Information Note No 5

An update of the latest news from the IAA History Study Group

1. The Results of the March 2006 IPC for Valencia

After a slow start of abstracts coming in, we finally got some 37 proposed papers in on time (with ~ 75 in the last two weeks). The results after the discussions at the IPC in Paris on March 22, having made some paper combinations and some rejections, can be seen in Annex 1. We now have 29 papers in 4 regular sessions and one additional poster presentation. (Note: the given list is the official draft, with some editing/spelling to be corrected.) We will soon see the final programme on the web, but each and every one can go in and look at the Symposium E.4 under www.iac-paper.com.

This year we shall have all papers in full length on a DVD, which allows us to expand the manuscripts to 5MB.

Also the value and way of conducting the Poster Sessions has been improved, and details can be found on the IAF web site.

2. Frank Malina Highlight Lecture

Roger Malina has been asked, and for all agreed, to give a Highlight Lecture at the IAC 2006 in Valencia on the subject of his father Frank Malina, to recognize a true space pioneer on the 25th anniversary of his death. This “History Highlight Lecture” ought to be considered for our IAA History Symposia Proceedings, and the volume Editor Marsha Freeman will have the pleasure to deal with Roger Malina. Tentative date would be Friday October 6, 2006. The exact title is TBD.

3. 41st IAA History Symposium in India 2007

First of all, the 2007 IAC has now officially been moved from New Delhi to Hyderabad, with better congress facilities of the size needed.

The draft Call for Papers has been issued (see Annex 2), and will be published as the first issue before the Valencia congress. We have been able to maintain the 4 regular sessions (see also below), and as co-chair for the session dedicated to the History of Rocketry and Astronautics in India it is the pleasure to introduce Dr. P.V. Manoranjan Rao, former Group Director at the ISRO Vikram Sarabhi Space Center.
4. **History Plenary at the 2007 IAC**

The IPC also approved the proposed History Plenary dedicated to the “50th Anniversary of the Space Era – Sputnik 1 and the International Geophysical Year “. (Annex 3)

The LOC in India has also concurred and we now have to detail the programme and fine the pioneers to participate.

**We are now looking for the space pioneers from the period 1957-60 who are alive and could possibly travel to India. Do you know anyone else than the persons listed in the Annex 3? If so get back to me as soon as possible with relevant details on how to contact this person.**

The next tasks are to make a more precise definition of the plenary programme, find speakers, find moderator(s), and decide on any audiovisual elements. The possibility of associating a small exhibition with this topic is also an idea. And the publication of the Plenary must be planned.

We also have to coordinate with the Russian Academy of Sciences, but we have no direct time conflict with any event planned to take place in Russia.

It should also be noted that the United Nations Committee for the Peaceful uses of Outer Space will also hold its 50th meeting during 2007. A reflection on how to celebrate this anniversary was initiated in September 2005 by Gerard Brachet in his capacity of incoming chairman of COPUOS for 2006-2007. After discussing the idea with Sergio Camacho, Director, UN Office for Outer Space Affairs, he contacted COSPAR President Roger-Maurice Bonnet and IAF president James V. Zimmermann to start developing the idea of a high level event, possibly in the UN Headquarters in New York City, to take place in October 2007. In a very preliminary outline, this one day event could be structured around four sessions:

- The first session would be focusing on achievements in space during the past fifty years, with two or three high level speakers, one from Russia, one from the US and one from a developing country.
- The other three sessions would be focussing on the next fifty years of space, taking stock of what has been achieved so far.

More details can be found on the IAF web site concerning the “50th Anniversary”

5. **IAF/IAA/IISL Advisory Committee on History of Cooperation in Space Activities**

This joint advisory IAF/IAA/IISL ctee on history (ACHA) has been initiated, and the chairperson is now Dr. A. Ingemar Skoog. Members of this advisory ctee are Gerard Brachet and Lubos Perek from IAF, Skoog and John Logsdon from IAA and Stephen Doyle and Peter Jankowitsch from IISL.

