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Folder Title:
US Soviet Agreement on Basic Scientific Research [1 of 2]

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AGREEMENT BETWEEN
THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND
THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS
ON COOPERATION IN THE FIELD OF BASIC SCIENTIFIC RESEARCH

The Government of the United States of America and the
Government of the Union of Soviet Socialist Republics
(hereinafter referred to as "the Parties");

Considering basic scientific research as important for
development of national economies;

Realizing that international cooperation in the field of
basic scientific research will strengthen the bonds of
friendship and understanding between their peoples and will
advance the state of science to the benefit of both countries,
as well as of all mankind;

Recalling the fruitful cooperation which has occurred
between the two countries in the past;

Referring to the relevant principles, provisions and
objectives set forth in the Final Act of the Conference on
Security and Cooperation in Europe;

Convinced of further need for developing mutually
advantageous scientific cooperation;

Noting the General Agreement Between the Government of the
United States of America and the Government of the Union of
Soviet Socialist Republics on Contacts, Exchanges and
Cooperation in Scientific, Technical, Educational, Cultural and
Other Fields, signed on November 21, 1985;

Wishing to establish closer and more regular cooperation
between scientific organizations and individual scientists;

Have agreed as follows:

ARTICLE I

The Parties shall coordinate, facilitate, and support the development and implementation of cooperation in the field of basic scientific research on the basis of the principles of equality, overall reciprocity, and mutual benefit.

ARTICLE II

Taking into account that fundamental and applied research involve a continuum of scientific activity, for the purposes of this Agreement, "basic scientific research" means theoretical or experimental research having as its objective the acquisition of fuller knowledge or understanding of the elemental principles of phenomena and observable facts; such research extends the knowledge base from which many societal benefits ultimately flow, and, in the framework of this Agreement, such research is not designed for the transformation of new discoveries into applied technologies. The foregoing definition does not preclude subsequent application of knowledge or understanding gained from basic scientific research conducted under this Agreement, subject to the extent of rights under Annex II.

ARTICLE III

Cooperation under this Agreement may be implemented in the following forms:

- Joint scientific research projects including the exchange of scientists, specialists, and researchers participating in them as well as exchange of their results;

- Joint scientific conferences, symposia, and workshops;
- Exchange of scientific information and documentation;
and
- Other forms of cooperation which may be mutually
agreed.

ARTICLE IV

Scientific organizations of the two Parties will conclude subsidiary Memoranda of Understanding (hereinafter referred to as "MOUs") in order to carry out the operational implementation of this Agreement. Consideration of MOUs shall be initiated upon agreement of the Parties, acting through their Executive Agents identified in Annex I, which is an integral part of this Agreement.

ARTICLE V

Cooperative activities in the field of basic scientific research under this Agreement will be subject to official approval in each country, and implemented, in accordance with their respective international obligations, national laws, regulations and procedures. Such cooperation will be governed by the applicable MOUs. Within this framework:

- such cooperation may include the participation of scientific institutions, government and nongovernment agencies, higher educational institutions, and individual scientists, specialists and researchers (hereinafter referred to as "partners");
- partners may carry out such cooperation in approved areas through direct contacts and arrangements.

In order to facilitate implementation of this Agreement, partners of one country intending to visit partners of the other country for purposes of developing or implementing cooperation under this Agreement are to so indicate in applying for permission to enter.

ARTICLE VI

Cooperation under this Agreement shall be conducted within the limits of available funds. Financial arrangements for cooperation will be set forth in the MOUs.

ARTICLE VII

With respect to cooperation under this Agreement, each Party, in accordance with its international obligations, national laws and regulations, shall:

(a) encourage the participation of qualified scientists, specialists, and researchers in activities under this Agreement, whether or not they are affiliated with institutions participating in cooperation;

(b) facilitate prompt and efficient entry into and exit from its territory of persons participating in the implementation of this Agreement, as well as of appropriate instrumentation and equipment; and

(c) facilitate prompt and efficient access of persons of the other Party participating in the implementation of this Agreement to its relevant geographic areas, institutions, data, materials, and individual scientists, specialists, and researchers.

ARTICLE VIII

Protection of intellectual property and rights thereto shall be as set forth in Annex II, which constitutes an integral part of this Agreement.

ARTICLE IX

Scientific and technological information derived from cooperative activities under this Agreement, other than information not disclosed for commercial or industrial reasons, shall be made available, unless otherwise agreed in writing as provided for in Articles IV and V, to the world scientific community. This will be accomplished through customary channels and in accordance with Article VIII and Annex II of this Agreement, and the normal practices and regulations of the Parties.

ARTICLE X

The Parties agree to establish a US-USSR Joint Commission on Cooperation in the Field of Basic Scientific Research (hereinafter referred to as the "Joint Commission"). The composition of the Joint Commission and the principles for its operation are specified in Annex I.

ARTICLE XI

Initial areas of cooperation are listed in Annex III, which constitutes an integral part of this Agreement. Additions, deletions, or modifications to the list of areas may be

considered by the Joint Commission, as provided in Annex I, paragraph 7, and must be approved by the Parties, as provided in paragraph 4 of Article XIV.

ARTICLE XII

This Agreement and the MOUs shall be without prejudice to other agreements concluded between the Parties.

ARTICLE XIII

This Agreement shall be without prejudice to the cooperation of either Party with other States and international organizations.

ARTICLE XIV

1. This Agreement shall enter into force upon signature by both Parties and shall remain in force for five years. It may be extended for further five-year periods through an exchange of notes between the Parties.

2. Either Party may at any time give written notice to the other Party of its intention to terminate this Agreement, in which case this Agreement will terminate six months from the date notice is received by the other Party.

3. Expiration of this Agreement shall not affect the implementation of any cooperative activity undertaken pursuant to this Agreement and not fully executed before expiration occurs.

4. This Agreement may be amended by written agreement of the Parties.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

DONE at PARIS, this 8th day of JANUARY, 1989, in duplicate in the English and Russian languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

George P. Shultz

FOR THE GOVERNMENT OF THE UNION
OF SOVIET SOCIALIST REPUBLICS:

Andrei Gromyko

ANNEX I

US-USSR JOINT COMMISSION ON COOPERATION IN THE FIELD OF BASIC SCIENTIFIC RESEARCH

In accordance with Article X of this Agreement:

1. The Parties shall establish a Joint Commission consisting of representatives of both Parties, including their Executive Agents, as set forth in paragraph 4 below, and the parties to the MOUs.
2. Members of the Joint Commission shall serve without compensation.
3. The Joint Commission shall adopt procedures for its operation, and shall ordinarily meet once a year, alternately in the United States and in the Soviet Union.
4. Each Party shall have an Executive Agent to assist the Joint Commission. The Executive Agent of the United States will be the White House Office of Science and Technology Policy (OSTP). The Executive Agent of the Soviet Union will be the USSR State Committee for Science and Technology (GKNT).
5. The Executive Agent of each Party shall designate a Co-Chairperson of the Joint Commission. The Co-Chairperson of the hosting side shall act as Chairperson of the Joint Commission for the duration of that meeting. The Joint Commission shall act by mutual agreement.
6. The Joint Commission shall review, coordinate, and facilitate cooperation in the field of basic scientific research and recommend measures and programs for consideration and subsequent approval by both Parties.

7. The Joint Commission may consider proposals for additions, deletions, or modifications to the list of areas of cooperation in Annex III, which it shall forward to the Parties for their approval. Changes to Annex III which have been approved by the Parties will be submitted in writing to the Joint Commission.

ANNEX II

INTELLECTUAL PROPERTY

Pursuant to Article VIII of this Agreement:

I. GENERAL

A. For purposes of this Agreement, "intellectual property" is understood to have the meaning found in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm July 14, 1967.

B. The Parties shall ensure adequate and effective protection for intellectual property created or furnished under this Agreement and relevant implementing arrangements thereunder.

II. COPYRIGHTS

The Parties and the partners shall take appropriate steps to secure copyright to works created under this Agreement in accordance with their national laws, except as specifically provided otherwise in an applicable implementing arrangement. Rights to works created under this Agreement shall be determined in the applicable implementing arrangement.

III. INVENTIONS

A. For purposes of this Annex, "invention" means any invention made in the course of cooperation under this Agreement or implementing arrangements thereunder which is or may be patentable or otherwise protectable under the laws of the United States of America, the Union of Soviet Socialist Republics, or any third country. An invention "made" means one conceived or for which an application for patent or other title of protection has been filed or which has otherwise been reduced to practice.

B. Between a Party and its nationals, the ownership of rights and interests in inventions will be determined in accordance with that Party's national laws and practices.

C. As between the Parties, unless otherwise specifically provided in an applicable implementing arrangement, the Parties and the partners shall take appropriate steps to secure rights to implement the following:

1. If the invention is made in the course of a program of cooperative activity that involves only the transfer or exchange of information between the Parties, such as by joint meetings, seminars, or the exchange of technical reports or papers, unless provided otherwise in an applicable implementing arrangement:

- a. The Party whose personnel makes the invention ("the Inventing Party") has the right to obtain all rights and interests in the invention in all countries in accordance with applicable national laws of such countries;

- b. In any country where the Inventing Party decides not to obtain such rights and interests, the other Party has the right to do so.

2. If the invention is made by personnel of one Party ("the Assigning Party") while assigned to the other Party ("the Receiving Party") in the course of a program of cooperative activity that involves only the visit or exchange of scientific and technical personnel:

a. The Receiving Party has the right to obtain all rights and interests in the invention in all countries in accordance with applicable national laws of such countries;

b. In any country where the Receiving Party decides not to obtain such rights and interests, the Assigning Party has the right to do so.

