



**March 5, 2001**

**Michael Braukus**  
Headquarters, Washington, DC  
(Phone: 202/358-1979)

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**Release No. 01-33**

## **KENNEDY TEAM CLEANS UP WITH FERTILE INVENTION; WINS NASA AWARD**

Faced with the daunting task of reducing hazardous rocket-fuel waste, a team of inventive scientists and engineers from NASA's Kennedy Space Center (KSC), FL, found a way to really clean up, while at the same time produce a commercially successful and safe byproduct.

The team developed a process to convert the hazardous waste to a helpful fertilizer and was honored with NASA's Commercial Invention of the Year Award.

The invention was developed by NASA's Dr. Clyde Parrish, Dr. Dale Lueck, Andrew Kelly and Dynacs Engineering's Paul Gamble. Together, they developed the new process in response to an Agency request to reduce the hazardous waste stream captured in a scrubber when a toxic oxidizer is transferred back and forth from storage tanks into the space shuttle's Orbital Maneuvering Subsystem (OMS) and Reaction Control System (RCS) pods. The shuttle's OMS is used for the major orbital and deorbit maneuvers and the RCS is used for orbiter attitude control.

The process was tested and is being implemented at Kennedy, where it is being used on orange groves located on the center's grounds.

"We have a number of talented scientists and engineers on our team and we're proud of them. I believe this is just the first of many such awards for the Kennedy Space Center," said Kennedy Director Roy Bridges. It is the first time Kennedy has won the award, given annually by NASA Headquarters to recognize a significant technology spinoff developed at one of the Agency's centers.

The inventors will be honored at a ceremony at NASA Headquarters in April where the team will receive a check and a certificate from the NASA Administrator. The technology will be submitted as NASA's nominee for the Intellectual Property Owners Inc. Invention of the Year award, which is held in cooperation with the United States Patent and Trademark Office.

"This was very much a team effort," said Gamble, the current lead for the project at Dynacs Engineering. Dynacs is the engineering development contractor at Kennedy. "We're all very proud to have been a part of it. When we're able to commercialize a technology we've developed at KSC, it benefits everyone. It's another example of how the space program

makes all our lives better," said Gamble.

Parrish suggested the original idea for the technology and led development of the process, which started while he worked at Dynacs. Parrish had worked on a Navy project team 25 years before that found an oxidizer used in battlefield illumination flares could be used as a fertilizer. Parrish has numerous patents and awards to his credit.

"When we were approached with the technical challenge to reduce hazardous waste, I remembered the flare oxidizer project. I thought the scrubber chemistry could be modified to produce a fertilizer," Parrish said.

The invention has been licensed to Phoenix Systems International Inc. of McDonald, Ohio, an engineering firm that develops technologies applied to utility and industrial fossil fuel. The U.S. Air Force also has expressed interest in the technology for launch facilities at Cape Canaveral Air Force Station, FL, and Vandenberg Air Force Base, Calif.

The award represents another success for Kennedy's Technology Programs and Commercialization Office. The office works with KSC scientists and engineers to report new technologies and commercialize them when possible.

"Our office has been striving to create an awareness of all facets of new technology reporting, including the awards program. As a part of this effort, we're seeking to provide more recognition for our inventors and their inventions," said Pam Bookman, a commercialization manager for the office. "Our people have always produced new technologies to cope with the operational challenges we face, but they're realizing more often now that those technologies can often be commercialized."

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**January 3, 2001**

Joel Wells  
NASA Kennedy Space Center  
321/867-2468

KSC Release No.: 1-01

**Note to Editors:  
MEDIA OPPORTUNITIES WITH STS-98 CREW SET FOR THIS WEEK'S  
COUNTDOWN TEST**

The crew of Space Shuttle mission STS-98, the 102nd mission in the history of Shuttle flight, will be at Kennedy Space Center this week for the Terminal Countdown Demonstration Test (TCDT). The crew is scheduled to arrive at KSC Wednesday evening.

The TCDT is held at KSC prior to each Space Shuttle flight, providing the crew an opportunity to participate in simulated countdown activities. The TCDT ends with a mock launch countdown culminating in a simulated main engine cut-off. The crew also spends time undergoing emergency egress training exercises at the pad and has an opportunity to view and inspect the payloads in the orbiter's payload bay.

The following events are available for media to attend during the STS-98 TCDT:

**Thursday, Jan. 4** -- Media are invited to attend a photo event featuring the crew of STS-98 as they practice driving an armored personnel carrier (M113). This transport is designed to assist the crew if an emergency egress is required away from the pad. Media should be at the KSC Press Site at 9:45 a.m. for transport to the M113 location.

**Friday, Jan. 5** -- Media representatives will have an opportunity to speak informally with and photograph the crew at Launch Pad 39A. Media interested in participating in this question and answer session should be at the KSC Press Site by 12:30 p.m. for transport to the pad. This question and answer session will be a local media event only. However, the session will be covered live on NASA TV beginning at about 1:30 p.m.

On Saturday, the crew will enter the orbiter Atlantis fully suited for the final hours of the practice countdown, including the simulated Shuttle main engine ignition and cut-off.

Following TCDT, the crew will depart KSC on Sunday for final mission preparations in Houston, TX.

Atlantis, on mission STS-98, is targeted for launch from Kennedy Space Center no earlier than Jan. 19. The flight is scheduled to last 11 days and will feature Atlantis docking with the International Space Station (ISS). Atlantis will deliver to ISS the U.S. Science Laboratory "Destiny".

Crew members for mission STS-98 are: Commander Ken Cockrell; Pilot Mark Polansky; and Mission Specialists Robert Curbeam, Thomas Jones, Marsha Ivins.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**January 5, 2001**

George H. Diller  
NASA Kennedy Space Center  
321/867-2468

KSC Release No.: 2-01

## **MARS 2001 ODYSSEY SPACECRAFT ARRIVES AT KSC FOR PROCESSING**

The first major step toward NASA's return of a spacecraft to an orbit around Mars was achieved late Thursday night, Jan. 4, when the Mars Odyssey spacecraft arrived at Kennedy Space Center, Fla. It was shipped aboard an Air Force C-17 cargo airplane from Denver, Co., location of the Lockheed Martin plant where the spacecraft was built.

Mars Odyssey was moved on a transport trailer from KSC's Shuttle Landing Facility to the Spacecraft Assembly and Encapsulation Facility 2 (SAEF-2) located in the KSC Industrial Area. There it will undergo final assembly and checkout. This includes installation of two of the three science instruments, integration of the three-panel solar array, and a spacecraft functional test. It will be fueled and then mated to an upper stage booster, the final activities before going to the launch pad.

Launch is planned for April 7, 2001 -- the first day of a 21-day planetary window. Mars Odyssey will be inserted into an interplanetary trajectory by a Boeing Delta II launch vehicle from Pad A at Complex 17 at the Cape Canaveral Air Force Station, Fla. The spacecraft will arrive at Mars on Oct. 20, 2001 for insertion into an initial elliptical capture orbit. Its final operational altitude will be a 250-mile-high Sun-synchronous polar orbit. Mars Odyssey will spend two years mapping the planet's surface and measuring its environment.

"Ultimately the spacecraft could contribute significantly toward understanding what may be necessary for a more sophisticated exploration of Mars," said George Pace, Mars Odyssey Project Manger.

The program management of the Mars Odyssey mission is by the Office of Space Science at NASA Headquarters, Washington, D.C. with project management by the Jet Propulsion Laboratory, Pasadena, CA. Launch management is by NASA's Kennedy Space Center, Fla.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



January 9, 2001

**Tracy Young**  
Kennedy Space Center, Fla.  
(Phone: 321/867-9284)

**KSC Release No. 3-01**

## **J. EMILIO VALENCIA, JR., HONORED BY NASA ASTRONAUT**

J. Emilio Valencia, Jr., a former resident of Howell, N.J., was recently presented with NASA's prestigious Silver Snoopy Award for service to the Space Shuttle astronauts.

Astronaut Scott Altman presented the award to Valencia in December at Kennedy Space Center. Valencia joined NASA in 1985 at Goddard Space Flight Center, Greenbelt, Md. He transferred to KSC in 1995. He is responsible for design and development of Checkout and Launch Control System (CLCS) hardware and software required for Space Shuttle upgrade initiatives.

Valencia was honored for his role in supporting the Shuttle Upgrades Integrated Vehicle Health Monitoring System, Human Exploration and Development of Space Technology Demonstration (HTD) ground support activities.

"The outcome of your efforts and extraordinary engineering talent provided an analysis of the ground processing the orbiter would require when it returned to the launch site," said Altman. "This analysis increased safety insight, improved turn-around time for the Shuttle program, and will potentially reduce ground support requirements."

Valencia graduated from Howell High School in 1981. After high school, he went on to receive a bachelor degree in electrical engineering from Fairleigh Dickinson University, Teaneck, N.J., in 1985. He received a master's degree from Johns Hopkins University in 1992. His parents, J. Emilio, Sr., and Blanca Valencia, reside in Howell.

Valencia and his wife, Lisa, currently live in Merritt Island, Fla. They have two children, Elaina and Emily.

Snoopy, of the comic strip "Peanuts," has been the unofficial mascot of NASA's astronaut corps since the earliest days of human space flight. The Silver Snoopy Award was created by the astronauts to honor persons who contribute most to the safety and success of human space flight.

The award is presented to no more than 1 percent of the space center's work force each year. Recipients are given a silver pin depicting the famous beagle wearing a space suit. All the pins have flown on a previous Space Shuttle mission. The awardees also receive a framed certificate and a congratulatory letter signed by the presenting astronaut.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-*

release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



January 9, 2001

**Tracy Young**  
Kennedy Space Center, Fla.  
(Phone: 321/867-9284)

**KSC Release No. 4-01**

## **SEVENTEEN KSC WORKERS HONORED BY NASA ASTRONAUTS**

Seventeen civil service and contractor employees at Kennedy Space Center, Fla., recently were presented with NASA's prestigious Silver Snoopy Award for service to the Space Shuttle astronauts.

Civil service employees honored were Susie Barth, Launch Integration Office; James (Mike) Lunceford, Spaceport Engineering & Technology Directorate; Sheila M. Perry, Spaceport Services Directorate; Philip J. Scarpa, Spaceport Services Directorate; Emilio J. Valencia, Jr., Checkout and Launch Control System Office, and Scott B. Wilson, Spaceport Engineering & Technology Directorate.

Contractor employees honored were William McLamb, Bionetics Corp.; Holly Loesel, Dynamac, Inc.; Wendy P. Benison, Wesley L. Lineberry, and Stanley W. Tieman, United Space Alliance; Dennis J. Camacho, Raymond P. Huddleston, Richard G. Keeseey, Renee E. Russell, Ned A. Scheerhorn, and Hemant Solanky, Space Gateway Support.

Awards were presented at KSC in December 2000. Astronaut Scott Altman presented awards to Barth, Lunceford, Perry, Scarpa, Valencia, Wilson, McLamb, and Loesel. Astronaut Terry Wilcutt presented awards to Benison, Lineberry, and Tieman. Astronaut Rick Mastracchio presented awards to Camacho, Huddleston, Keeseey, Russell, Scheerhorn, and Solanky.

