

# Shuttle Cargo Ready for Return To Flight

June 15 2005

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The cargo for the Space Shuttle Discovery's historic Return to Flight mission (STS-114) arrived yesterday at Launch Pad 39-B at NASA's Kennedy Space Center, Fla.

Discovery's payload includes the Multi-Purpose Logistics Module Raffaello, the Lightweight Multi-Purpose Experiment Support Structure Carrier (LMC), and the External Stowage Platform-2 (ESP-2).

NASA's Italian-built Raffaello will carry 12 large racks filled with food, clothing, spare parts and research equipment to the International Space Station. Included in the cargo is the Human Research Facility-2 that will expand the Station's capability to support human life sciences research.

The LMC will deliver a Control Moment Gyroscope to replace an inoperable one that failed in August 2002. Gyroscopes provide attitude control for the Station keeping it properly oriented without use of rocket fuel.

A Thermal Protection System repair sample box containing pieces of the Shuttle's heat-shielding tile is also installed on the LMC. The samples will enable crew members to test new on-orbit repair techniques.

The ESP-2 will carry replacement parts to the Station. The platform will be deployed, attached to the Station's airlock, and serve as a permanent spare parts facility.

Returning the Shuttle to flight and completing the Space Station are the first steps in the Vision for Space Exploration, a stepping stone strategy toward new exploration goals. Using the Station to study human endurance and adaptation in space, and to test new technologies and techniques, NASA will be prepared for longer journeys on to the moon, Mars and beyond.

Discovery's Return to Flight mission is targeted for July 13 with a launch planning window that extends through July 31.

Source: NASA

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