

# International Academy of Astronautics

## Minutes of Commission III Meeting

29 September 2018

Messe Bremen, Findorffstraße 101, 28215 Bremen, Germany

**Chair:** Lenard Roger (USA) (Present)

**Vice Chair:** Genta Giancarlo (Italy) (Present)

**Secretary:** Razoumny Yury (Russia) (Present)

**Past-Chair:** Ramakrishnan Sundaram (India) (Absent-excused)

**Agenda:** see attachment

**List of participants:** see attachment

1. The Commission III meeting was opened by Mr. Roger Lenard at 13:00. Roger Lenard introduced the Commission III members and welcomed all the invitees and thanked them for their continued support and active participation in Commission III discussions.
2. The agenda is approved.
3. The Minutes of Commission III Paris March 2018 meeting are approved.
4. Status of IAA Cosmic Studies:

**Study Group 3.14** *Public/Private Human Access to Space - Vol. 2 - Earth Orbit and beyond*

Study is completed and published.

**Study Group 3.15** *Long Term Space Propellant Depot*

Study is completed and published.

**Study Group 3.18** *Possible International Protocol to handle Crisis/Emergency of Astronauts in Low Earth Orbit*

No representative.

**Study Group 3.19** *Feasibility study of Standardized Career Dose Limits in LEO and outlook for BLEO*

Study is completed. A paper for Acta Astronautica 'The performance and reliability of spacecraft in the near Earth environment due to Space Weather' is under development. A book on the study titled 'Feasibility Study of Astronaut Standardized Career Dose Limits in LEO and the

outlook for BLEO” is in preparation. The design for the book cover has been approved by the Academy.

**Study Group 3.21** *Space Disposal of Radioactive Waste*

No representative.

**Study Group 3.22** *Next-Generation Space System Development Basing on On-Orbit-Servicing Concept*

The materials of chapters are prepared and discussed. The papers were presented IAC and are planned to be submitted for conferences in 2019.

**Study Group 3.24** *Road to Space Elevator Era*

Final draft of report submitted for review.

**Study Group 3.25** *The Maintainability and Supportability of Deep Space Manned Spacecrafts*

Final draft of report submitted for review.

**Study Group 3.26** *Space Mineral Resources #2*

Book is complete in first draft. A SG meeting is planned for Tuesday 2 October to coordinate final preparation for release of the report of Commission for review. Target for publishing the SG Spring 2019.

**Study Group 3.27** *Towards the utilization of the Moon, Preparing for Mars Exploration*

First draft reviewed. Final draft due in June 2019.

**Study Group 3.28** *Strategy of Low Cost and Large Scale Access to Space in Future*

Revised version of draft report discussed. Report in preparation for publication next year.

**Study Group 3.29** *Strategy and Feasibility Assessment of Collision Protection from Asteroid and Comet: Concept, Technology, and Prospect*

No representative.

**Study Group 3.30** *Space and its Utility in Forecasting Climate Change*

SG chair made a presentation (at the request of the Academy) at Academy day. Five more individuals volunteered to assist with the study. Study is in the data gathering phase.

**Study Group 3.31** *Decadal Study on Space Solar Power*

Study aiming to be completed by March 2021.

## 5. IAA Conferences:

Current conferences/congress:

- **69th International Astronautical Congress (IAC)** on 01-05 October 2018 in Bremen, Germany
- **IAA SciTech Forum 2018** on 13-15 November 2018 in Moscow, Russia (includes IAA Conference on Space Flight Mechanics and IAA Conference on Space Structures and Materials)

Two IAA conferences have been announced for 2019:

- **2nd IAA SciTech Forum 2019**, 25-27 June 2019, Moscow, Russia (includes 2nd IAA Conference on Space Flight Mechanics and 2nd IAA Conference on Space Structures and Materials)
- **11th IAA Symposium on the future of space exploration**, 17-19 June 2019, Torino, Italy

## 6. IAA Heads of Space Agencies Summit

No new information about the new summit on exploration is available.

## 7. Other business – none.

## 8. The meeting was adjourned at 16:00.

## IAA Commission III Meeting

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### List of attendees