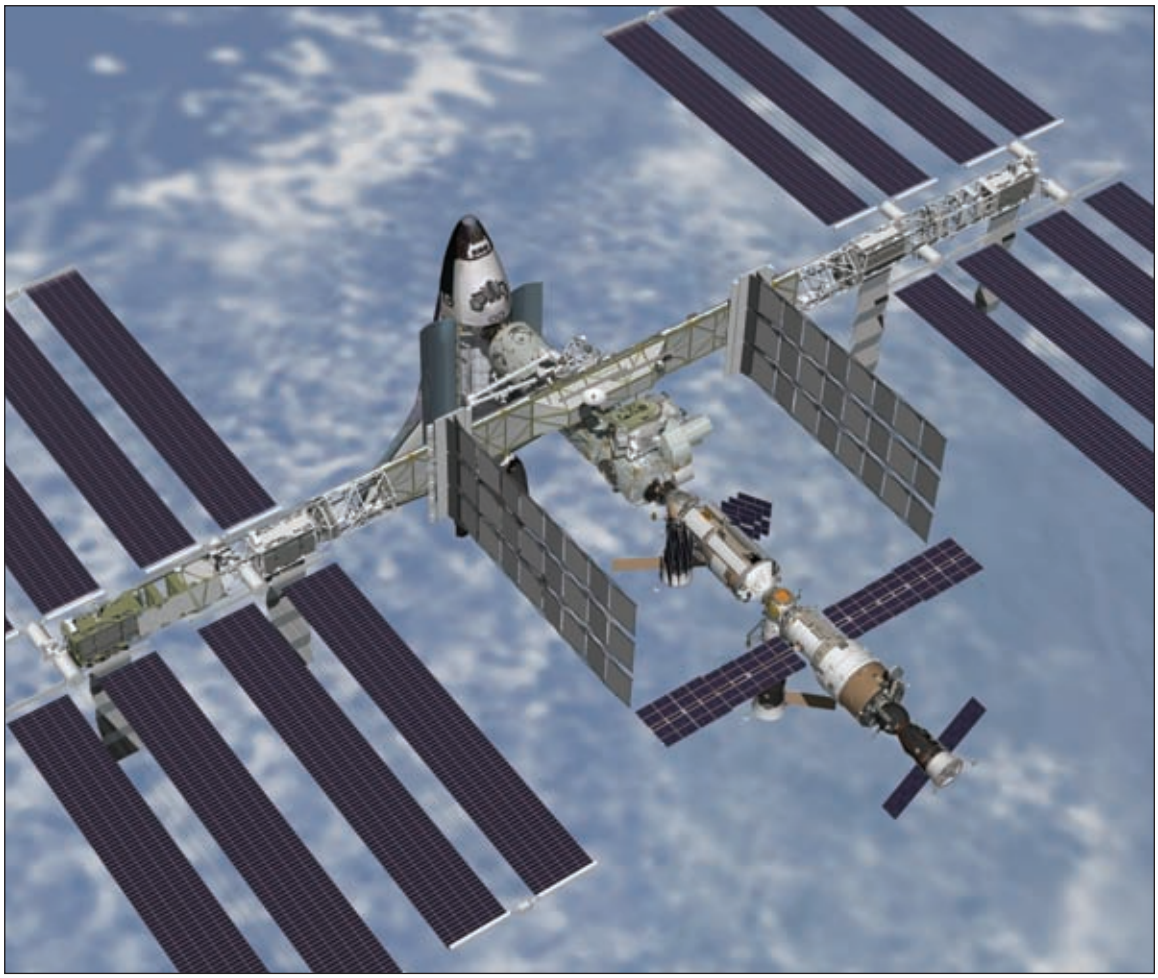
NASA**facts**

International Space Station Harmony Module



Expansion of the International Space Station will continue with the delivery of the Harmony connecting module. Harmony will travel to the station inside Space Shuttle *Discovery's* payload bay during STS-120, also known as Assembly Flight 10A. Harmony's addition sets the stage for the arrival of new research laboratories.

Harmony, or Node 2, will be the first pressurized module added to the station since the Russian Pirs Docking Compartment was added in September 2001. Harmony joins three other named U.S. modules on the station: the Destiny laboratory, the Quest airlock and the Unity node.