Snoopy, of the comic strip "Peanuts," has been the unofficial mascot of NASA's astronaut corps since the earliest days of human space flight. The Silver Snoopy Award was created by the astronauts to honor persons who contribute most to the safety and success of human space flight.

The award is presented to no more than 1 percent of the space center's work force each year. Recipients are given a silver pin depicting the famous beagle wearing a space suit. All the pins have flown on a previous Space Shuttle mission. The awardees also received a framed certificate and a congratulatory letter signed by the presenting astronaut.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*





Jan. 11, 2001

**Ken Thornsley**  
Kennedy Space Center, Fla.  
(Phone: 321/867-7819)

**KSC Release No. 5-01**

**Note to Editors/News Directors:**

## **MISSION STS-98 ORIENTATION TOUR AND PHOTO OPPORTUNITIES FOR NEWS MEDIA SCHEDULED**

Accredited news media representatives are invited to participate in an orientation tour and a variety of photo opportunities for the launch of the Space Shuttle Atlantis on Mission STS-98. The preferred launch time on Jan. 19 is 2:11 a.m. EST at the opening of a window that extends for about 2 ½ - 5 minutes. All tour and photo opportunities will originate from the KSC Press Site.

-- end of general release --

### **STS-98 MEDIA EVENTS SCHEDULE**

(all times are EST)

#### **Monday, Jan. 15**

6:15 p.m. - Depart Press Site for crew arrival at the Shuttle Landing Facility (Arrival is slated for 7:15 p.m.)

#### **Tuesday, Jan. 16**

4:00 p.m. - Depart Press Site for T-38 flight. (Commander and Pilot) (Wire News Services Only)

#### **Wednesday, Jan. 17**

1:00 p.m. - Depart Press Site for news media orientation tour

#### **Thursday, Jan. 18**

5:30 a.m. - Photographers with remote cameras and equipment should report to the bus loading area in the lower parking lot

6:00 a.m. - Depart Press Site for remote camera set up. Remote camera set up will conclude no later than 12 noon

6:00 a.m. - Depart Press Site for sunrise photography of Atlantis on Pad 39A with the Rotating Service Structure retracted

9:20 p.m.- Depart Press Site for STS-98 crew walkout of O&C Building

#### **Friday, Jan. 19**

12:55 a.m. - Depart Press Site for Banana Creek Viewing Site

12:55 a.m. - Depart Press Site for Fire Tower Road

1:05 a.m. - Depart Press Site for Astronaut Road

2:11 a.m. - Launch

**NEWS MEDIA ARE REQUIRED TO BE UNDER PUBLIC AFFAIRS ESCORT AT ALL TIMES WHILE AT KSC EXCEPT WHEN DRIVING TO THE NEWS CENTER OR THE COMPLEX 39 CAFETERIA.**

**NEWS MEDIA ARE ALLOWED AT THE PRESS SITE ONLY WHEN THE KSC NEWS CENTER IS OPEN.**

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Feb. 1, 2001**

**Ken Thornsley**  
Kennedy Space Center, Fla.  
(Phone: 321/867-7819)

**KSC Release No. 5-01 (revised)**

**Note to Editors/News Directors:**

## **MISSION STS-98 ORIENTATION TOUR AND PHOTO OPPORTUNITIES FOR NEWS MEDIA RESCHEDULED**

Accredited news media representatives are invited to participate in an orientation tour and a variety of photo opportunities for the launch of the Space Shuttle Atlantis on Mission STS-98. The preferred launch time on Feb. 7 is 6:11 p.m. EST at the opening of a window that extends for about 2 ½ - 5 minutes. All tour and photo opportunities will originate from the KSC Press Site.

-- end of general release --

### **STS-98 MEDIA EVENTS SCHEDULE**

(all times are EST)

#### **Sunday, Feb. 4**

12:30 p.m. - Depart Press Site for crew arrival at the Shuttle Landing Facility (Arrival is slated for 1:30 p.m.)

#### **Monday, Feb. 5**

8:00 a.m. - Depart Press Site for STA flight. (Commander and Pilot) (Wire News Services Only)

#### **Tuesday, Feb. 6**

10:30 a.m. - Photographers with remote cameras and equipment should report to the bus loading area in the lower parking lot

11:00 a.m. - Depart Press Site for remote camera set up

1:00 p.m. - Depart Press Site for news media orientation tour

5:30 p.m. - Depart Press Site for sunset photography of Atlantis on Pad 39A

9:15 p.m. - Depart Press Site for rollback of Rotating Service Structure at Pad 39A

#### **Wednesday, Feb. 7**

1:20 p.m. - Depart Press Site for STS-98 crew walkout of O&C Building

4:35 p.m. - Depart Press Site for Banana Creek Viewing Site

4:35 p.m. - Depart Press Site for Fire Tower Road

5:05 p.m. - Depart Press Site for Astronaut Road

6:11 p.m. - Launch

**NEWS MEDIA ARE REQUIRED TO BE UNDER PUBLIC AFFAIRS ESCORT AT ALL TIMES WHILE AT KSC EXCEPT WHEN DRIVING TO THE NEWS CENTER OR THE COMPLEX 39 CAFETERIA.**

**NEWS MEDIA ARE ALLOWED AT THE PRESS SITE ONLY WHEN THE KSC NEWS CENTER IS OPEN.**

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**January 10, 2001**

Bruce Buckingham  
NASA Kennedy Space Center  
321/867-2468

KSC Release No.: 7-01

## **FIRST 2001 SHUTTLE LAUNCH SET JAN. 19 TO TURN SCIENCE FICTION TO SCIENCE REALITY ABOARD THE INTERNATIONAL SPACE STATION**

The launch of the Space Shuttle Atlantis has been set for 2:11 a.m. EST Jan. 19, on a mission that will deliver the first laboratory to the International Space Station, the United States-developed Destiny lab.

"The Space Shuttle will see the 20th anniversary of its first launch this spring, and it's a fitting celebration that the year ahead holds some of the most challenging and spectacular tasks the Shuttle has ever been assigned," Space Shuttle Program Manager Ron Dittmore said. "The team has done an excellent job getting Atlantis ready to go, and we're ready to get what will be an historic year in space off to a great start."

Space Shuttle managers today completed a flight readiness review of all preparations for Atlantis' flight, designated Shuttle mission STS-98. The launch window on Jan. 19 will be about five minutes long.

The crew of Atlantis -- Commander Ken Cockrell, Pilot Mark Polansky and Mission Specialists Tom Jones, Marsha Ivins and Bob Curbeam -- will use the Shuttle's robotic arm to attach the 15-ton Destiny lab to the Station and reposition a Shuttle docking port. Jones and Curbeam will conduct three space walks to complete the new laboratory's connection.

After an 11-day mission, Atlantis is scheduled to land at about 9:51 p.m. EST Jan. 29 at the Kennedy Space Center, Fla.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



Jan. 12, 2001

**Joel Wells**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 8-01**

## **LAUNCH COUNTDOWN FOR SHUTTLE MISSION STS-98 BEGINS JAN. 16**

NASA will begin the countdown for launch of Space Shuttle Atlantis on mission STS-98 Jan. 16 at 5:30 a.m. EST at the T-43 hour mark. This mission marks the 7th Shuttle flight to the International Space Station and the 1st Shuttle mission this year. The KSC launch team will conduct the countdown from Firing Room 3 of the Launch Control Center.

The countdown includes 25 hours and 40 minutes of built-in hold time leading to a preferred launch time at about 2:11 a.m. on Jan. 19 with a launch window not to exceed 5 minutes. The exact location of the orbiting International Space Station (ISS) will be determined during the T-9 minute built-in hold. The launch director will at that time determine the exact time of launch.

Mission STS-98 is the 23rd flight of the orbiter Atlantis and the 102nd flight overall in NASA's Space Shuttle program. STS-98 is scheduled to last 10 days, 19 hours and 40 minutes with a planned KSC landing at about 9:51 p.m. on Jan. 29.

Atlantis rolled into KSC's Orbiter Processing Facility on Sept. 20, 2000, after completing mission STS-106, to undergo processing for this flight. The orbiter rolled out of OPF bay 3 and into the Vehicle Assembly Building on Dec. 4. While in VAB high bay 3, Atlantis was mated to the external tank and solid rocket boosters. The entire Space Shuttle stack was transferred to Launch Pad 39A Jan. 3.

On mission STS-98, the five-member crew will deliver the U.S. Laboratory "Destiny" to the growing International Space Station. Destiny will be attached to the Unity node using the Shuttle's robot arm. The three member ISS crew will host the Shuttle crew members during the six days of docked operations. Three space walks are required to complete the planned construction work.

The STS-98 crew includes: Commander Kenneth Cockrell, Pilot Mark Polansky, and Mission Specialists Robert Curbeam, Thomas Jones and Marsha Ivins.

-- end of general release --

### **COUNTDOWN MILESTONES**

\*all times are Eastern

#### **Launch-3 Days (Tuesday, Jan. 16)**

Prepare for the start of the STS-98 launch countdown  
Perform the call-to-stations (5 a.m.)  
Countdown begins at the T-43 hour mark (5:30 a.m.)

Begin final vehicle and facility close-outs for launch  
Check out back-up flight systems  
Review flight software stored in mass memory units and display systems  
Load backup flight system software into Atlantis's general purpose computers  
Remove mid-deck and flight-deck platforms (1:30 p.m.)  
Activate and test navigational systems (6:30 p.m.)  
Complete preparation to load power reactant storage and distribution system (8:30 p.m.)  
Flight deck preliminary inspections complete (9:30 p.m.)

**Enter first built-in hold at T-27 hours for duration of 4 hours (9:30 p.m.)**

Clear launch pad of all non-essential personnel  
Perform test of the vehicle's pyrotechnic initiator controllers (10:30 p.m.)

### **Launch-2 Days (Wednesday, Jan. 17)**

**Resume countdown (1:30 a.m.)**

Begin operations to load cryogenic reactants into Atlantis' fuel cell storage tanks (1:30 a.m.  
- 9:30 a.m.)

**Enter 4-hour built-in hold at T-19 hours (9:30 a.m.)**

Begin filling pad sound suppression system water tank (9:30 a.m.)  
Demate orbiter mid-body umbilical unit (10 a.m.)  
Resume orbiter and ground support equipment close-outs  
Pad sound suppression system water tank filling complete (1 p.m.)

**Resume countdown (1:30 p.m.)**

Final preparations of the Shuttle's three main engines for main propellant tanking and flight (1:30 p.m.)  
Close out the tail service masts on the mobile launcher platform

**Enter planned hold at T-11 hours for 12 hours, 45 minutes (9:30 p.m.)**

Begin star tracker functional checks (10 p.m.)  
Activate orbiter's inertial measurement units  
Activate the orbiter's communications systems  
Install film in numerous cameras on the launch pad (12 midnight)

### **Launch Day-1 (Thursday, Jan. 18)**

Flight crew equipment late stow (2 a.m.)  
Move Rotating Service Structure (RSS) to the park position (6 a.m.)  
Perform ascent switch list  
Fuel cell flow-through purge complete

**Resume countdown at T-11 hours (10:15 a.m.)**

Activate the orbiter's fuel cells (11:25 a.m.)  
Clear the blast danger area of all non-essential personnel  
Switch Atlantis' purge air to gaseous nitrogen (12:30 p.m.)

