

The majority of the participants felt that the meeting of space technology experts was useful, and a follow-on meeting should be held next year just prior to the meeting of the Scientific and Technical Subcommittee of the Committee on Peaceful Uses of Outer Space.



Gene A. Thorley

Distribution: R. Southard
 R. Mullen
 F. Doyle
 J. Salisbury
 L. Starr
 L. Pettinger
 A. Colvocoresses

Intergovernmental Meeting of Space Technology Experts

List of Attendees

I. SPEAKERS (non-U.S. Government):

A. Abiodun
Expert on Space Applications
United Nations Secretariat

Pierre-Marie Adrien
Project Analysis Department
Inter-American Development Bank

~~Dr. Ali Al-Mashat
Director General
ARABSAT~~

Prof. Eduardo Amaldi
Space Science Advisory Committee
ESA

Jean Arets
Head of International Affairs Branch
ESA

Dr. Ing. W. Juergen Beck
Head, Scientific Technical Facilities Dept.
DFVLR
Federal Republic of Germany

Gerard Brachet
Head of Applications Programs Division
CNES

Dr. Jack Chambers
Director General, Space Communications Planning
Department of Communications
Canada

Dr. Nand Kishore Chitre
Director of Systems Planning
INTELSAT

Lewis Cuccia
Principal Engineer
Ford Aerospace and Communications Corporation

Dr. Ing. Heinz Haeberle
Head of Research Dept.
Communication Technology and Remote Sensing
DFVLR
Federal Republic of Germany

Prof. Gerhard Haerendel
Max Planck Institute
Federal Republic of Germany

Claude Honvault
Head of Remote Sensing Division
Earth Observations Division
ESA

Tadahico Inada (Feb. 5 only)
Washington Representative for the National Space
Development Agency of Japan

Dr. Klaus Itten
Department of Geography
University of Zurich

Dr. Abd Al-Wahab Kabakibo
Director General for Meteorology at the Ministry of Defense
Syrian National Remote Sensing Center

F. A. Khan
Chairman, Space Research and Remote Sensing Organization
Bangladesh

Dr. Vittorio Manno
Space Science Director
ESA

~~Dr. Willy Moenandir
Director, Perumtel
Indonesia~~

Prof. Tobias Owen
State University of New York

Nelson de Jesus Parada
Director General
Instituto de Pesquisas Espaciais (INPE)
Brazil

Dr. Joseph Pelton
Executive Assistant to the Director General
INTELSAT

Dr. Herbert Roemer
Head of Space Planning & Programming Section
Federal Ministry for Research and Technology
Federal Republic of Germany

Jean Gerard Roussel
Director for International and Industrial Affairs
CNES

~~Ing. Miguel E. Sanchez Ruiz
Director Special Projects
Ministry of Communications
Mexico~~

Dr. Edryd Shaw
RADARSAT Manager
RADARSAT Project Office, Canada

Anna Stahmer
Vice President and Director
AID Rural Satellite Program
Academy for Educational Development

Dr. Karoly Szego
Director, Nuclear and Particle Physics Institute
Central Research Institute for Physics
Hungarian Academy of Sciences

Dr. Patrick Thaddeus
Goddard Institute for Space Studies

Chamesou Toure
Engineer
Tele-Senegal

Dr. Ernst A. Trendelenburg
Director of Scientific and Meteorological Programs
European Space Agency (ESA)

Dr. Kiyoshi Tsuchiya
Professor, University of Chiba
Japan

II. AUDIENCE PARTICIPANTS (non-U.S. Government, by country)

A. Countries

Australia

Professor John Henry Carver
Director/Research School of Physical Sciences
Australia

Ronald Cummins
Defense/Science Attache
Australian Embassy

Dr. Kenneth McCracken
Head, CSIRO
Division of Mineral Sciences
Australia

Austria

Dr. Lothar Beckel
Austrian Academy of Sciences

Dr. Erwin Mondre
Austrian Solar and Space Agency

Dr. Johannes Ortner
Director, Austrian Solar and Space Agency

Belgium

SPACE
Jaques Laurent
① Programmation de la Politique Scientifique
Services du Premier Ministre

