

IAA Commission IV Meeting

26 Sept 2010
Hotel Corinthia Tower, Prague

AGENDA

1 Welcome

The chair of Commission 4, Amnon Ginati called the meeting to order at 10hrs. Members of Commission 4 and other attendees were asked to introduce themselves.

2 Review of Minutes from March meeting at IAA HQ

Amnon covered the high points of the Paris meeting and noted that the meeting minutes are available on the IAA website. Items from the minutes include the topics discussed below.

- a) For the purposes of the introduction he began with a discussion of the purview of Commission 4 which is the entire scope of space activities and space activities role in helping society. He mentioned that we of Commission 4 were asked for ideas for the Cape Town activities. We have forwarded to the IAA detailed proposals for the IAC 2011 meeting theme: Space for Africa – Africa in Space. One of the roles that we can fill is in creating a bridge between IAF and IAA and that we want to coordinate with UN activities. The IAC in 2011 in Africa is a chance to combine these elements - our goal is to establish a Commission 4 working group to address the particular opportunities presented by the 2011 meeting.
- b) At the Paris meeting Dr. S. O. Mohammed (Nigeria) presented plans and initiatives. African IAA members are interested in having more conferences. The starting point is an African lead study on the use of equatorial plane with plans towards a stand-alone conference. Dr. Mohammed asks Commission IV for support, approval and review which he received based on the delivery of an electronic version of the request from the IAA Secretariat.
- c) Dr. Xiang Zhou (China) presented a new proposal from China for a study group on Cooperation Programs for Global Environment Impact related to the topic disaster monitoring/management in a very strategic approach. China is seeking support and participation of international partners and requests from IAA suggestions for international members, especially members involved with other studies. Travel and accommodation would be covered for those who would like to participate in the initial meeting in May 2010 in Beijing. The chairman encouraged open discussion of the topic, interfaces and synergies with study group 4.9 as well as with study group 4.7. Members from Commission 4 attended the Beijing meeting.

Commission 4 welcomed both initiatives (b & c) and requested executive summaries (1-2 pages) of the initiatives to distribute through Commission IV members and study group participants to attract potential members. This has not yet been delivered.

3 Study Group Activities

3.1 Overview

A brief overview of the activities and purpose of study groups was presented and the Chairman called for the Study Group reports to be summarized. We noted that the Study Group reports have been posted on the web. The open study groups are S4.1, S4.5, S4.9 and a joint one with Comm 5 and Comm 1 (S5.9) with Comm 5 as the lead.

3.2 Status/Progress reports from SG chairpersons

SG 4.1 – Knowledge Management for Space Activities (J. Holm)

The study group is concluding in 2010. Three conferences were held with the final one in 2010 in Darmstadt. The goal is to create an ongoing community and forum in addition to the IAC session. The outcome will not only be the study group report but also ontology to create and foster information exchange in the space community via website. The study group established collaboration space (via a Google group) with about 40 members and is still receiving new membership requests.

For detailed status see the SG 4.1 web page at <http://iaaweb.org/content/view/89/154/>

SG 4.5 – Hitch-Hiking to the Moon (L. Alkalai, presented by T. Balint)

An ISS related study was performed under the umbrella of the study group with results presented in Prague. Recent meetings took place in Berlin 2009, at AGU 2009 and at LPSC 2010. Dr. Alkalai began with a review of the current missions. The core idea is that access to the moon is currently a privilege of the larger agencies so how do we open up access to the Moon? The principle to be adhered to, ideally, is that anyone going to the moon should provide a ride to other people. Chandrayaan 1 mission had a call for payloads outside of ISRO and LCROSS resulted from solicitation for secondary payloads. Leon also reported that there is an interesting approach to be presented at the Friday session that would deliver 6 payloads of 50 kg each, assembled in stages by astronauts in LEO on the International Space Station as part of the Space Utilization Initiative. That study has been completed and the paper is to be presented on Friday. On Thursday the study group will hold a meeting to discuss the plans to close the report in 2010.

For detailed status see the SG 4.5 web page <http://iaaweb.org/content/view/244/376/>

SG 4.7 – Integrated Applications Services (A. Ginati)

The study group is on hold and looking for volunteer key person to be focal point and create momentum. Some new interesting initiatives and activities were launched recently by the European Union and the ESA including new telemedicine initiatives in Africa.

For detailed status see the SG 4.7 web page <http://iaaweb.org/content/view/359/507/>

SG 4.8 – Space Systems Cross-Compatibility (M. D'Errico)

The last status was provided in September 2009 at the IAC. The study group is on schedule with having a new draft distributed before the spring meeting and planning for a final draft by IAC2010. The final report will be delivered for the Berlin symposium in 2011. To addressing some concerns regarding progress: group had issues in sharing technical information due to export control regulations in various countries and therefore the focus was shifted more to programmatic side.

For detailed status see the SG 4.8 web page <http://iaaweb.org/content/view/314/459/>

SG 4.9 - International Aerospace System for Monitoring of Global Geophysical Phenomena and Forecasting of Natural and Man-Caused Disasters (presented by Sergei Zolotoy)

The first symposium was organized in 2009 and first results of the study group were presented at UNCOPUOS in 2010 and approved. The Cyprus Symposium resulted in a concept, ready for distribution to members of the study group and commission IV members for review. This is still an open action item. There was a presentation to the UNCOPUOS available at www.unoosa.org/pdf/pres/copuos2010/tech-32E.pdf from 2010-06-17. They have published a book and held an additional symposium (see <http://www.spacesystems.ru/>)

SG5.9 Policy and economic aspects of space weather (L. Paxton)

Following the Korea IAC a proposal for forming an IAA Study Group on this topic was prepared. The Study Group (S 5.9) was subsequently formally approved by IAA's Scientific Activities Committee (SAC) in March 2010¹.