The first study project to be undertaken and now under discussion could be **THE INTERNATIONAL GEOPHYSICAL YEAR - STARTER OF INTERNATIONAL SCIENTIFIC SPACE COOPERATIONS.**

This is an ambitious project, which would involve representatives of many countries to cover the bilateral and multilateral aspects of the IGY and the extensive first real scientific space cooperation initiated by the IGY. The advantage of this project is that it could be
broken down into many smaller parts to be handled by representatives from many countries involved at that time. But it needs a very good and strong overall management to integrate all parts into one OUTPUT. One of the basic outcomes of the IGY is the COSPAR and their support is definitely needed for such a project. Contacts have been established with COSPAR for further discussions on how to best proceed. A working plan will have to be agreed upon in the very near future.

Any member of the IAA SG 6.7 interested in participating in the actual study work now under definition is welcome. Just send an e-mail to the ACHA chair.

May 10, 2006
A. Ingemar Skoog
IAA Study Group 6.7 co-chair
Annex 1

IPC Session Report

E4. HISTORY OF ASTRONAUTICS (40TH SYMPOSIUM)
Coordinators Skoog, Ake Ingemar
Coordinators Rothmund, Christophe
Coordinators Freeman, Marsha
Coordinators James, George

1. Memoirs
Chairmen Skoog, Ake Ingemar
Chairmen Ordway, Frederick I.
Rapporteur McKenna-Lawlor, Susan
Rapporteur Pirard, Theo

IAC-06-E4.1.01 They Blazed the Trail for the Space Pioneers: on some little-known Ukrainian names in the history of astronautics and rocketry
Mr. Oleg Ventskovsky, Yuzhnoye SDO European Representation, Brussels, Belgium
Dr Iryna Vavilova, Kiev, Ukraine
Academician Yaroslav Yatskov, Kiev, Ukraine

IAC-06-E4.1.02 Rudolf Hermann, Wind Tunnels and Aerodynamics
Dr. Charles Lundquist, University of Alabama in Huntsville, Huntsville, United States
Mrs. Anne Coleman, University of Alabama in Huntsville, Huntsville, AL 35899, United States

IAC-06-E4.1.03 Sources of the Ukrainian Space Potential - to 85th Anniversary of V.M. Kovtounenko
Prof. Vladimir Prisniakov, Institute of Geotechnical Mechanics, National Academy of Sciences, Dnipropetrovsk, Ukraine
Mr. S.S. Kavelin, Design bureau "Pivdenne", Dnipropetrovsk, Ukraine

IAC-06-E4.1.04 Preparing for the Space Age: The History of Project EMILY
Dr. L. Parker Temple, Aerospace Corporation, Burke, United States
Dr. Peter L. Portanova, Rancho Palos Verdes, United States

IAC-06-E4.1.05 Sir Hermann Bondi: a journey through his life and the early endeavours of Europe into space
Ms. Veerle Sterken, Technical University of Delft (TU Delft), Delft, Netherlands

IAC-06-E4.1.06 Corresponding Member of Ukrainian Academy of Sciences Nikolay Fyodorovich Gerasyuta – Originator of Ukrainian Scientific School of Ballistics, Flight Dynamics and Rocket Control
Mr Alexander Novikov, Yuzhnoye State Design Office, Dnepropetrovsk, Ukraine

IAC-06-E4.1.07 Word “Cosmonautics:” a history
Prof Mike Gruntman, University of Southern California, Los Angeles, United States

2. Organisational Histories
Chairmen Freeman, Marsha
Chairmen Moulin, Herve
Rapporteur Dowling, Richard
Rapporteur Cosyn, Philippe

IAC-06-E4.2.01 The Kennedy Administration and Project Apollo: International Competition and Cooperation through Space Policy
Mr. Hirotaka Watanabe, Osaka University, Kurashiki-shi, Okayama, Japan
IAC-06-E4.2.02 The NASA Office of Advanced Research and Technology - An Overview
Mr. John Mankins, Artemis Innovation Management Solutions LLC, Ashburn, United States

IAC-06-E4.2.03 Origins and Development of NASA's Exobiology Program, 1958-1976
Dr Steven Dick, NASA- HQ, Washington, DC, United States

IAC-06-E4.2.04 The Oral History Tradition at the University of Alabama in Huntsville
Mrs. Anne Coleman, University of Alabama in Huntsville, Huntsville, AL 35899, United States
Mr. Robert L. Middleton, Alabama, United States
Dr. Charles Lundquist, University of Alabama in Huntsville, Huntsville, United States
Mr. David L. Christensen, Alabama, United States

