



*Fédération
Aéronautique
Internationale*



Minutes

of the Annual Meeting of the **FAI Astronautic Records Commission**

held in Lausanne, Switzerland
on 21 April 2006

**FEDERATION AERONAUTIQUE INTERNATIONALE
FAI ASTRONAUTIC RECORDS COMMISSION (ICARE)**

**MINUTES OF A MEETING HELD AT THE FAI HEADQUARTERS
24 AVENUE MON REPOS, 1005 LAUSANNE, SWITZERLAND
ON FRIDAY 21 APRIL 2006, STARTING AT 09h15**

MINUTES

Present:

M. Segismundo SANZ FERNANDEZ de CORDOBA	President
Mr. Mike COLLINS	USA
M. Christian MARCHAL	France
Mr. Ulf MERBOLD	Germany
Mr. John F MILES	United Kingdom
Mr Yuri TARASOV	Russia

In attendance :

Mr Max Bishop	FAI Secretary General
Mme. Elvira Orlova	Interpreter

1 WELCOME BY THE PRESIDENT

M. Segismundo SANZ FERNANDEZ de CORDOBA welcomed all those attending.

2 APPROVAL OF THE MINUTES OF THE LAST MEETING

The minutes of the previous meeting (29 April 2005) were approved without correction. There were no matters arising from those minutes.

3. FAI CENTENARY GENERAL CONFERENCE

The ICARE President's report to the Paris FAI General Conference, October 2005, is at **Annex 1**.

The FAI Secretary General reported on the FAI Centenary celebrations at which the world of astronautics had been represented by Apollo 11 moon-walker, Buzz Aldrin. Full details are at:

<http://www.fai.org/fai_news_12_05>

4. ASTRONAUTICS ACTIVITIES AND PROJECTS

a. Progress report by FAI and Delegates from Member Countries.

France: M. Marchal reported that the Mars and Cassini-Huygens missions had been highly successful and that the mission to Venus had been launched without problem. Water had been found underground on Mars.

UK: Mr Miles reported that the Bristol spaceplane project remained largely conceptual in nature, but "Starchaser" was still active, with an eye to space tourism. Drop tests had been carried out on the capsule, and work had proceeded on the engines. However, no date had been set for a manned flight, and this still seemed a fairly distant prospect.

Russia: Mr Tarasov distributed the written report at **Annex 2**.

USA: Mr Collins submitted the written report at **Annex 3**. He pointed out that human flight in space was hard. Only 11 vehicles had carried humans in the first 45 years of space flight. In the first 45 years of aviation there had been thousands of types of aircraft. Only three nations had succeeded so far. It was to be hoped that commercial involvement in the field might widen the scope for space flight. A tourist spaceport was under development in New Mexico, and the Rutan team was developing SpaceShipTwo for passenger carrying. The extra energy required to put a space vehicle into orbit, as compared to sub-orbital flight, was enormous. Mr Collins paid tribute to Russia, for enabling the ISS to remain in service. He reported that work continued to try and solve the foam problem on the Shuttle fuel tank, and that the next launch remained scheduled for July 2006. There were plans for two more Shuttle flights to complete assembly of the ISS, and it was hoped that a permanent crew of 6 could be re-established in the ISS by 2009. Apart from one more servicing mission for the Hubble telescope, all other planned Shuttle flights were to the ISS. NASA had secured a good budget settlement, and was moving ahead with plans to return to the moon and onwards to Mars.

Germany: Mr Merbold reported on activity at the ESA, where there was no manned flight programme, although a German ESA astronaut, Thomas Reiter, would soon make the first European long-duration mission (6 months). Ariane 5 had the capacity to carry a 6-man capsule into space, which would greatly assist the ISS effort, but there was no political will to proceed with such a project in Europe. On the other hand, a ministerial level ESA Council meeting had recently approved all the unmanned ESA programmes, so their future was assured.

Spain: The ICARE President reported that Spain continued to support the ESA space programmes.

5. FAI SPORTING CODE SECTION 8 (ASTRONAUTICS).

a) Delegates debated at some length what constituted a sub-orbital distance flight in space. It was agreed that the relevant distance for spacecraft was the distance travelled in space along the ellipsoid 100 km above the earth's surface, from the point where the spacecraft ascends through the Karman line to the point where it descends back through that line, using the set of axes rotating with the earth. The ICARE President undertook to draft a new version of Section 8 paragraph 4.2.1.4. based on this decision, to replace the existing text ("*Distance flown along the trajectory, from the point of launch to the point where the mission ends.*") He agreed to circulate this new version to ICARE delegates and to invite their approval by email.

b) For aerospacecraft, it was agreed that in paragraph 5.2.1.4., the words “*Length travelled along the trajectory measured...*” should be deleted and replaced by “*Distance travelled...*”

so that the entire paragraph would read “*Distance travelled from the point of lift-off to the point of touch down at which the planned operation is terminated.*” In addition, a new paragraph 5.2.1.7. would be added to the Code, the text of which would reflect that in the new 4.2.1.4. and would be prepared by the ICARE President and handled in the same way as described above.

c) Delegates discussed the definition of spacecraft in 2.2 (a), which could theoretically be taken to include vehicles such as balloons. However, since no balloon or other such vehicle could cross the Karman line under its own power, this did not seem to be of any practical consequence as far as World Records were concerned. It was therefore decided to leave the paragraph unchanged.