D. Arrangements involving other forms of cooperation, such as joint research projects with an agreed scope of work, shall provide for the mutually agreed upon disposition of rights to an invention made as a result of such activity on an equitable basis. Except as otherwise specifically agreed, each Party has the right to obtain all rights and interests in the invention in its own country, whereas the right to secure legal protection of that invention in third countries, as well as the right to license or transfer such rights and interests in third countries, shall be allocated by mutual written agreement.

E. Notwithstanding the foregoing, if an invention is of a type for which exclusive rights are available under the laws of one Party but not of the other Party, the Party whose laws provide for exclusive rights shall be entitled to all rights in all countries which provide rights to such invention. The Parties may agree, however, to a different allocation of rights to such invention.

F. The Parties shall disclose to one another inventions made in the course of programs of cooperative activities and furnish to one another any documentation and information

necessary to enable them to secure any rights to which they may be entitled. The Parties may ask one another in writing to delay publication or public disclosure of such documentation or information for the purpose of protecting their respective rights related to inventions. Unless otherwise agreed in writing, such restriction shall not exceed a period of six months from the date of communication of such information. Communication shall be through the parties to the applicable MOUs.

IV. BUSINESS-CONFIDENTIAL INFORMATION

A. The Parties do not expect to furnish to one another or create, or have the partners furnish or create, business-confidential information in the course of cooperation under this Agreement. In the event that such information is inadvertently furnished or created or the Parties agree to furnish such information, the Parties and the partners shall give full protection to such information in accordance with their laws, regulations, and administrative practices.

B. For purposes of this Annex, "business-confidential information" means information of a confidential nature which meets all of the following conditions:

1. it is of a type customarily held in confidence for commercial reasons;
2. it is not generally known or publicly available from other sources;
3. it has not been previously made available by the owner to others without an obligation concerning its confidentiality; and

4. it is not already in the possession of the recipient Party or partner without an obligation concerning its confidentiality.

C. Any information to be protected as "business-confidential information" shall be appropriately identified by the Party or partner furnishing such information or asserting that it is to be protected, except as otherwise provided in the Parties' laws, regulations, and administrative practices. Subject to the aforesaid laws, regulations and administrative practices, unidentified information will be assumed not to be information to be protected, except that a Party to the cooperative activity may notify the other Party in writing, within a reasonable period of time after furnishing or transferring such information, that such information is business-confidential information under the laws, regulations, and administrative practices of its country. Such information will thereafter be protected in accordance with paragraph A above.

V. OTHER TYPES OF INTELLECTUAL PROPERTY

"Other types of intellectual property" means any intellectual property protectable in accordance with the laws, regulations and administrative practices of either Party or any third country other than those described in Articles II, III, and IV above and includes, for example, mask works and trademarks. Rights to other types of intellectual property shall be determined in the same manner as for inventions,

Article III, Paragraphs B-D of this Annex. If an intellectual property is one for which protection is available under the laws of one Party but not of the other Party, the Party whose laws provide such protection shall be entitled to all rights in all countries which protect such intellectual property. The Parties may agree, however, to a different allocation of rights to such intellectual property.

VI. MISCELLANEOUS

A. Each Party and each partner shall take all necessary and appropriate steps to provide for the cooperation of its authors, inventors, and discoverers which is required to carry out the provisions of this Annex.

B. Each Party shall assume the responsibility to pay to its nationals such awards or compensation as may be in accordance with its laws and regulations. This Annex does not create any entitlement or prejudice any right or interest of the author or inventor to an award or compensation for his or her work or invention.

C. Intellectual property disputes arising under this Agreement should be resolved, if possible, through discussions between the concerned partners. If the partners cannot resolve such a disagreement, it shall be settled through consultations between the Parties or their designees.

VII. EFFECT OF TERMINATION OR EXPIRATION

Termination or expiration of this Agreement shall not affect rights or obligations under this Annex.

VIII. APPLICABILITY

This Annex is applicable to any implementing arrangements or cooperation under this Agreement, except as otherwise specifically provided for in individual implementing arrangements.

ANNEX III

AREAS OF COOPERATION

1. Geosciences
2. Basic Scientific Research in Engineering Sciences
3. Scientific Problems of the Arctic and the North
4. Life Sciences
5. Science Policy
6. Chemistry
7. Mathematics
8. Theoretical Physics

AGREEMENT BETWEEN
THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND
THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS
ON COOPERATION IN THE FIELD OF BASIC SCIENTIFIC RESEARCH

The Government of the United States of America and the
Government of the Union of Soviet Socialist Republics
(hereinafter referred to as "the Parties");

Considering basic scientific research as important for
development of national economies;

Realizing that international cooperation in the field of
basic scientific research will strengthen the bonds of
friendship and understanding between their peoples and will
advance the state of science to the benefit of both countries,
as well as of all mankind;

Recalling the fruitful cooperation which has occurred
between the two countries in the past;

Referring to the relevant principles, provisions and
objectives set forth in the Final Act of the Conference on
Security and Cooperation in Europe;

Convinced of further need for developing mutually
advantageous scientific cooperation;

Noting the General Agreement Between the Government of the
United States of America and the Government of the Union of
Soviet Socialist Republics on Contacts, Exchanges and
Cooperation in Scientific, Technical, Educational, Cultural and
Other Fields, signed on November 21, 1985;

Wishing to establish closer and more regular cooperation
between scientific organizations and individual scientists;

Have agreed as follows:

ARTICLE I

The Parties shall coordinate, facilitate, and support the development and implementation of cooperation in the field of basic scientific research on the basis of the principles of equality, overall reciprocity, and mutual benefit.

ARTICLE II

Taking into account that fundamental and applied research involve a continuum of scientific activity, for the purposes of this Agreement, "basic scientific research" means theoretical or experimental research having as its objective the acquisition of fuller knowledge or understanding of the elemental principles of phenomena and observable facts; such research extends the knowledge base from which many societal benefits ultimately flow, and, in the framework of this Agreement, such research is not designed for the transformation of new discoveries into applied technologies. The foregoing definition does not preclude subsequent application of knowledge or understanding gained from basic scientific research conducted under this Agreement, subject to the extent of rights under Annex II.

ARTICLE III

Cooperation under this Agreement may be implemented in the following forms:

- Joint scientific research projects including the exchange of scientists, specialists, and researchers participating in them as well as exchange of their results;

- Joint scientific conferences, symposia, and workshops;
- Exchange of scientific information and documentation;
and
- Other forms of cooperation which may be mutually
agreed.

ARTICLE IV

Scientific organizations of the two Parties will conclude subsidiary Memoranda of Understanding (hereinafter referred to as "MOUs") in order to carry out the operational implementation of this Agreement. Consideration of MOUs shall be initiated upon agreement of the Parties, acting through their Executive Agents identified in Annex I, which is an integral part of this Agreement.

ARTICLE V

Cooperative activities in the field of basic scientific research under this Agreement will be subject to official approval in each country, and implemented, in accordance with their respective international obligations, national laws, regulations and procedures. Such cooperation will be governed by the applicable MOUs. Within this framework:

- such cooperation may include the participation of scientific institutions, government and nongovernment agencies, higher educational institutions, and individual scientists, specialists and researchers (hereinafter referred to as "partners");
- partners may carry out such cooperation in approved areas through direct contacts and arrangements.

In order to facilitate implementation of this Agreement, partners of one country intending to visit partners of the other country for purposes of developing or implementing cooperation under this Agreement are to so indicate in applying for permission to enter.

ARTICLE VI

Cooperation under this Agreement shall be conducted within the limits of available funds. Financial arrangements for cooperation will be set forth in the MOUs.

ARTICLE VII

With respect to cooperation under this Agreement, each Party, in accordance with its international obligations, national laws and regulations, shall:

(a) encourage the participation of qualified scientists, specialists, and researchers in activities under this Agreement, whether or not they are affiliated with institutions participating in cooperation;

(b) facilitate prompt and efficient entry into and exit from its territory of persons participating in the implementation of this Agreement, as well as of appropriate instrumentation and equipment; and

(c) facilitate prompt and efficient access of persons of the other Party participating in the implementation of this Agreement to its relevant geographic areas, institutions, data, materials, and individual scientists, specialists, and researchers.

ARTICLE VIII

Protection of intellectual property and rights thereto shall be as set forth in Annex II, which constitutes an integral part of this Agreement.

ARTICLE IX

Scientific and technological information derived from cooperative activities under this Agreement, other than information not disclosed for commercial or industrial reasons, shall be made available, unless otherwise agreed in writing as provided for in Articles IV and V, to the world scientific community. This will be accomplished through customary channels and in accordance with Article VIII and Annex II of this Agreement, and the normal practices and regulations of the Parties.

ARTICLE X

The Parties agree to establish a US-USSR Joint Commission on Cooperation in the Field of Basic Scientific Research (hereinafter referred to as the "Joint Commission"). The composition of the Joint Commission and the principles for its operation are specified in Annex I.

ARTICLE XI

Initial areas of cooperation are listed in Annex III, which constitutes an integral part of this Agreement. Additions, deletions, or modifications to the list of areas may be

considered by the Joint Commission, as provided in Annex I, paragraph 7, and must be approved by the Parties, as provided in paragraph 4 of Article XIV.

ARTICLE XII

This Agreement and the MOUs shall be without prejudice to other agreements concluded between the Parties.

ARTICLE XIII

This Agreement shall be without prejudice to the cooperation of either Party with other States and international organizations.

ARTICLE XIV

1. This Agreement shall enter into force upon signature by both Parties and shall remain in force for five years. It may be extended for further five-year periods through an exchange of notes between the Parties.

2. Either Party may at any time give written notice to the other Party of its intention to terminate this Agreement, in which case this Agreement will terminate six months from the date notice is received by the other Party.

3. Expiration of this Agreement shall not affect the implementation of any cooperative activity undertaken pursuant to this Agreement and not fully executed before expiration occurs.