Canada

I. Graham Lochhead
Director, Transportation and Communications Division
Office of External Relations
Canada

China

Dr. Ye Shu Hua
Director, Shanghai Observatory

Cyprus

E. Ipsarides to the UN
E. Ipsarides
Cyprus Mission in New York

Dr. F. Phaedonos, or
M.A. Viki's
Mission of Cyprus to the United Nations

Finland

Veli Matti Santomma
Technical Research Center of Finland

Federal Republic of Germany

Dr. Rudolf Winter
DFVLR
Federal Republic of Germany

France

Jean-Pierre Fouquet
Scientific Attache, Embassy of France

← Helene Jillard
CNES

Gabon

3 Representatives to be named
Guatemala - one rep to be named
Indonesia

Dr. Wiranto Arismunandar
Deputy Director of the Indonesian National Aviation and
Space Institute (LAPAN)

Brig. General Subagyo
Chief, Research and Development
Indonesian Air Force

India

Dr. Sri S. Chandrasekar
Indian Space Research Organization

Israel

Prof. D. Otterman
~~Israel~~ Tel Aviv University
Resident Research Associate
Goddard Space Flight Center

Prof. Yaacov Shaham
Hebrew University
(on sabbatical at Columbia University's Department of Physics)

Japan

Masamitsu Ohki
First Secretary, Permanent Mission of Japan to the United
Nations.

Kuwait

Dr. Adnan Shehab Eldin
Director General
Kuwait Institute for Scientific Research

Hamid Al-Arbash
Ministry of Communications

Lebanon

Dr. Raji Abu-Shaqra
Dean of the Faculty of Sciences
University of Lebanon, Beirut

Netherlands

N. de Boer
Deputy Head, Space Division
Netherlands Agency for Aerospace Programs

Norway

Bjoern Landmark
Space Activity Division
Royal Norwegian Council for Scientific and Industrial
Research (NTNF)

Pakistan

Dr. M. Shafi Ahmad
Pakistan Space and Upper Atmosphere Research Commission
(SUPARCO)

Philippines

Esperidon Aragon
Special Asst. to the Director-General, Philippine
Atmospheric, Geophysical, and Astronomical Services
Administration

Dr. Celso Roque
Director General, Natural Resources Management Center

Romania

Eugeniu Mandescu
Secretary of the Romanian Commission for Space Activities

Switzerland

Christian Risch
Embassy of Switzerland to the United States

United Kingdom

Dr. A. Clifford Nicholas
Director, Space Branch
Dept. of Industry
United Kingdom

J. Troughton
Dept. of Industry
United Kingdom

Venezuela

Santiago Aguerrevere
Ministry of Transport

Luis Leanez Lugo
Director General of Communications
Ministry of Transport

Alejanda Ornes
Office of International Relations
Ministry of Transport

B. International Organizations

Renato Batti
European Economic Community

Dr. John Howard
Chief, Remote Sensing Center
Food and Agricultural Organization

Dr. John Leese
Scientific Officer for Meteorological Satellites
World Meteorological Organization

Herve Pouliquen
Counselor
International Telecommunications Union

Ian Pryke (Registration Paid)
Washington Office
ESA

III. U.S. GOVERNMENT (Speakers and Audience
Participants)

James M. Beggs
Administrator
NASA

Dr. Clifford R. Block
Associate Director for Communications
Bureau for Science and Technology
US/AID

Dr. Wallace Broecker
Lamont-Doherty Geological Observatory

Carla Carlson
Science Editor
USIA

Jennifer Clapp
Director, International Affairs
NOAA/NESDIS

Dr. Burton Edelson
Associate Administrator for Space Science
and Applications
NASA

Margaret G. Finarelli
Chief, International Program Planning Office
International Affairs Division
NASA

Richard E. Halpern
Deputy Director, Spacelab Flight Division
NASA

Bud Henson
USIA

Donald Jansky
National Telecommunications and Information Administration
U.S.

Richard J. Keating
Chief, Office of External Relations
NOAA/NESDIS

Mark Kieffer
International Affairs Division
NASA

Robert R. Lovell
Director, Communications Division
NASA

Dr. Dudley McConnell
Assistant Associate Administrator
Office of Space Science and Applications
NASA

Dr. John McElroy
Acting Assistant Administrator for Environmental
Satellite Data and Information Services
NOAA/NESDIS

Thomas McGunigal
SARSAT Program Manager
NASA

James R. Morrison
Deputy Director, International Affairs
NASA

Dr. Charles Paul
Manager, Remote Sensing Program
US/AID

Kenneth S. Pedersen
Director, International Affairs Division
NASA

Addison Richmond
Office of Advanced Technology
U.S. Department of State

Dr. Mark Settle
Non-renewable Resources Program Manager
NASA

Brent Smith
International Affairs Division
NASA

Gene A. Thorley
Senior Adviser for Remote Sensing
National Mapping Division
U.S. Geological Survey

