IAA Commission IV Meeting

September 23rd, 2007 - 8:30-13:30
Hyderabad, Meeting place: International Convention Center

AGENDA

1 Welcome

- Attendees: Larry Paxton (Chair), Amnon Ginati (Vice Chair), Rhoda Hornstein (Secretary), Rainer Sandau (Chair Emeritus), Rock Jeng Shing Chern, Arnoldo Valenzuela, Sias Mostert, Miguel Hernandez, Luigi Bussolino, Jeanne Holm, Sheldon Kravitz, and A. R. Upadhya

2 Study Group Activities

2.1 Overview

2.2 Status/Progress Reports from Study Group Chairpersons

S.4.1 Knowledge Management (J. Holm)—detailed notes attached

Actions were completed on the following plans this year

- Support a better understanding among member and aerospace organizations of the ways in which they can share knowledge
- Ensure that there is a set of related papers from workshop participants at the 2007 IAC conference that exemplifies excellent knowledge management practices at aerospace organizations.
- Ensure that there is a set of related papers from workshop participants at the 2008 IAC conference that exemplifies excellent knowledge management practices at aerospace organizations.
- Information will be posted on a web site for each of communication and status reference.
- Coordination with other key working groups such as the OMG standards committee for knowledge-based engineering and the W3C committees for interoperability.
- A position paper on the recommended approaches for an aerospace organization to follow in knowledge management that would promote knowledge sharing and interoperability with other organizations.

S.4.5 Hitchhiking to the Moon (L. Alkalai and Lance Wu)

- Our working group had a very productive meeting in April at the Berlin IAA Symposium on Small Satellites and we laid out a schedule for progress.
- Members will attend the International Lunar Exploration Working Group meeting (ILEWG) in Sorrento, Italy, 22-28 October where there will be another working group meeting.
- At next year's IAC meeting in Glasgow, our working group will be represented by the 4.8 Small Satellites/Hitchhiking to the Moon session. This information

and abstract has been circulated with colleagues in the US and it has generated a lot of interest, so very good representation is expected.
- What is the status of position paper?—*Response from Leon required*

S.4.6 Quality Considerations for Space Programmes (M. Hernandez)
- Study group proposed last year to analyze problems that have been throughout the history of the space program and look at risk mitigation standards and quality considerations
- Create a way for organizations to access lessons learned and close calls from other organizations
- Seeking members to open to as much participation as possible, initial membership has been started
- Position paper is expected in the future
- Kick off meeting Tuesday, 25 September at 1500-1700 at IAC in Sunset Room

New : Interface Standards (J. Esper and M. D'Errico)
- *Space Systems Cross-Compatibility*
  o Common systems and standardization have been referred as "key words" in reducing space mission costs. NASA has experimented with these concepts for at least 35 years and implemented approaches for modular, standard components and interfaces with varying degrees of success. Interface definitions today have evolved considerably, and present a unique opportunity to effect cost reductions, in particular through the application of "plug-and-play" (PnP) principles. The IAA is launching a study group on "Space System Cross-Compatibility" that leverages PnP interfaces, modularity and other concepts in reducing mission costs. Among the numerous possibilities, systems that leverage these ideas promise to find application in Science, Exploration, Commerce, and other areas requiring fast system design, build, integration, test and flight. Subjects to be explored by the study group are contained within both Space and Ground Segments, and include electrical, mechanical, software, fluid, and sensor systems (space), and ground systems and networks.
  o Thursday, 27 September at 1300 to 1500; Novotel Granite I and II

New : Integrated Applications (A. Ginati)
- Promote space as a new way to collaborate
- Small project to be implemented that looks at innovation that occurs when different groups collaborate, particularly with climate and health issues
- Create synergy between competencies that have been developed
- Semi-transparent mirror to enable industry to share while still protecting proprietary information
- Several pilot projects started
- Information Day on 15 January for ESA Space Commission
- New European Space Policy (26 May 2007) that allows clearer lines of authority
- Position paper is being planned with the World Health Organization
  o Kick off Monday, 24 September at 1300-1400

3 Program Committee Activities

3.1 Overview

3.2 Reports from PC chairpersons

- IAA 4.9   Safety and Quality – IAC2007 status and IAC2008 proposal (M. Grimard)
  - TBD
- IAA 4.11   Small Satellite Missions – IAC2007 status and IAC2008 proposal (R. Hornstein) (minutes attached)
  - Membership lists need to be updated
  - IAC2008 includes all eight sessions for the Commission and many have been renamed to avoid confusion with other, similar activities
- Stand-alone Symposium Berlin (R. Sandau)

4 Organizational Issues

- Chairmanship has moved from Rainer Sandau to Larry Paxton
- Working with IAA and IAF to better define activities of the Commission

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

6 Next Meeting and Action Items

- Paris, approximately the third Tuesday in March 2008