**Enter planned 2-hour built-in hold at the T-6 hour mark (3:15 p.m.)**

Launch team verifies no violations of launch commit criteria prior to cryogenic loading of the external tank  
Clear pad of all personnel  
Chilldown of propellant transfer lines (4:45 p.m.)

Begin loading the external tank with about 500,000 gallons of cryogenic propellants (about 5:15 p.m.)

**Resume countdown (5:15 p.m.)**

Complete filling the external tank with its flight load of liquid hydrogen and liquid oxygen propellants (about 8:15 p.m.)  
Final Inspection Team proceed to launch pad

**Enter planned 2-hour built-in hold at T-3 hours (8:15 p.m.)**

Perform inertial measurement unit preflight calibration  
Align Merritt Island Launch Area (MILA) tracking antennas  
Perform open loop test with Eastern Range

**Resume countdown at T-3 hours (10:15 p.m.)**

Crew departs Operations and Checkout Building for the pad (at 10:20 p.m.)  
Complete close-out preparations in the white room  
Check cockpit switch configurations  
Flight crew begins entry into the orbiter (about 10:50 p.m.)  
Astronauts perform air-to-ground voice checks with Launch and Mission Control

**Launch Day (Friday, Jan. 19)**

Close Atlantis' crew hatch (about 12:05 a.m.)  
Begin Eastern Range final network open loop command checks  
Perform hatch seal and cabin leak checks  
Complete white room close-out  
Close-out crew moves to fallback area  
Primary ascent guidance data is transferred to the backup flight system

**Enter planned 10-minute hold at T-20 minutes (12:55 a.m.)**

NASA Test Director conducts final launch team briefings  
Complete inertial measurement unit preflight alignments

**Resume countdown at T-20 minutes (1:05 a.m.)**

Transition the orbiter's onboard computers to launch configuration  
Start fuel cell thermal conditioning  
Close orbiter cabin vent valves  
Transition backup flight system to launch configuration

**Enter estimated 45-minute hold at T-9 minutes (1:16 a.m.)**

Launch Director, Mission Management Team and NASA Test Director conduct final polls for go/no go to launch

**Resume countdown at T-9 minutes (about 2:01 a.m.)**

Start automatic ground launch sequencer (T-9:00 minutes)  
Retract orbiter crew access arm (T-7:30)  
Start mission recorders (T-6:15)  
Start Auxiliary Power Units (T-5:00)  
Arm SRB and ET range safety safe and arm devices (T-5:00)  
Start liquid oxygen drainback (T-4:55)  
Start orbiter aerosurface profile test (T-3:55)  
Start main engine gimbal profile test (T-3:30)  
Pressurize liquid oxygen tank (T-2:55)

Begin retraction of the gaseous oxygen vent arm (T-2:55)  
 Fuel cells to internal reactants (T-2:35)  
 Pressurize liquid hydrogen tank (T-1:57)  
 Deactivate SRB joint heaters (T-1:00)  
 Orbiter transfers from ground to internal power (T-0:50 seconds)  
 Ground Launch Sequencer go for auto sequence start (T-0:31 seconds)  
 SRB gimbal profile (T-0:21 seconds)  
 Ignition of three Space Shuttle main engines (T-6.6 seconds)  
 SRB ignition and liftoff (T-0)

### SUMMARY OF BUILT-IN HOLDS FOR STS-98

T-TIME	LENGTH OF HOLD	HOLD BEGINS	HOLD ENDS
T-27 hours	4 hours	9:30 p.m. Tues.	1:30 a.m. Wed.
T-19 hours	4 hours	9:30 a.m. Wed.	1:30 p.m. Wed.
T-11 hours	12 hours, 45 minutes	9:30 p.m. Wed.	10:15 a.m. Thurs.
T-6 hours	2 hours	3:15 p.m. Thurs.	5:15 p.m. Thurs.
T-3 hours	2 hours	8:15 p.m. Thurs.	10:15 p.m. Thurs.
T-20 minutes	10 minutes	12:55 a.m. Fri.	1:05 a.m. Fri.
T-9 minutes	about 45 minutes	1:16 a.m. Fri.	2:01 a.m. Fri.

### CREW FOR MISSION STS-98

Commander (CDR)	Kenneth Cockrell
Pilot (PLT)	Mark Polansky
Mission Specialist (MS1)	Robert Curbeam
Mission Specialist (MS2)	Marsha Ivins
Mission Specialist (MS3)	Thomas Jones

### SUMMARY OF STS-98 LAUNCH DAY CREW ACTIVITIES

Thursday, Jan. 18

2:30 p.m.	Crew wake up
3:00 p.m.	Breakfast
8:00 p.m.	Lunch
*9:10 p.m.	Photo opportunity
9:40 p.m.	Weather briefing (CDR, PLT, MS2)
9:40 p.m.	Don flight suits (MS1, MS3)
*9:50 p.m.	Don flight suits (CDR, PLT, MS2)
*10:20 p.m.	Depart for launch pad
*10:50 p.m.	Arrive at white room and begin ingress

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

**Friday, Jan. 19**

*12:05 a.m.	Close crew hatch
*2:11 a.m.	Launch

\*Televised events (times may vary slightly)

All times Eastern



Jan. 12, 2001

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 9-01**

**Note to Editors/News Directors:**

## **MISSION STS-98 EVENTS, NEWS CENTER OPERATING HOURS SET**

News conferences, events and operating hours for KSC's News Center have been set for the Jan. 19 launch of the Space Shuttle Atlantis on Mission STS-98, the 102nd launch in the Shuttle program. Launch on Jan. 19 is set for about 2:11 a.m. EST at the opening of a window that extends for about 2 ½ - 5 minutes. The news conferences and events listed below will be carried live on NASA Television (unless otherwise noted) and originate from the KSC Press Site.

The five-member STS-98 crew is scheduled to arrive at KSC on Monday, Jan. 15 at about 7:15 p.m. EST. News media representatives planning to cover the event must be at the KSC News Center by 6:15 p.m. (in the event of a possible early crew arrival) for transportation to the Shuttle Landing Facility. On launch day, the crew will depart their KSC living quarters and be driven to the launch pad at about 10:20 p.m. Media interested in attending this event should be at the News Center no later than 9:20 p.m.

In addition to daily 9 a.m. countdown status briefings, a prelaunch press conference will be held two days before launch. The full briefing schedule is listed below.

News media representatives with proper authorization may obtain STS-98 mission credentials at the Pass and Identification Building on State Road 3 (south of KSC) on Merritt Island during published times. (Credential and badging hours are listed below.)

Media with annual badges are reminded to submit their requests for year 2001 annual badges as soon as possible. Year 2000 annual badges will be honored through the end of January 2001.

-- end of general release --

### **STS-98 BRIEFINGS & EVENTS SCHEDULE** *(all times are EDT)*

*(All briefings are held inside the KSC Press Site auditorium and will be carried live on NASA TV unless otherwise noted)*

#### **L-4 Days - Monday, Jan. 15**

**7:15 p.m.** ----- STS-98 Flight Crew Arrival *(Live on NASA TV)*

#### **L-3 Days - Tuesday, Jan. 16**

Launch countdown begins at 5:30 a.m. Codaphone will be updated with status (321/867-2525).

**9 a.m.** ----- Countdown Status Briefing

Steve Altemus, NASA Test Director

Jon Cowart, U.S. Laboratory payload manager  
Ed Priselac, Shuttle Weather Officer

### **L-2 Days - Wednesday, Jan. 17**

#### **9 a.m. ----- Countdown Status Briefing**

Pete Nickolenko, NASA Test Director  
Jon Cowart, U.S. Laboratory payload manager  
Ed Priselac, Shuttle Weather Officer

#### **4 p.m. ----- Prelaunch News Conference**

Ron Dittmore, Shuttle Program Manager, NASA, JSC  
Bill Gerstenmaier, ISS Deputy Program Manager, NASA, JSC  
Dave King, Director of Shuttle Processing, NASA, KSC  
Captain Clif Stargardt, Staff Meteorologist, 45th Weather Squadron, USAF

### **L-1 Day - Thursday, Jan. 18**

*(Tanking begins at about 5:15 p.m.)*

#### **9 p.m. ----- NASA Television live launch programming begins**

#### **Launch Day Crew activities:**

2:30 p.m. -----Wake up  
3:00 p.m. -----Breakfast  
8:00 p.m. -----Lunch  
\*9:10 p.m. -----Snack (Crew Photo)  
9:40 p.m. -----Weather briefing  
\*10:05 p.m. -----Suit up photo  
\*10:20 p.m. ----- Walkout/depart for pad  
\*10:50 p.m. ----- Arrive at pad

### **L-0 Day - Friday, Nov. 19**

\*12:05 a.m. -----Close hatch  
\*2:11 a.m. -----Launch of Atlantis

(\* Carried live on NASA TV)

#### **\*3:15 a.m. ----- Post-launch Press Conference**

Jim Halsell, Shuttle Program Launch Integration Manager, KSC  
Mike Leinbach, Shuttle Launch Director, KSC

### **KSC News Center office hours for STS-98**

*(Times may be adjusted in real time depending on mission events and timelines.)*

Monday, Jan. 15 (Holiday) (Launch minus 4 days) - 4 p.m. - 8:30 p.m.

Tuesday, Jan. 16 (Launch minus 3 days) - 8 a.m. - 4:30 p.m.

Wednesday, Jan. 17 (Launch minus 2 days) - 8 a.m. - 6:30 p.m.

Thursday, Jan. 18 (Launch minus 1 day) - 8 a.m. - around-the-clock

Friday, Jan. 19 (Launch day) - ----- 4:30 p.m.

#### **[FOR MISSION DAY SCHEDULES SEE NOTE BELOW]**

Monday, Jan. 29 (Landing day) -- TBD

**NOTE:** The KSC News Center will support media questions for overnight and weekend STS-98 Mission Status Briefings and the in-flight crew news conference. Media interested in attending the briefings that occur after normal office hours (8 a.m. - 4:30 p.m. Monday-Friday), MUST make their intentions known to the KSC News Room at least 24-hours in advance, in order to secure proper access to the press site. Times of these briefings are available in the NASA TV schedule at:

<http://www.spaceflight.nasa.gov/realdata/nasatv/schedule.html>

### **Pass and Identification Hours**

L-4 Monday, Jan. 15 --- closed  
L-3 Tuesday, Jan. 16 --- 8 a.m. - 4:30 p.m.  
L-2 Wednesday, Jan. 17 --- 8 a.m. - 4:30 p.m.  
L-1 Thursday, Jan. 18 --- 8 a.m. - 1 a.m. (Friday)

News media may obtain STS-98 mission credentials at the Pass and Identification Building at Gate 2 on State Road 3, Merritt Island, during the above published times.

News media with annual Shuttle credentials are reminded to sign the logbook at the query counter in the News Center.