4. This Agreement may be amended by written agreement of the Parties.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

DONE at PARIS, this 8th day of JANUARY, 1989, in duplicate in the English and Russian languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

George P. Shultz

FOR THE GOVERNMENT OF THE UNION
OF SOVIET SOCIALIST REPUBLICS:

Nikolai Gerasimov

ANNEX I

US-USSR JOINT COMMISSION ON COOPERATION IN THE FIELD OF BASIC SCIENTIFIC RESEARCH

In accordance with Article X of this Agreement:

1. The Parties shall establish a Joint Commission consisting of representatives of both Parties, including their Executive Agents, as set forth in paragraph 4 below, and the parties to the MOUs.
2. Members of the Joint Commission shall serve without compensation.
3. The Joint Commission shall adopt procedures for its operation, and shall ordinarily meet once a year, alternately in the United States and in the Soviet Union.
4. Each Party shall have an Executive Agent to assist the Joint Commission. The Executive Agent of the United States will be the White House Office of Science and Technology Policy (OSTP). The Executive Agent of the Soviet Union will be the USSR State Committee for Science and Technology (GKNT).
5. The Executive Agent of each Party shall designate a Co-Chairperson of the Joint Commission. The Co-Chairperson of the hosting side shall act as Chairperson of the Joint Commission for the duration of that meeting. The Joint Commission shall act by mutual agreement.
6. The Joint Commission shall review, coordinate, and facilitate cooperation in the field of basic scientific research and recommend measures and programs for consideration and subsequent approval by both Parties.

7. The Joint Commission may consider proposals for additions, deletions, or modifications to the list of areas of cooperation in Annex III, which it shall forward to the Parties for their approval. Changes to Annex III which have been approved by the Parties will be submitted in writing to the Joint Commission.

ANNEX II

INTELLECTUAL PROPERTY

Pursuant to Article VIII of this Agreement:

I. GENERAL

A. For purposes of this Agreement, "intellectual property" is understood to have the meaning found in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm July 14, 1967.

B. The Parties shall ensure adequate and effective protection for intellectual property created or furnished under this Agreement and relevant implementing arrangements thereunder.

II. COPYRIGHTS

The Parties and the partners shall take appropriate steps to secure copyright to works created under this Agreement in accordance with their national laws, except as specifically provided otherwise in an applicable implementing arrangement. Rights to works created under this Agreement shall be determined in the applicable implementing arrangement.

III. INVENTIONS

A. For purposes of this Annex, "invention" means any invention made in the course of cooperation under this Agreement or implementing arrangements thereunder which is or may be patentable or otherwise protectable under the laws of the United States of America, the Union of Soviet Socialist Republics, or any third country. An invention "made" means one conceived or for which an application for patent or other title of protection has been filed or which has otherwise been reduced to practice.

B. Between a Party and its nationals, the ownership of rights and interests in inventions will be determined in accordance with that Party's national laws and practices.

C. As between the Parties, unless otherwise specifically provided in an applicable implementing arrangement, the Parties and the partners shall take appropriate steps to secure rights to implement the following:

1. If the invention is made in the course of a program of cooperative activity that involves only the transfer or exchange of information between the Parties, such as by joint meetings, seminars, or the exchange of technical reports or papers, unless provided otherwise in an applicable implementing arrangement:

- a. The Party whose personnel makes the invention ("the Inventing Party") has the right to obtain all rights and interests in the invention in all countries in accordance with applicable national laws of such countries;

- b. In any country where the Inventing Party decides not to obtain such rights and interests, the other Party has the right to do so.

2. If the invention is made by personnel of one Party ("the Assigning Party") while assigned to the other Party ("the Receiving Party") in the course of a program of cooperative activity that involves only the visit or exchange of scientific and technical personnel:

a. The Receiving Party has the right to obtain all rights and interests in the invention in all countries in accordance with applicable national laws of such countries;

b. In any country where the Receiving Party decides not to obtain such rights and interests, the Assigning Party has the right to do so.

D. Arrangements involving other forms of cooperation, such as joint research projects with an agreed scope of work, shall provide for the mutually agreed upon disposition of rights to an invention made as a result of such activity on an equitable basis. Except as otherwise specifically agreed, each Party has the right to obtain all rights and interests in the invention in its own country, whereas the right to secure legal protection of that invention in third countries, as well as the right to license or transfer such rights and interests in third countries, shall be allocated by mutual written agreement.

E. Notwithstanding the foregoing, if an invention is of a type for which exclusive rights are available under the laws of one Party but not of the other Party, the Party whose laws provide for exclusive rights shall be entitled to all rights in all countries which provide rights to such invention. The Parties may agree, however, to a different allocation of rights to such invention.

F. The Parties shall disclose to one another inventions made in the course of programs of cooperative activities and furnish to one another any documentation and information

necessary to enable them to secure any rights to which they may be entitled. The Parties may ask one another in writing to delay publication or public disclosure of such documentation or information for the purpose of protecting their respective rights related to inventions. Unless otherwise agreed in writing, such restriction shall not exceed a period of six months from the date of communication of such information. Communication shall be through the parties to the applicable MOUs.

IV. BUSINESS-CONFIDENTIAL INFORMATION

A. The Parties do not expect to furnish to one another or create, or have the partners furnish or create, business-confidential information in the course of cooperation under this Agreement. In the event that such information is inadvertently furnished or created or the Parties agree to furnish such information, the Parties and the partners shall give full protection to such information in accordance with their laws, regulations, and administrative practices.

B. For purposes of this Annex, "business-confidential information" means information of a confidential nature which meets all of the following conditions:

1. it is of a type customarily held in confidence for commercial reasons;
2. it is not generally known or publicly available from other sources;
3. it has not been previously made available by the owner to others without an obligation concerning its confidentiality; and

4. it is not already in the possession of the recipient Party or partner without an obligation concerning its confidentiality.

C. Any information to be protected as "business-confidential information" shall be appropriately identified by the Party or partner furnishing such information or asserting that it is to be protected, except as otherwise provided in the Parties' laws, regulations, and administrative practices. Subject to the aforesaid laws, regulations and administrative practices, unidentified information will be assumed not to be information to be protected, except that a Party to the cooperative activity may notify the other Party in writing, within a reasonable period of time after furnishing or transferring such information, that such information is business-confidential information under the laws, regulations, and administrative practices of its country. Such information will thereafter be protected in accordance with paragraph A above.

V. OTHER TYPES OF INTELLECTUAL PROPERTY

"Other types of intellectual property" means any intellectual property protectable in accordance with the laws, regulations and administrative practices of either Party or any third country other than those described in Articles II, III, and IV above and includes, for example, mask works and trademarks. Rights to other types of intellectual property shall be determined in the same manner as for inventions,

Article III, Paragraphs B-D of this Annex. If an intellectual property is one for which protection is available under the laws of one Party but not of the other Party, the Party whose laws provide such protection shall be entitled to all rights in all countries which protect such intellectual property. The Parties may agree, however, to a different allocation of rights to such intellectual property.

VI. MISCELLANEOUS

A. Each Party and each partner shall take all necessary and appropriate steps to provide for the cooperation of its authors, inventors, and discoverers which is required to carry out the provisions of this Annex.

B. Each Party shall assume the responsibility to pay to its nationals such awards or compensation as may be in accordance with its laws and regulations. This Annex does not create any entitlement or prejudice any right or interest of the author or inventor to an award or compensation for his or her work or invention.

C. Intellectual property disputes arising under this Agreement should be resolved, if possible, through discussions between the concerned partners. If the partners cannot resolve such a disagreement, it shall be settled through consultations between the Parties or their designees.

VII. EFFECT OF TERMINATION OR EXPIRATION

Termination or expiration of this Agreement shall not affect rights or obligations under this Annex.

VIII. APPLICABILITY

This Annex is applicable to any implementing arrangements or cooperation under this Agreement, except as otherwise specifically provided for in individual implementing arrangements.

ANNEX III

AREAS OF COOPERATION

1. Geosciences
2. Basic Scientific Research in Engineering Sciences
3. Scientific Problems of the Arctic and the North
4. Life Sciences
5. Science Policy
6. Chemistry
7. Mathematics
8. Theoretical Physics

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AGREEMENT BETWEEN
THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND
THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS
ON COOPERATION IN TRANSPORTATION SCIENCE AND TECHNOLOGY

The Government of the United States of America and the
Government of the Union of Soviet Socialist Republics,
(hereinafter referred to as "the Parties");

Recognizing that cooperation in the field of transportation
science and technology can promote the well-being and
prosperity of both countries;

Affirming that cooperation will strengthen friendly
relations between both countries;

Desiring to establish closer and regular cooperation
between appropriate scientific and technical organizations and
individuals in both countries;

Noting the General Agreement between the Government of the
United States of America and the Government of the Union of
Soviet Socialist Republics on Contacts, Exchanges, and
Cooperation in Scientific, Technical, Educational, Cultural and
Other Fields, signed on November 21, 1985;

Recalling the Helsinki Final Act;

Have agreed as follows:

ARTICLE I

1. The Parties will develop and implement cooperation in the following areas of mutual interest:

- (a) Civil aviation;
- (b) Railroad safety;
- (c) Highway bridge construction; and
- (d) Highway and traffic safety.

2. The list of agreed initial topics for cooperation within the framework of areas of mutual interest is set forth in Annex I, which is an integral part of this Agreement.

3. Cooperation will be based on the principles of equality, reciprocity and mutual benefit and will be aimed at solving common transportation problems and improving the safety level and usefulness of transportation systems in each country.

ARTICLE II

Cooperation under this Agreement may involve:

- 1. Exchanges of scientists, specialists and researchers;
- 2. Exchanges of scientific and technical information, documentation, and, where appropriate, scientific equipment;
- 3. Joint conferences, seminars and workshops;

4. Joint planning, development and implementation of research projects and programs; and
5. Such other forms of cooperation as may be mutually agreed.

