

Minutes of the FAI ICARE meeting

held virtually on 2021-09-10

1	WELCOME BY THE PRESIDENT	1
2	ROLL-CALL	1
3	DECLARATION OF CONFLICTS OF INTEREST	2
4	APPROVAL OF THE MINUTES OF THE LAST MEETING.....	2
5	FAI GENERAL CONFERENCE, MEETINGS and ACTIVITIES.....	2
6	ASTRONAUTICS ACTIVITIES AND PROJECTS.....	3
7	FAI SPORTING CODE	3
8	NEW ASTRONAUTICAL RECORDS.....	3
9	PROPOSALS FOR FAI AWARDS	3
10	INTERNATIONAL ASTRONAUTIC FEDERATION	3
11	PRESENT WORLD RECORDS – REPORT	3
12	ANY OTHER BUSINESS	4
13	ELECTIONS.....	4
14	DATE AND PLACE OF NEXT ICARE MEETING.....	4

1 WELCOME BY THE PRESIDENT

The President welcomed all attendees, noting many items to discuss. Further (virtual) meetings needed.

Mr. Ojha also noted the three-year hiatus, hopeful of the revival of ICARE due to rise of private sector spaceflight activities. Definitions of space and astronaut are among the most pressing issues.

2 ROLL-CALL

Present

- Anu OJHA (UK) and commission president
- Henrik AKERSTEDT (SWE) and commission vice-president
- Sergey ANANOV (RUS)
- Scott NEUMANN (US)
- Jean-Fancois CLERVOY (FR)
- Nicholas BEREND (Commission Technical Expert- France)
- Lark HOWORTH (US - Alternate)

- Marcus HAGGENEY (FAI)

3 DECLARATION OF CONFLICTS OF INTEREST

Mr. Ojha – Involved as advisor to Space Hero. Working for UK & UAE space administrations.

No further conflicts.

4 APPROVAL OF THE MINUTES OF THE LAST MEETING

Open debate regarding the Karman line: more data is available now, compared to when the 100km definition was first calculated. Summary of talking points below:

- Mr. Neumann: Human sensation of being in space is relevant but clear definition needed
- Mr Akerstedt: Differentiation between suborbital & orbital flights
- Mr. Berend: Karman only looked at lift, not e.g. drag. The limit will be somewhat arbitrary, no matter the definition
- Mr. Clervoy: Four factors at play: altitude of flight, sensation (blackness of space, seeing the round Earth), time being weightless, level of participation (passenger, or mission critical)
The Association of Space Explorers uses the Universal Astronaut Insignia
- Mr. Ananov: What is the end goal of a change? Is it really needed?
- Mr. Ojha: RCS and TPS needed even far below 100km
Regarding astronaut definition: separate working & passenger. SpaceShip2 pilots are definitely astronauts due to the hands-on piloting needed. Dedicated meeting needed.
- Mr. Haggeneay: Very good reason needed to change 100km for historical reasons

The 2018 Annual Meeting minutes were approved after the preceding discussion.

5 FAI GENERAL CONFERENCE, MEETINGS and ACTIVITIES

Recent change of president (David MONKS) and new EB. 5 years of attempts to commercialize airports, unfortunately not very successful.

Focus on core activities now, reducing fixed costs. Over 2500 volunteers and 5.4 full time employees. Less international competitions due to Covid, and reduced number of airport participants. Some airports are growing though.

Mr. Haggeneay ensured that the FAI offers full support of ICARE activities.

6 ASTRONAUTICS ACTIVITIES AND PROJECTS

- USA: Increasing activities, mainly commercial. Crew Dragon, SpaceShip2, New Shepard
Upcoming: Inspiration4 (first civilian-only orbital flight), Starliner, Artemis1, Starship (first fully reusable spacecraft)
- UK: Huge reorganization – separate military and civilian organizations. National launchsites being built, both for vertical and horizontal launches, starting next year. Growing space sector.
- ESA: New ambitions leadership. Agenda 2025: EU boot on moon by 2030. Woman on Mars late 2030.
- FR: 8000 of 23000 astronaut applicants, great public interest in human spaceflight. Some interesting projects: Zephyr – scientific/crewed balloon project and early plans to host crewed flights from Kouru
- CN: Tianhe crewed space station, huge achievement.
UK/CN & RUS/CN collaboration under negotiation.
Two new Tianhe modules and telescope scheduled for next year.
- RUS: 2019: 25 launches, 3 crewed. 2020: 17 launches, 4 crewed.
Transition to Soyuz 2.1 for crewed missions. Angara heavy launcher reached orbit in 2020.
RD-191 engine ready for production, new module added to ISS
- Nordics: Sweden (Esrangle) and Norway (Andøya are constructing polar and sun-synchronous launch sites, scheduled for 2022. Esrange will host Thermis (reusable ESA booster) hop tests.
Copenhagen Suborbital progressing with their crewed Spica rocket. Engine test in progress, tanks in production.

7 FAI SPORTING CODE

Major revision might be needed regarding e.g. boundary and astronaut definitions.
Suggestion to hold new meeting in advance of the FAI GC.

8 NEW ASTRONAUTICAL RECORDS

None filed

9 PROPOSALS FOR FAI AWARDS

TBD

10 INTERNATIONAL ASTRONAUTIC FEDERATION

Mr. Berend may attend and will represent FAI

11 PRESENT WORLD RECORDS – REPORT

N/A

12 ANY OTHER BUSINESS

Mr Ananov proposed new types of records, e.g. time from launch to dock.

Mr. Neumann asked for clarification regarding reusable spacecraft as defined in SC8. As reusability incurs a mass-penalty on a spacecraft, it might warrant it being a separate class entirely.

This issue, and possible SC8 modification, requires a great deal of thought as not to disrupt previous records. To be discussed further.

13 ELECTIONS

To be held next meeting

14 DATE AND PLACE OF NEXT ICARE MEETING

Mid December 2021 for focused discussions on boundary definition, astronaut definition and spacecraft classes as written in SC8.