**NEWS MEDIA ARE REQUIRED TO BE UNDER PUBLIC AFFAIRS ESCORT AT ALL TIMES WHILE AT KSC EXCEPT WHEN DRIVING TO THE NEWS CENTER OR THE COMPLEX 39 CAFETERIA.**

**NEWS MEDIA ARE ALLOWED AT THE PRESS SITE ONLY WHEN THE KSC NEWS CENTER IS OPEN.**

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**January 19, 2001**

Bruce Buckingham  
321/867-2468

Debbie Frostrom  
321/867-2144

KSC Release No.: 10-01

## **SHUTTLE LAUNCH VEHICLE PASS REQUESTS BEING ACCEPTED ONCE AGAIN**

Written requests for vehicle passes to view Space Shuttle launches within the restricted perimeter of Kennedy Space Center (KSC) are once again being accepted. These passes grant visitors permission to drive through several designated guard stations to a public viewing site on the causeway between KSC and Cape Canaveral Air Force Station without the requirement of an escort.

Anyone is welcome to make a request, including members of the general public worldwide, educators, and representatives from groups or organizations wishing to attend the launch together.

Only requests for passes for the following Space Shuttle missions currently targeted for launch in the year 2001 are being accepted:

STS-102 (March)  
STS-100 (April)  
STS-104 (May)  
STS-105 (June)  
STS-107 (Aug.)  
STS-108 (Oct.)  
STS-109 (Nov.)

Specific Space Shuttle mission launch assessment dates can be found on the World Wide Web at <http://www-pao.ksc.nasa.gov/kscpao/schedule/schedule.htm>.

Since the number of vehicle passes is limited, requests will be accepted on a first come first served basis. All requests should be submitted in writing to:

Car Pass Request  
PA-PASS  
Kennedy Space Center, FL 32899

Letter and postcard requests are allowed. No e-mail or telephone requests will be accepted.

The request must be for one mission only. The mission must be specified in the request letter. The request must also specify which of the following category of vehicle pass is required: car, motor home, bus, or disabled.

Only those selected will be notified by mail. The passes will then be mailed to the

recipient's address approximately three weeks prior to the launch. Only one request per person will be honored. Only one pass will be issued per request.

Because of the limited number of passes available, only one (1) request per household or address will be honored each calendar year. This policy will apply to all future Space Shuttle missions. Requests for passes for missions launching after the year 2001 will not be honored at this time.

For more information, visit the following Web site:

<http://www-pao.ksc.nasa.gov/kscpao/carpass/carpass.htm>

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



Feb. 1, 2001

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 12-01**

**Note to Editors/News Directors:**

## **MISSION STS-98 EVENTS, NEWS CENTER OPERATING HOURS SET**

News conferences, events and operating hours for KSC's News Center have been set for the Feb. 7 launch of the Space Shuttle Atlantis on Mission STS-98, the 102nd launch in the Shuttle program. Launch on Feb. 7 is set for about 6:11 p.m. EST at the opening of a window that extends for about 5 minutes. The news conferences and events listed below will be carried live on NASA Television (unless otherwise noted) and originate from the KSC Press Site.

The five-member STS-98 crew is scheduled to arrive at KSC on Sunday, Feb. 4 at about 1:30 p.m. EST. News media representatives planning to cover the event must be at the KSC News Center by 12:30 p.m. (in the event of a possible early crew arrival) for transportation to the Shuttle Landing Facility. On launch day, the crew will depart their KSC living quarters and be driven to the launch pad at about 2:20 p.m. Media interested in attending this event should be at the News Center no later than 1:20 p.m.

In addition to daily 9 a.m. countdown status briefings, a prelaunch press conference will be held two days before launch. The full briefing schedule is listed below.

News media representatives with proper authorization may obtain STS-98 mission credentials at the Pass and Identification Building on State Road 3 (south of KSC) on Merritt Island during published times. (Credential and badging hours are listed below.)

Media with annual badges are reminded to submit their requests for year 2001 annual badges as soon as possible. Year 2000 annual badges will be honored through the end of the STS-98 mission.

-- end of general release --

### **STS-98 BRIEFINGS & EVENTS SCHEDULE** *(all times are EDT)*

*(All briefings are held inside the KSC Press Site auditorium and will be carried live on NASA TV unless otherwise noted)*

#### **L-3 Days - Sunday, Feb. 4**

**1:30 p.m.** ----- STS-98 Flight Crew Arrival *(Live on NASA TV)*

Launch countdown begins at 10 p.m.

(The KSC codaphone will be updated with daily status - 321/867-2525).

#### **L-2 Days - Monday, Feb. 5**

**9 a.m.** ----- Countdown Status Briefing

Steve Altemus, NASA Test Director  
Jon Cowart, U.S. Laboratory payload manager  
Ed Priselac, Shuttle Weather Officer

**4 p.m. ----- Prelaunch News Conference**

Ron Dittmore, Shuttle Program Manager, NASA, JSC  
Bill Gerstenmaier, ISS Deputy Program Manager, NASA, JSC  
Dave King, Director of Shuttle Processing, NASA, KSC  
Captain Clif Stargardt, Staff Meteorologist, 45th Weather Squadron, USAF

**L-1 Day - Tuesday, Feb. 6**

**9 a.m. ----- Countdown Status Briefing**

Pete Nickolenko, NASA Test Director  
Jon Cowart, U.S. Laboratory payload manager  
Ed Priselac, Shuttle Weather Officer

**L-0 Day - Wednesday, Feb. 7**

*(Tanking begins at about 5:15 p.m.)*

**1 p.m. ----- NASA Television live launch programming begins**

**Launch Day Crew activities:**

6:30 a.m. -----Wake up  
7:00 a.m. -----Breakfast  
12:30 p.m. -----Lunch  
\*1:10 p.m. -----Crew Photo  
1:41 p.m. -----Weather briefing  
\*2:05 p.m. -----Suit up photo  
\*2:21 p.m. -----Walkout/depart for pad  
\*2:51 p.m. -----Arrive at pad  
\*4:06 p.m. -----Close hatch  
\*6:11 a.m. -----Launch of Atlantis

(\* Carried live on NASA TV)

**\*7:15 p.m. ----- Post-launch Press Conference**

Jim Halsell, Shuttle Program Launch Integration Manager, KSC  
Mike Leinbach, Shuttle Launch Director, KSC

**KSC News Center office hours for STS-98**

*(Times may be adjusted in real time depending on mission events and timelines.)*

Sunday, Feb. 4 (Launch minus 3 days) - 12 noon - 4 p.m.  
Monday, Feb. 5 (Launch minus 2 days) - 8 a.m. - 6:30 p.m.  
Tuesday, Feb. 6 (Launch minus 1 day) - 8 a.m. - 12 midnight  
Wednesday, Feb. 7 (Launch day) - 6:00 a.m. - 8 p.m.

**[FOR MISSION DAY SCHEDULES SEE NOTE BELOW]**

Monday, Feb. 18 (Landing day) -- 9 a.m. - 5 p.m.

**NOTE:** The KSC News Center will support media questions for overnight and weekend STS-98 Mission Status Briefings and the in-flight crew news conference. Media interested in attending the briefings that occur after normal office hours (8 a.m. - 4:30 p.m. Monday-Friday), MUST make their intentions known to the KSC News Room at least 24-hours in advance, in order to secure proper access to the press site. Times of these briefings are available in the NASA TV schedule at:

<http://www.spaceflight.nasa.gov/realdata/nasatv/schedule.html>

**Pass and Identification Hours**

L-2 Monday, Feb. 5 --- 8 a.m. - 4:30 p.m.  
L-1 Tuesday, Feb. 6 --- 8 a.m. - 4:30 p.m.

L-0 Wednesday, Feb. 7 --- 8 a.m. - 5 p.m.

News media may obtain STS-98 mission credentials at the Pass and Identification Building at Gate 2 on State Road 3, Merritt Island, during the above published times.

News media with annual Shuttle credentials are reminded to sign the logbook at the query counter in the News Center.

**NEWS MEDIA ARE REQUIRED TO BE UNDER PUBLIC AFFAIRS ESCORT AT ALL TIMES WHILE AT KSC EXCEPT WHEN DRIVING TO THE NEWS CENTER OR THE COMPLEX 39 CAFETERIA.**

**NEWS MEDIA ARE ALLOWED AT THE PRESS SITE ONLY WHEN THE KSC NEWS CENTER IS OPEN.**

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Feb. 2, 2001**

**George Diller**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-2468)**

**KSC Release No. 13-01**

## **"DONATELLO" MULTI-PURPOSE LOGISTICS MODULE ARRIVES AT KSC**

The Italian Space Agency's "Donatello" Multi-Purpose Logistics Module (MPLM), the third of three for the International Space Station, arrived at Kennedy Space Center (KSC) late Thursday, Feb. 1. It was transported to the United States by a special Airbus "Beluga" air cargo plane from the factory of Alenia Aerospazio in Turin, Italy. Today it is being offloaded from the Beluga and transported to KSC's Space Station Processing Facility (SSPF).

The Donatello MPLM, one of Italy's major contributions to the International Space Station program, is a reusable logistics carrier. These logistics modules are the primary delivery system used to resupply and return Station cargo requiring a pressurized environment. The cylindrical module is approximately 21 feet long, 15 feet in diameter and weighs almost 4.5 tons, excluding up to 20,000 pounds of contents.

Launched in the Space Shuttle's payload bay, it will contain supplies, science experiments, spare parts and components for the International Space Station. Once on orbit, it will be removed from the payload bay and docked to the Station using the remote manipulator arm of either the Shuttle or the Station. During each MPLM mission, supplies and scientific experiments are exchanged for items to be returned to earth including completed experiments, equipment for repair, or trash and recyclables.

The Donatello, Raffaello, Leonardo logistics modules are processed by NASA with engineering support from the Italian Space Agency, Alenia Aerospazio and Boeing. Among the activities for the payload test team to prepare the module for launch are: integrated electrical tests with other Station elements in the SSPF, leak tests, electrical and software compatibility tests with the Space Shuttle using the Cargo Integrated Test Equipment (CITE), and an Interface Verification Test (IVT) once the module is installed in the Space Shuttle's payload bay at the launch pad.

The most significant mechanical task to be performed on Donatello in the SSPF is the installation and outfitting of the racks for carrying the various experiments and cargo. Donatello provides interfaces for up to 16 racks, five of which also furnish power, data and fluid support to a refrigerator freezer. The racks will be installed into the module using an efficient piece of robotic equipment called the "Rack Insertion Device (RID)." The RID was developed by Kennedy Space Center engineers for fast and easy installation and removal of the racks for rapid turnaround of the logistics module between missions.

The first of the three MPLM's, "Leonardo" arrived at KSC on Aug. 3, 1998 and will be launched in March on mission STS-102. Raffaello, the second module, arrived on Aug. 2, 1999 and will be launched in April on mission STS-100. Donatello will be launched on mission STS-130, currently planned for September 2004.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Feb. 2, 2001**

**Joel Wells**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-2468)**

**KSC Release No. 14-01**

## **LAUNCH COUNTDOWN FOR SHUTTLE MISSION STS-98 BEGINS FEB. 4**

NASA will begin the countdown for launch of Space Shuttle Atlantis on mission STS-98 Feb. 4 at 10 p.m. EST at the T-43 hour mark. Launch had earlier been scheduled to occur Jan. 19 but was delayed when Shuttle managers decided to roll Atlantis back to the Vehicle Assembly Building (VAB) for additional solid rocket booster electrical cable inspections. Atlantis was returned to Launch Pad 39A on Jan. 26.

This mission marks the 7th Shuttle flight to the International Space Station and the 1st Shuttle mission this year. The KSC launch team will conduct the countdown from Firing Room 3 of the Launch Control Center.