ARTICLE III

1. Implementation of this Agreement will be carried out by governmental organizations within the framework of agreed cooperative activities.

2. In addition, the Parties may encourage, as appropriate, cooperation involving other interested organizations in the area of transportation science and technology.

ARTICLE IV

1. The Parties will establish a Joint Committee on Cooperation in Transportation Science and Technology (hereinafter, the "Joint Committee"), which normally will meet once a year, alternately in the United States and the Soviet Union, unless otherwise agreed.

2. The Joint Committee will review cooperative activities under this Agreement and submit an annual report to the Parties on the status of such activities.

3. The Joint Committee may make recommendations to the Parties on ways to improve cooperation, on changes in the list of areas of mutual interest and on changes in topics for cooperation within such areas, and on such other matters related to cooperation in the field of transportation science and technology as it deems appropriate.

ARTICLE V

1. Each Party will have an Executive Agent. The Executive Agent for the United States of America will be the Department of Transportation. The Executive Agent for the Union of Soviet Socialist Republics will be the State Committee on Science and Technology.

2. The Executive Agents will be responsible for coordination and supervision of cooperative activities under this Agreement. The Executive Agents will establish a joint working group for each of the areas of cooperation listed in Article I to assist them in carrying out their functions.

ARTICLE VI

1. All activities under this Agreement, including exchanges of technical information and equipment, exchanges of specialists, and the carrying out of cooperative activities, will be conducted in accordance with the international

obligations, national laws and regulations of the Parties and within the limits of available funds.

2. Each Party or participating organization will bear the costs of its participation in carrying out cooperative activities under this Agreement, unless otherwise mutually agreed.

ARTICLE VII

With respect to cooperative activities under this Agreement, each Party, in accordance with its international obligations, national laws and regulations, will:

(a) ensure that qualified specialists may participate in activities under this Agreement, whether or not they are affiliated with institutions participating in the implementation of this Agreement;

(b) facilitate prompt and efficient entry into and exit from its territory of participants of the other Party, as well as provide access to its institutions, organizations, relevant geographic areas, information, materials, and individual specialists; and

(c) facilitate prompt and efficient entry into and exit from its territory of necessary equipment and instrumentation of the other Party.

ARTICLE VIII

Protection of intellectual property and rights thereto will be as set forth in Annex II, which is an integral part of this Agreement.

ARTICLE IX

Scientific and technological information derived from cooperative activities under this Agreement, other than information not disclosed for commercial or industrial reasons, will be made available, unless otherwise agreed in writing, to the world scientific community through customary channels and in accordance with Article VIII and Annex II of this Agreement, and the normal practices and regulations of the Parties.

ARTICLE X

This Agreement will be without prejudice to the cooperation of either Party with other States and international organizations.

ARTICLE XI

1. This Agreement will enter into force upon signature by the Parties and will remain in force for five years.

2. The Parties may mutually agree to extend or amend this Agreement.

3. Either Party may at any time give notice in writing to the other Party of its intention to terminate this Agreement, in which case this Agreement will terminate six months from the date notice is received.

4. Expiration of this Agreement will not affect the implementation of any cooperative activity undertaken pursuant to the Agreement and not fully executed before expiration occurs.

IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

DONE at Moscow, in duplicate, this thirty-first day of May, 1988, in the English and Russian languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:



GEORGE P. SHULTZ
Secretary of State

FOR THE GOVERNMENT OF THE UNION
OF SOVIET SOCIALIST REPUBLICS:



EDUARD AMVROSIYEVICH SHEVARDNADZE
Minister of Foreign Affairs

ANNEX I

AREAS AND TOPICS FOR COOPERATION

In the area of civil aviation:

1. Microwave landing system;
2. Air traffic control requirements, including Mode S secondary radar requirements/data link, collision avoidance systems, and satellite civil aviation applications;
3. Accident investigation; and
4. Aviation medicine.

In the area of railroad safety:

1. Locomotive engineer selection and training;
2. Human factors affecting crew performance;
3. Rail traffic safety; and
4. Railway bridge inspection.

In the area of highway bridge construction:

1. Streambed degradation;
2. Deck construction techniques;
3. Segmental construction techniques;
4. Concrete studies; and
5. Electroslag welding.

In the area of highway and traffic safety programs:

1. Human factors studies; and
2. Physical factors (highway).

INTELLECTUAL PROPERTY

Pursuant to Article VIII of this Agreement:

I. GENERAL

A. For purposes of this Agreement, "intellectual property" is understood to have the meaning found in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm July 14, 1967.

B. The Parties shall ensure adequate and effective protection for intellectual property created or furnished under this Agreement.

II. COPYRIGHTS

The Parties and their Executive Agents shall take appropriate steps to secure copyright to works created under this Agreement in accordance with their respective national laws, except as otherwise specifically agreed. The following provisions shall apply to copyright protection for works created under this Agreement:

1. Except as otherwise agreed, each Party is entitled to a nonexclusive, irrevocable, royalty-free license under a

copyright, secured in accordance with the national laws of either Party, to translate, reproduce, publish, and distribute published scientific, technical, and medical works in its own territory, with the right to grant sublicenses in its territory in accordance with that Party's laws and practices. Any such copyrighted work shall indicate the names of all persons who participated in the joint work. Either Party is entitled to a license in third countries upon request.

2. Rights to other copyrighted works and copyrighted works that may also be protected as business-confidential information shall be allocated in the same manner as inventions, Article III, Paragraphs B-E of this Annex. A Party receiving rights pursuant to this provision to copyrighted works which embody business-confidential information shall protect such information in accordance with Article IV of this Annex.

III. INVENTIONS

A. For purposes of this Annex, "invention" means any invention made in the course of cooperation under this Agreement which is or may be patentable or otherwise protectable under the laws of the United States of America, the Union of Soviet Socialist Republics, or any third country. An invention "made" means one conceived or for which an application for patent or other title of protection has been filed or which has otherwise been reduced to practice.

B. Between a Party and its nationals, the ownership of rights and interests in inventions will be determined in accordance with that Party's national laws and practices.

C. As between the Parties, unless otherwise specifically agreed, the Parties and their Executive Agents shall take appropriate steps to secure rights to implement the following:

1. If the invention is made as a result of a program of cooperative activity that involves only the transfer or exchange of information between the Parties, such as by joint meetings, seminars, or the exchange of technical reports or papers:

- a. The Party whose personnel makes the invention ("the Inventing Party") has the right to obtain all rights and interests in the invention in all countries in accordance with applicable national laws of such countries;

- b. In any country where the Inventing Party decides not to obtain such rights and interests, the other Party has the right to do so.

2. If the invention is made by personnel of one Party ("the Assigning Party") while assigned to the other Party ("the Receiving Party") in the course of a program of

cooperative activity that involves only the visit or exchange of scientific and technical personnel:

a. The Receiving Party has the right to obtain all rights and interests in the invention in all countries in accordance with applicable national laws of such countries;

b. In any country where the Receiving Party decides not to obtain such rights and interests, the Assigning Party has the right to do so.

D. For other forms of cooperation, such as joint research projects with an agreed scope of work, each Party has the right to obtain all rights and interests in any invention made as a result of such cooperation in its own country, whereas the Party in whose country the invention was made has first option to secure legal protection of that invention in third countries, as well as the right to license or transfer such rights and interests in third countries.

E. Notwithstanding the foregoing, if an invention is of a type for which exclusive rights are available under the laws of one Party but not of the other Party, the Party whose laws provide for exclusive rights shall be entitled to all rights in all countries which provide rights to such invention. The Parties may agree, however, to a different allocation of rights to such invention.

F. The Parties shall disclose to one another inventions made in the course of programs of cooperative activities and furnish to one another any documentation and information necessary to enable them to secure any right to which they may be entitled. The Parties may ask one another in writing to delay publication or public disclosure of such documentation or information for the purpose of protecting their respective rights related to inventions. Unless otherwise agreed in writing, such restriction shall not exceed a period of six months from the date of communication of such information. Communication shall be through the Parties.

IV. BUSINESS-CONFIDENTIAL INFORMATION

A. The Parties do not expect to furnish or create, or have their Executive Agents furnish or create, business-confidential information in the course of cooperation under this Agreement. In the event that such information is inadvertently furnished or created or the Parties agree to furnish such information, the Parties and their Executive Agents shall give full protection to such information in accordance with their laws, regulations, and administrative practices.

B. For purposes of this Annex, "business-confidential information" means information of a confidential nature which meets all of the following conditions:

1. it is of a type customarily held in confidence for commercial reasons;
2. it is not generally known or publicly available from other sources;
3. it has not been previously made available by the owner to others without an obligation concerning its confidentiality; and
4. it is not already in the possession of the recipient Party or Executive Agent without an obligation concerning its confidentiality.

C. Any information to be protected as "business-confidential information" shall be appropriately identified by the Party or Executive Agent furnishing such information or asserting that it is to be protected, except as otherwise provided in the Parties' laws, regulations, and administrative practices. Subject to the aforesaid laws, regulations, and administrative practices, unidentified information will be assumed not to be information to be protected, except that a Party to the cooperative activity may notify the other Party in writing, within a reasonable period of time after furnishing or transferring such information, that such information is business-confidential information under the laws, regulations,

and administrative practices of its country. Such information will thereafter be protected in accordance with Paragraph A above.

V. OTHER TYPES OF INTELLECTUAL PROPERTY

"Other types of intellectual property" means any intellectual property protectable in accordance with the laws, regulations, and administrative practices of either Party or any third country other than those described in Articles II, III, and IV above and includes, for example, mask works and trademarks. Rights to other types of intellectual property shall be determined in the same manner as for inventions, Article III, Paragraphs B-D of this Annex. If an intellectual property is one for which protection is available under the laws of one Party but not of the other Party, the Party whose laws provide such protection shall be entitled to all rights in all countries which protect such intellectual property. The Parties may agree, however, to a different allocation of rights to such intellectual property.

