

SPACE COOPERATION

**Agreement Between the
UNITED STATES OF AMERICA
and INDONESIA**

Signed at Washington and Jakarta
May 31 and June 19, 2012



NOTE BY THE DEPARTMENT OF STATE

Pursuant to Public Law 89—497, approved July 8, 1966
(80 Stat. 271; 1 U.S.C. 113)—

“ . . .the Treaties and Other International Acts Series issued under the authority of the Secretary of State shall be competent evidence . . . of the treaties, international agreements other than treaties, and proclamations by the President of such treaties and international agreements other than treaties, as the case may be, therein contained, in all the courts of law and equity and of maritime jurisdiction, and in all the tribunals and public offices of the United States, and of the several States, without any further proof or authentication thereof.”

INDONESIA

Space Cooperation

*Agreement signed at Washington and Jakarta
May 31 and June 19, 2012;
Entered into force June 19, 2012.*

**AGREEMENT
BETWEEN THE
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
OF THE UNITED STATES OF AMERICA
AND THE
NATIONAL INSTITUTE OF AERONAUTICS AND SPACE
OF THE REPUBLIC OF INDONESIA
FOR
COOPERATION ON THE SOUTHEAST ASIA COMPOSITION, CLOUD,
CLIMATE COUPLING REGIONAL STUDY**

The National Aeronautics and Space Administration (NASA) and the National Institute of Aeronautics and Space (LAPAN) (hereinafter referred to individually as "the Party" or jointly as "the Parties"):

DESIRING to cooperate on NASA's Southeast Asia Composition, Cloud, Climate Coupling Regional Study (SEAC⁴RS) that is of mutual interest and benefit to the Parties; and

REFERRING to the Agreement between the Government of the United States of America and the Government of the Republic of Indonesia on Scientific and Technological Cooperation, signed at Jakarta on March 29, 2010;

HAVE AGREED as follows:

I. PROGRAM DESCRIPTION

SEAC⁴RS is a NASA aircraft campaign that will address science questions related to the relationships between atmospheric composition and convection in Southeast Asia. Broadly stated, SEAC⁴RS will facilitate progress in understanding and improving predictive capability for changes in the ozone layer, climate forcing, and air quality associated with changes in atmospheric composition. Southeast Asia stands out globally in satellite observations. For instance, during the Asian monsoon (July-October), carbon monoxide observations of the middle to upper troposphere are consistently enhanced over southern and Southeast Asia each year. These observations point to the region's unique sensitivity to rapidly changing emissions of gas phase and aerosol pollutants in Asia. Simultaneously, this region also hosts one of the most complex meteorological and observing environments in the world. Understanding the sensitivity of this region to changes in climate and air quality requires knowledge of how dynamical, physical, chemical, and radiative processes are influenced by these emissions.

SEAC⁴RS will take place in August and September of 2012. This deployment will address key science questions regarding the influence of Asian emissions on clouds, climate, and air quality as well as fundamental satellite observability of the system. Current satellite observations suggest a strong impact of the Asian summer monsoon on

Tropopause Transition Layer composition and a direct relationship to surface sources including pollution, biogenic emissions, and biomass burning. Hence, SEAC⁴RS science observations will focus specifically on the role of the Asian monsoon circulations in governing emissions, transport, convective impacts/redistribution and upper atmospheric composition and chemistry. Attention will also be given to the influence of biomass burning and pollution, their temporal evolution, and ultimately impacts on meteorological processes which in turn feed back into regional air quality. With respect to meteorological feedbacks, the opportunity to examine the impact of pollution aerosol particles on cloud properties and ultimately dynamics will be of particular interest.

To accomplish the goals of SEAC⁴RS, multiple aircraft will be required to fly over key areas of Southeast Asia, including Indonesia. The NASA DC-8 will provide observations from near the surface to 12 km; the United States National Science Foundation Gulfstream V will provide observations up to 14 km; and the NASA ER-2 will provide high-altitude observations reaching into the lower stratosphere as well as important remote sensing observations connecting satellites with observations from lower flying aircraft and surface sites. The aircraft and operations will be hosted in Thailand during the duration of the campaign.

II. DEFINITIONS

For the purpose of this Agreement the term "Related Entity" means:

- (a) A contractor or subcontractor of a Party at any tier;
- (b) A grantee or any other cooperating entity or investigator of a Party at any tier; or
- (c) A contractor or subcontractor of a grantee or any other cooperating entity or investigator of a Party at any tier.

For the purpose of Article VI (Liability and Risk of Loss), the term "Related Entity" also means:

- (a) A user or customer of a Party at any tier; or
- (b) A contractor or subcontractor of a user or customer of a Party at any tier. It may also include another State or an agency or institution of another State, where such State, agency, or institution is an entity described above or is otherwise involved in the activities undertaken pursuant to this Agreement.

