



Agenda

Commission VI Meeting

1000-1200 26 September 2010

- Welcome and Introduction of Attendees
- Brief Summary of Daejeon IAC
- Overview of Prague IAC
- Proposals for Capetown IAC
- Status of Nov 17th 50th Celebration in DC
 - Participation of Commission VI members
- Report from Study Groups
 - 6.3 Interstellar Message Construction
 - 6.7 50th Anniversary of the Space Era in 2007
 - 6.8 Space Expectations
 - 6.9 The Architecture of Space: Tools for Development in the 21st Century
 - 6.10 The 50th Anniversary of the Space Era Edition of the IAA Multilingual Dictionary
 - 6.11 Competency Based Space Systems Engineering Education
 - 6.12 Lunar Laser Reflectors for First Moon-Light timing and Navigation Applications
 - 6.13 Space Terminology for Africa
 - 6.14 Communications with Extraterrestrial Intelligence
- Ideas for next Space and Society Conference
- AOB – interest in being an officer of Commission VI, other



Report to the SAC

26 Sept 2010

Commission VI

Peter Swan - Chair
Geoffrey Langedoc Vice - Chair
Olga Bannova - Secretary

1. Commission VI convened on the Academy Day with the following agenda:
 - Welcome and Introduction of Attendees
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 - Ideas for next Space and Society Conference
 - AOB – interest in being an officer of Commission VI, other
2. Welcome: The chair, co-chair, and secretary were in attendance along with many of the voting members and friends of Commission VI. The following attended the Commission VI meeting: C. Swan, P. Swan, G. Langedoc, A.I. Skoog, D. Vakoch, R. Malina, K Doetsch, P. Jung, Y.J.A. Chung, Brent Sherwood, Igor Kabashkin, Christinan Lardier, Kerrie Dougherty, Otfried Liepack, Lubos Perek, Jeff Maclure, Dale Fester, and Yuriy Moshnenko.



3. Brief summary of Daejeon IAC Sessions: During the Daejeon IAC, Commission VI participated in the following activities and successfully stimulated much discussion relative to its interests in Space and Society. Within the 20th Symposium on Space Activity and Society, Commission VI organized three main sessions:

- Technology Transfer Trends - had eight papers scheduled
- Space Expectations – How the Public Views Space Activities - had 11 papers scheduled
- The Architecture of Space: New Frontiers of 21st Century Space Architecture and Entrepreneurship for a New Generation of Explorers - had six papers scheduled

In addition, a Technical Interactive Session on Space Activity and Society (which would comprise papers not selected for the main E5 sessions) was also planned; and, it had 9 interactive papers scheduled. Commission VI also contributed to the D4.2 session on Space Elevators and the D3.4 Joint session on Space Technologies and Program Management practices.

The History Group held three sessions inside the 43rd History of Astronautics Symposium. These sessions related to Memoirs and Organizational Histories; Scientific and Technical Reviews; and History of Korean Contributions to Astronautics.

4. Overview of Prague IAC sessions: During the Prague IAC, Commission VI will participate in the following activities.

Within the 21st Symposium on Space Activity and Society, Commission VI organized three main sessions:

- E5.1. Future and current space missions: including and expanding all aspects of human life aboard and in other worlds – ten abstracts submitted
- E5.2. Space Expectations: Involving the Public in Space Activities – ten abstracts submitted
- E5.3. Space Architecture: Exploration and Tourism – 15 abstracts submitted

In addition, a fourth session was organized inside Space Activity and Society:

- E5.4.-E1.6. Water from Space: Societal, Educational and Cultural Aspects – nine abstracts submitted within both sessions



The History Group will hold four sessions inside 44th History of Astronautics Symposium. These sessions relate to IAA 50th Anniversary, Memoirs and Organizational Histories, Scientific and Technical History, and History of Czech Republic contributions to astronautics. Commission VI also is contributing to the D4.3 & D4.4 sessions on Space Elevators and the D3.4 Joint session on Space Technologies and Program Management practices. As the commission has done for the last few years, we are supporting the Commission I activities on SETI, to include supporting a session.

5. Proposals for South Africa IAC: During the South Africa IAC, Commission VI will participate in the following activities, similar to the past two symposia:

Within the 22st Symposium on Space Activity and Society, Commission VI will organize three main sessions. In addition, a fourth session will be organized around space and water. The History Group will hold four sessions inside the 44th History of Astronautics Symposium. Commission VI also will be contributing to the session on Space Elevators, the Joint session on Space Technologies and Program Management practices, as well as the special topic of space and water (continued from 2010).