VI. MISCELLANEOUS

A. Each Party and its Executive Agent shall take all necessary and appropriate steps to provide for the cooperation of its authors, inventors, and discoverers which is required to carry out the provisions of this Annex.

B. Each Party shall assume the responsibility to pay to its nationals such awards or compensation as may be in accordance with its laws and regulations. This Annex does not create any entitlement or prejudice any right or interest of the author or inventor to an award or compensation for his or her work or invention.

C. Intellectual property disputes arising under this Agreement should be resolved, if possible, through discussions between the Executive Agents. If the Executive Agents cannot resolve such a dispute, it shall be settled through consultations between the Parties or their designees.

VII. EFFECT OF TERMINATION OR EXPIRATION

Termination or expiration of this Agreement shall not affect rights or obligations under this Annex.

VIII. APPLICABILITY

This Annex is applicable to all cooperative activities undertaken pursuant to this Agreement, except as otherwise specifically agreed.

AGREEMENT
BETWEEN THE UNITED STATES OF AMERICA AND
THE UNION OF SOVIET SOCIALIST REPUBLICS
CONCERNING COOPERATION IN THE EXPLORATION
AND USE OF OUTER SPACE FOR PEACEFUL PURPOSES

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties;

Considering the role of the two States in the exploration and use of outer space for peaceful purposes;

Desiring to make the results of the exploration and use of outer space available for the benefit of the peoples of the two States and of all peoples of the world;

Taking into consideration the provisions of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, and other multilateral agreements regarding the exploration and use of outer space to which both States are Parties;

Noting the General Agreement Between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics on Contacts, Exchanges, and Cooperation in Scientific, Technical, Educational, Cultural, and other fields, signed on November 21, 1985;

Have agreed as follows:

ARTICLE 1

The Parties shall carry out cooperation in such fields of space science as solar system exploration, space astronomy and astrophysics, earth sciences, solar-terrestrial physics, and space biology and medicine.

The initial agreed list of cooperative projects is attached as an Annex.

ARTICLE 2

The Parties shall carry out cooperation by means of mutual exchanges of scientific information and delegations, meetings of scientists and specialists and in such other ways as may be mutually agreed, including exchange of scientific equipment where appropriate. The Parties, acting through their designated cooperating agencies, shall form joint working groups for the implementation of cooperation in each of the fields listed in Article 1. The recommendations of the joint working groups shall be subject to the approval of each Party in accordance with its appropriate national procedures prior to implementation. The designated cooperating agencies shall notify each other of the action taken by the Parties on the recommendations within three months of their adoption by the joint working groups.

ARTICLE 3

The joint working groups shall begin their work with the projects listed in the Annex to this Agreement. Revisions to the list of projects in the Annex, which may include the identification of other projects in which cooperation would be of mutual benefit, may be effected by written agreement between the Parties through a procedure to be determined by them.

ARTICLE 4

Cooperative activities under this Agreement, including exchanges of technical information, equipment and data, shall be conducted in accordance with international law as well as international obligations, national laws, and regulations of each Party, and within the limits of available funds.

ARTICLE 5

This Agreement shall be without prejudice to the cooperation of either Party with other States and international organizations.

ARTICLE 6

The Parties shall encourage international cooperation in a study of legal questions of mutual interest which may arise in the exploration and use of outer space for peaceful purposes.

ARTICLE 7

This Agreement will enter into force on the date of signature by the Parties and will remain in force for five years. It may be extended for further five-year periods by an exchange of notes between the Parties. Either Party may notify the other in writing of its intent to terminate this Agreement at any time effective six months after receipt of such notices by the other Party.

IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

DONE at Moscow, in duplicate, this 15th day of April, 1987, in the English and Russian languages, both texts being equally authentic.



FOR THE UNITED STATES OF
AMERICA:



FOR THE UNION OF SOVIET
SOCIALIST REPUBLICS:

AGREED LIST OF COOPERATIVE PROJECTS

1. Coordination of the Phobos, Vesta, and Mars Observer missions and the exchange of scientific data resulting from them.
2. Utilization of the U.S. Deep Space Network for position tracking of the Phobos and Vesta landers and subsequent exchange of scientific data.
3. Invitation, by mutual agreement, of co-investigators' and/or interdisciplinary scientists' participation in the Mars Observer and the Phobos and Vesta missions.
4. Joint studies to identify the most promising landing sites on Mars.
5. Exchange of scientific data on the exploration of the Venusian surface.
6. Exchange of scientific data on cosmic dust, meteorites and lunar materials.
7. Exchange of scientific data in the field of radio astronomy.
8. Exchange of scientific data in the fields of cosmic gamma-ray, x-ray and sub-millimeter astronomy.
9. Exchange of scientific data and coordination of programs and investigations relative to studies of gamma ray burst data.
10. Coordination of observations from solar terrestrial physics missions and the subsequent exchange of appropriate scientific data.
11. Coordination of activities in the study of global changes of the natural environment.
12. Cooperation in the Cosmos biosatellite program.
13. Exchange of appropriate biomedical data from U.S. and U.S.S.R. manned space flights.
14. Exchange of data arising from studies of space flight-induced changes of metabolism, including the metabolism of calcium, from both space flight and ground experiments.
15. Exploration of the feasibility of joint fundamental and applied biomedical experiments on the ground and in various types of spacecraft, including exobiology.
16. Preparation and publication of a second amplified edition of the joint study "Fundamentals of Space Biology and Medicine."

Withdrawal/Redaction Sheet

(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
01. Agreement	[Russian] (5 pp.)		(b)(1)	

Collection:

Record Group: Bush Presidential Records
Office: Science and Technology Policy, Office of (OSTP)
Series: O'Neil, John F., Files
Subseries: Russia Subject Files
WHORM Cat.:
File Location: US Soviet Agreement on Basic Scientific Research [1 of 2]

Date Closed:	5/26/2010	OA/ID Number:	62093-007
FOIA/SYS Case #:	2005-0336-F	Appeal Case #:	
Re-review Case #:		Appeal Disposition:	
P-2/P-5 Review Case #:		Disposition Date:	
AR Case #:		MR Case #:	
AR Disposition:		MR Disposition:	
AR Disposition Date:		MR Disposition Date:	

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P-1 National Security Classified Information [(a)(1) of the PRA]
P-2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P-3 Release would violate a Federal statute [(a)(3) of the PRA]
P-4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P-5 Release would disclose confidential advice between the President and his advisors, or between such advisors [(a)(5) of the PRA]
P-6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM. Removed as a personal record misfile.

Freedom of Information Act - [5 U.S.C. 552(b)]

(b)(1) National security classified information [(b)(1) of the FOIA]
(b)(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
(b)(3) Release would violate a Federal statute [(b)(3) of the FOIA]
(b)(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
(b)(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
(b)(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
(b)(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
(b)(9) Release would disclose geological or geophysical information

SUMMARY OF RESULTS
FIRST MEETING OF THE US/USSR JOINT WORKING GROUP
ON ASTRONOMY AND ASTROPHYSICS

WASHINGTON, DC, USA.
APRIL 26 - MAY 3, 1988

1. The US/USSR Joint Working Group (JWG) on Astronomy and Astrophysics held its first meeting in Washington, D.C., USA. from April 26 - May 3, 1988. This meeting was held pursuant to the "Agreement Between the United States of America and the Union of Soviet Socialist Republics Concerning Cooperation in the Exploration and Use of Outer Space for Peaceful Purposes" signed in Moscow on April 15, 1987. The participants at this meeting are listed in Attachment 1. The agreed agenda is provided in Attachment 2. The USSR Co-Chairman of the JWG is Dr. Rashid A. Sunyaev, Chief of the High Energy Astrophysics Program of the Space Research Institute (IKI), USSR Academy of Sciences. The US Co-Chairman of the JWG is Dr. Charles J. Pellerin, Jr., Director, Astrophysics Division, National Aeronautics and Space Administration (NASA).
2. The US and USSR sides reviewed their present and future programs in space astrophysics, and concluded it was mutually beneficial to cooperate in the study and exploration of the Universe. Over the past three decades both sides have made major contributions to understanding the origin and evolution of the Universe by using observations from space vehicles.
3. Each side presented an overview of their plans for study of the Universe using space techniques. The US side discussed past missions and the status of the data from each of these: the International Ultraviolet Explorer (IUE), the Infrared Astronomical Satellite (IRAS), the High Energy Astronomy Observatories (HEAO-1 and HEAO-2), and the Solar Maximum Mission (SMM). They also discussed missions under development: the Hubble Space Telescope (HST), the Cosmic Background Explorer (COBE), the

Extreme Ultraviolet Explorer (EUVE), the Gamma Ray Observatory (GRO), Astro, and Gravity Probe-B (GP-B). Planned missions, including the Advanced X-ray Astrophysics Facility (AXAF), the X-ray Timing Explorer (XTE), and Far Ultraviolet Spectroscopy Explorer (FUSE) were also discussed. The Astrophysics Data System plans for data analysis on each mission were also discussed. The USSR discussed their missions: Astron, Mir/Kvant and Relict-1; their upcoming missions Gamma-1, Granat, Relict-2 and their future missions Spectrum X-Gamma, Radioastron, 1.7m UV telescope, and Aelita. They also presented their capabilities for gamma-ray burst studies on the USSR Phobos mission.

4. Exchange of scientific data in the field of radio astronomy: In accordance with Annex item 7 in the Space Agreement, the JWG discussed coordination of observations, and exchange of data for subsequent correlation between the USSR Radioastron mission and the US ground-based radio-astronomy facilities, including the Very Large Array (VLA), the Very Long Baseline Array (VLBA) and the Deep Space Network (DSN). Data resulting from the coordinated observations will be correlated in the US and USSR, exchanged, and analyzed jointly.

