

IAA Commission 1 'Space Physical Sciences' Meeting  
Sunday, 23 September 2007, 8:30 am, in room G 01 at the Hyderabad  
International Convention Center, India.

**Minutes of the meeting**

**Meeting Attendance:**

Gerhard Haerendel (chair), Nickolay Smirnov (secretary), Stamatios Krimigis, Bernard Foing, Susan McKenna-Lawlor, Claudio Maccone, Antonio Viviani, Ralph McNutt, Stephan Ulamec, David Kendall, Seth Shostak, Mazlan Othman, Ji Wu, Ranganath Navalgund, Hans Sunkel, Lou-Chuang Lee.

**Agenda:**

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| 1. Welcome and adoption of agenda                                       | Chairman          |
| 2. Minutes from the meeting on 20 March 2007 in Paris                   | Secretary         |
| 3. Action items from the Paris meeting                                  | Chairman          |
| 4. Study Group activities   |                   |
| (a) Revision of SETI Position Paper of 1996.                            | Seth Shostak      |
| (b) Update on status of "Next Steps for Human Expl                      | Bob Farquhar      |
| (c) Update on status of "Radiation Hazards en route.."                  | S. McKenna-Lawlor |
| (d) Any new proposals   |                   |
| 5. Preview of Commission 1 relevant events at the 58th IAC at Hyderabad |                   |
| 6. Ideas for the 59th IAC at Glasgow                                    |                   |
| 7. Nomination of a 10th member  |                   |
| 8. A Two-Years plan of Commission 1                                     |                   |
| 9. Any other business   |                   |

**1. Welcome**

Gerhard Haerendel, Commission 1 Chair, was chairing the meeting. He warmly welcomed the attendees. Participants introduced themselves.

**2. Minutes from the meeting on 20 March 2007 in Paris**

These were approved.

**3. Action items from the Paris meeting:**

1. Susan McKenna-Lawlor will prepare drafts of letters of invitation to join the SG 1.5 and send to Wes Huntress for approval and signing. - That was done – details were discussed during study group activity report.
2. The data on the SG 1.5 will be placed on the web by Susan McKenna-Lawlor. That was done.
3. Secretary will take care of posting on the web the agenda of the Commission meeting as early as possible, but not later than 1 week prior to the meeting. – It was impossible to place the agenda on the web for this meeting as the IAA web was down. The agenda was sent to committee members by the Chairman.
4. Claudio Maccone will invite Seth Shostak to the Commission 1 meeting to explain proposed changes to the transmission protocols endorsed by the IAA SETI Permanent Study Group. These have a bearing on both passive and active SETI. The Chairman thanked Seth Shostak for attending the meeting in Hyderabad.

5. Nickolay Smirnov will bring together Susan McKenna-Lawlor and Inessa Kozlovskaya to discuss joint efforts within SG 1.5 team. – That was done on the day after the Paris meeting.
6. Susan McKenna-Lawlor will present an interim report to the Commission 1 in one year by the next Commission 1 meeting in Paris in March 2008. – **That was confirmed.**
7. Bob Farquhar will organize at 59-th IAC in Glasgow, 2008 a technical session based on the results of SG 1.4 efforts: “The Next Steps for Human Space Exploration: What are the Alternatives?” – Bob Farquhar was absent at the meeting, but Secretary informed based on the e-mail exchanges, that a regular session was included in the Program of Glasgow meeting.

**Mr. Nair, Vice President, attended the Commission meeting.**

In a short speech he warmly welcomed the Commission Members. The attendees introduced themselves.

Gerhard Haerendel, the Commission 1 Chairman, thanked Mr. Nair for coming and sharing part of his time with Commission 1.

**4. Study Group activities**

**(a) Revision of SETI Position Paper of 1996.**

Seth Shostak

One of the clauses in a previously proposed component of the protocols dealing with SETI have been revisited by the IAA SETI Permanent Study Group, of which Shostak is the Chair. In particular, there was considerable discomfort with the clause that no communication shall be sent by any state unless approved by an International body. It is requested that this phrase be changed to: “No communication in response to a detected signal should be sent .....”

Tom Krimigis and Nickolay Smirnov suggested to state more precisely which international body should be responsible for taking the decision. Will it be UN, or IAA, or the SETI Study group? Gerhard Haerendel suggested to keep this ambiguous, as no one knows, which international bodies will exist by the time of a detection.

The suggested changes were approved.

Finalizing the discussion Gerhard Haerendel stated, that Mankind should move towards systematic, active SETI. That should be its obligation.

Later, the recommendation of the Commission 1 on the revision of the SETI position paper was reported to the Science Activities Committee by the chairman.

**(b) Update on status of "Next Steps for Human Expl..."**

Bob Farquhar was absent, Ralph McNutt informed of the plans to organize a session in Glasgow, where the study group members will deliver their results in the form of presentations.

Second, meeting of the study group members in Hyderabad was planned.

**(c) Update on status of "Radiation Hazards en route to Mars .."**

S. McKenna-Lawlor's

Study is going on. Now most of the invited team members are involved in this work. Some scientific discoveries had already been made with respect to analyzing the statistics of interplanetary shock and particle arrival at Mars Express. Susan had a question as to who should be responsible in future for signing letters of invitation to join her study group as Wes Huntress is no longer Chairman. Gerhard Haerendel, the present Chairman, empowered Susan to sign such letters of invitation herself.

**(d) Any new proposals**

No new proposals were suggested.

## **5. Preview of Commission 1 relevant events at the 58th IAC at Hyderabad**

Bernard Foing invited Commission 1 members to attend the A3 Symposium on space exploration (over the whole week), where a lot of exciting results from the Moon, Mars and the whole solar system, and future missions concepts were to be discussed, as well as the IAC plenary panel on global exploration.

Nickolay Smirnov and Antonio Viviani invited Commission 1 members to attend the A2 Symposium on Microgravity Science and processes to learn the latest results of scientific experiments in Space.

## **6. Ideas for the 59th IAC at Glasgow**

Bernard Foing suggested a plenary on Space exploration, inviting as panelists not only heads of Space agencies, but people from different stratus of society: businessmen, scientists, engineers, teachers, and candid representing the views of general public and societal aspects. The idea was considered interesting.

Tom Krimigis draw the attention to the fact that the end of June 2008 would be the end of Cassini-Huygens nominal mission. It would be good to have a highlight lecture in Glasgow on the results of this mission.

Gerhard Haerendel informed that on July 14-18, 2008 there would be held the bi-annual COSPAR Scientific Assembly meeting in Montreal. There will be a celebration of the 50-th anniversary of COSPAR. As a Chairman of the Celebration Committee he also asked for ideas and suggestions, and proposed to have a Commission 1 meeting during the event.

## **7. Nomination of a 10th member**

David Kendall from Canadian Space Agency was nominated.

## **8. A Two-Years plan of Commission 1**

Chairman suggested that final reports from the on-going study groups are expected within the present chairmanship.

Bernard Foing suggested that more science should be included in the agenda of the Commission.

Seth Shostak suggested to involve astrobiologists to work more closely with Commission 1.

Susan McKenna-Lawlor informed participants that investigations within her study group of particle radiation to be expected at the surface/subsurface of Mars would be considered by biological experts in the context of the potential survival of dormant bacteria cyro-preserved in the Martian permafrost.

## **9. Any other business**

Bernard Foing suggested to discuss the conferences to be supported by the IAA, and to distribute the list of those conferences via e-mail among the attendees of the meeting.