U.S.A.
Nomination for the Fédération Aéronautique Internationale
Komarov Diploma

Nominee: **The International Space Station Expedition 11 Crew**

Sergei Konstantinovich Krikalev
John L. Phillips, Ph.D.

Affiliations: Sergei Konstantinovich Krikalev: Russian Cosmonaut, Roscosmos - RSC Energia
John L. Phillips, Ph.D.: NASA Astronaut

Suggested Citation:

For the successful completion of the eleventh expeditionary mission to live and work on board the International Space Station (ISS), and support of the first Space Shuttle visit to the ISS since the Columbia accident.

Justification:

The Expedition 11 mission began with the launch of Soyuz TMA-6 on April 15, 2005, from the Baikonur Cosmodrome in Kazakhstan. Onboard were ISS Russian Expedition 11 Station and Soyuz Commander Sergei Krikalev, NASA Flight Engineer and Science Officer, Dr. John L. Phillips, and European Space Agency astronaut, Roberto Vittori. Following an 8-day handover, the Expedition 10 crew, along with Roberto Vittori, returned to Earth on April 25, leaving behind Sergei and John to carry out the Expedition 11 mission. The Expedition 11 mission marked several milestones, including the arrival of the first Space Shuttle since November 2002, the arrival of 2 Progress vehicles, the repositioning of the Soyuz vehicle, one EVA, and numerous crew-tended payload experiments. The Expedition 11 crew returned to Earth in the Soyuz
TMA-6 on Tuesday, October 11, 2005, after having spent 193 days in space.

As Commander of both the ISS and the Soyuz vehicle, Sergei Krikalev was responsible for the overall safety and mission operations of the crew. Dr. Phillips, as the U.S. Science Officer and Flight Engineer on the Soyuz vehicle, was responsible for all systems in the U.S. segment and the conduct of the U.S. science program. Both crewmembers were responsible for performing a spacewalk utilizing the Russian "Orlan" spacesuits.

During the Expedition 11 mission, Sergei and John supported the arrival and unpacking of two Russian Progress resupply cargo ships filled with food, fuel, water, and supplies. They also donned their spacesuits and relocated their Soyuz spacecraft from their Pirs docking port to the Zarya docking port in August to free up the Pirs airlock to support spacewalk activity from the Russian segment.

Sergei and John were onboard the Station when Commander Eileen Collins and the STS-114 crew launched on the Space Shuttle Discovery on the first post-Columbia mission. It marked the first time since the STS-113 mission in November 2002, that a Shuttle visited the Station. The two crews had nine days of joint docked operations.

The Expedition 11 crew's lone spacewalk was conducted in Russian Orlan spacesuits out of the Pirs docking module on August 18, 2005. The crew retrieved a variety of external experiments and installed a TV camera to support European ATV docking operations. The EVA lasted for
4 hours and 58 minutes. Sergei is a spacewalk veteran, having logged seven excursions outside the Mir Space Station. The spacewalk was the first for John.

This was the sixth flight into space for Sergei - more than any other Russian cosmonaut - and the second flight into space for John. It was Sergei's third trip to the International Space Station. He first flew to the ISS on the STS-88 mission, which attached the Unity Module to the first Station element, the Zarya Control Module. He was also the Flight Engineer on the first ISS Expedition crew in 2000. Sergei also made three previous flights to the Mir Space Station and has accumulated more than 800 days in space on his six flights - more than any other human. John's first mission was STS-100 in 2001, which delivered the Canadarm2 robotic arm to the Station. Dr. Phillips launched on his second mission to the ISS on his 54th birthday.

The success of the eleventh expedition, including the docked mission of STS-114, was an extremely important event in the history of the ISS Program and will contribute greatly to the future human exploration of the solar system. The crew of Expedition 11 showed that through teamwork, humans could continue to live and work aboard the ISS during this prolonged period of reduced logistical support. The hard work, adaptability, and tireless devotion to duty exhibited by the crew during this groundbreaking mission reflect most highly upon themselves, and demonstrate that they are very deserving of the Komarov Diploma.