- 4.1 The Soviet side presented information on their Radioastron mission, and the US side described their present VLA, the capabilities of the DSN for radioastronomy, and those of the VLBA now under construction. The US side informed that the VLBA will be completed in 1992 and this system might be used with the Radioastron mission. There is a history of very successful cooperation between the US and USSR in ground based radioastronomy. It was noted that the scientific results from both the USSR space mission and the US ground-based facilities would be enhanced in a mutually beneficial way if interferometric data were obtained simultaneously by the space and ground elements in such a manner that they could be correlated and jointly analyzed. Such coordination could proceed in several steps:

- 4.1.a Identification of specific astrophysical sources or phenomena which are appropriate to study using the added baseline and image coverage obtainable with coordinated interferometric observations.
 - 4.1.b Development of the coordinated observation sequences, and detailed plans for simultaneous observations, during the operations phase of Radioastron.
 - 4.1.c Simultaneous observations of astronomical sources using the Radioastron mission and US ground-based radio telescopes.
 - 4.1.d Electronic correlation of US and USSR data by the US in US facilities, and US and USSR data by the USSR side in USSR facilities, and the subsequent transfer of the finished data products to scientists on both sides.
- 4.2 It was agreed that the coordination and subsequent data exchange activity described above could begin most effectively with continued discussions between the project scientists for the two activities, namely Dr. N. Kardashev of IKI for Radioastron and Dr. K. Kellerman of NRAO for the US ground-based facilities.
- 4.2.a An implementation team will be formed at the appropriate time under the auspices of the JWG.
- 4.3 It was suggested by the Soviet side that the US consider a significant role in the operation of the Radioastron mission. This would involve high-bandwidth communications between the Radioastron and a US ground system, such as the DSN, in order to accomplish science data acquisition from the spacecraft, the transfer of the timing data needed to assure proper subsequent data correlation and orbit determination. The US agreed to consider this proposal and respond by the next JWG.

5. Exchange of data in the fields of cosmic gamma-ray, x-ray and submillimeter astronomy. In accordance with Annex item 8 of the Space Agreement, the JWG discussed cooperation and exchanges of data from past and future missions. It was agreed there were many opportunities for exchange of data resulting from past missions, and for coordination of observations and subsequent data exchanges on future missions, and that such exchanges would be mutually beneficial.

5.1 The Soviet side presented information on its gamma-ray results from the Mir/Kvant, and on their future missions Gamma-1, Granat and Spectrum X-gamma. The US presented information on their past missions HEAO-1 and HEAO-3, the presently operating Solar Maximum Mission (SMM) and the future GRO. The sides agreed that an exchange and comparison of past data on objects of mutual interest was beneficial to both sides, and that coordination of observations with subsequent exchange of data on future missions was also of mutual benefit and would enhance the scientific return from each side's missions.

5.1.a The sides agreed to establish an implementation team at the appropriate time under the auspices of the JWG.

5.2 The US side presented information on the past X-ray astronomy mission HEAO-2, the XTE (1994) and the planned AXAF (1995). The USSR presented information on the Mir/Kvant, the future Granat, and the mission Spectrum X-Gamma. It was agreed that many of these missions overlapped in time, or had results of a complementary nature on astrophysical sources of mutual interest. It is therefore of mutual benefit to both sides to exchange data and coordinate observations on X-ray sources of joint

interest. This would enhance the scientific return of each side's missions.

5.2.a The sides therefore agreed to discuss these topics in the same implementation team as for gamma-ray topics mentioned above. This team will thus be responsible for high energy (i.e., X-ray and gamma-ray) astronomy.

5.2.b The Soviet side noted that the Spectrum X-Gamma mission includes two thin foil telescopes with 8 meter focal length. The current concept envisions sliding focal plane detectors that can accommodate up to eight to ten detectors. It is intended to select the flight detectors in an international competition. The USSR side invited the US to suggest experiments in the area of high energy astrophysics for possible flight on this mission. Decisions about the flight experiment complement are expected to be taken by the Soviet side following meetings with the international scientific community planned for September 1988. The US side agreed to take this suggestion under consideration, and will respond before the September meeting. The Soviet side also noted that a second Spectrum X-Gamma mission mainly devoted to gamma-ray spectroscopy, gamma-ray bursts, and X-ray timing was under consideration, and expressions of interest in participation by the US side would be welcome.

5.3 The USSR side presented information on their past cosmic background experiment, Relict-1, and on future missions, Relict-2 and Aelita. The US side described the Infrared Astronomy Satellite mission (IRAS) (1983) and future Cosmic Background Explorer (COBE) (1989). It was recognized that several of these missions complemented

each other, and nearly overlapped in time, and all had data on astrophysical phenomena of mutual interest. Both sides agree that microwave background investigations are important and should be continued. In fact, the combined experiments promise to reveal significant insights into the origin and fate of the universe. A critical issue in the interpretation of the data from the missions of each side is the removal of systematic errors. The exchange of data by the sides will enable them to minimize this background interference. It is, therefore, of great interest to exchange data and coordinate observations to obtain the maximum scientific benefit from missions on both sides.

5.3.a The sides therefore agreed to establish an implementation team at an appropriate time under the auspices of the JWG.

6. Exchanges of data and coordination of observations in the field of cosmic gamma-ray bursts. In accordance with Annex item 9 of the Space Agreement, the JWG discussed exchanges of data and coordination of observations from current and future missions. It was agreed that comparison of data from several spacecraft was important for identification and location of burst sources, and that such cooperative data analysis would be of mutual benefit. Both sides recognized the scientific importance of continued study of gamma-ray bursts.

- 6.1 The USSR side presented information on its current observations from the Mir/Kvant instrumentation and described the future gamma-burst instrumentation for the Phobos mission to Mars (1988) and Granat mission scheduled for 1989. Also, two experiments planned for MIR were described. They are "Marina" to be launched in 1989, and "Marina-2" to be launched in 1990. US participation in the data analysis from these two experiments was encouraged by the Soviet side. The US side

discussed the operations of the gamma-burst detectors on the Solar Maximum Mission, the Pioneer Venus orbiter, and the joint US/Japanese gamma-burst detectors on the Ginga satellite. The US also described the planned gamma-burst sensors for the Gamma Ray Observatory mission (1990), the NASA/ESA Ulysses mission (1990) and the Mars Observer Mission scheduled for 1992. Since both the US and USSR have both current and future efforts in gamma-burst studies, the time is particularly appropriate for the exchange of data from the respective National programs and coordinated studies.

6.1.a. The sides, therefore, agreed to establish an implementation team under the auspices of the JWG at an appropriate time.

6.2 The sides agreed to continue the coordination in gamma-ray burst studies, begun in 1977 under the previous US/USSR space agreement, including studies involving the Georgian Academy of Sciences.

7. Exchanges of data in the field of visible and UV astronomy. It was noted that all spectral ranges except the visible and ultraviolet (UV) were discussed in the context of data exchanges. Both sides noted that it would be mutually beneficial if US results from the HST, Astro and EUVE be exchanged for USSR results from EUV instruments on Spectrum X-Gamma and on their proposed 1.7m UV telescope.

7.1 In accordance with the request from the Soviet co-chairman before the meeting, the US side presented information on their Hubble Space Telescope (HST), Astro, and EUVE mission and on the status of data from the International Ultraviolet Explorer. The Soviet side described their Astron mission, the capabilities of the normal incidence EUV telescopes on

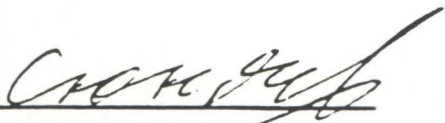
Spectrum X-Gamma, their 1.7m space UV telescope under study.

- 7.1.a Both sides agreed to take their matter under consideration. A report on the status of exchanges in this area would be made at the next JWG meeting.

8. Proposal for a US EUV telescope on Spectrum X-Gamma The Soviets noted that there are available resources on the USSR approved mission, Spectrum X-Gamma. Both sides agreed that an extreme ultra-violet (EUV) telescope/spectrometer could provide an important complement to the present array of instruments. The Soviet side suggested that the US side propose a grazing incidence EUV telescope/spectrometer. The US will consider this and will respond to the suggestion.
- 8.1 The US will consider the possibility of providing the mirrors, gratings, and structure for an EUV telescope of at least 70 cm in diameter to be included in the Spectrum X-Gamma mission. The USSR side will examine the accommodation of such an instrument on the Spectrum X-Gamma mission. Both sides will report on the status of these matters before September 1988.
9. The Mission Planning Process. It was noted that the international scientific community is involved in mission planning processes of each side. It was agreed that whenever scientists from either side were requested to participate in scientific meeting for the purpose of planning future, or on-going Astrophysics missions, the invitation will be made through the respective agencies on each side responsible for implementing the US/USSR space agreement. In this regard, in the case of invitations to the US scientific community, all requests will be made to NASA, not directly to the US scientists themselves.

10. The Implementation Teams. For the projects listed above, implementation teams will be formed at an appropriate time. The teams will be co-chaired by the USSR and US. The Co-Chairmen, members of the teams, and meeting schedules for the teams will be determined by the JWG Co-Chairmen. The teams will consist of scientists from the relevant missions including Project Scientists, Investigators, and other persons as appropriate. The teams will work out the detailed arrangements for items to be provided/exchanged and the rights of participants from each side with respect to such matters as publications, authorship, and data. The work of the implementing teams will be reviewed and ratified by the JWG Co-Chairmen.
11. The sides agreed to hold the second meeting of the Astronomy and Astrophysics JWG in the USSR in early 1989. The exact dates and place of the meeting, proposed agenda, and names/affiliations of the participants will be exchanged between the two sides at least two months prior to the next JWG meeting.
12. This document is subject to confirmation by the sides within three months of the date of signature.
13. This document has been prepared in the English and Russian languages, both versions of which are equally authentic.