Dr. Shelby Tilford
Director, Environmental Observation Division
NASA

Dr. W. Stanley Wilson
Environmental Observations Division
NASA

IV. COLUMBIA UNIVERSITY

Dr. Lambros Comitas
Director, Institute of Latin American and Iberian Studies
School of International Affairs

Dr. Robert F. Goldberger
Provost

Dr. Speridio Faisol (Brazil)
Visiting Scholar

Dr. James E. Hansen
Director
Goddard Institute for Space Studies

Dr. David Helfand
Assistant Professor of Astronomy

Dr. Jacob C. Hurewitz
Director, Middle East Institute
School of International and Public Affairs

Dr. Graham W. Irwin
Director, Institute of African Studies
School of International and Public Affairs

Dr. Morton Klass
Director, South-Asia Institute
School of International and Public Affairs

Ruth Levenson
Columbia University

Dr. James W. Morley
Director
East Asian Institute
School of International and Public Affairs

Dr. Steven J. Noble
Assistant Dean
School of International and Public Affairs

Dr. Barry Raleigh
Director
Lamont-Doherty Geological Observatory

Dr. Harold Segal
Director
Institute on East Central Europe
School of International and Public Affairs

Dr. Marshall Shulman
Director, W. Averell Harriman Institute
School of International and Public Affairs

Dr. James Simpson
Lamont-Doherty Geological Observatory

Dr. Michael I. Sovern
President
Columbia University

Dr. Thomas E. Stern
Professor of Electrical Engineering
School of Engineering

Dr. Elliot Zupnick
Director, Institute on Western Europe
School of International and Public Affairs

E. Thorley

INTERGOVERNMENTAL MEETING OF SPACE TECHNOLOGY EXPERTS

Columbia University, New York, New York

February 4-5, 1983

Schedule and Agenda

Friday, February 4

08:00-09:00 Registration and Coffee

09:00-09:05 Welcome

Dr. Robert Goldberger, Provost, Columbia University

09:05-09:15 Opening Remarks

James M. Beggs, Administrator, NASA

09:15-09:30 Review of Program and Schedule

James R. Morrison, Deputy Director of International Affairs, NASA

09:30-12:00, Session I, Space Science

Chairman: Dr. Ernst Trendelenburg, Director of Scientific and Meteorological Programs, European Space Agency (ESA)

09:30-09:40 Opening Remarks--Dr. Trendelenburg

09:40-10:10 Astrophysics

Dr. Patrick Thaddeus, Goddard Institute for Space Studies

10:10-10:40 Solar/Terrestrial

Prof. Gerhard Haerendel, Max Planck Institute, Federal Republic of Germany

10:40-10:55 BREAK (Coffee and Tea)

10:55-11:25 Planetary

Prof. Tobias Owen, State University of New York

11:25-11:55 International Halley Collaboration

Dr. Vittorio Manno, Space Science
Directorate, ESA

12:00-13:30, Luncheon Columbia University Faculty House

Guest Speaker: Prof. Eduardo Amaldi, Chairman, Space
Science Advisory Committee, ESA
"International Cooperation in Space Science"

13:45-17:30, Session 2, Earth Science and Applications

Chairman: Dr. John McElroy, Assistant Administrator for
Environmental Satellite Data and Information
Services, National Oceanic and Atmospheric
Administration

13:45-13:55 Opening Remarks--Dr. McElroy

13:55-14:25 Global Perspective: Integrated Earth
Observations

Dr. Shelby Tilford, Director of
Environmental Observations, NASA

14:25-15:45 Session II, Panel 1: Land Remote Sensing
Applications in Developing Countries

Regional Presentations

Latin America --Pierre-Marie Adrien,
Inter-American Development Bank

Middle East--Dr. Abd Al-Wahab Kabakibo,
Syrian National Remote Sensing Center

Asia--Speaker to be named.