6. Commission VI/IAF cooperation: Commission VI and the new Space Societies Committee are working together to ensure that the space involvement of the public increase over the years.

7. Study Groups:

- 6.3 Interstellar Message Construction
- 6.7 50th Anniversary of the Space Era in 2007
- 6.8 Space Expectations
- 6.9 The Architecture of Space: Tools for Development in the 21st Century
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- 6.13 Space Terminology for Africa
- 6.14 Communications with Extraterrestrial Intelligence

6.3 Interstellar Message Construction: This study group is almost finished. The first draft of the final report is being accomplished which will lead to red teaming and final approval in the near future. Some major advances have occurred and they need to be included in the report, as



such, the study group will turn in a status report showing an extension to fall of 2011 for the report.

6.7 50th Anniversary of the Space Era: This group expects to be completed by Dec 2010. Some major history volumes will be printed this year and others will complete editing prior to the transition to the Permanent History Study Group.

6.8 Space Expectations: This study group has accomplished most of its tasks. It has transferred the operations of the web based survey to the Space Generation Executive Committee and is in the process of writing the final report. The red team review has occurred and the inputs are being inserted this month into the final report. The Final Report will go to the Academy for final publication by the end of the year.

6.9 Architecture of Space: This report has been returned to the authors for major rewrites. The authors have agreed to this action and have “jumped into” the re-write and rearrangement of chapters to be consistent with the desires of the Board of Trustees. The chairs are working with the Secretariat. The goal is to finish editorial and have the Final Report published by the end of 2010.

6.10 50th Anniversary of the Space-Era Edition of the IAA Multilingual Dictionary: This study group is very close to closing its activities and starting another effort under another study designation. Parts of the final report have been published. These final actions should occur this year.

6.11 Space System Engineering Education: No further input has been received for this SG despite a number of reminders.

6.12 Lunar Laser Reflectors for First Moon-Light Timing and Navigation: This effort has been “kicked-off” and should have reported its first major activities during the Prague IAC study group meeting. –this did not happen.

6.13 Space Terminology for Africa: This is a new study just starting.

6.14 Communication with Extraterrestrial Intelligence: Scientific, Technical, Societal, and Legal Dimensions of Active SETI: This has been kicked off and will post a schedule soon. It was suggested that the title of the SG to be changed to avoid confusion with other existing study groups. A new name was proposed: “Active SETI: Scientific, Technical, Societal, and Legal Dimensions.”

New Study Groups



As several of the study groups are due to terminate in 2010, the Commission leadership is making suggestions for topics to its members and interested others. There are two new study groups being proposed. The forms will be filled out this week in Prague and circulated to the commission members.

8. Ideas for future Space and Society Conferences: One topic of interest to all members of this commission is the continuation of the tradition of having a conference every two years or so. We have had three conferences in the past based upon Space and Society and look forward to a follow-on activity. During the session today, much discussion occurred and four good ideas surfaced.

8a. The idea is that there should be some public interest in the possible denial of access to Low Earth Orbit due to catastrophic growth of space debris. After much discussion, it was decided that the effort should be refocused into a plenary in Capetown.

Action Item: Develop the words and structure for a plenary at Capetown on Public Impact of LEO denial. – K. Doetsch & P. Swan

8b. The second idea has to do with the concept of archeology of space activities and how to: identify, classify, designate and support historic locations that saw the development of rocket and spacecraft technology over the last century. This would reflect the long and varied history of our industry with its impact upon the communities that supported these advancements. This could be tied into worldwide heritage sites sponsored by UNESCO. An academy study could assist in the designation of potential locations and establish criteria for selection of space sites.

Action Item: P. Jung and K. Dougherty to discuss during the Permanent History Committee meeting on Monday.

8c. Public Outreach – Issues of Human Exploration beyond LEO.

Action Items: J. Maclure and P. Swan to develop study proposal form.

8d. Native Peoples and Space. The idea is that the future will bring many changes to the environments of native people. Space could enable more knowledge and preparation [with warning] for potential catastrophes.

Action Items: P. Jukkola and P. Swan, develop form for a study proposal.

8e. Space Architecture Symposium was proposed to be organized in together with AIAA Space Architecture Technical Committee during IAC 63 in 2012.



9. AOB:

The ability to expand in studies, symposia and support to the IACs requires new members of Commission VI. As a result, a sub-committee has been created to investigate “more robust involvement.” This would have two factors; 1 – provide information and invite new corresponding members to the commission meetings, 2 – initiate an effort to ensure that the proper individuals are approved for Academy membership supporting Commission VI.