Minutes

IAA COMMISSION 1 MEETING Space Physical Sciences

Held during the International Astronautical Congress Vancouver, Canada 03 Oct 2004

Meeting Attendance

R. M. Bonnet, R. Farquhar, W. Huntress (Vice-Chair), S. Krimigis, C. Maccone, S. McKenna-Lawlor, V. Reglero, H. P. Shuch, J.V. Zimmerman.

Agenda

- 1. Welcome
- 2. Minutes from the July meeting
- 3. Study group activities (leaders report)
- 4. New study groups and leads
- 5. Membership renewal
- 6. Draft UN report
- 7. Vancouver IAC status
 - a. Technical sessions
 - b. Plenary events
 - c. Highlight lectures
- 8. Fukuoka IAC status
 - a. Technical sessions
 - b. Plenary events
 - c. Highlight lectures
- 9. Next meeting
- 10. Other business
- **11.** Adjourn

1. Welcome

Wes Huntress (Vice-Chair AC1) opened the meeting and welcomed the very small (9) number of Academicians present.

2. Minutes from the July Meeting

Approved by acclimation.

3. Study group activities

Wes Huntress reported on activities involving the IAA Cosmic Study "The Next Steps in Exploring Deep Space" released at the Paris meeting. A plenary panel session will be held on this study at this Vancouver IAC on Thursday, Oct. 7, and a presentation is scheduled in the U.S. to Congressional members and staff on Oct 12 in Washington,

D.C. The Jet Propulsion Laboratory has agreed to publish a limited number of hard copies, about 100 so far, and these have been sent to influential individuals in our community in Europe, Japan and the U.S. including ESA and NASA. The entire report is available as a pdf file on the IAA website. A condensed version of the report has been prepared and about 300 copies will be printed, again by JPL. There was no one present to give a report on the SETI study. Wes Huntress later reported to the SAC that Commission 1 did not accept the "Quantum" study (Hansson) and the SAC determined to delete the study. Hansson is free to re-propose to an appropriate Commission. Thus the only remaining active study in Commission 1 is the SETI study.

4. Ideas/proposals for new Study Groups

There were no proposals put forward at this meeting for new study groups. Several potential ideas were discussed including a review of those discussed at the last meeting in Paris. A list of potential studies derived from the "Next Steps..." study were presented by Huntress. Two of these received the most interest from those present.

- Science enabled by space telescopes at Sun-Earth L2 and the requirements for human construction and servicing. Bob Farquhar indicated that about one year from now he would be able and interested in conducting such a study with the assistance of Ralph McNutt of the Applied Physics Lab in the U.S.
- 2. Radiation hazards and risk mitigation for humans at Mars. Susan McKenna-Lawlor was interested in conducting this study (the SAC later requested that any such study be done in cooperation with Commission 2).

These two potential leaders should be encouraged to submit proposals. C. Maccone reported that his lunar farside radio study, having been deleted as a Commission 1 study, was being prepared as a technical paper for submission to Acta Astronautica. He will be proposing a new study to Commission 5 on environmental protection of the lunar farside. He also may propose a study on relativistic interstellar flight in a few years.

A short discussion was held on the idea introduced in Paris for a study on science missions enabled by nuclear electric propulsion. The tentative conclusion for the time being is that there is already a great deal of work being done on this by NASA and the U.S. National Research Council. A joint study involving the IAF (Q) or Commission 3 may yet be considered at a future time.

5. Rejuvenation of IAA membership

This topic was part of the discussion of new study groups; the issue being the difficulty to finding passionate individuals willing to take the time and effort to conduct cosmic studies. Huntress reminded the attendees of the action to submit proposals for new members to the Chair before Christmas. We should be thinking particularly of young academicians and involving scientists, whether IAA members or not, on new cosmic studies.

6. Draft UN Report

Huntress reported on the draft UN report including Peter Wenzels' comments on overlap with the COSPAR report and Jerry Grey's reply that some overlap is to be expected and should not be an issue. No comments from the attendees.

7. Vancouver IAC status

There is one technical session on SETI, one plenary event on The Next Steps in Exploring Deep Space, and no highlight lecture.

8. Fukuoka IAC status

As always there is a SETI symposium, the 34th, at the Fukuoka IAC. The call for proposals for plenary sessions and highlight lectures will be issued soon and we should consider responding. It was agreed that a timely topic would be the Cassini-Huygens mission (reinforced later at the SAC meeting). We should consider a joint plenary session with IAF symposium Q as well as a highlight lecture **[ACTION required].**

9. Next Commission 1 meeting

IAA Commission 1 meeting, Monday 21 March 2005, 2-5 pm, IAA Headquarters, Paris.

10. Any other business

There was none.

11. Adjourn

Huntress thanked all participants and closed the meeting.

---- submitted by Wes Huntress