The most recent U.S. pressurized module added was the Quest airlock in July 2001.

Harmony is 23.6 feet long, 14.5 feet wide and will weigh 31,500 pounds at launch. It was built for NASA by ThalesAlenia Space in Italy. The module will act as an internal connecting port and passageway to additional international science labs and cargo spacecraft.

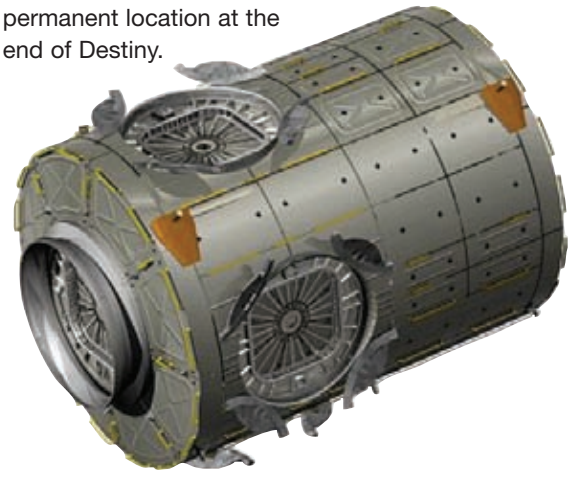
Harmony is a utility hub, providing air, electrical power, water and other systems essential to support life on the station. It will distribute resources from the station's truss to the Destiny lab and, when added to the station, to the European Space Agency's Columbus Research Laboratory and the Japanese Experiment Module (Kibo). In addition to increasing the living and working space inside the station, its exterior will also serve as a work platform for the station's robotic arm, Canadarm2.

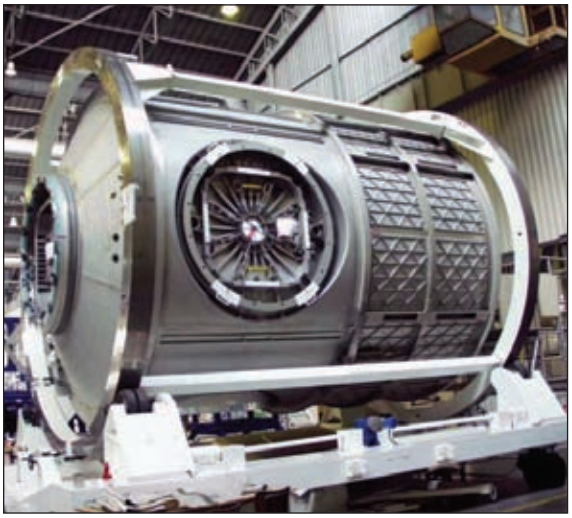
Harmony is similar in shape to the six-sided Unity module, known also as Node 1, launched in 1998. Unity links the Destiny lab and the Russian Zarya module.

Installation

Harmony's installation is a two-step process. First, *Discovery* will dock to pressurized mating adapter-2 (PMA-2), located on the end of Destiny, and then its crew will attach the new module to a temporary position on the outside of Unity.

After *Discovery* leaves, the Expedition 16 crew will use Canadarm2 to move PMA-2 to the forward port on Harmony. Then, the crew will use the arm to move and install Harmony to its permanent location at the end of Destiny.





Naming the Module

On March 15, 2007, Node 2 received its name during an academic competition involving more than 2,200 students from 32 states. Six different schools submitted "Harmony."

A panel of NASA educators, engineers, scientists and senior agency management selected the name because it symbolizes the spirit of international cooperation embodied by the station, as well as the module's specific role in connecting the international partner modules.

The Node 2 Challenge required students to learn about the space station, build a scale model and write an essay explaining their proposed name for the module that will serve as a central hub for science labs.

Harmony is the first U.S. piece of the space station named by people outside of NASA.

Length: 7.2 meters (23.6 feet)
Width: 4.4 meters (14.5 feet)
Mass: 14,288 kilograms (31,500 pounds) at launch
Exterior: aluminum cylindrical sections, 2 endcones
Number of racks: 8
Pressurized Volume: 75.5 cubic meters (2,666 cubic feet)
Habitable Volume: 1,230 cubic feet

National Aeronautics and Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

www.nasa.gov

---FS-2007-10-014-JSC