The terms "contractor" and "subcontractor" include suppliers of any kind.

III. RESPONSIBILITIES

1. NASA will use reasonable efforts to carry out the following responsibilities:
 - (a) Operate the SEAC⁴RS campaign;
 - (b) Provide flight opportunities for Indonesian Government personnel, as requested by LAPAN; and
 - (c) Provide to LAPAN access to all Earth observation data that results from the campaign and training opportunities to process the data and related data such as A-Train Satellite data;
2. LAPAN will use reasonable efforts to carry out the following responsibilities:
 - (a) Make LAPAN and/or other Indonesian scientists available for campaign planning and analysis of results;
 - (b) Provide access to meteorologists as well as weather data and forecasts; and
 - (c) Facilitate research overflight permission for Indonesian land and water, subject to restrictions imposed by the Indonesian Government.

IV. FINANCIAL ARRANGEMENTS

1. Each Party will bear the costs of discharging its respective responsibilities, including travel and subsistence of personnel and transportation of all equipment and other items for which it is responsible.
2. The ability of the Parties to carry out their obligations is subject to the availability of appropriated funds. Should either Party encounter budgetary problems that may affect the activities to be carried out under this Agreement, the Party encountering the problems will notify and consult with the other Party as soon as possible.

V. POINTS OF CONTACT

NASA:
Dr. Hal Maring
Radiation Sciences Program
Earth Science Division
Science Mission Directorate
Mail Suite 3B74
NASA Headquarters
Washington, DC 20546-0001
Phone: +1-202-358-1679
Fax: +1-202-358-2770
Email: hal.maring@nasa.gov

LAPAN:

Technical matters:

Director of Atmospheric Science & Technology Center, LAPAN

Jalan Dr. Djunjunan no. 133, Bandung 40173, Indonesia

Phone: +62-22-6037445

Fax: +62-22-6037443, 6014998

Email: afifbd@yahoo.com, afif.budiyono@lapan.go.id

Administrative matters:

Head of Cooperation and Public Relation Bureau

Jalan Pemuda Persil no. 1, Rawamangun, Jakarta 13220, Indonesia

Phone: +62-21-4892802

Fax: +62-21-47882726

Email: ratih_dewanti@lapan.go.id, kerjasama_lapan@yahoo.com

VI. LIABILITY AND RISK OF LOSS

1. Each Party hereby waives any claim against the other Party, employees of the other Party, the other Party's Related Entities or employees of the other Party's Related Entities for any injury to, or death of, the waiving Party's employees or the employees of its Related Entities, or for damage to, or loss of, the waiving Party's property or the property of its Related Entities arising from or related to activities conducted under this Agreement, whether such injury, death, damage, or loss arises through negligence or otherwise, except in the case of willful misconduct.
2. Each Party further agrees to extend this cross-waiver to its Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or of its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement. Additionally, each Party will require that their Related Entities extend this cross-waiver to their Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or of its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement.

VII. TRANSFER OF GOODS AND TECHNICAL DATA

The Parties are obligated to transfer only those technical data (including software) and goods necessary to fulfill their respective responsibilities under this Agreement, in accordance with the following provisions, notwithstanding any other provisions of this Agreement:

1. All activities under this Agreement will be carried out in accordance with the Parties' national laws and regulations, including those laws and regulations pertaining to export control. Only unclassified information will be exchanged.
2. The transfer of technical data for the purpose of discharging the Parties' responsibilities with regard to interface, integration, and safety will normally be made without restriction, except as required by paragraph 1, above.
3. All transfers of goods and proprietary or export-controlled technical data are subject to the following provisions.
 - (a) In the event a Party or its Related Entity finds it necessary to transfer such goods or data, for which protection is to be maintained, such goods will be specifically identified and such data will be marked.
 - (b) The identification for such goods and the marking on such data will indicate that the goods and data will be used by the receiving Party and its Related Entities only for the purposes of fulfilling the receiving Party's or Related Entities' responsibilities under this Agreement, and that such goods and data will not be disclosed or retransferred to any other entity without the prior written permission of the furnishing Party.
 - (c) The receiving Party and its Related Entities will abide by the terms of the notice and protect any such goods and data from unauthorized use and disclosure.
 - (d) The Parties to this Agreement will cause their Related Entities to be bound by the provisions of this Article through contractual mechanisms or equivalent measures.
4. All goods exchanged in the performance of this Agreement will be used by the receiving Party or Related Entity exclusively for the purposes of the Agreement. Upon completion of the activities under this Agreement, the receiving Party or Related Entity will return or otherwise dispose of all goods and marked proprietary or export-controlled technical data provided under this Agreement, as directed by the furnishing Party or Related Entity.

