

## UNITED STATES HUMAN SPACE FLIGHT ACTIVITIES FOR 2000

**Mission:** STS-99

**Crew:**

Commander: Kevin Kregel

Pilot: Dom Gorie

Mission Specialist: Tamara Jernigan

Mission Specialist: Gerhard P.J. Thiele (ESA, Germany)

Mission Specialist: Janet Lynn Kavandi

Mission Specialist: Janice Voss

Mission Specialist: Mamoru Mohri (NASDA)

**Launched:** 11 February 2000

**Landed:** 22 February 2000

**Primary Mission Objective:**

The primary objective of the Shuttle Radar Topography Mission was to acquire a high-resolution topographic map of the Earth's land mass (between 60°N and 56°S) and to test new technologies for deployment of large rigid structures and measurement of their distortions to extremely high precision.

The Shuttle Radar Topography Mission represents a breakthrough in the science of remote-sensing and produced topographic maps of Earth 30 times as precise as the best global maps in use today. The information will be used to attempt to produce one of the most comprehensive and accurate maps of Earth ever assembled.



**Mission:** STS-101/ISS 2A.2a

**Crew:**

Commander: Jim Halsell  
Pilot: Scott Horowitz  
Mission Specialist: Mary Ellen Weber  
Mission Specialist: Jeff Williams  
Mission Specialist: Jim Voss  
Mission Specialist: Susan Helms  
Mission Specialist: Yuri Usachev (RSA)

**Launched:** 19 May, 2000

**Landed:** 29 May, 2000

**Primary Mission Objectives:**

The primary objectives for STS-101 were to deliver supplies to the International Space Station, perform a space walk and reboost the station's orbit from 370 kilometers (230 miles) to 402 kilometers (250 miles). Atlantis' crew spent six days docked with the station, delivered several important items and replaced four suspect batteries on Zarya. During the space walk, Astronauts James Voss and Jeff Williams completed the assembly of a Russian crane, tested the integrity of a U.S. crane, replaced a faulty communications antenna, installed handrails and set up a camera cable.



**Mission:** STS-106/ISS 2A.2b

**Crew:** Commander: Terrence Wilcutt  
Pilot: Scott D. Altman  
Mission Specialist: Edward T. Lu  
Mission Specialist: Richard A. Mastracchio  
Mission Specialist: Daniel C. Burbank  
Mission Specialist: Yuri I. Malenchenko  
Mission Specialist: Boris V. Morukov

**Launched:** 8 Sept., 2000

**Landed:** 20 Sept., 2000

**Primary Mission Objectives:**

Among priority tasks completed during the STS-106 mission of Atlantis to the International Space Station were: changing Zvezda, the Service Module, from launch to flight configuration; logistics activities, including unloading supplies in the Progress cargo vessel into the ISS and transferring equipment, supplies and water from the shuttle to the ISS; removing the TORU docking unit and the aft docking probe from the Zarya module; replacing two batteries on Zarya and installing three batteries and associated electronic equipment on the Zvezda, installing voltage converters and one charge/discharge device in the Zvezda and performing other electrical system work in that module; and a spacewalk to connect power, data and communications cables.



**Mission:** STS-92/ISS 3A

**Crew:**

Commander: Brian Duffy

Pilot: Pamela Melroy

Mission Specialist: Koichi Wakata NASDA Astronaut

Mission Specialist: Leroy Chiao

Mission Specialist: Peter "Jeff" Wisoff

Mission Specialist: Michael Lopez-Alegria

Mission Specialist: William "Bill" McArthur, Jr.

**Launched:** 11 Oct., 2000

**Landed:** 24 Oct., 2000

**Primary Mission Objectives:**

The STS-92 crew's successful mission to the International Space Station included installing the Z-1 Truss and Pressurized Mating Adapter 3 and completing four space walk. The Z1 truss is an early exterior framework to allow first U.S. solar arrays on flight 4A to be temporarily installed on Unity for early power.



**Mission:** STS-97/ISS 4A

**Crew:**

Commander: Brent W. Jett, Jr.

Pilot: Michael J. Bloomfield

Mission Specialist: Joseph R. "Joe" Tanner

Mission Specialist: Carlos Noriega

Mission Specialist: Marc Garneau, CSA

**Launch:** 1 Dec., 2000

**Landed:** 11 Dec., 2000

**Primary Mission Objectives:**

The main objective of STS-97 was to build and enhance the capabilities of the International Space Station. It delivered the first set of U.S. solar arrays and batteries, as well as radiators to provide cooling. Endeavour and its crew spent seven days docked to the station, which was staffed by its first resident crew. The STS-97 crew conducted three space walks and attached and unfurled the 73-meter (240-foot) solar arrays. A communications system for voice and telemetry also was installed.



