Report to the SAC 23 March 2010 Commission VI

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

- 1. **Commission VI convened** at the Academy with the following agenda:
- Welcome and introduction of newcomers
- · Ideas for future Space and Society Conferences
- · Brief summary of Daejeon IAC Sessions
- Overview of Prague IAC sessions
- Proposals for South Africa IAC
- Overview of IAA approaches to space and society issues, especially Commission VI/IAF cooperation
- Study Groups [Permanent Study Group History, Reports from Current Study Groups, New Study Group Ideas]
- · AOB
- 2. **Welcome:** The chair and co-chair 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, D. Raitt, G. Languedoc, A.I. Skoog, D. Vakoch, A. Bureaud, R. Malina, K Doetsch, B. Foing, P. Jung, H. Moulin, and Y. Matogana.
- 3. 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 two good ideas surfraced.
 - 3a. The first idea is that Space and Society could focus on native populations around the world and show how remote sensing has impacted their world. This could range from the straightforward idea of direct support from mapping of their regions from space all the way to the concept of having ground stations in their areas and the increase in local employment. The impact of space upon the native culture and population could be discussed as well.

3b. 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 on the communities that supported theses advancements. This could be tied into worldwide heritage sites sponsored by UNESCO. The academy study could assist in the designation of potential locations and establish criteria for selection of space sites.

3c. Much discussion centered around the issues of choosing and supporting space and society conferences:

Support - It takes a dedicated effort to run a conference well and requires one person to volunteer to be the leader, orchestrator, emailer, do'er, and lackey. This one person needs some type of support to put on the conference such as the ESTEC conference bureau, a national space agency, or a large company with resources.

Funding – Most space conferences have a fee and associated expenses for each attendee. Many who would be interested in space and society topics do not have the deep pockets of space professionals and their organizations. As such, any Academy space and society symposium focused around artists must recognize that registration fees are exclusions to possible attendees.

Tie Together – It was suggested that an Academy Space and Society symposia could be an "add-on" workshop day to a larger activity. This could significantly increase commitments of individuals as well as organizations. One suggestion is to have a mid-2011 mini-symposium tied to the regional Academy days of Mexico, US and Canada. (one event--three regions)

Action Items: Geoff will research an event within Canada that his organization could leverage for an Academy Space and Society symposium (one or two day workshop). He will focus on the Canadian environment for the time being.

Action Item: Karl will look at the Canadian indigenous peoples activities (maybe US and Mexican as well) that could be leveraged to expose a wider audience to space and it's societal impacts.

Note: The conclusion is that the Space and Society commission should expand its reach and see if it could be tied into cultural events NOT related to space. Some suggestions are the ARTS, Anthropology, history, music, or sports.

Note: Currently, there are some major efforts in the area of space archeology. In September 2010, the British Interplanetary Society and the University of Birmingham are holding a 2 ½ day conference. They will discuss heritage sites, UNESCO processes and lunar opportunities. Maybe this could be a follow-on topic for a S&S symposium.

Note: In addition, the space architecture study group has been invited to support a series of workshops dealing with "sustainability on the Lunar Surface: Space Architecture." Olga should contact Bernard Foing on this activity (April and Fall 2010).

Conclusion: to enable an Academy sponsored Space and Society workshop, the "owner-volunteer" must propose topic, dates, who will do which tasks, timeline to be ready, and additional support they will require. Being prepared to support the conference from Commission VI is critical to success.

- 4. 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 8 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 6 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

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.

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.

5. **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
- In parallel, this topic is being proposed as a Highlight lecture with a commercial astronaut as the speaker.

The History Group will hold four sessions inside 43rd 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 D4.4 session 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.

6. **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 44rd 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).

7. **Commission VI/IAF cooperation:** Commission VI is trying to support across both the Academy activities and all the new efforts within the IAF infrastructure. However, as there seems to be little concern for overlap, the efforts are hindered by simple time overlaps. It would seem logical to expand the week by one more day and have the two organizations focus on half the week. The Academy could accomplish its tasks by Wednesday 1300 hrs. The IAF could then have 2 ½ days to complete its activities. This would enable individuals to meet their obligations across both major organizations. If not this, then block on Tuesday AM should be reserved as ONLY ACADEMY focus on the commissions, and Thursday am should be reserved as ONLY IAF focus on selection of papers.

8. Study Groups:

- **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 this last month 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 [approved by the commission at this meeting].
- **6.7 50**th **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 estimate is that the document will be submitted for Red Teaming by Aug 2010.
- **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.

6.10 50th Anniversary of the Space-Era Edition of the IAA Multilingual Dictionary

This study group is very close to closing it's activities and starting another effort under another study designation. Parts of the final report have been published. A full day meeting will be held Thursday to continue progress on the dictionary.

- **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 be reporting its first major activities during the Prague IAC study group meeting.

New Study Groups

Since several of the study groups are due to terminate in 2009, the Commission leadership is making suggestions for topics to its members and others interested. There are two new study groups being proposed:

SG 6.x -- :"Communications with Extraterrestrial Intelligence: Scientific, Techical, Societal, and Legal Dimensions of Active SETI." This one will be voted upon by the commission voting members within two months with proposal to the Academy staff well before Prague with its first meeting there.

SG 6.y - "Space Archeology" This study is not quite to the proposal level. Probably at Prague.

9. **AOB:** The commission will start an effort entitled:

"Bring a friend to a Commission VI activity."