Signed in Washington, in duplicate, on May 2, 1988.



Dr. Rashid A. Sunyaev
USSR Co-Chairman
Space Research Institute
USSR Academy of Sciences



Dr. Charles J. Pellerin, Jr.
US Co-Chairman
NASA Headquarters

US/USSR JOINT WORKING GROUP
ASTROPHYSICS

NAME	INSTITUTION	FUNCTION	EXPERTIZE	MISSION	SPECIALTY
DELEGATION					
KELLER, S.	NASA HQ, E	DEP ASSOC ADM, OSSA			
PELLERIN, C. J. Jr.	NASA HQ, EZ	DIRECTOR, ASTRO DIV.			
DESILVESTRE, I.	NASA HQ, XI	INTNL RELATIONS DIV			
PETERSON, L.	NASA HQ, EZ	SCIENCE, ASTRO DIV	GAMMA RAY ASTRO.	HEAO-1	
GILLET, F.	NASA HQ, EZ	SCIENCE, IR/SUBMM/RA...	IR ASTRO		
BUNNER, A.	NASA HQ, EZ	CHIEF, HIGH ENERGY	X-RAY ASTRO.		
WEILER, E.	NASA HQ, EZ	CHIEF UV/OPT	UV ASTRO		
RIEGLER, G.	NASA HQ, EZ	CHIEF, DATA SYSTEMS	X-RAY ASTRO		
EVANS, D.	LANL		GAMMA-RAY BURSTS	PIONEER VENUS	
JORDAN, F.	JPL		OVLBI	DSN	
FORCE, CHARLES	NASA HQ, T	DEP DIR, SPACE OPERATI...	TRACKING AND DATA	DSN	
KELLERMAN, K.	NRAO	DEP DIR, NRAO	RADIO ASTRONOMY	VLA, VLBA	
FIRSHOW, I	STATE DEPT	INTERPRETER			
INVITED EXPERTS					
HOLT, S.S.	GSFC	CODE 640 CHIEF	X-RAYS	XTE	
HAUSER, M.	GSFC	CODE 680 CHIEF	INFRARED	COBE	
KALUZIENSKI, L.	NASA HQ, EZ	HEAO-2 PROG. SCIENTIST	X-RAY ASTRONOMY	HEAO	
BOWYER, S.	UC BERKELEY	EUVE PI	UV ASTRONOMY	EUVE	
BAHCALL, N.	STSI	CHIEF, G.O. PROGRAM	OPT. ASTRONOMY	HST	
CLINE, T.	GSFC	GRO BATSE SCIENTIST	GAMMA-RAY BURSTS	GRO, ULYSSES	
BERTSCH D.	GSFC	GRO PROJ SCIENTIST	GAMMA RAY ASTRONOMY	GRO	
BEICHMAN, C.	JPL/IPAC	IPAC PROJ SCIENTIST	IR ASTRONOMY	IRAS	
MATHER, J.	GSFC	COBE PROJ SCIENTIST	IR, SUBMM ASTRONOMY	COBE	
DENNIS, B.	GSFC	SMM SCIENTIST	SOLAR & COSMIC GAMM...	SMM	
STACHNICK, R.	NASA HQ	UV/VIS PROG OFFICE	INTERFEROMETRY		
RIEGEL, K	NSF	NSF CENTERS OFFICE	RADIO ASTRONOMY	VLA, VLBA	

**USSR DELEGATION
ASTRONOMY AND ASTROPHYSICS JOINT WORKING GROUP**

NAME	INSTITUTION	SCIENTIFIC AREA	MISSION
SUNYAEV, RASHID A.	IKI, MOSCOW	THEO, ASTROPHYSICS	HIGH ENERGY, MIR
KARDASHEV, NICKOLAI	IKI, MOSCOW	RADIO ASTRONOMY	RADIOASTRON
KOLDYBAEV, SERGEII G.	IKI, MOSCOW		
STRUKOV, IGOR A.	IKI, MOSCOW	MICROWAVE BKGND	RELICT
SHOLOMITSKI, GENNADII B.	IKI, MOSCOW	IR & SUBMM ASTRO.	ABELITA
KAKHIDZE, GURAM P.	ABASTUMANSKAIA OBS	X-RAY ASTRONOMY	GRANAT, SPECTRUM-X
KOZYREV, VALENTIIN	INTERCOSMOS		
PERMINOV, VLADIMIR G.	GLAVCOSMOS	SPACECRAFT DESIGN	
TURCHANINOV, VLADIMIR N.	GLAVCOSMOS	SPACECRAFT DESIGN	
ZHURNIYA, LEONID		INTERPRETER	

US/USSR JOINT WORKING GROUP

ASTRONOMY & ASTROPHYSICS

April 26 - May 3, 1988

Hyatt Regency
Bethesda, Maryland

AGENDA

<u>DATE</u>	<u>TIME</u>	<u>ACTIVITY</u>	<u>PARTICIPANT/ SPEAKER</u>
Tues. Apr. 26	14:00	Arrival of USSR Delegation Dulles Int'l. Airport	
	18:00	Reception Hyatt Regency	Delegates
Wed. Apr. 27	09:30	Coffee	
	10:00	Welcoming remarks Goals, logistics	S. Keller
	11:30	Astrophysics JWG Introduction & agenda	C. Pellerin R. Sunyaev
	12:30	Lunch	
	14:00	US Space Astrophysics Program Overview	C. Pellerin
	15:00	Coffee break	
	15:30	USSR Space Astrophysics Program Overview	R. Sunyaev
	16:30	Discussion	
	17:30	Adjourn	
		Free Evening	

**Thurs.
Apr. 28**

09:00	US Visible/UV Astronomy HST, EUVE	E. Weiler
09:45	USSR Visible/UV Astronomy Astron	R. Sunyaev
10:15	Coffee	
10:45	Discussion - Item, Comp A	
11:30	Astrophysics Data Program	G. Riegler
12:30	Lunch	
14:00	GSFC Tour	
17:30	Barbecue Dinner and Square Dance GSFC Recreation Center	

**Fri.
Apr. 29**

09:00	USSR X-ray Program Mir/Kvant, Granat, Spectra-X	R. Sunyaev
09:45	U.S. High-Energy Astrophysic HEAD, XTE, GRO	A. Bunner
10:30	Coffee break	
11:00	Discussion Item 8, Comp B	
12:30	Lunch	
14:00	USSR Gamma-Ray Program Granat, Gamma-1, Phobos	R. A. Sunyaev G. Kakhidze
14.45	U.S. Gamma-Ray Burst Studies/SMM, GRO	A. Bunner
15:30	Coffee break	Continued ...

	16:00	Discussion - Item 8 Comp A - Item 9	
	17:30	Adjourn	
		Free Evening	
Sat. Apr. 30	09:00	US IR/Submm/Radio Program IRAS, COBE, Airplane	F. Gillett
	09:45	USSR Submillimeter Program Relict-1, Relict-2, Aeleta	I. Strukov G. Sholomiskii
	10:30	Coffee break	
	11:00	Discussion - Item 8, Comp C	
	12:30	Lunch	
	14:00	USSR Radio Astronomy	N. Kardashev
	14:45	U.S. Ground-Based Radio Astronomy	K. Kellerman
	15:30	Coffee break	
	16:00	Discussion - Item 7	
	17:00	Adjourn	
	19:00	Buffet Reception Naval Observatory	
Sun. May 1	09:00	Depart for Washington visit	
	18:00	AIAA Reception	
	20:00	National Theater - "Cats"	

ASTRONOMY AND ASTROPHYSICS

FIRST MEETING OF THE US/USSR JOINT WORKING GROUP

DOCUMENTS EXCHANGED

US SIDE

1. Advanced X-ray Astrophysics Facility; - NASA Astrophysics Division Brochure, EP 251.
2. AXAF - Scientific Objectives; - Smithsonian Astrophysical Observatory Flyer.
3. Messengers of Creation: - NASA's Gamma-ray Observatory Mission; TRW Brochure.
4. SHEAL II - Broad band X-ray NASA/Telescope/Diffuse X-ray Spectrometer; GSFC Brochure.
5. Cosmic Background Explorer: NASA/GSFC Brochure.
6. Astrophysics of Time Variability in X-ray and Gamma-ray Sources; Workshop Report, Los Alamos National Laboratory, August 1985.
7. Astro: A New Observatory for Ultraviolet Astronomy; NASA/MSFC Brochure.
8. The Deep Space Network: NASA/JPL Brochure, January, 1988.

USSR SIDE

1. Extraatmospheric X-ray and Gamma-ray Astronomy; Academy of Sciences of the USSR, Space Research Institute, Report 1987.
2. Gamma-1: High Energy Gamma-ray Astronomy; Academy of Sciences of the USSR, Space Research Institute, Report 1987.
3. Aelita: Cosmological and Astrophysical Studies in the Submillimeter and Millimeter Ranges; Academy of Sciences of the USSR, Space Research Institute, Report 1987.
4. Relict - 2: Satellite based study of Microwave Background Anistropy; Academy of Sciences of the USSR, Space Research Institute, Report 1987.

DOCUMENTS EXCHANGED CONTINUED

PAGE 2 OF 2

5. Radioastron: Radiotelescopes Larger than the Earth; Academy of Sciences of the USSR, Space Research Institute, Report 1987.
6. Space Ultraviolet Telescope T-170; Space Research Institute, Report 1988.



National Aeronautics and
Space Administration

Washington, D.C.
20546

AUG 13 1987

Reply to Attn of: XIB

TO: Members, IG (Space) Working Group on Space
Science Cooperation with the U.S.S.R.

FROM: Co-Chairmen

SUBJECT: Terms of Reference

Attached for your information and use are the Terms of Reference for the IG (Space) Working Group, approved by NSC memorandum of July 27.