## INTERNATIONAL SPACE STATION EXPEDITIONS

### Expedition 1:

The crew was launched to the International Space Station by Russia on International Space Station Flight 2R.

The crew consisted of:

Commander: Bill Shepherd

Soyuz Commander: Yuri Gidzenko.

Flight Engineer: Sergei Krikalev

Launched: Oct. 31, 2000

Docked: Nov. 2, 2000

Mission [End](#): March 18, 2001



## **Expedition 2:**

The crew was launched to the International Space Station by the United States on STS-102/ISS Flight 5A.1.

The crew consisted of:

Commander: Yury Usachev

Flight Engineer James Voss

Flight Engineer Susan Helms

Launched: 8 March, 2001

Docked: 9 March, 2001

Mission [End](#): To Be Determined





## UNITED STATES SPACE FLIGHT ACTIVITIES FOR 2001

During 2001, the United States has flown two successful Space Shuttle mission and a third mission is in progress. All of the 2001 Space Shuttle missions are for International Space Station assembly. The Expedition 1 International Space Station crew is scheduled for launch about the end of October this year.

**Mission:** STS-98/ISS 5A

**Crew:**

Commander: Kenneth Cockrell  
Pilot: Mark Polansky  
Mission Specialist: Robert Curbeam  
Mission Specialist: Thomas Jones  
Mission Specialist: Marsha Ivins

**Launched:** 7 Feb., 2001

**Landed:** 20 Feb., 2001

**Primary Mission Objective:**

While at the space station, the STS-98 crew installed the U.S. Destiny Laboratory Module, relocated a docking port, delivered supplies and equipment to the Expedition One crew, and conducted three successful space walks.





**Mission:** STS-102/ISS 5A.1

**Crew:**

Commander: Jim Wetherbee  
Pilot: Jim Kelly  
Mission Specialist: Andy Thomas  
Mission Specialist: Paul Richards  
Expedition Two Commander: Yury Usachev  
Expedition Two Flight Engineer: Jim Voss  
Expedition Two Flight Engineer: Susan Helms  
Expedition One Commander: Bill Shepherd  
One Flight Engineer: Sergei Krikalev  
Expedition One Soyuz Commander: Yuri Gidzenko

**Launched:** 8 March, 2001

**Landed:** 21 March, 2001

**Primary Mission Objective:**

Mission accomplishments include the delivery of the Expedition Two crew and the contents of the Leonardo Multi-Purpose Logistics Module to the station and the completion of two successful space walks. In addition to returning the Expedition One crew to Earth, STS-102 returned Leonardo - a reusable cargo carrier built by the Italian Space Agency. STS-102 was the 103rd shuttle flight and the eighth shuttle mission to visit the station.



**Mission:** STS-100/ISS 6A

**Crew:**

Commander: Kent V. Rominger  
Pilot: Jeffrey S. Ashby  
Mission Specialist: Chris Hadfield, CSA  
Mission Specialist: John L. Phillips  
Mission Specialist: Scott Parazynski  
Mission Specialist: Umberto Guidoni, ESA  
Mission Specialist: Yuri Lonchakov, Rosaviakosmos

**Launched:** 19 April, 2001

**Landed:** To Be Determined

**Primary Mission Objective:**

Space Shuttle Endeavour to Deliver Robotic Arm to Space Station

STS-100 will be the ninth space shuttle flight to visit the International Space Station. Space Shuttle Endeavour and its seven-member crew will deliver the station's robotic arm, the Raffaello Multi-Purpose Logistics Module and a UHF antenna. Raffaello contains six system racks and two storage racks for the station's U.S. Destiny Laboratory Module. The crew will conduct at least two space walks to install the robot arm, which is also known as the Space Station Remote Manipulator System, and the antenna.



REMAINING SPACE SHUTTLE / INTERNATIONAL SPACE STATION MANIFEST  
FOR 2001

Date	Assembly Flight	Launch Vehicle	Element(s)
June 14, 2001	<b>7A</b>	U.S. Orbiter <b>STS-104</b>	Joint Airlock High Pressure Gas Assembly
TBD	<b>4R</b>	Russian Soyuz	Docking Compartment 1 (DC-1) Strela Boom
July 12, 2001	<b>7A.1</b>	U.S. Orbiter <b>STS-105</b>	Donatello Multi-Purpose Logistics Module (MPLM) <b>Expedition 3 Crew</b>
Nov. 1, 2001	<b>UF-1</b>	U.S. Orbiter <b>STS-108</b>	Multi-Purpose Logistics Module (MPLM) <b>Expedition 4 Crew</b>
Nov. 19, 2001	N/A	U.S. Orbiter <b>STS-109</b>	Hubble Space Telescope Servicing Mission

**Notes:**

Additional Progress, and Soyuz, flights for crew transport, logistics and resupply are not listed.