

2008 **Crew of STS Mission 122 (International)**

The crew of STS 122:

Stephen N. Frick, Commander NASA Astronaut

Alan G. Poindexter, Pilot, NASA Astronaut

Leland D. Melvin, Mission Specialist, NASA Astronaut

Rex J. Walheim, Mission Specialist, NASA Astronaut

Hans Schlegel, Mission Specialist, ESA Astronaut

Stanley Love, Mission Specialist, NASA Astronaut

Leopold Eyharts, ISS Flight Engineer, ESA Astronaut

International Space Station (ISS) Assembly Mission 1E along with the Increment 16:

Peggy Whitson, Commander, NASA Astronaut

Yuri Malenchenko, Flight Engineer, RSA Cosmonaut

Dan Tani, Flight Engineer, NASA Astronaut

The success of the STS-122/Increment 16 mission was extremely significant in the assembly sequence of the International Space Station with the addition of the European module, the Columbus laboratory which will contribute greatly to the future of human space flight operations.

Justification: The STS-122 mission began with a successful launch on February 7, 2008. While en-route to the International Space Station, the Atlantis crew executed multiple techniques to inspect the vehicle's thermal protection system for any damage.

Following docking with the ISS, the Shuttle crew used the Space Station's robotic arm to lift the mission's primary cargo, the Columbus module from its berth in the payload bay and maneuvered it for installation on the Space Station. Initial activation of the primary module systems were subsequently completed immediately upon installation. Three space walks were accomplished to prepare and install the Columbus module, replace a Space Station Nitrogen tank assembly (NTA), and retrieve a failed ISS control moment gyroscope (CMG). The spacewalks also installed two payloads on the exterior of Columbus, Solar, which studies the sun and the European Technology Exposed Facility (EuTEF). Columbus' secondary systems, as well as activation and outfitting of the primary payloads were initiated during the second half of the mission and continued into the increment operations. Without the extraordinary skill of these astronauts during these space walks and module activation, the STS-122 mission and the addition of

the European laboratory would not have been a success.

The STS-122 mission was completed with a nominal landing at Kennedy Space Center in Florida. This outstanding mission is highly deserving of the Komarov Diploma.