IAC-06-E4.2.05 The Weapons Research Establishment: an Administrative History
Ms. Kerrie Dougherty, Power House Museum, Haymarket, NSW, Australia

IAC-06-E4.2.06 The international space cooperation in the early years of the French space activities: Political voluntarism and/or necessity?
Mr. Herve Moulin, Institut Francais d'Histoire de l'Espace, 75001 Paris, France

IAC-06-E4.2.07 The Manfred Lachs Space Law Moot Court Competition and its Impact on the Development of Space Law
Mr. Ricky J. Lee, Flinders University of South Australia, Adelaide, Australia
Ms. Tanja Masson-Zwaan, IISL Secretary, 2584 CV The Hague, Netherlands
Mr. Gabriel Laferranderie, ESA, 75015 PARIS, France
Mr. Milton Smith, Sherman & Howard, LLC, Colorado Springs, CO 80903, United States
Mr. Alberto Marchini, ECSL, 75015 Paris, France

IAC-06-E4.2.08 Portugal in Space
Ms Vera Gomes, Lisboa, Portugal

3. Scientific & Technical Reviews
Chairmen Dougherty, Kerrie
Chairmen Jung, Philippe
Rapporteur Harlow, John
Rapporteur Braun, Julius

IAC-06-E4.3.01 X-15B: The Spaceplane That Almost Was
Dr. L. Parker Temple, Aerospace Corporation, Burke, United States

IAC-06-E4.3.02 Swedish Sounding Rocket Projects
Dr. Ake Ingemar Skoog, D-88090 Immenstaad, Germany

IAC-06-E4.3.03 Maruca: an early French navy liquid-fuelled rocket
Mr. Philippe Jung, AAAF, Grasse, France
Mr. Jean-Jacques Serra, AAAF, Font Romeu, France
Mr Jean Robert, Toulouse, France

IAC-06-E4.3.04 Fluorine rocket engine demonstrators
Mr. Christophe Rothmund, Snecma, Vernon, France

IAC-06-E4.3.05 Goddard’s 85 Years Optimal Ascent Problem Finally Solved
Dr. Radu Rugescu, Politechnic University of Bucharest, Bucharest, Romania

IAC-06-E4.3.06 The Fabric of Flight: From Early Balloons to Modern Spacecraft
Mr Anthony Springer, NASA- HQ, Washington, United States
Mrs. Emily Springer, AIAA, Reston, Virginia, United States
4. History of Spanish Contribution to Astronautics
Chairmen Liepack, Otfrid G.
Chairmen Dorado Gutierrez, Jose M.
Rapporteur Launius, Roger D.
Rapporteur Liebermann, Randy

IAC-06-E4.4.01 THE BEGINNING OF CEDEA (“EL ARENOSILLO” EXPERIMENTATION CENTER). TECHNICAL AND SCIENTIFIC ACCOMPLISHMENTS
Dr. Alvaro Azcarraga, SENER Ingenieria y Sistemas, S.A., 28760 Tres Cantos (Madrid), Spain
Mr. Luis V. Sanchez-Muniosguren, Murcia, Spain

IAC-06-E4.4.02 THE FIRST SPANISH SPACE PLAN 1968 TO 1974
Dr. Jose M. Dorado Gutierrez, EASL, Pozuelo de Alarcon-Madrid, Spain

IAC-06-E4.4.03 THREE DECADES OF SPACE ACTIVITIES AT IDR/UPM
Dr. Angel Sanz-Andres, Instituto Universitario de Microgravedad \"Ignacio Da Riva; IDR/UPM, Madrid, Spain
Dr Jose Meseguer, IDR/UPM, Madrid, Spain

IAC-06-E4.4.04 SPACE COMMUNICATION STATIONS IN SPAIN AND THEIR CONTRIBUTIONS TO SOLAR SYSTEM EXPLORATION.
Dr Jose M Urech. INSA. Madrid.
Mr Gregorio Rodriguez Pasero. Madrid.