Panel Discussion

Dr. Charles Paul, Manager, Remote Sensing
Program, U.S. Agency for International
Development

Dr. Klaus Itten, Department of Geography,
University of Zurich

Dr. Wallace Broecker, Newberry Professor,
Lamont Doherty Geological Laboratory

15:45-16:00

BREAK (Coffee, tea, cold drinks)

16:00-17:30 Session II Panel 2: Land Remote Sensing
Technology: Current Status and Future Prospects

16:00-16:30 Survey Presentation

Mark Settle, Non-renewable Resources Program
Manager, NASA ✓

16:30-17:30 Presentations and Discussion

Gerard Brachet, Head of Applications
Programs Division, CNES, France ✓

Claude Honvault, Head of Remote Sensing
Division, Earth Observations Division, ESA ✓

Dr. Edryd Shaw, RADARSAT Program Manager,
Canada ✓

Dr. Kiyoshi Tsuchiya, Professor of Remote
Sensing, Chiba University, Japan ✓

Dr. Nelson de Jesus Parada, Director
General, National Council of Scientific
Development, Brazil ✓

Dr. Juergen Beck, Head, Scientific Technical
Facilities Department, German Aerospace
Research Establishment (DFVLR), Federal
Republic of Germany ✓

17:30-18:00, Bus transportation available to Midtown Manhattan

20:00-21:30, RECEPTION and Showing of Film "HAIL COLUMBIA"

Location: American Museum of Natural History, 77th St. and
Central Park West. Enter at 77th St. Reception
in Hall of Mexico and Central America .

Hosts: James M. Beggs and Dr. Jerome Rozen, Deputy
Director, Research, American Museum of Natural
History

*Informal attire. Dessert and beverages will be served.

Saturday, February 5

09:00-12:30, Session 3, Communications Satellites

Chairman: Dr. Joseph Pelton, Special Assistant to the
Director General, Intelsat ✓

09:00-09:10 Opening Remarks--Dr. Pelton

09:10-09:30 Session III, Panel 1: Communications Satellite Services for Development

09:10-09:30 Survey Presentation

Anna Stahmer, Vice President and Director,
AID Rural Satellite Program, Academy for
Educational Development, Washington, D.C. ✓

09:35-10:30 Presentations and Discussion

Dr. Willy Moenandir, President, Perumtel,
Indonesia

Dr. Ali Al-Mashat, Director General, Arab
Satellite Communications Organization,
Arabsat

Chamesou Toure, Engineer, Tele-Senegal ✓
(in French)

Dr. Clifford R. Block, Associate Director
for Communications, Bureau for Science and
Technology, U.S. Agency for International
Development

10:30-10:45 BREAK

10:45-12:35 Session III, Panel 2: Communications Satellite Technology: Current Status and Future Prospects

10:50-11:10 Survey Presentation

Lewis Cuccia, Principal Engineer, Ford
Aerospace and Communications Corporation ✓

11:10-12:35 Presentations and Discussion

Robert Lovell, Director, Communications
Division, NASA ✓

Gerard Brachet, CNES, France ✓

Dr. Ing. Heinz Haeberle, Head of Research
Department, Communication Technology and
Remote Sensing, German Aerospace and
Research Establishment, DFVLR ✓

Dr. Jack Chambers, Director General, Space
Communications Planning, Department of
Communications, Canada ✓

Dr. Nand Kishore Chitre, Director of Systems
Planning, INTELSAT

12:45-14:15, Luncheon, Columbia University Faculty House

Guest Speaker: Thomas McGunigal, Search and Rescue
Satellite Program Manager, NASA.
"COSPAS/SARSAT" ✓

14:30-15:15, Session IV Spacelab, Status, Plans and
Opportunities

Chairman: Dr. Heinz Haeberle, DFVLR

Speaker: Richard E. Halpern, Deputy Director, Spacelab
Flight Division, NASA ✓

15:20-17:00, Session V Cooperative Opportunities for Developing
Countries

Chairman: Dr. Nelson de Jesus Parada

Presentations and Discussion

Tadahico Inada, Washington Representative
for the National Space Development Agency of
Japan ✓

Jean Gerard Roussel, Director for
International and Industrial Affairs, CNES,
France

Margaret Finarelli, Chief, International
Planning and Programs Office, International
Affairs Division, NASA ✓

16:00-16:15 BREAK

Mr. A. Abiodun, United Nations Expert on
Space Applications ✓

Mr. Jean Arets, Head of International
Affairs Branch, ESA ✓

Dr. Herbert Roemer, Head of Space Planning
and Programming Section, Federal Ministry
for Research and Technology (BMFT), Federal
Republic of Germany ✓

16:40-17:00 Discussion

17:00-17:30, Session VI Conclusions and General Discussion

Chairman: Kenneth S. Pedersen, Director of International
Affairs, NASA

Sponsors:

U.S. Government/National Aeronautics and Space Administration
Columbia University, Office of the Provosts
Goddard Institute for Space Studies

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