Survey

It was agreed to be useful to arrange for a joint effort in this field by the coordinated launching of two artificial earth satellites equipped with magnetometers during the period of the International Year of the Quiet Sun. These two satellites will be launched, one by the USSR and the other by the U.S., on different mutually agreed orbits. The period before the International Year of the Quiet Sun will be used by both parties (the USSR and the U.S.) to continue magnetic measurements in space in accordance with national work programs, with mutual exchange of processed data of the magnetic measurements.

The representatives of the USSR and the U.S. agreed that it would be desirable to establish a Joint Working Group, consisting of USSR and U.S. specialists, for the preliminary consideration of the scientific and technical aspects of the compilation of a map of the magnetic field of the earth with the aid of artificial earth satellites. In particular, the Joint Working Group is to make recommendations on the shape of the orbits, their angle of inclination to the equator, the period during which the satellites are to be operated, the necessary accuracy of measurements, the type of magnetometers

to be used on the satellites, the methods of processing and analyzing the data obtained, the methods of correcting them, and so on.

Conducting its work, the Joint Working Group will take into consideration any possible recommendations on this question of the Scientific and Technical Subcommittee of the UN Committee on the Peaceful Uses of Outer Space.

The parties agreed that it would be desirable for the members of this Joint Working Group to be appointed by each side as soon as technically possible to begin work on the problems placed before the group, by correspondence and by subsequent meetings, if necessary.

The parties 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 the artificial earth satellites. They therefore agreed to make efforts to arrange, through World Data Centers A and B, for a prompt exchange of standard magnetograms from earth observatories, and to arrange that these magnetograms contain all the data required for their use for analyzing the data acquired by satellites. Each side agreed to use its influence with non-governmental organizations (such as the International Committee on Geophysics (CIG), the Committee on Space Research (COSPAR), and others) to expedite the transmission to World Data Centers A and B of the necessary earth magnetic data from third countries cooperating with the USSR and U.S.

Satellite Telecommunications

Recognizing the role of the International Telecommunications Union and the importance of the establishment of bilateral cooperation between the USSR and the U.S. in the exploration and peaceful use of outer space, we submit the following recommendations:

In 1962-63 the USSR and the U.S. agree to cooperate in experiments on communication by means of the U.S. satellite "Echo A-12".

We agree 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 our next series of meetings.

Among the problems which should be discussed at the following meetings is that of the preparation for the working out with other nations of a project for an experimental global system of space communications with due regard to the recommendations of the ITU.

Conclusion

The recommendations proposed at the present stage of the bilateral discussions by the representatives of the USSR and the U.S. have a preliminary character and will be presented by both parties to their governments through appropriate agencies for final consideration. If either of the two parties finds it necessary to make any corrections, additions, or deletions in the text of the prepared documents, then all of these changes should be made within the period of two months from this date by correspondence, which will be sent to the following address in Moscow:

Academy of Sciences of the USSR
Leninsk: Prospekt 14
Moscow
USSR

And to the following address in Washington:

National Aeronautics and Space Administration
Attention: Dr. Hugh L. Dryden
400 Maryland Avenue, S.W.
Washington 25, D.C., U.S.A.

Geneva, June 8, 1962

APPENDIX A

The following persons participated in the discussions:

USSR Representatives

Academician A. A. Blagonravov
Deputy Minister I. V. Klokov
Professor Y. D. Kalinin
Professor V. A. Bugaev
Mr. Y. A. Barinov
Mr. G. S. Stashevsky

U.S. Representatives

Dr. Hugh L. Dryden
Professor Donald F. Hornig
Dr. John W. Townsend, Jr.

Other U.S. Consultants

Mr. Arnold W. Frutkin
Mr. Howard Furnas
Dr. Richard W. Porter
Dr. Harry Wexler

Dr. James P. Heppner
 Mr. Philip H. Valdes
 Congressman George P. Miller
 Congressman James G. Fulton

U.S. NOTE OF 29 AUGUST 1962

The embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs of the USSR and has the honor to refer to the technical agreement reached in Geneva on June 8, 1962, by representatives of the USSR and the United States of America, headed by Academician Blagonravov and Dr. Hugh Dryden on cooperation in space activities.

The Embassy recalls that the agreement of June 8 took the form of recommendations submitted to the two governments for final consideration, and specified a period of two months during which either side could propose changes in the agreement. On July 9, 1962, Dr. Dryden wrote to Academician Blagonravov informing him that as United States technical representative he had no changes to propose on behalf of the United States of America.

As the period of two months has elapsed and as Academician Blagonravov has not proposed changes, the Government of the United States of America therefore proposed to the Government of the Union of Soviet Socialist Republics an exchange of notes referring to and confirming the agreement of June 8. This exchange could take place in Moscow or Washington, as the Government of the Union of Soviet Socialist Republics prefers.

NO. 49/USA

The Ministry of Foreign Affairs of the USSR presents its compliments to the Embassy of the USA and in connection with the Embassy's note No. 216 of August 29, 1962, has the honor to state the following.

In the course of a meeting at Geneva of USA and USSR scientists which took place in June, 1962, technical recommendations on several questions of cooperation in the field of the peaceful research of the use of outer space were agreed upon between the Academy of Sciences of the USSR and the National Aeronautics and Space Administration of the USA.

On September 13, 1962, Academician A.A. Blagonravov, during the course of his stay in New York for a session of the UN Committee on the use of space for peaceful purposes, informed NASA representative, Mr. A. Frutkin of the approval by the Soviet side of the aforementioned recommendations of the scientists regarding outer space.

The President of the Academy of Sciences of the USSR is sending the Director of NASA appropriate official notification on this question.

MOSCOW

October 12, 1962

October 12, 1962

Dear Mr. Webb:

Referring to the agreement on cooperation in the peaceful exploration and uses of outer space which was reached during the meetings between delegations of Soviet and American scientists, headed by Dr. Hugh Dryden and Academician A. A. Blagonravov, in June of 1962, the Academy of Sciences of the USSR notes that neither side has proposed within the specified period of time any changes or additions to the text of the recommendations as agreed in Geneva.

In view of this, we consider the above named agreement to have thus entered into force and are informing you herewith that Soviet scientists are prepared to commence its implementation.

The Academy of Sciences of the USSR expresses the hope that the agreement on cooperation in the peaceful exploration and use of outer space will provide a good beginning for the further development and expansion of cooperation between Soviet and American scientists in this noble task for the sake of scientific progress and the strengthening of peace on earth.

Respectfully yours,
M. V. Keldysh
President,
Academy of Sciences of
the USSR

October 30, 1962

Dear President Keldysh:

This will acknowledge your letter of October 12, 1962, expressing the desire of the USSR Academy of Sciences to commence implementation of the agreement reached in Geneva last June by Dr. Dryden and Academician Blagonravov. Since our two governments have now confirmed this agreement, I believe such a step to be appropriate and desirable.

I am asking Dr. Dryden to communicate with Academician Blagonravov in order to establish mutually agreeable dates for convening working groups to begin this agreed cooperative program.

I hope, with you, that this first step will be a fruitful one, and that it will lead to other such steps.

Sincerely yours,
James E. Webb