The countdown includes 25 hours and 11 minutes of built-in hold time leading to a preferred launch time at about 6:11 p.m. on Feb. 7 with a launch window not to exceed 5 minutes. The exact location of the orbiting International Space Station (ISS) will be determined during the T-9 minute built-in hold. The launch director will at that time determine the exact time of launch.

Mission STS-98 is the 23rd flight of the orbiter Atlantis and the 102nd flight overall in NASA's Space Shuttle program. STS-98 is scheduled to last 10 days, 19 hours and 28 minutes with a planned KSC landing at about 1:39 p.m. on Feb. 18.

Atlantis rolled into KSC's Orbiter Processing Facility on Sept. 20, 2000, after completing mission STS-106. The orbiter rolled out of OPF bay 3 and into the VAB on Dec. 4. While in VAB high bay 3, Atlantis was mated to the external tank and solid rocket boosters. The entire Space Shuttle stack was transferred to Launch Pad 39A on Jan. 3, returned to the VAB Jan. 19, and moved back to the pad a week later once managers cleared it for flight.

On mission STS-98, the five-member crew will deliver the U.S. Laboratory "Destiny" to the growing International Space Station. Destiny will be attached to the Unity node using the Shuttle's robot arm. The three member ISS crew will host the Shuttle crew members during the six days of docked operations. Three space walks are required to complete the planned construction work.

-- end of general release --

### **COUNTDOWN MILESTONES**

\*all times are Eastern

#### **Launch-3 Days (Sunday, Feb. 4)**

Prepare for the start of the STS-98 launch countdown

Perform the call-to-stations (9:30 p.m.)  
Countdown begins at the T-43 hour mark (10 p.m.)  
Begin final vehicle and facility close-outs for launch  
Check out back-up flight systems  
Review flight software stored in mass memory units and display systems

### **Launch-2 Days (Monday, Feb. 5)**

Load backup flight system software into Atlantis's general purpose computers  
Remove mid-deck and flight-deck platforms (6 a.m.)  
Activate and test navigational systems (11 a.m.)  
Complete preparation to load power reactant storage and distribution system (1 p.m.)  
Flight deck preliminary inspections complete (2 p.m.)

**Enter first built-in hold at T-27 hours for duration of 4 hours (2 p.m.)**

Clear launch pad of all non-essential personnel  
Perform test of the vehicle's pyrotechnic initiator controllers (3 p.m.)

**Resume countdown (6 p.m.)**

Begin operations to load cryogenic reactants into Atlantis' fuel cell storage tanks  
(6 p.m. - 2 a.m.)

### **Launch Day-1 (Tuesday, Feb. 6)**

**Enter 4-hour built-in hold at T-19 hours (2 a.m.)**

Demate orbiter mid-body umbilical unit (2:30 a.m.)  
Begin filling pad sound suppression system water tank (3:30 a.m.)  
Resume orbiter and ground support equipment close-outs

**Resume countdown (6 a.m.)**

Final preparations of the Shuttle's three main engines for main propellant tanking and flight  
(6 a.m.)  
Pad sound suppression system water tank filling complete (7 a.m.)  
Close out the tail service masts on the mobile launcher platform

**Enter planned hold at T-11 hours for 12 hours, 16 minutes (2 p.m.)**

Begin star tracker functional checks (2 p.m.)  
Activate orbiter's inertial measurement units  
Activate the orbiter's communications systems  
Install film in numerous cameras on the launch pad (4 p.m.)  
Flight crew equipment late stow (6 p.m.)  
Move Rotating Service Structure (RSS) to the park position (10 p.m.)  
Perform ascent switch list  
Fuel cell flow-through purge complete

### **Launch Day (Wednesday, Feb. 7)**

**Resume countdown at T-11 hours (2:16 a.m.)**

Activate the orbiter's fuel cells (2:56 a.m.)  
Clear the blast danger area of all non-essential personnel  
Switch Atlantis' purge air to gaseous nitrogen (4:01 a.m.)

**Enter planned 2-hour built-in hold at the T-6 hour mark (7:16 a.m.)**

Launch team verifies no violations of launch commit criteria prior to cryogenic loading of the external tank

Clear pad of all personnel

Chilldown of propellant transfer lines (8:46 a.m.)

Begin loading the external tank with about 500,000 gallons of cryogenic propellants (about 9:16 a.m.)

**Resume countdown (12:16 p.m.)**

Complete filling the external tank with its flight load of liquid hydrogen and liquid oxygen propellants (about 12:16 p.m.)

Final Inspection Team proceed to launch pad

**Enter planned 2-hour built-in hold at T-3 hours (12:16 p.m.)**

Perform inertial measurement unit preflight calibration

Align Merritt Island Launch Area (MILA) tracking antennas

Perform open loop test with Eastern Range

**Resume countdown at T-3 hours (2:16 p.m.)**

Crew departs Operations and Checkout Building for the pad (2:21 p.m.)

Complete close-out preparations in the white room

Check cockpit switch configurations

Flight crew begins entry into the orbiter (about 2:51 p.m.)

Astronauts perform air-to-ground voice checks with Launch and Mission Control

Close Atlantis' crew hatch (about 4:06 p.m.)

Begin Eastern Range final network open loop command checks

Perform hatch seal and cabin leak checks

Complete white room close-out

Close-out crew moves to fallback area

Primary ascent guidance data is transferred to the backup flight system

**Enter planned 10-minute hold at T-20 minutes (4:56 p.m.)**

NASA Test Director conducts final launch team briefings

Complete inertial measurement unit preflight alignments

**Resume countdown at T-20 minutes (5:06 p.m.)**

Transition the orbiter's onboard computers to launch configuration

Start fuel cell thermal conditioning

Close orbiter cabin vent valves

Transition backup flight system to launch configuration

**Enter estimated 45-minute hold at T-9 minutes (5:17 p.m.)**

Launch Director, Mission Management Team and NASA Test Director conduct final polls for go/no go to launch

**Resume countdown at T-9 minutes (about 6:02 p.m.)**

Start automatic ground launch sequencer (T-9:00 minutes)

Retract orbiter crew access arm (T-7:30)

Start mission recorders (T-6:15)

Start Auxiliary Power Units (T-5:00)

Arm SRB and ET range safety safe and arm devices (T-5:00)

Start liquid oxygen drainback (T-4:55)

Start orbiter aerosurface profile test (T-3:55)

Start main engine gimbal profile test (T-3:30)

Pressurize liquid oxygen tank (T-2:55)

Begin retraction of the gaseous oxygen vent arm (T-2:55)  
 Fuel cells to internal reactants (T-2:35)  
 Pressurize liquid hydrogen tank (T-1:57)  
 Deactivate SRB joint heaters (T-1:00)  
 Orbiter transfers from ground to internal power (T-0:50 seconds)  
 Ground Launch Sequencer go for auto sequence start (T-0:31 seconds)  
 SRB gimbal profile (T-0:21 seconds)  
 Ignition of three Space Shuttle main engines (T-6.6 seconds)  
 SRB ignition and liftoff (T-0)

## SUMMARY OF BUILT-IN HOLDS FOR STS-98

T-TIME	LENGTH OF HOLD	HOLD BEGINS	HOLD ENDS
T-27 hours	4 hours	2 p.m. Mon.	6 p.m. Mon.
T-19 hours	4 hours	2 a.m. Tues.	6 a.m. Tues.
T-11 hours	12 hours, 16 minutes	2 p.m. Tues.	2:16 a.m. Wed.
T-6 hours	2 hours	7:16 a.m. Wed.	9:16 a.m. Wed.
T-3 hours	2 hours	12:16 p.m. Wed.	2:16 p.m. Wed.
T-20 minutes	10 minutes	4:56 p.m. Wed.	5:06 p.m. Wed.
T-9 minutes	about 45 minutes	5:17 p.m. Wed.	6:02 p.m. Wed.

## CREW FOR MISSION STS-98

Commander (CDR): Kenneth Cockrell  
 Pilot (PLT): Mark Polansky  
 Mission Specialist (MS1): Robert Curbeam  
 Mission Specialist (MS2): Marsha Ivins  
 Mission Specialist (MS3): Thomas Jones

## SUMMARY OF STS-98 LAUNCH DAY CREW ACTIVITIES

### Wednesday, Feb. 7

6:30 a.m. Crew wake up  
 7 a.m. Breakfast  
 7:30 a.m. Medical Checks  
 12:30 p.m. Lunch  
 \*1:10 p.m. Photo opportunity  
 1:41 p.m. Weather Briefing (CDR, PLT, MS2)  
 1:41 p.m. Don flight suits (MS1, MS3)  
 \*1:51 p.m. Don flight suits (CDR, PLT, MS2)  
 \*2:21 p.m. Depart for launch pad  
 \*2:51 p.m. Arrive at white room and begin ingress  
 \*4:06 p.m. Close crew hatch  
 \*6:11 p.m. Launch

\* Televised events (times may vary slightly)  
 All times Eastern

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---





**Feb. 6, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 15-01**

**NOTE TO EDITORS:**

**RESEARCH LAB GROUNDBREAKING CEREMONY IS 1ST STEP IN  
TECHNOLOGICAL GROWTH**

On Feb. 8 at 2 p.m., Center Director Roy Bridges and Florida's Lt. Gov. Frank T. Brogan will break ground to kick off a new research laboratory construction project that will serve KSC and the State through the new millennium. The site is actually the location of the start of a new road, Space Commerce Way, that will provide 24-hour access through KSC and a proposed Space Commerce Park to the Visitor Complex. The groundbreaking is for this road as well as the Space Experiment Research and Processing Laboratory (SERPL).

The SERPL will be a world-class laboratory for experiment processing and biological and life sciences research for the International Space Station. In partnership with the Spaceport Florida Authority and other State agencies, NASA is designing the facility and the State will fund and perform construction. Plans are for the completed SERPL to be co-managed by NASA and the Florida Space Research Institute, using the University of Florida as its lead academic institution. Construction is expected to be completed in 2003.

Bridges, Brogan and invited guests such as Joseph Rothenberg, associate administrator, Office of Spaceflight, NASA; Florida representative Randy Ball; Dr. Pamella J. Dana, director of Office of Tourism, Trade and Economic Development, and Dr. Samuel T. Durrance, executive director of Florida Space Research Institute, will be bused from the Dr. Kurt H. Debus Conference Facility at the KSC Visitor Complex to the groundbreaking site on S.R. 3. Bridges and Brogan are expected to comment on the plans for SERPL.

Media who wish to take part in this photo opportunity should be at the Debus Conference Facility by 1 p.m. for transport to the groundbreaking. They will be bused back to the Debus Facility afterward where they will be able to interview key participants. A reception follows.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**Feb. 8, 2001**  
**4:00 p.m. EST**

**Bruce Buckingham**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-2468)**

**Eddie Ellegood**  
**Spaceport Florida Authority**  
**(321) 730-5301**

**KSC Release No. 17-01**

## **NASA AND FLORIDA JOIN FORCES TO DEVELOP SPACE SCIENCE FACILITY**

Florida Lt. Governor Frank Brogan and Kennedy Space Center Director Roy Bridges broke ground today for the construction of a 100,000 square-foot research facility and a three-mile roadway made possible through a unique partnership between NASA and the State of Florida. The Space Experiment Research & Processing Laboratory (SERPL) will be the magnet facility for a proposed 400-acre Space Commerce Park, located south of the Kennedy Space Center Visitor Complex.