As reported at the July 10 Working Group meeting, we plan to convene the next meeting in early September to discuss the results of the Space Biology and Medicine JWG meeting and begin preparation for the Solar System Exploration JWG meeting tentatively planned for November-December.

Richard J.H. Barnes

Attachment

Michael A.G. Michaud

NATIONAL SECURITY COUNCIL
WASHINGTON, D.C. 20506

5564

July 27, 1987

MEMORANDUM FOR MELVYN LEVITSKY
Executive Secretary
Department of State

MR. HENRY E. CLEMENTS
Executive Officer
National Aeronautics and Space
Administration

SUBJECT: US-USSR Joint Working Group on Space
Cooperation

The request from the NASA/State Co-chairmen of the IG(Space) Working Group on Space Cooperation (Memorandum, July 21, 1987) is approved, subject to the usual restrictions outlined below.

Please ensure that team members are aware of the stringent controls concerning technical exchanges and instruct team members to confine their discussions to the guidance contained in your May 19, 1987, documentation. Any agreements over and above established guidelines must be subject to approval by affected U.S. government agencies.

We note that the interagency deliberations on these Space Biology and Medicine projects were the first accomplished under procedures contained in draft terms of reference (TOR) that have been developed. By general consensus these TOR (as modified) are now ready to be used for subsequent space cooperation projects as well. Accordingly, you may distribute the TOR at Tab A as approved procedures to the members of your interagency working group.


Grant S. Green, Jr.
Executive Secretary

Attachment

Tab A Approved TOR

78 JUL 30 1 29 PM '87

RECEIVED

7807

100-2-2913

Terms of Reference

for

Interagency Procedures for US Participation in
Space Science Cooperation With the Soviet UnionIntroduction

This Terms of Reference establishes interagency procedures and mechanism for implementation of the Agreement Between the United States of America and the Union of Soviet Socialist Republics Concerning Cooperation in the Exploration and Use of Outer Space for Peaceful Purposes, signed in Moscow in April of 1987.

In requiring (Article 2) that Joint (US/Soviet) Working Groups be established for implementation of cooperation, the agreement specifies that "recommendations of the Joint Working Groups shall be subject to the approval of each Party in accordance with its appropriate national procedures" and that "designated cooperating agencies shall notify each other of the action taken by [each Party] on the recommendations within three months of their adoption by the Joint Working Groups." Procedures within the USG for implementing Article 2 of the agreement are as follows:

A. Review and Approval of Project Proposals

1. All proposals for cooperation with the Soviet Union in space science must be sponsored by a USG agency and will be submitted to NASA for processing in accordance with its designation as the lead implementing agency within the U.S. government.
2. NASA, with the assistance of the sponsoring agency, will prepare a full description of those projects it proposes to submit to Joint Working Groups. Each description will include sufficient technical and programmatic detail to permit an informed interagency evaluation and a statement of the proposed US position on the project for use at the Joint Working Group meeting. Agencies submitting proposals should comply with the guidelines approved by the Interagency Coordinating Committee on US-Soviet Affairs for all US-Soviet cooperative science and technology activities. In addition, review of project descriptions will include evaluations of specific, tailored considerations. These considerations will be developed by the interagency working group described below.
3. Descriptions will be simultaneously provided to the members of an NSC-established IG (Space) Working Group

(IWG), including the DCI for review by appropriate intelligence community elements, in sufficient time for full review prior to the IWG meeting. The IWG, co-chaired by NASA and State, with membership from DOD, OSTP, OMB, the DCI and others as appropriate, will review proposed project descriptions to ensure that each proposed project meets national security, foreign policy, and budgetary requirements. The IWG will report its findings to the NSC staff at least 15 days before the scheduled start of the Joint Working Group meeting. If any major issues remain unresolved, the NSC will chair a SIG (Space) Working Group (SWG) meeting no later than 10 days before the scheduled Joint Working Group meeting to resolve the issues identified by the IWG report.

4. The NSC will approve guidance prepared by the IWG for the US delegations to the Joint Working Group meetings. The SWG will exercise continuing oversight by providing policy guidance and resolving open issues which arise through the IWG process.
5. Following each Joint Working Group meeting and prior to providing confirmation to the Soviet Union of the proceedings of Joint Working Groups, NASA will provide the agreed minutes and other relevant supporting documentation to the IWG for approval and/or guidance as to any conditions which should be placed on NASA's confirmation of the minutes to its Soviet counterpart. The IWG will report its conclusions through the NSC staff within 45 days of the end of each Joint Working Group for which confirmation is being considered. Open issues will be addressed through a SWG meeting no more than 15 days after the IWG's report is received by the designated NSC office.

B. US/Soviet Joint Working Group Composition and Functions

1. Joint Working Groups will: be composed of scientists and scientific administrators of the two sides in the relevant discipline areas: be co-chaired by the appropriate NASA management official (with an appropriate, mutually agreed role for NOAA in the field of earth sciences) and a Soviet counterpart; be the principal mechanism for detailed planning and monitoring of the agreed cooperative projects; make recommendations to sponsoring/participating government agencies for implementation.
2. NASA will ensure US participation is by the most qualified specialists from government departments and agencies, industry and the academic community. Any agency may

nominate a member for the US delegation to any Joint Working Group meeting. Selection of US delegates to Joint Working Groups will be made by NASA subject to oversight by the SWG.

3. The Joint Working Groups will seek appropriate ways to integrate near-term cooperative activities with future directions which cooperation may take, so as to develop a scientifically beneficial program of cooperation, and will provide recommendations to their agency principals as appropriate.
4. The U.S. delegations to Joint Working Groups will develop for NASA and sponsoring agency review and approval: specific project plans; schedules for joint activities; specific lists of data, publications and all other materials to be exchanged as part of cooperative activities; and detailed proposals for required personnel exchanges.
5. The Joint Working Groups will meet as mutually agreed and required. The agenda for each meeting will be agreed in advance. Lists of delegation members to each meeting will be exchanged in advance. The outcome of each meeting will be recorded in agreed minutes or other appropriate documentation, subject to confirmation according to paragraph 5 above. Between Joint Working Group (JWG) meetings, NASA will periodically report to IWG members the substance of all scientific contact between the JWG parties in implementing agreed projects.
6. The U.S. delegations to Joint Working Groups will report on the progress of each project. This feedback report will include statements regarding attainment of objectives, difficulties with project execution and evaluation of the benefits.

January 10, 1989

ON SUNDAY, JANUARY 8, 1989, SECRETARY SHULTZ AND FOREIGN MINISTER SHEVARDNADZE SIGNED A FRAMEWORK AGREEMENT ON COOPERATION IN BASIC SCIENTIFIC RESEARCH. THIS AGREEMENT IS AIMED AT ENCOURAGING MUTUALLY BENEFICIAL COOPERATION BETWEEN SCIENTISTS OF THE TWO NATIONS.

THE AGREEMENT IDENTIFIES EIGHT BROAD AREAS OF RESEARCH FOR COOPERATION IN BASIC SCIENTIFIC RESEARCH: GEOSCIENCES, BASIC SCIENTIFIC RESEARCH IN ENGINEERING SCIENCES, SCIENTIFIC PROBLEMS OF THE ARCTIC AND THE NORTH, LIFE SCIENCES, SCIENCE POLICY, CHEMISTRY, MATHEMATICS, AND THEORETICAL PHYSICS.

THE IMPLEMENTATION OF THE FRAMEWORK AGREEMENT WILL TAKE PLACE UNDER SUBSIDIARY MEMORANDA OF UNDERSTANDING. NEGOTIATIONS ON THOSE MEMORANDA ARE EXPECTED TO BEGIN SOON. AT THIS TIME, THERE ARE TWO MEMORANDA UNDER CONSIDERATION, ONE BETWEEN THE NATIONAL SCIENCE FOUNDATION AND THE SOVIET ACADEMY OF SCIENCES, AND ONE BETWEEN THE UNITED STATES GEOLOGICAL SURVEY AND THE SOVIET MINISTRY OF GEOLOGY. THE MEMORANDA WILL FURTHER DETAIL THE TOPICS FOR COOPERATION. AFTER THE MEMORANDA HAVE BEEN NEGOTIATED AND SIGNED, COOPERATIVE RESEARCH UNDER THE FRAMEWORK AGREEMENT MAY BEGIN.

THIS AGREEMENT IS UNIQUE IN THAT IT STRESSES PROPOSALS THAT ARE INITIATED BY THE COOPERATING SCIENTISTS. INDIVIDUAL SCIENTISTS FROM THE TWO NATIONS WISHING TO COOPERATE UNDER THIS AGREEMENT ARE JOINTLY TO SUBMIT PROJECT PROPOSALS TO THEIR GOVERNMENTS. IN THE UNITED STATES, THE NATIONAL SCIENCE FOUNDATION AND THE UNITED STATES GEOLOGICAL SURVEY WILL BE FUNDING AND SUBMITTING FOR PEER REVIEW THOSE SCIENTIST-INITIATED PROPOSALS. ONLY AFTER SUCCESSFULLY COMPLETING PEER REVIEW MAY EACH PROJECT BE CONSIDERED FOR FUNDING AND IMPLEMENTATION UNDER THE AGREEMENT.

THIS AGREEMENT COVERS BASIC SCIENTIFIC RESEARCH AND DOES NOT ENCOMPASS APPLIED OR DEVELOPMENTAL RESEARCH. BOTH SIDES RECOGNIZE THAT LONG TERM BENEFITS ARE OFTEN DERIVED FROM BASIC SCIENTIFIC RESEARCH, AND HOPE THAT COOPERATION UNDER THIS AGREEMENT WILL ENRICH THE STORE OF SCIENTIFIC KNOWLEDGE TO THE BENEFIT OF THE WORLD.