VIII. INTELLECTUAL PROPERTY RIGHTS

1. Nothing in this Agreement will be construed as granting, either expressly or by implication, to the other Party any rights to, or interest in, any inventions or works of a Party or its Related Entities made prior to the entry into force of, or outside the scope of, this Agreement, including any patents (or similar forms of protection in any country) corresponding to such inventions or any copyrights corresponding to such works.

2. Any rights to, or interest in, any invention or work made in the performance of this Agreement solely by one Party or any of its Related Entities, including any patents (or similar forms of protection in any country) corresponding to such invention or any copyright corresponding to such work, will be owned by such Party or Related Entity. Allocation of rights to, or interest in, such invention or work between such Party and its Related Entities will be determined by applicable laws, rules, regulations, and contractual obligations.
3. It is not anticipated that there will be any joint inventions made in the performance of this Agreement. Nevertheless, in the event that an invention is jointly made by the Parties in the performance of this Agreement, the Parties will, in good faith, consult and agree within 30 calendar days as to:
 - (a) The allocation of rights to, or interest in, such joint invention, including any patents (or similar forms of protection in any country) corresponding to such joint invention;
 - (b) The responsibilities, costs, and actions to be taken to establish and maintain patents (or similar forms of protection in any country) for each such joint invention; and
 - (c) The terms and conditions of any license or other rights to be exchanged between the Parties or granted by one Party to the other Party.
4. For any jointly authored work by the Parties, should the Parties decide to register the copyright in such work, they will, in good faith, consult and agree as to the responsibilities, costs, and actions to be taken to register copyrights and maintain copyright protection (in any country).
5. Subject to the provisions of Article VII (Transfer of Goods and Technical Data) and Article IX (Release of Results and Public Information), each Party will have an irrevocable royalty-free right to reproduce, prepare derivative works, distribute, and present publicly, and authorize others to do so on its behalf, any copyrighted work resulting from activities undertaken in the performance of this Agreement for its own purposes, regardless of whether the work was created solely by, or on behalf of, the other Party or jointly with the other Party.

IX. RELEASE OF RESULTS AND PUBLIC INFORMATION

1. The Parties retain the right to release public information regarding their own activities under this Agreement. The Parties will coordinate with each other in advance concerning releasing to the public information that relates to the other Party's responsibilities or performance under this Agreement.
2. The Parties will make the results available to the general scientific community, as appropriate and agreed between the Parties, in a timely manner.

3. The Parties acknowledge that the following data or information does not constitute public information and that such data or information will not be included in any publication or presentation by a Party under this article without the other Party's prior written permission:
 - (a) Data furnished by the other Party in accordance with Article VII (Transfer of Goods and Technical Data) which is identified as export-controlled or proprietary; or
 - (b) Information about an invention of the other Party before an application for a patent (or similar form of protection in any country) corresponding to such invention has been filed covering the same, or a decision not to file has been made.

X. INVESTIGATION OF MISHAPS

In the case of an accident or mishap, the Parties agree to provide assistance to each other in the conduct of any investigation, bearing in mind, in particular, the provisions of Article VII (Transfer of Goods and Technical Data). In the case of activities which might result in the death of or serious injury to persons, or substantial loss of or damage to property, as a result of activities under this Agreement, the Parties agree to establish a process for investigating each such accident or mishap.

XI. CONSULTATION AND DISPUTE RESOLUTION

The Parties agree to consult promptly with each other on all issues involving interpretation, implementation, or performance of the Agreement. Such issues will first be referred to the Points of Contact named above for the Parties. If they are unable to come to agreement, then the issue will be referred to the NASA Associate Administrator for International and Interagency Relations and the Head of Planning and Organization Bureau, LAPAN, or their designated representatives for joint resolution.

XII. AMENDMENTS

This Agreement may be amended at any time by written agreement of the Parties.

XIII. CONTINUING OBLIGATIONS


The obligations of the Parties set forth in Article VI (Liability and Risk of Loss), Article VII (Transfer of Goods and Technical Data), Article VIII (Intellectual Property Rights) and Article IX (Release of Results and Public Information) of this Agreement will continue to apply after the expiration or termination of this Agreement.

XIV. ENTRY INTO FORCE, TERM AND TERMINATION

This Agreement will enter into force upon signature. The Agreement will remain in force until September 30, 2017. The Agreement may be terminated by either Party by notifying the other Party in writing two (2) months in advance.

XV. SIGNATORIES

FOR NASA




Karen C. Feldstein
Director, Science Division
Office of International and Interagency
Relations

May 31, 2012
Date

Washington, DC
Place

FOR LAPAN



Ratih Dewanti
Head of Cooperation and Public Relation
Bureau

June 19, 2012
Date

Jakarta
Place