"The SERPL facility and the Commerce Park will contribute to the expansion and diversification of NASA, commercial, academic and international space programs in our state," said Lt. Governor Brogan. "Together with NASA, Florida is investing in the success of the International Space Station, and in the commercial potential for space-related research and technology development in our state."

The SERPL facility will support the development and processing of life sciences experiments destined for the International Space Station and accommodate NASA, industry and academic researchers performing associated biological research. The Florida Space Research Institute and the University of Florida will have a permanent presence within SERPL and will be using the facility for biological and space related academic and research activities.

Facility design is being performed by Flad & Associates, Affiliated Engineers, SE Inc. and Jones, Edmunds & Associates Inc. under a contract with NASA. The facility construction will be managed by Bovis Lend Lease under a contract with the Florida Department of Management Services and Spaceport Florida Authority. Upon completion in 2003, the SERPL activities will be co-managed by the Florida Space Research Institute and NASA.

The roadway, to be known as Space Commerce Way, will serve the proposed Space Commerce Park and the public by providing a 24-hour access route through Kennedy Space Center. The road will connect Kennedy Parkway (State Road 3) with the NASA Causeway (State Road 405) and will enable 24-hour public access to the Space Commerce Park and the Visitor Complex. The road is being designed and constructed in two phases. Design of the first phase was performed by Jones, Edmunds & Associates Inc. under a NASA contract with construction funded by a Florida Department of Transportation project grant. Funding for the second phase design and construction will be through NASA (non-appropriated) funds under the management of the Kennedy Space Center Visitor

Complex Concessionaire.

"SERPL and the unprecedented opportunities for collaboration that it represents are key to Kennedy's evolution to a recognized center for technology development," said Roy Bridges. "We expect this partnership to pay dividends to NASA, the State of Florida, and the space industry well into the future."

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Feb. 9, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 18-01**

**Note to Editors:**

## **MEDIA OPPORTUNITIES WITH STS-102 CREW SET FOR NEXT WEEK'S COUNTDOWN TEST**

The crew of Space Shuttle mission STS-102, the 103rd mission in the history of Shuttle flight, will be at Kennedy Space Center next week for the Terminal Countdown Demonstration Test (TCDT). The flight crew will arrive in two waves at KSC. No photo opportunity is being made available Monday. However, when the Expedition Two crew arrives the next day, media will be permitted to attend.

The following events are available to media during the STS-102 TCDT:

**Tuesday, Feb. 13** - To cover the arrival of the Expedition Two crew, media must be at the KSC Press Site by 11 a.m. for transport to the Shuttle Landing Facility. The astronauts are scheduled to arrive at noon.

**Wednesday, Feb. 14** -- Media representatives have an opportunity to speak informally with and photograph the entire STS-102 crew at Launch Pad 39B. Media interested in participating in this question and answer session should be at the KSC Press Site by 12:30 p.m. for transport to the pad. This is a local media event only. No live NASA TV coverage is planned. The session, however, will be replayed on NASA TV at 6 p.m., immediately following the STS-98 Mission Status Briefing.

**Thursday, Feb. 15** - Media are invited to the crew walkout which occurs as the crew depart their quarters and are driven to the launch pad. Media must be at the KSC press site by 6:45 a.m. for the walkout which is scheduled for 7:45 a.m.

The TCDT is held at KSC prior to each Space Shuttle flight, providing crews an opportunity to participate in simulated countdown activities. The TCDT ends with a mock launch countdown culminating in a simulated main engine cut-off. The astronauts also spend time undergoing emergency egress training exercises at the pad and have opportunities to view and inspect the payloads in the orbiter's payload bay.

On Thursday, the crew will enter the orbiter Discovery fully suited for the final hours of the practice countdown, including the simulated Shuttle main engine ignition and cut-off.

Following TCDT activities Thursday, the crew will depart KSC for final mission preparations in Houston, TX.

Mission STS-102 is targeted for launch from Kennedy Space Center March 8. The flight is scheduled to last 11 days and will feature Discovery docking with the International Space Station (ISS). In Discovery's payload bay will be the Leonardo Multi-purpose Logistics Module.

Crew members for mission STS-102 are: Commander James Wetherbee; Pilot James M. Kelly; and Mission Specialists Andy Thomas (MS1) and Paul Richards (MS2). The Expedition Two members being flown to the International Space Station are: James Voss (MS3), Susan Helms (MS4) and Yury Usachev (MS5).

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Feb. 16, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 19-01**

**Note to Editors:**

## **ATLANTIS SCHEDULED TO LAND AT KSC COMPLETING MISSION STS-98**

The orbiter Atlantis is scheduled to land at Kennedy Space Center on Sunday, Feb. 18, at about 12:50 p.m. EST completing its 11-day STS-98 mission that was launched from KSC Feb. 7, 2001.

Landing at KSC's Shuttle Landing Facility (SLF) is slated to occur on orbit 169 at mission elapsed time 10 days, 18 hours, 37 minutes. Deorbit burn will occur at about 11:45 a.m. EST.

The two KSC landing opportunities on Sunday are: 12:50 p.m. and 2:26 p.m. EST.

If managers must keep Atlantis in orbit an additional day, two additional landing opportunities are available Monday at KSC at 1:24 p.m. and 3:00 p.m. EST.

Two landing opportunities also exist at the back-up landing location at Edwards Air Force Base (EAFB), Calif., on Sunday and Monday.

If landing occurs as scheduled, it will be the mark the 54th landing at KSC in the history of the program.

### **SLF and KSC Ground Operations**

The Shuttle Landing Facility was built in 1975. It is 300 feet wide and 15,000 feet long with 1,000-foot overruns at each end. The strip runs northwest to southeast and is located about three miles northwest of the 525-foot tall Vehicle Assembly Building.

Once the orbiter is on the ground, safing operations will commence and the flight crew will prepare the vehicle for post-landing operations. The Crew Transport Vehicle (CTV) will be used to assist the crew, allowing them to leave the vehicle and remove their launch and re-entry suits easier and quicker.

The CTV and other KSC landing convoy operations have been "on-call" since the launch of Atlantis. The primary functions of the Space Shuttle recovery convoy are to provide immediate service to the orbiter after landing, assist crew egress, and prepare the orbiter for towing to the Orbiter Processing Facility.

Convoy vehicles are stationed at the SLF's mid-point. About two hours prior to landing, convoy personnel will don SCAPE suits, or Self-Contained Atmospheric Protective Ensemble, and communications checks are made. A warming-up of coolant and purge equipment is conducted and nearly two-dozen convoy vehicles are positioned to move onto

the runway as quickly and as safely as possible once the orbiter coasts to a stop. When the vehicle is deemed safe of all potential explosive hazards and toxic gases, the purge and coolant umbilical access vehicles move into position at the rear of the orbiter.

Following purge and coolant operations, flight crew egress preparations will begin and the CTV will be moved into position at the crew access hatch located on the orbiter's port side. A physician will board the Shuttle and conduct a brief preliminary examination of the astronauts. The crew will then make preparations to leave the vehicle.

Following departure from the SLF, the crew will be taken to their quarters in the O&C Building, meet with their families and undergo physical examinations. The crew is scheduled to remain at KSC overnight and depart for Johnson Space Center on Monday.

If Atlantis lands at Edwards, an augmented KSC convoy team will be on-site to safe the vehicle, disembark the crew and move the orbiter to the Mate/Demate Device. The turnaround team will be deployed to Edwards by charter aircraft on landing day.

About 3½ hours after Atlantis lands at KSC, the orbiter will be towed to the Orbiter Processing Facility for post-flight deservicing.

**Notice to Editors:** The KSC press site will be open this weekend at the following times. The office will be open Saturday from 4 - 6 p.m. for the planned mission status briefing from JSC. For landing on Sunday, the office will be open from 9 a.m. - 4 p.m. On Monday, the office will be open from 11 a.m. - 3 p.m. for the post-mission crew press conference set for 1 p.m.

Accredited news media wishing to view Atlantis' landing should be at the KSC press site prior to 11:30 a.m. Sunday for transport to the SLF.

Additional specific information regarding landing photo opportunities, post-landing press conferences and KSC News Center operational hours is available at the KSC News Center.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Feb. 20, 2001**

**Bruce Buckingham**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-2468)**

**KSC Release No. 20-01**

## **STUDENT-BUILT ROBOTS BATTLE FOR FIRST IN COMPETITION AT KSC**

Thousands of spirited high school students will engage in a battle of wits and robots as they descend on Kennedy Space Center March 1-3 for the FIRST (For Inspiration and Recognition of Science and Technology) Southeast Regional Robotics Competition. About 40 teams of students will come to test the limits of their imagination using robots they have designed and built to compete in a technological battle against other school's robots.

This three-day competition closely resembles a high-energy sporting competition complete with a live disc jockey, yelling cheerleaders and encouraging fans. Students arrive at the Kennedy Space Center Visitor Complex for a day of practice, inspection and final machine work, with the next two days featuring the fierce, action-packed robotics competition.

"We could not be happier that KSC is hosting the FIRST Robotics Competition," said Roy Bridges, center director at Kennedy Space Center. "All of the students that participate in this outstanding educational competition are the best and brightest future engineers. Their energy and enthusiasm about science and technology inspires us all."

The student teams are scheduled to compete in the Southeast Regional, with nine of the 27 Florida teams co-sponsored by KSC. Local competing teams include students from Astronaut, Bayside, Cocoa Beach, Eau Gallie, Melbourne, Melbourne Central Catholic, Palm Bay, Rockledge, Satellite and Titusville high schools.

The preparation for the competition is a six-week, intense program bringing together students and engineers to collectively brainstorm, design, construct and test their "Champion robot." FIRST supplies each team with a kit of assorted parts to create a robot to compete in two-minute contests.

Teams from the various regional competitions around the country will meet at the finals competition to be held at EPCOT Center in Orlando, Fla., April 5-7.

The goal of FIRST is to introduce professional mentors from schools, businesses and universities to the students in the hopes of providing an exchange of resources and talent while exposing students to new career choices.

Information is also available at the FIRST Web site: [www.usfirst.org](http://www.usfirst.org)

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-*

release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



Feb. 20, 2001

George H. Diller  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

KSC Release No. 21-01

Note to Editors:

## **LEONARDO MPLM PRESS OPPORTUNITY SCHEDULED WEDNESDAY, FEB. 21**

In the Space Station Processing Facility (SSPF), the "Leonardo" Multi-purpose Logistics Module (MPLM) has completed processing for the upcoming STS-102 mission. On Wednesday, Feb. 21, it will be placed into the payload transportation canister in preparation for its move to Launch Pad 39-B. There it will be installed into the payload changeout room and readied for installation into Space Shuttle Discovery on Feb. 26.

The Leonardo MPLM, one of Italy's major contributions to the International Space Station Program, is a reusable logistics carrier. It is the primary delivery system used to resupply and return Station cargo requiring a pressurized environment. The cylindrical module is 21 feet long and 15 feet in diameter. Leonardo will deliver to the International Space Station up to 10 tons of laboratory racks filled with equipment, experiments and supplies for outfitting the newly arrived U.S. Laboratory Destiny.

