

IAA Commission III « Space Technology & System Development »

Bremen, 29 Sept 2003

Introduction

The new Commission Chair, Mr. Hans Hoffmann, opened the meeting. Dr Peter Swan volunteered to be the Bremen meeting secretary in absence of the nominated one André van Gaver, absent and excused.

Participants Peter Swan, Heinz Stoewer, D.E. Koelle, Wendell Mendell, Fenggan Zhuang, Horst Rauck, Hans Hoffmann, William H. Siegfried, Dale Fester, Delma Freeman, and Claudio Bruno.

Study groups The first point in the agenda was to discuss the studies that had been approved and were underway. The studies, their leaders, and the comments from the meeting are as follows:

1. Propulsion Evolution and Roadmaps [Marcel Pouliquen, Anders Hansson]
Comment: The question was brought up that asked when the product was due? what type of roadmap was going to be produced? Scope to be limited to? When will it be finished? Who will vet the product?

2. Space Nuclear Propulsion and Power [M. Pouliquen, Anders Hansson, Claudio Bruno]
Comment: This is an internationally critical study that should be done sooner rather than later.

Action item: Wendell will provide charts that he has developed to the study team.

Action item: Have follow up meeting of this study group during the week of Bremen?

3. Quantum State Reduction Tests in Space [Anders Hansson]
Comment: This seems to be a study that fits with Commission I due to its TRL level. Wendell coordinated with that commission and they accepted the transfer. This means that 3.3 should be part of their commission and change its number.

Action Item: Study team lead to transfer officially.

4. Development of Infrastructure for International Space Exploration [William Siegfried, M. Reichert, U. Apel]
Comment: On hold until the other two significant studies are more mature.

5. Dealing with the Threat to Earth from Asteroids and Comets [Ivan Bekey]
Comment; Slow start, but a great finish because it is based on a full workshop in LA In Feb 04. Should be ready to report out in Vancouver.

6. Strategies and Concepts for Future Exploration and Commercial Development of the Solar System -- the ISS and Beyond [John Mankins, Ernesto Vallerani, Michael Duke]
Comment: Excellent progress. There will be a meeting on this topic on Wed of the week in Bremen.

Action Item: Bill Siegfried will ensure both study groups coordinate plans to ensure complementary study outputs with minimum overlap.

7. Study of the Most Effective Techniques for Mitigating Impairment of Astronaut Performance during Long-term Micro gravity Human Space

Missions -- Use of Induced Artificial Gravity, Remediation Techniques, or Both

[Dr. Inessa Kozlovskaya, George Morgenthaler, Charles Sawin, Douglass O'Handley]

Comment: no one represented this study, as such, no comments.

Study Proposals

They should be complete and include:

- Tasking defined
- Basic theme and direction to be followed
- Product expected
- Schedule for the product development
- Extensive use of the web and email

Two meetings a year (Paris in March and IAC in Oct) should be planned:

- this is a necessary step - to plan on attending two meetings a year for the major players.
- this requires the leads of the study to plan ahead and get a room and time for the meeting.

Plenary events:

The Vancouver and Japan plenary events were discussed with the suggestion that each commission propose one major plenary for each IAC. The two suggestions are (see action items!):

Vancouver: Dealing with the Threat to Earth from Asteroids and Comets
Action Item: Ivan Bekey - Will we be ready after Feb. conference - Will you lead activities to create and support a major plenary?

Japan: Space Nuclear Power and Propulsion
Action Item: Study leads for 3.2 Will we be ready for this? Will you lead activities?

Next IPC meeting:

The IPC agenda in March 04 will be the following:

- March 23 Academy Commission meetings
- 23 Open for the study teams to meet [Academy board of trustees]
- 24/25 IPC meeting [usually only takes one day.. so study team could meet on second day]

Any other business:

The meeting was closed with action items identified and expectations of next meeting:

NEXT Commission III meeting 23 March 04 Agenda:

- Review of Minutes and Action Items
- Status of Vancouver Papers
- Review of Plenary actions
- Status of Program teams for 3.6, 3.7, and 3.8
- Report of on-going study teams with meeting times for that week
- Proposed new studies
- Proposed new program teams (new symposia or sessions)
- General discussions