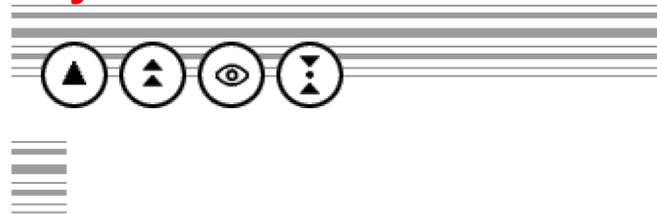


Payloads



STS-101

Integrated Cargo Carrier

Payload Bay

3,700 pounds

Overview

Astronauts use the [SPACEHAB](#) Integrated Cargo Carrier to accommodate and support the transfer of exterior cargo from the shuttle orbiter to the International Space Station and from the station to work sites on the truss assemblies.

The ICC provides sufficient surface area in the orbiter cargo bay to carry approximately 8,000 pounds of cargo, which would otherwise have to be carried in the shuttle's cabin.

The ICC is an unpressurized flatbed pallet and keel yoke assembly housed in the orbiter's payload bay. Constructed of aluminum, it is 8 feet long, 15 feet wide and 10 inches thick, and is capable of carrying cargo on both faces of the pallet, both on top and below. There are no active interfaces (thermal, electrical or data) to the shuttle.

On Mission STS-101, the ICC will carry three cargoes: parts of the Russian Strela crane, the Space Integrated Global Positioning System/Inertial Navigation System (SIGI) Orbital Attitude Readiness (SOAR) payload, and the [SPACEHAB](#)-Oceaneering Space System (SHOSS) box.

Strela is a Russian crane that will be mounted on the Zarya module to transport orbital replacement units and serve as a translational aid for extravehicular crew members on the Russian segment of the station. The Strela grapple fixture adapter and base were installed on STS-96; STS-101 will deliver the boom, ring and extension to complete the crane assembly.

SOAR is designed to be space station's primary global positioning source and the crew return vehicle's primary navigation source. (DTO 700-21 describes the SOAR test on STS-101 to demonstrate that SIGI can determine GPS attitude in space.)

The SHOSS is a trunk mounted on the ICC that can carry up to 400 pounds of tools and flight equipment. On STS-101, it will contain space-walking tools and logistics items to be transferred and stowed in the U.S. Unity module for use in future missions.

History/Background

This is the second flight of the Integrated Cargo Carrier. It last flew on STS-96.

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