Media wishing to observe and photograph Leonardo being installed into the payload canister at the SSPF will depart from the KSC News Center at 12 Noon. Spokespersons from NASA and the Italian Space Agency will be available for questions and interviews.

Donatello, the third and last of the Italian logistics modules, will also be seen.

Media should check the KSC codaphone at 321-867-2525 after 8:30 a.m. to assure that the time of the event has not changed.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**February 22, 2001**

**Joel Wells/Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 22-01**

## **SHUTTLE COLUMBIA TO RETURN TO KSC FOLLOWING EXTENSIVE MODIFICATIONS**

After spending the last 17 months in California, Space Shuttle Columbia is scheduled to return to Kennedy Space Center Sunday, Feb. 25, mounted on the back of NASA's modified 747 Shuttle Carrier Aircraft (SCA). Columbia's current flight plan, weather permitting, includes a flyover of Florida's capital city Sunday morning.

Final preparations for Columbia's departure and the flight plan are contingent upon weather conditions in California and its cross-country route to Florida. Stringent flight rules may cause changes to the flight path or cancellation of planned flyovers. Flight rules state that the orbiter/SCA cannot fly at night, through precipitation, thick clouds or high turbulence. There are also wind and temperature restrictions.

Columbia is scheduled to roll out of the Boeing Orbiter Assembly Facility in Palmdale, Calif., Feb. 23 and be mated to NASA's SCA No. 905. Then Columbia, atop the SCA, will depart California Saturday morning, Feb. 24. Preliminary plans call for an overnight stay at Ellington Field in Houston, Texas, before returning to KSC the morning of Feb. 25. An on-time departure from Houston may allow a flyover of Tallahassee's downtown Capitol area at about 10:30 a.m. Arrival at KSC is targeted for about 12:30 p.m. Feb. 25.

While in California, Columbia underwent extensive maintenance, inspections and enhancements. More than 100 upgrades make Columbia safer and more reliable than ever before. A new "glass cockpit" was installed, replacing mechanical instruments with flat computer screens. Other improvements include an orbiter weight reduction of more than 1,000 pounds; increased protection from space debris; improved wiring protection; enhanced heat protection for wing leading edges; and preliminary docking system wiring work that could allow Columbia to make future International Space Station flights if required.

Columbia has completed 26 flights into space and is nearing the 20th anniversary of its maiden voyage as America's first Space Shuttle. STS-1 was launched April 12, 1981. The next flight of Columbia is planned for later this fall.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*





Bruce Buckingham  
Kennedy Space Center  
(321) 867-2468

For Release: Feb. 27, 2001

James Hartsfield  
Johnson Space Center  
(281) 483-5111

KSC Release No. 23 - 01

## **SHUTTLE DISCOVERY TO LAUNCH MARCH 8 WITH FIRST STATION CREW SHIFT CHANGE AND ITALIAN-BUILT STATION LOGISTICS CARRIER**

The launch of the Space Shuttle Discovery has been set for 6:42 a.m. EST March 8 on a mission to the International Space Station that will make NASA's first crew shift change in orbit and carry an Italian-built Station logistics carrier filled with laboratory experiments and equipment.

"This will be the fifth Space Shuttle launch in the past seven months, and each of those missions has been safe, fully successful and, relative to their challenge and complexity, almost deceptively smooth," said Space Shuttle Program Manager Ron Dittmore. "That record is a testament to the excellent work that has been done by all members of the Space Shuttle and Space Station teams coast to coast. Discovery is ready and so are we."

Discovery's flight, designated Space Shuttle mission STS-102, will be commanded by Jim Wetherbee. The pilot will be Jim Kelly and Andy Thomas and Paul Richards will serve as mission specialists. Discovery also will carry the second expedition crew -- Commander Yury Usachev and Flight Engineers Jim Voss and Susan Helms -- to the International Space Station.

At the end of its almost 12-day flight, Discovery will bring home the first Station crew, Commander Bill Shepherd, Pilot Yuri Gidzenko and Flight Engineer Sergei Krikalev, completing more than four months spent in orbit aboard the complex. Discovery also will take aloft the first Station logistics carrier, an Italian-built logistics module named Leonardo that will be filled with the first major laboratory experiments as well as key equipment.

Discovery is planned to land March 20 at the Kennedy Space Center, Fla.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**March 1, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 24-01**

**Note to Editors/News Directors:**

## **MISSION STS-102 EVENTS, NEWS CENTER OPERATING HOURS SET**

News conferences, events and operating hours for KSC's News Center have been set for the March 8 launch of the Space Shuttle Discovery on mission STS-102, the 103rd launch in the Shuttle program. The preferred launch time on March 8 is about 6:42 a.m. EST at the opening of a window that extends for about 5 minutes. The news conferences and events listed below will be carried live on NASA Television (unless otherwise noted) and originate from the KSC Press Site.

The four-member STS-102 crew and the three-member expedition two crew will arrive at KSC on Sunday, March 4, at about 11 p.m. EST. News media representatives planning to cover the event must be at the KSC News Center by 10 p.m. (in the event of a possible early crew arrival) for transportation to the Shuttle Landing Facility. On launch day, the crew will depart their KSC living quarters and be driven to the launch pad at about 2:55 a.m. Media interested in attending this event should be at the News Center no later than 2 a.m.

In addition to daily 9 a.m. countdown status briefings, a prelaunch press conference will be held two days before launch. The full briefing schedule is listed below.

News media representatives with proper authorization may obtain STS-102 mission credentials at the Pass and Identification Building on State Road 3 (south of KSC) on Merritt Island during published times. Credential and badging hours are listed below.

The KSC codaphone will be updated with daily status reports at 321-867-2525.

-- end of general release --

### **STS-102 BRIEFINGS & EVENTS SCHEDULE** *(all times are EDT)*

*(All briefings are held inside the KSC Press Site auditorium and will be carried live on NASA TV unless otherwise noted)*

#### **L-4 Days - Sunday, March 4**

**11 p.m.** ----- STS-102 Flight Crew Arrival *(Live on NASA TV)*

#### **L-3 Days - Monday, March 5**

**9 a.m.** ----- Countdown Status Briefing

Jeff Spaulding, NASA Test Director  
Glenn Chin, Leonardo Payload Manager  
Ed Priselac, Shuttle Weather Officer

(Launch countdown begins at 10:00 a.m.)

## **L-2 Days - Tuesday, March 6**

### **9 a.m. ----- Countdown Status Briefing**

Pete Nickolenko, NASA Test Director  
Glenn Chin, Leonardo Payload Manager  
Ed Priselac, Shuttle Weather Officer

### **4 p.m. ----- Prelaunch News Conference**

Ron Dittmore, Shuttle Program Manager, NASA, JSC  
Tommy Holloway, ISS Program Manager, NASA, JSC  
Dr. Silvana Rabbia, MPLM Program Manager, Italian Space Agency  
Dave King, Director of Shuttle Processing, NASA, KSC  
Captain Clif Stargardt, Staff Meteorologist, 45th Weather Squadron, USAF

## **L-1 Day - Wednesday, March 7**

No briefings scheduled

*(Tanking begins at about 9:45 p.m.)*

## **L-0 Day - Thursday, March 8**

**1:30 a.m. ----- NASA Television live launch programming begins**

### **Launch Day Crew activities:**

6:30 p.m. (Wednesday) -----Wake up  
7:00 p.m. (Wednesday) -----Breakfast  
11:00 p.m. (Wednesday) -----Lunch  
\*1:45 a.m. -----Crew Photo  
2:15 a.m. -----Weather briefing  
\*2:35 a.m. -----Suit up photo  
\*2:55 a.m. ----- Walkout/depart for pad  
\*3:25 a.m. ----- Arrive at pad  
\*4:40 a.m. -----Close hatch  
\*6:42 a.m. -----Launch of Discovery

(\* Carried live on NASA TV)

### **\*7:45 a.m. ----- Post-launch Press Conference**

Jim Halsell, Shuttle Program Launch Integration Manager, KSC  
Mike Leinbach, Shuttle Launch Director, KSC

## **KSC News Center office hours for STS-102**

*(Times may be adjusted in real time depending on mission events and timelines.)*

Sunday, March 4            9 p.m. - 12 midnight  
Monday, March 5           8 a.m. - 4:30 p.m.  
Tuesday, March 6           8 a.m. - 6:30 p.m.  
Wednesday, March 7      8 a.m. - round-the-clock  
Thursday, March 8 (Launch day) - until 4:30 p.m.

### **[FOR MISSION DAY SCHEDULES SEE NOTE BELOW]**

Tuesday, March 20 (Landing day)    10 p.m. (Monday) - 4:30 p.m. (Tuesday)

**NOTE:** The KSC News Center will support media questions for overnight and weekend STS-102 Mission Status Briefings and the in-flight crew news conference. Media interested in attending the briefings that occur after normal office hours (8 a.m. - 4:30 p.m. Monday-Friday), **MUST** make their intentions known to the KSC News Room at least 24-hours in advance, in order to secure proper access to the press site. Times of these briefings are available in the NASA TV schedule at:

<http://www.spaceflight.nasa.gov/realdata/nasatv/schedule.html>

**Pass and Identification Hours**

Monday, March 5 ----- 12 noon - 4:30 p.m.

Tuesday, March 6 ----- 8 a.m. - 4:30 p.m.

Wednesday/Thursday, March 7/8 --- 12 noon ---- 5:30 a.m. (Launch day)

News media may obtain STS-102 mission credentials at the Pass and Identification Building at Gate 2 on State Road 3, Merritt Island, during the above published times.

News media with annual Shuttle credentials are reminded to sign the logbook at the query counter in the News Center.

**NEWS MEDIA ARE REQUIRED TO BE UNDER PUBLIC AFFAIRS ESCORT AT ALL TIMES WHILE AT KSC EXCEPT WHEN DRIVING TO THE NEWS CENTER OR THE COMPLEX 39 CAFETERIA.**

**NEWS MEDIA ARE ALLOWED AT THE PRESS SITE ONLY WHEN THE KSC NEWS CENTER IS OPEN.**

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**February 8, 2001**

**Bruce Buckingham**  
Kennedy Space Center, FL  
(321) 867-2468

**Eddie Ellegood**  
Spaceport Florida Authority  
(321) 730-5301 ex. 1105

**KSC Release No. 26-01**

## **FLORIDA SPACE RESEARCH INSTITUTE AND NASA KSC SIGN TECHNOLOGY CONTRACT**

The Florida Space Research Institute (FSRI) and NASA Kennedy Space Center (KSC), under a cooperative agreement signed last week, will collaborate on FSRI's Advanced Learning Environment (ALE) initiative, incorporating cutting-edge NASA and military web-based education and simulation technologies into a revolutionary new learning environment designed to prepare space industry scientists, engineers and technicians for tomorrow's technology challenges.

"I see great synergy between Florida's simulation and space industries, both of which have been among the top high-tech enterprises in our state," said Florida Lt. Governor Frank Brogan. "This program can leverage the strengths of each industry to solve training problems facing our state's most important high-tech economic sectors."

Under the agreement, FSRI and NASA will develop, test and evaluate a prototype web-based "advanced distributed learning" environment for cryogenics engineering at KSC. The project will involve the development of a consortium of public and private universities designed to support KSC's research, and will allow Florida's colleges and universities to incorporate these technologies to enhance their science and engineering education programs.