IAC-06-E4.4.05 SOUNDING ROCKETS DEVELOPMENTS IN SPAIN
Dr. PEDRO SANZ-ARANGUEZ, Madrid Politechnic University, MADRID, Spain
Dr JULIAN SIMON, INTA, Torrejón de Ardoz, Spain

IAC-06-E4.4.06 THEN AND NOW: FROM INTASAT TO MINI AND NANO SATELLITES
Mr Inocencio Tato Ribera, Spain
Mr Jose Torres, INTA, Madrid, Spain

IAC-06-E4.4.07 THE HISTORY OF THE ARIANE LAUNCHER IN SPAIN
Mr. Miguel Angel Llorca, EADS CASA Espacio, Madrid, Spain

IAC-06-E4.4.08 HISPASAT SATELLITES PROGRAM - BACKGROUND, BEGINNING, EXPERIENCE AND BENEFITS FOR SOCIETY AND SPANISH SPACE INDUSTRY
Dr Pedro Pinto, Consultant, San Sebastian de los Reyes, Spain

P. Poster Session on History of Astronautics
Rapporteur Springer, Emily

IAC-06-E4.P.01 Euroavia the European Association of Aerospace Students
Mr Sergio Benitez, Escuela Universitaria de Ingenieria Tecnica Aeronautica, Madrid, Spain
ANNEX 2

E4. 41st HISTORY OF ASTRONAUTICS SYMPOSIUM
Honouring the 50th anniversary of the Space Era (Sputnik 1 and the International Geophysical Year, IGY). History of space science, technology and development, rocketry, personal memoirs. The history of rocketry and astronautics of India. The entire spectrum of space history, at least 25 years old, is covered.

Coordinators:
Steven J. Dick
NASA Headquarters - USA
Email: steven.j.dick@nasa.gov
Christophe Rothmund
SNECMA - FRANCE
Email: christophe.rothmund@sneecma.fr
Tony Springer
NASA Headquarters - USA
Email: tony.springer@hq.nasa.gov

E4.1. The International Geophysical Year, Sputnik 1 and the Space Race
Session honouring the 50th Anniversary of the Space Era. Invited space pioneers involved in the initiation and early conduct of the Soviet/Russian space programme (Sputnik 1), the International Geophysical Year (IGY) 1957-58 and the space race.
The political and programmatic implications of the space race and self-biographical memoir’s of early pioneers. Proposed papers by scholars researching the beginning of the space era.

Chairs:
Frederick I. Ordway
US Space & Rocket Center - USA
Email: ordmars@aol.com

Valery V. Glushkov
Institute of the History of Sciences and Technology named after S.I. Vavilov, - RUSSIA
Email: postmaster@ihst.ru

Rapporteurs:
Ake Ingemar Skoog - GERMANY
Email: ake.ingemar.skoog@t-online.de

Théo Pirard
Space Information Center - BELGIUM
Email: theopirard@hotmail.com

E4.2. Memoirs
Autobiographical and biographical memoirs of individuals who have made significant original contributions to the development and application of astronautics and rocketry.

Chairs:
Marsha Freeman
21st Century - USA
Email: krafft@erols.com

Hervé Moulin
IFHE - FRANCE
Email herve.moulin-hmi@wanadoo.fr

Rapporteurs:
Philippe Cosyn - BELGIUM
Email: Philippe.Cosyn@vrt.be

Richard Dowling
Space Media - USA
Email: rldowling@aol.com
E4.3. Organisational, Scientific & Technical Reviews
History of government, industrial, academic and professional societies and organisations long engaged in astronautical endeavours. Historical summaries of rocket and space programmes.

Chairs:
Philippe Jung
AAAF - FRANCE
Email: philippe.jung3@free.fr

Kerrie Dougherty
Curator Space Technology - AUSTRALIA
Email: kerried@phm.gov.au

Rapporteurs:
Emily Springer
AIAA - USA
Email: emilys@aiaa.org

Charles Lundquist
University of Alabama in Huntsville - USA
Email: lundquc@email.uah.edu

E4.4. History of Indian Contributions to Rocketry and Astronautics
Special session with invited and proposed speakers. This session will cover ancient rocketry and the origin (technical and political aspects) of the modern space programme of India.