The next meetings of the Study Group are planned to be held during the 61st International Astronautical Congress (IAC) in Prague, Czech Republic, taking place from 27 September to 1 October 2010 in connection with IAA Symposium/Session E3.2 on "Policy and economic aspects of space weather" and during the forthcoming 48th session of the UNCOPUOS Scientific and Technical Subcommittee, taking place from 7-16 February 2011 in Vienna, Austria.

The 1st Meeting of the IAA Study Group on International Cooperation on Space Weather was held on 15 February 2010, on the margins of the 47th Session of the Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space.

The Meeting was attended by 16 Study Group Members. Participation in the Study Group is open to all those with an interest/stake in space weather-related issues. Study Group members participate and act in their personal capacity.

Status on the Summit in Washington, DC

There will be a Plenary Session 330pm suite #2 on the Space Agency Heads meeting. Arnoldo Valenzuela will coordinate with the planning committee and provide an update to Commission 4. There were some recommendations and summaries of the 4 studies. These will be presented for approval to the Board of Trustees, September 28th, 2010.

Program Committee Activities

3.3 Overview

3.4 Space Summit Working Group status

3.5 Status reports from PC chairpersons for Prague

Commission 4 is particularly concerned that the schedules for the various study groups and the Commission meetings are neither widely distributed nor readily available on either the IAC or IAA web sites. At times significantly conflicting information is published as to times and locations.

Commission 4 is also concerned that once again there is an overlap between sessions in the B4.4 and D5.2 tracks. We attempted to coordinate this with the program planners and had seen versions of the schedule where there were no conflicts.

Even though Commission 4 has the highest rated Symposia based on the established metrics (as reviewed during the Saturday IPC meeting), we are concerned that the long time between the review of papers (March) and the conference (October) leads to an increased likelihood that conflicts will arise that prevent presenters from attending. Since talks have been rejected rather than placed in a poster session it is hard to make good use of the time.

The Small Satellite Program Committee meeting will be held Tuesday, meeting room 3, at 13:15 hrs. The committee and Commission 4 members were heavily involved in the first Nanosat Exhibit at IAF booth d2

The session chairs are satisfied with the number of talks uploaded. There are 15 session slots devoted to Comm 4 activities.

IAC 2011 Status

The Chair of commission 4, Amnon Ginati, presented a lengthy overview of the issues associated with telemedicine and the need to provide a viable focus area for interaction with Africa that addresses the needs of Africans for a special IAC Event: The Space for Africa – Africa in Space.

Organizational Issues

There was an extensive discussion of the role of the Permanent Committee on Small Satellites under the AOB category. The discussion took an additional hour and involved many commission 4 participants.

4 Acta Astronautica Journal status

One of the issues that Commission 4 is particularly sensitive to is that it takes too long for articles to appear in Acta and there is no way for authors to track the status of their articles. There should be the ability to see which papers have been nominated for publication after presentation at the IAC and then which ones have gone on to review etc.

The other issue is that the papers presented at the IAC are only accessible if you have the DVD or buy the paper through the AIAA site. This does not provide much exposure of the presentations which leads to a very low impact factor.

5 Report to the Scientific Activities Committee and to the Board of Trustees

6 Next Meeting & Action Items

The next formal meeting will be in Paris at the IPC planning meeting for IAC 2011.

7 AOB

The Commission is concerned about the way in which the Permanent Committee has arisen. Small satellite missions have long been the focus for Commission 4 activities. Though there are other activities in Commission 4, small satellites and lower cost approach to all problems has been a central tenet of Commission 4 activities. While one might argue that Small Satellites could be placed under any Commission the logical place and the historical place is in Commission 4.

Commission 4 is unable to determine added value from establishing a permanent committee and recommends the following:

- Rhoda Hornstein (program chair for B4.4) to be named on the permanent committee

- Rhoda Hornstein to review operations for permanent committee
- There should be a formal discussion on it in Paris, in March 2011, but earlier discussions are needed
- Two months for reviewing the Terms of Reference (TOR)
- Current Permanent committee to provide TOR to Commission 4
- Broader approach to the problem of attracting younger people to Commission 4

Several views from Commission 4 were expressed. Rhoda said it was worth considering that:

- the permanent committee be connected to Small Satellites
- the permanent committee transcends all commissions (reflecting the cross cutting nature of small sats)

Vice chair Leon Alkalai suggested the:

- IAA should keep the Permanent Committee under Commission 4, but require that it transcend between other commissions as well.

Given the broad nature of these comments further coordination of this issue seems warranted.

Rainer Sandau presented an overview of ISPRS coordination. A MOU between the IAA and ISPRS will be completed soon. The near-term goal is to have IAA participation in the next ISPRS in Melbourne Australia. See <http://www.isprs.org/> for details about the ISPRS.

Commission 4 has an Action Item to let Rainer Sandau know whether we want to do something with them. This action item needs to be completed by Oct 12 for their 2012 quadrennial conference

23 attendees

See attached attendance list for details