American Institute of Aeronautics and Astronautics Space Architecture Technical Committee Meeting Minutes 2013/09/23-27 64th International Astronautical Congress (IAC) Beijing, China

## 1. Roll Call

Total members:37Participating members:4

The SATC roster appears below. Membership categories are: Associate (A), Regular (R), International (I). Members participating in this conference are indicated by  $\checkmark$ .

Anton Andonov (I)
Payam Bahrami (I)
✓ Olga Bannova (R)
Donald Barker (R)
Annette Barnes (R)
Lynn Baroff (R)
Maijinn Chen (R)
Marc Cohen (R)
Silvano Colombano (R)
✓ Ondřej Doule (I)
Donna Duerk (R)
Maria João Durão (I)

Maria João Durão (I) Michael Fox (R) Shai Gerner (I) John Gulliford (R) Ted Hall (R), Chair Patrick Harkness (I) Sandra Häuplik-Meusburger (I) Scott Howe (R)

Ogbonnaya Iheukwumere (I) Barbara Imhof (I) Rohan Jaguste (I) Päivi Jukola (I) Mark Kerr (R) Shahzad Khaligh (R), Treasurer François Lévy (R) Renée Matossian (R) Susmita Mohanty (I) David Nixon (R) Regina Peldszus (I) Georgi Petrov (R) Raúl Pólit Casillas (I) Tomáš Rousek (I) Brent Sherwood (R) ✓ Jackelynne Silva (R) Frederick Slane (R) ✓ David Wong (I)

## 2. Technical Sessions

Commission VI of the International Academy of Astronautics (IAA) organized Symposium E5: The 24th Symposium on Space Activity and Society. SATC members are prominent in this commission. Olga Bannova was one of the symposium coordinators (along with Geoffrey Languedoc). There were 6 paper sessions and 1 poster session:

- E5.1: New Architectural, Strategic and Design Approaches to the Future of Human Space Flight
- E5.2: Moon, Mars and Beyond: Analogues, Habitation and Spin-Offs
- E5.3: Space Technologies Earth Applications
- E5.4: Space as an Artistic Medium
- E5.5: Space Assets and Disaster Management
- E5.6: Space Societies and Museums
- E5.P: Poster Session

Among the sessions chaired by SATC members, 21 accepted abstracts produced 7 papers:

• E5.1: New Architectural, Strategic and Design Approaches to the Future of Human Space Flight

Wednesday, 2013/09/25, 09:45 Chairs: Olga Bannova, Brent Sherwood Rapporteur: A. Scott Howe

David Wong stood in for Sherwood and Howe, who were unable to attend due to NASA travel restrictions.

- Wong, David; Peldszus, Regina (2013 September). <u>"Less is More"? Exploring</u> <u>Design Principles of Modern Architecture in the Context of Space Habitation</u> (IAC-13-E5.1.1).
- Chang, Huai-Chien; Wang, Chun-Chieh (2013 September). <u>How the Design of</u> <u>Humanized Zero Gravity Toilet Benefit Space Tourists with Disabilities</u> (IAC-13-E5.1.3).
- E5.2: Moon, Mars and Beyond: Analogues, Habitation and Spin-Offs Wednesday, 2013/09/25, 11:15 Chairs: Olga Bannova, Brent Sherwood Rapporteur: A. Scott Howe

David Wong stood in for Sherwood and Howe, who were unable to attend due to NASA travel restrictions.

Oungrinis, Konstantinos-Alketas; Liapi, Marianthi; Linaraki, Despoina; Mairopoulos, Dimitris; Klothakis, Aggelos; Gargalis, Leonidas; Kelesidi, Anna; Gkologkina, Elli; Paschidi, Mariana (2013 September). <u>Intelligent Spacecraft Modules:</u> <u>Employing User-Centered Architecture with Adaptable Technology for the</u> <u>Design of Habitable Interiors in Long-Term Missions (IAC-13-E5.2.1).</u>

Linaraki, Despoina (2013 September). <u>Architectural Design of a Research Space</u> <u>Station in the Venusian Clouds</u> (IAC-13-E5.2.3). • E5.3: Space Technologies - Earth Applications Wednesday, 2013/09/25, 14:45 Chairs: Olga Bannova, Nona Minnifield Cheeks Rapporteur: Anna Barbara Imhof

David Wong stood in for Cheeks and Imhof, who were unable to attend.

Zheng, Xinhua; Wang, Haining; Guo, Yafei (2013 September). <u>Development and</u> <u>Application of Chinese Aerospace Systems Engineering Method</u> (IAC-13-E5.3.2).

Chong, Yean Joo (2013 September). <u>The Usefulness of Historical Earth Observation</u> <u>Satellite Images</u> (IAC-13-E5.3.3).

Bannova, Olga; Mayorova, Vera (2013 September). <u>International Exchange Intern</u> <u>Programs as a Foundation for Future Space Exploration Cooperation</u> (IAC-13-E5.3.11).

In addition, 3 SATC member (Ondřej Doule, Sandra Häuplik-Meusburger and Jackelynne Silva) co-authored 3 papers in 3 other sessions: A5.1 (Human Lunar Exploration), A5.2 (Human Mars Exploration), and V.2-B3.9 (Human Space Endeavours Young Professionals Virtual Forum):

- Doule, Ondřej; Wachtl, Oldrich; Eriksson, Katarina; Platt, Don; Saleny, Vratislav (2013 September). Sinterhab 2.0 <u>Deployment, Life Support Integration and Architecture Spin-Offs</u> (IAC-13-A5.1.10).
- Häuplik-Meusburger, Sandra; Petrova, Polina; Evetts, Simon N.; Sivanesan, Chan; Grömer, Gernot (2013 September). <u>MASH: Deployable and Portable Emergency</u> <u>Shelter for Mars</u> (IAC-13-A5.2.6).

Silva, Jackelynne (2013 September). <u>Lunar Exploration Architecture Trade Analyses</u> (IAC-13-V.2-B3.9.1).

Another SATC member (Päivi Jukola) participated in organizing 2 other sessions:

- D3.2: Systems and Infrastructures to Implement Future Building Blocks in Space Exploration and Development
   Wednesday, 2013/09/25, 09:45
   Chairs: William H. Siegfried, Scott Hovland
   Rapporteurs: Horst Rauck, Päivi Jukola
- D3.4: Space Technology and System Management Practices and Tools Friday, 2013/09/27, 13:30 Chairs: John C. Mankins, Päivi Jukola Rapporteurs: Maria Antonietta Perino, Hans E. W. Hoffmann