6. PROPOSALS FOR FAI AWARDS

- a. FAI Gold Space Medal: No nominations had been received this year. The US delegate, Mr Collins, noting that the FAI Gold Space Medal was deemed to be of equal status and prestige as the FAI Gold Air Medal, proposed that the final decision on the award of the Gold Space Medal be made by the assembly of FAI Vice Presidents, on the basis of a recommendation made by ICARE. He felt that the perceived value of the Medal could be undermined if the final decision was made by ICARE. Although Vice Presidents did not all have expert knowledge of astronautics, most took a general interest in space, and would in any case be very likely to follow advice given by ICARE. The FAI Secretary General pointed out that this proposal, if adopted, would necessitate a small modification to FAI By Laws, which could be achieved in at least two ways: by transferring the By Law concerning the Gold Space Medal from Chapter 12 (awards made by Commissions) to Chapter 11 (awards subject to the approval of Vice Presidents); or by amending the existing By Law to contain a provision that Vice Presidents’ approval was needed. The US delegate stated that he was content to allow the Statutes Working Group to recommend how this change should best be implemented.
- b. Yuri Gagarin Gold Medal: A nomination had been received from USA for this medal to be awarded to the crew of Mission STS-114 (citation attached, **Annex 4**). ICARE unanimously approved this award.
- c. Komarov Diploma: A nomination had been received from USA for this Diploma to be awarded to the crew of International Space Station Expedition 11. (Citation attached, **Annex 5**). ICARE unanimously approved this award.
- d. Korolev Diploma: A nomination had been received from USA for this Diploma to be awarded to the crew of International Space Station Expedition 10. (Citation attached, **Annex 6**). ICARE unanimously approved this award.

7. INTERNATIONAL ASTRONAUTIC FEDERATION

The ICARE President reported that no ICARE representative had been able to attend the 2005 IAF Congress. The 2006 Congress was due to be held in Valencia, Spain (2-6 October 2005). There was a possibility that the ICARE President and Mr Ulf Merbold might be able to attend. It was agreed that if at all possible, one of these persons would be officially designated as FAI representative and would report to IAF on World Records.

8. WORLD RECORDS

Mr Christian Marchal reported on the new world records ratified since the previous meeting, a series of new sub-orbital records established by SpaceShipOne, and a new Assembled Mass of Spaceships Linked in Flight record (294 850.5 kg) established by the crews of the ISS and STS-114.

All space records can now be consulted on-line at the FAI web-site at <<http://records.fai.org/astronautics/>>.

9. ANY OTHER BUSINESS

- a) Simplification of Section 8. The US delegate, Mr Collins, proposed that all ICARE delegates should take a careful look at the Sporting Code Section 8 to see if it could be simplified and improved, in such a way as to enable it to meet future demands in a dynamically developing situation. The rules needed to be understandable for the general public as well as for those intimately involved with astronautics. However, any simplification needed also to preserve the historical record. It may perhaps be necessary to have an accompanying explanatory document annexed to the main technical document. Mr Collins suggested that this topic should become a main item for the agenda of the 2007 meeting. Mr Merbold (GER) agreed and stated that, if a direct choice had to be made, simplicity should prevail over precision. ICARE delegates agreed to put this matter on the agenda for discussion in 2007.
- b) Time. Mr Christian Marchal (FRA) presented a most interesting paper (**Annex 7**) on time systems. ICARE delegates agreed to study this paper and to pass their expert opinions directly to Mr Marchal, even though the contents of the paper had no direct impact on ICARE's responsibilities for world records.
- c) Significance of Karman Line. The ICARE President reiterated his view that any flight that crossed the 100 km boundary should only be entitled to claim astronautic records, not airplane records. He therefore questioned whether FAI should have ratified the first flight of SpaceshipOne as a world airplane altitude record (breaking the previous X-15 rocket-plane record). Some other ICARE delegates felt that this was essentially a problem for the General Aviation Commission rather than ICARE. The ICARE President agreed to discuss the matter with other FAI Commission Presidents at the May 2006 Air Sport Commission Presidents' meeting in Lausanne.

10. ELECTIONS

The following were re-elected for 2006/2007 :

President : Dr Sanz Fernandez de Cordoba
Vice President : Mr John Miles (UK)

11. DATE AND PLACE OF NEXT ICARE MEETING

It was agreed that the next meeting would be held in Lausanne on Friday 27 April 2007 at 09h15.