Chairs:
Otfrid Liepack
Jet Propulsion Laboratory – USA
Email: otfrid.liepack@jpl.nasa.gov

Manoranjan Rao
ISRO - INDIA
Email: ranjananjali@asianetindia.com

Rapporteurs:
George S. James
Rocket Research Institute Inc, Eastern Operations Office - USA
Email: George.James@ee.doe.gov

Yasunori Matogawa
JAXA - JAPAN
Email: matogawa.yasunori@jaxa.jp
### ANNEX 3
Proposal for Establishing an IAA Program Committee

<table>
<thead>
<tr>
<th>Title of IAA Symposium:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of IAA Session(s):</td>
</tr>
<tr>
<td>IAC 2007 PLENARY EVENT:</td>
</tr>
<tr>
<td>50th Anniversary of the Space Era – Sputnik 1 and the International Geophysical Year</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposer(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Ingemar Skoog,</td>
</tr>
<tr>
<td>on behalf of the</td>
</tr>
<tr>
<td>IAA History Study Group 6.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary IAA Commission Preference: VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary IAA Commission Interests:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Members of Program Committee:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Int’l Astronautical Congress Sessions, stand alone Conferences, or any others). Please list below names of Session Coordinator (eventually), Session Chair(s), Conference Chair(s), Rapporteur(s), Members:</td>
</tr>
</tbody>
</table>

It is proposed that the History Plenary Program Ctee consists of max 10 persons from the following groups of organizers (Coordinators and chairs):

- Tentative chairpersons (alternatives; number TBD):
  - High-ranking Indian Official
  - IAA President Ed Stone
  - IAF President Jim Zimmerman
  - Fred Durant III
  - Karl Doetsch
  - TBD

- Moderator:
  - TBD

- Plenary Coordinators:
  - Fred Ordway (IAA)
  - A. Ingemar Skoog (IAA SG 6.7)
  - Valery V. Glushkov (RAS)

- Member of IAC IPC (TBD)
- Member of IAC LOC (TBD)
The objective of this History Plenary Event would be to celebrate the 50th anniversary of the space era, which originated by the launch of Sputnik 1 in 1957, and was a direct result of the International Geophysical Year (IGY) 1957-58. The prestige involved in a first earth satellite in orbit and the following competition for the new goals in the space exploration also resulted in the space race between the Soviet Union and the USA.

The main character of the Plenary Event could be a ‘moderated historical event’ with self-biographical contributions from pioneers and political decision-makers, and historical perspective inputs from the scholars and the other participants. Various background and historical ‘discussion-triggering’ inputs could be done by means of multimedia. The event would be guided by a moderator (TBD) with some space knowledge.

If possible the event ought to be documented by video, and transcripts could be published in the IAA History Symposia Proceedings series.

A possible link to the IAC Outreach Programme is worthwhile considering.

This event would be a rare opportunity to gather some of the very few remaining pioneers of the 1957-58 period and to give the audience some self-biographical knowledge of this historical event of the 20th century.

Today a few pioneers from the participants of the International Geophysical Year, the teams of Sputnik 1 and Explorer 1, and key personalities of the subsequent space race, are still alive:
Boris Chertok, Georgiy Grechko, James van Allen, Robert Seamans, Ernst Stuhlinger, Fred Durant, S. Fred Singer, Sir Bernard Lovell. (Search for further pioneers is underway.)

Also some others more indirectly involved like Sergey Khrushchev, Susan and John S. D. Eisenhower, Arthur C. Clark, and scholars on this subject, e.g. Roald Sagdeev and Asif Siddiqi, are also potential participants for a History Plenary Event.
Meeting(s), for which the Session is proposed
(International Astronautical Congress, COSPAR congress, etc. Please indicate tentative dates)

Venue: 58th International Astronautical Congress, New Delhi, September 2007

Appropriate Timing: Monday pm (First day of Congress); ca 2 hrs

Anticipated Size of Audience: 300-400 persons

Target Community:
All congress participants, general public (?), press

Support Needed:
The invitation of some of the pioneers from the IGY, Russian Sputnik 1 team and US early space programme might need some financial support. The preparation and conduct of the Plenary Event could require some multimedia preparation. These issues will be discussed with the IAC IPC and LOC after clarification of Plenary Event preliminary plan and participation nomination.

Potential Co-Sponsors:
Space Agencies,
Russian Academy of Sciences (RAS) (TBC)

Date: February 12, 2007  Signature: A. Ingemar Skoog