MEMORANDUM OF UNDERSTANDING BETWEEN THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION OF THE DEPARTMENT OF COMMERCE OF THE UNITED STATES OF AMERICA AND THE RUSSIAN ACADEMY OF SCIENCES OF THE RUSSIAN FEDERATION ON COOPERATION IN THE AREA OF THE WORLD OCEANS AND POLAR REGIONS

The National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce of the United States of America and the Russian Academy of Sciences (RAS) of the Russian Federation (Parties), acting under the Agreement between the Government of the United States of America and the Government of the Russian Federation on Science and Technology Cooperation, signed December 16, 1993 (S&T Agreement):

Realizing that international cooperation in the field of science and technology pertaining to the world oceans and polar regions will strengthen the bonds of friendship and understanding between both countries;

Considering that scientific and technological cooperation pertaining to these areas is important for the development of their respective national economies;

Recognizing that significant interrelated, atmospheric, oceanic and terrestrial global environmental changes have recently occurred and that exploration of the seas is necessary to provide the information needed to understand the magnitude and effects of these global changes on the environment;

Realizing that the Arctic region is undergoing rapid environmental change and that this may lead to greater environmental repercussions around the globe;

Recognizing that an international program of scientific sampling and observations is required to address the climate change and exploration issues;

Affirming that oceanic, terrestrial and atmospheric ecosystem studies should focus on the structure and processes of the environment from the sea floor to the upper atmosphere and the relationships and interactions between the global geosphere, the atmosphere, biosphere, hydrosphere and climate change need to be examined;

Desiring to establish long-term cooperation between the Parties in the field of world ocean and polar regions science; and

Wishing to cooperate on the basis of equity, fairness and mutual benefit,

Have agreed in accordance with the laws and regulations of each country as follows:

ARTICLE I Purpose

The purpose of this memorandum of understanding (MOU) is to foster the joint pursuit of world oceans and polar regions science and technology activities between the Parties taking into account the mutual interests and experience of both Parties. This MOU is subject to and governed by the S&T Agreement and any amendments, extensions or successor agreements.

ARTICLE II Policy Guidelines

The Parties shall conduct world oceans and polar regions cooperation based on the following principles:

A. Shared responsibilities and shared results obtained in the course of equal cooperation, commensurate with the Parties' strengths and mutual interests in the field of world oceans and polar regions studies;

B. Access, to the extent permitted by national laws and regulations, to government-sponsored or government-supported programs and institutions for visiting researchers, and, on these same conditions, access to and exchange of information in the field of world oceans and polar regions' related scientific development;

C. Adequate and effective protection and equal distribution of rights to intellectual property furnished or created in the course of collaboration;

D. General transparency of policies and programs in order to facilitate mutual understanding and the identification of opportunities for coordination and cooperation; and

E. The widest possible dissemination of research results and related information, subject to applicable international obligations, national laws, and regulations.

ARTICLE III Forms of Cooperation

1. The Parties shall duly encourage and facilitate the establishment and development of direct contacts and cooperation between government agencies, universities, research centers, institutes, private sector firms and other institutions dealing with world oceans and polar regions through the conduct of:

-Joint scientific, technical, and ecological projects such as described in the Annex to this MOU;

-Exchange of scientific and technical information, documentation and research results;

-Conduct of bilateral meetings, symposia and workshops;

-Publication of reports, articles and monographs;

-Exchange of delegations, scientists, experts, research scholars and specialists;

-Access to research areas of mutual interest in accordance with each Party's national rules and regulations and international obligations;

-Participation of specialists of the Parties in international conferences, symposia; and

-Exhibition of all aspects of world oceans and polar regions science.

2. Proposed specific project work in these areas shall be described in writing, agreed by both Parties or other participants and may be amended by mutual agreement.

3. Cooperation under this MOU shall be conducted in accordance with each Party's applicable national laws, procedures, regulations and international obligations.

ARTICLE IV Joint Coordinating Committee

1. To implement this MOU, the Parties shall establish a Joint Coordinating Committee on Cooperation in the Field of World Oceans and Polar Regions studies. As a rule the Joint Coordinating Committee shall meet once a year alternatively on the territory of the United States of America and the Russian Federation.

2. The Joint Coordinating Committee shall review specific measures and programs of cooperation, coordinate the activities of organizations involved in implementation of these program, and as appropriate make proposals to the Parties on the subject matter of this MOU.

3. Each Party shall designate a co-chair of the Joint Coordinating Committee. In the period between sessions of the Joint Coordinating Committee, the co-chairs will maintain contact between the Parties, coordinate the implementation of the pertinent programs of cooperation, update individual sections of these programs and coordinate the activity of organizations participating in cooperation in accordance with this MOU.

ARTICLE V Information and Intellectual Property

1. The Parties affirm their intention to use the information acquired under this MOU in accordance with their respective national laws and regulations.

2. Science and technology information resulting from cooperation under this MOU, other than information that is not disclosed for national security, commercial or industrial reasons, shall be made available, unless otherwise agreed, to the world scientific community through procedures established by the Parties.

3. Provisions for the protection and allocation of intellectual property set forth in Annex II to the S&T Agreement and any amendments, extensions or successor agreements shall apply to all activities carried out under this MOU.

ARTICLE VI Implementation Procedures

1. All activities under this MOU, including exchange of technical information and equipment, exchange of specialists, training scientists and technical experts, and implementation of other forms of cooperation, shall be conducted in accordance with national laws, regulations, international obligations and procedures of the Parties and shall be subject to the availability of personnel, resources, and funds. Each Party or participating organization shall bear the costs of its participation in conducting cooperation under this MOU, unless otherwise is agreed in writing. This MOU is not to be construed as obligating any particular expenditures or commitment of resources or personnel.

2. The activities to be carried out under this MOU shall be documented in the form of work plans or other correspondence, and the Parties shall conclude written agreements or contracts signed prior to the start of each activity.

3. This MOU is not intended to amend or otherwise modify existing science and technology agreements and other arrangements.

4. The Parties or participating organizations may, as mutually agreed upon and in accordance with international obligations, national laws, and regulations, invite scientists, technical experts, and entities of third countries or international organizations at their own expense, unless otherwise is agreed in writing, to participate in projects and programs being implemented under this MOU.

ARTICLE VII Effective and Termination Dates

1. This MOU shall enter into force upon signature by both Parties, shall remain in force for ten years, and shall be renewed automatically, for additional ten-year periods,

unless either Party gives notice of termination to the other in writing three months prior to the expiration of the first or any subsequent ten-year period. In any event, this MOU shall not be operable upon the termination of the S&T Agreement.

2. This MOU may be amended at any time, but only by the written agreement of the Parties.

3. This MOU may be terminated at anytime by either Party upon no less than six months written notice to the other Party of its intent to terminate.

4. Termination of this MOU shall not affect the implementation of activities undertaken pursuant to this MOU already in progress at the time of termination.

DONE at Washington, D.C., USA, in duplicate, on the 5th of December, 2003, in the English and Russian languages, each text being equally authentic.

FOR THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE, UNITED STATES OF AMERICA FOR THE RUSSIAN ACADEMY OF SCIENCES OF THE RUSSIAN FEDERATION

ANNEX Areas of Possible Cooperation

- Ocean Exploration 1.
- 2.
- Ecosystem Studies The Role of Climate Change on Ocean Circulation Arctic Climate Change Fresh Water Balance in the Northern Hemisphere Atmosphere-Ice-Ocean-Sea Floor fluxes 3.
- 4.
- 5.
- 6.