



FAI Awards for Astronautics 2016 Nomination Form

(one form per nomination)

Name of the Award:

- Y. A. Gagarin Gold Medal (By-Law 7.9.1)
- V. M. Komarov Diploma (By-Law 7.9.2)
- Korolev Diploma (By-Law 7.9.3)
- Odyssey Diploma (By-Law 7.9.4)

Submitted by:

NAC :Royal Aero Club of Great Britain

Name :Anu Ojha.....

Position / Function :President, ICARE

Date :29th February 2016.....

Signature and stamp :.....

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Nomination for:

Name :Scott Kelly and Mikhail Kornienko

Birthdate:21st Feb 1964 (Kelly) and April 15th 1960 (Kornienko).....

E-mail address :.....

Reasons for nomination (maximum 250 words, English only): On 2nd March 2016 (the day after tomorrow) NASA astronaut Scott Kelly and RSA cosmonaut Mikhail Kornienko will return to Earth from the ISS aboard Soyuz TMA-16M. This will be the end of the ISS “Year in Space” mission during which time Kelly and Kornienko will have spent over 340 days in space. Although similar duration missions were conducted on the Mir space station in the 1980s and early 1990s, the medical monitoring of crewmembers was relatively simplistic. During Kelly and Kornienko’s mission, extensive testing and monitoring was conducted on the crewmembers in the following areas:

- Functional studies examined crew member performance during and after the 12-month span.
- Behavioral studies monitored sleep patterns and exercise routines.
- Visual impairment was studied by measuring changes in pressure inside the human skull – including pre- and post-flight MRI scans
- Metabolic investigations examined the immune system and effects of stress.
- Physical performance was monitored through exercise examinations.



Researchers monitored microbial changes in the crew

The human factors associated with how the crew interacts aboard the station were documented

In addition, comparative genetic studies were conducted with Scott Kelly and his identical twin brother Mark Kelly – a former NASA astronaut who flew four Space Shuttle missions.

The medical data yield from the Year in Space mission will provide significant advances in our detailed understanding of the medical effects of long-duration spaceflight in areas which need to be much better understood if humans are to venture on interplanetary exploration missions beyond Earth orbit. Scott Kelly and Mikhail Kornienko are therefore highly deserving recipients of the V.M Komarov Diploma for outstanding achievement in the field of human space exploration.]