"NASA is very excited about the potential outcome of this partnership with FSRI," said KSC Director Roy Bridges. "We need a highly skilled workforce to accomplish our goals for space exploration and commerce, and this project will help us take a big step forward in learning technologies."

The NASA agreement provides a \$500,000 matching contribution to the second phase of FSRI's \$1.4 million ALE contract with Workforce Florida, Inc. The Workforce Florida contract, and NASA's participation in the program, resulted from an agreement signed by Lt. Governor Brogan and KSC Director Bridges in September 2000.

"Emerging technologies like 'advanced distributed learning' will revolutionize workforce education and training over the coming decades," said Curtis Austin, president and CEO of Workforce Florida. "We view this project with NASA as a demonstration of what will be possible throughout the state's various industrial sectors."

The Florida Space Research Institute was established by the state's Governor and Legislature to promote collaboration among the state's academic institutions, space-related

companies, and federal space agencies to support statewide space-related education, training, research and technology development.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**March 19, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 27-01**

**Note to Editors:**

## **DISCOVERY SCHEDULED TO LAND AT KSC COMPLETING MISSION STS-102**

The orbiter Discovery is scheduled to land at Kennedy Space Center (KSC) early Wednesday morning, March 21, at about 12:56 a.m. EST completing the nearly 13-day, STS-102 mission that was launched from KSC March 8, 2001.

Landing at KSC's Shuttle Landing Facility (SLF) is slated to occur on orbit 200 at mission elapsed time 12 days, 18 hours, 14 minutes. The deorbit burn will occur at about 11:50 p.m. EST on Tuesday, March 20.

The two KSC landing opportunities on March 21 are: 12:56 a.m. and 2:31 a.m. EST.

If managers must keep Discovery in orbit an additional day, two additional landing opportunities are available on March 22 at KSC at 1:28 a.m. and 3:05 a.m. EST.

Two landing opportunities also exist at the back-up landing location at Edwards Air Force Base (EAFB), Calif., on both days.

If landing occurs as scheduled, it will be the mark the 54th landing at KSC in the history of the program. Following landing, Discovery will be towed to Orbiter Processing Facility bay 2 and preparations made for it next mission, STS-105, this summer.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**March 19, 2001**

**George Diller**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 28-01**

## **ATHENA II ADDED TO NASA LAUNCH SERVICES CONTRACT**

NASA has announced that it is adding Lockheed Martin's Athena II to the NASA Launch Services (NLS) contract using the contract's "on-ramp" provision. This provides an opportunity for new, emerging launch service providers as well as incumbents to introduce qualified launch vehicles not available at the time of the award of the initial NLS contract.

The initial contract was awarded by NASA's John F. Kennedy Space Center to:

Lockheed Martin Commercial Launch Services, Inc.  
P.O. Box 179  
Denver, CO 80201-0179

NASA has not yet identified a potential payload and so there is no specific launch timeframe or a dollar value associated with this contract modification as awarded. The contract type is "Indefinite Delivery - Indefinite Quantity" (IDIQ) with a "not-to-exceed" fixed price to be specified for the launch services.

Lockheed Martin is now eligible to compete the Athena II for missions in the future. The initial NASA Launch Services contracts were awarded in June 2000 to Delta Launch Services, Inc. for the Delta class of vehicles and to Lockheed Martin Commercial Launch Services, Inc. for the Atlas class of vehicles.

The NASA Launch Services contracts call for launching payloads that weigh 3,300 pounds (1,500 kilograms) or heavier to a 125-mile-high (200-kilometer) circular orbit.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**March 22, 2001**

**George Diller**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-2468)**

**KSC Release No. 29-01**

**Note to Editors/News Directors:**

## **MARS ODYSSEY SPACECRAFT PRESS OPPORTUNITY TO BE HELD AT KSC ON SUNDAY, MARCH 25**

NASA's 2001 Mars Odyssey, to be launched on a Boeing Delta II launch vehicle early next month, is the subject of a news media opportunity on Sunday, March 25. Media representatives will be taken inside the clean room at the Spacecraft and Encapsulation Facility-2 (SAEF-2) located in the KSC Industrial Area to see and photograph the spacecraft. Team members from NASA's Jet Propulsion Laboratory (JPL) and Lockheed Martin Astronautics, builders of the spacecraft, will discuss Mars Odyssey and will be available for questions and interviews.

Mars Odyssey completes three months of pre-launch processing on Saturday with mating to the upper stage booster. The combination will be transported to Space Launch Complex 17 at Cape Canaveral Air Force Station on Tuesday, March 27 to be mated to the Boeing Delta II. Mars Odyssey will be closed out for flight when the launch vehicle nose fairing is installed around the spacecraft on April 2. The launch is scheduled for Saturday, April 7, at 11:02 a.m. EDT.

The orbiter will map the Martian surface in search of geological features that could indicate the presence of water, now or in the past, and may contribute significantly toward understanding what will be necessary for a more sophisticated exploration of Mars.

For this event, standard clean room protocol will be observed. Those planning to attend are requested to wear long pants and closed-toe shoes. Clean room attire (bunny suits) will be furnished. Quality control personnel may request cleaning of photographic equipment with alcohol wipes that will be provided. No suede, leather or vinyl attire or accessories are permitted. Please do not wear perfume, cologne or makeup. No graphite pencils, food, tobacco, lighters, matches, or pocketknives will be permitted inside the clean room. Electronic flash photography is permitted. The lighting in the facility is mercury vapor.

KSC annual badges will be in effect for this event. Those needing accreditation should contact the NASA News Center at 321/867-2468 by the close of business Friday, March 23. The KSC News Center will open at 12:30 p.m. on Sunday, March 25, with departure for SAEF-2 at 1 p.m.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*





**March 26, 2001**

**Lisa Fowler**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-1883)**

**KSC Release No. 31-01**

## **TEN KSC WORKERS HONORED BY NASA ASTRONAUTS**

Ten employees at Kennedy Space Center, Fla., recently were presented with NASA's prestigious Silver Snoopy Award for service to the Space Shuttle astronauts.

Employees honored were Harold Herring, Computer Sciences Raytheon, Inc.; Bruce E. Olseen and Dennis W. Raichart, Space Gateway Support; Mark E. Paxton and Sandra K. Weethee, United Space Alliance; Sherry L. Reed, Carmen C. Moore, Donald W. Stieler, Kimberly A. Serfozo, and Mark A. Hudson, Boeing Space Flight & Human Exploration.

Awards were presented at KSC in January 2001. Astronaut Brent Jett presented the award to Herring. Astronaut Pam Melroy presented awards to Olseen and Raichart. Astronaut Alan Poindexter presented awards to Paxton and Weethee. Astronaut Greg Johnson presented awards to Reed, Moore, Stieler, Serfozo, and Hudson.

Snoopy, of the comic strip "Peanuts," has been the unofficial mascot of NASA's astronaut corps since the earliest days of human space flight. The Silver Snoopy Award was created by the astronauts to honor persons who contribute most to the safety and success of human space flight.

The award is presented to no more than 1 percent of the space center's work force each year. Recipients are given a silver pin depicting the famous beagle wearing a space suit. All the pins have flown on a previous Space Shuttle mission. The awardees also received a framed certificate and a congratulatory letter signed by the presenting astronaut.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**March 27, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 32-01**

**Note to Editors:**

## **MEDIA OPPORTUNITIES WITH STS-100 CREW SET FOR THIS WEEK'S COUNTDOWN TEST**

The crew of Space Shuttle mission STS-100, the 104th mission in the history of Shuttle flight, will be at Kennedy Space Center this week for a Terminal Countdown Demonstration Test (TCDT). The crew is scheduled to arrive at KSC's Shuttle Landing Facility on Wednesday, March 28, and remain through the end of the test activities Friday.

The following events are available to media during the STS-100 TCDT:

**Wednesday, March 28** - A photo opportunity is available to the media covering the arrival of the STS-100 crew. Media must be at the KSC Press Site by 11 a.m. for transport to the Shuttle Landing Facility. The astronauts are scheduled to arrive at 12 noon.

**Thursday, March 29** -- Media representatives have an opportunity to speak informally with and photograph the entire STS-100 crew at Launch Pad 39A. Media interested in participating in this question-and-answer session should be at the KSC Press Site by 12:15 p.m. for transport to the pad. This event will be carried live on NASA TV; however, media must be present in order to participate.

**Friday, March 30** - Media are invited to the crew walkout, which occurs as the crew depart their quarters and are driven to the launch pad. Media must be at the KSC press site by 6:45 a.m. for the walkout, which is scheduled for 7:45 a.m.

The TCDT is held at KSC prior to each Space Shuttle flight, providing crews an opportunity to participate in simulated countdown activities. The TCDT ends with a mock launch countdown culminating in a simulated main engine cut-off. The astronauts also spend time undergoing emergency egress training exercises at the pad and have opportunities to view and inspect the payloads in the orbiter's payload bay.

On Friday, the crew will enter the orbiter Endeavour fully suited for the final hours of the practice countdown, including the simulated Shuttle main engine ignition and cut-off.

Following TCDT activities Friday, the crew will depart KSC for final mission preparations in Houston, Texas.

Mission STS-100 is targeted for launch from Kennedy Space Center at 2:41 p.m. April 19. The flight is scheduled to last 11 days and will feature Endeavour delivering the Space Station Remote Manipulator System to the International Space Station. Also, in Endeavour's payload bay will be the Raffaello Multi-Purpose Logistics Module.

Crew members for mission STS-100 are Commander Kent Rominger, Pilot Jeff Ashby and

Mission Specialists Chris Hadfield (MS1) of the Canadian Space Agency, John Phillips (MS2), Scott Parazynski (MS3), Umberto Guidoni (MS4) from the European Space Agency, and Yuri Lonchakov (MS5) representing the Russian Aviation and Space Agency.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**NOTE TO EDITORS: The dedication of the Launch Vehicle Data Center at Hangar AE, which had been scheduled for Friday, March 30, has been postponed due to expected weather concerns. This event will be rescheduled for a later date.**

**March 28, 2001**

**George Diller**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-2468)**

**KSC Release No. 33-01**

**Note to Editors/News Directors:**

## **MEDIA INVITED TO LAUNCH VEHICLE DATA CENTER DEDICATION AT NASA HANGAR AE**

On Friday, March 30, a new era will begin in the monitoring of expendable vehicle data. The advanced capability of the upgraded Launch Vehicle Data Center (LVDC), contained within NASA's historic Hangar AE on Cape Canaveral Air Force Station (CCAFS), will be christened with a ribbon cutting and dedication ceremony.

Three individual control rooms comprise the new LVDC. They will replace the single control room that has been in use since the mid-1970s. The LVDC was developed by NASA-KSC to support multiple test operations in parallel or a single large launch operation. Up to 100 launch vehicle engineers will monitor voice, data and video systems that support the checkout and launch of expendable vehicles. Also, the new facility can be linked with NASA's control rooms at Vandenberg Air Force Base, Calif., that are used to launch polar-orbiting spacecraft.

The LVDC engineering displays are state-of-the art, and the voice communications capabilities are upgraded. It has taken nearly six years to develop the new monitoring systems, which will be first used to support the launch of the Delta II/Mars Odyssey mission, currently scheduled for April 7 from CCAFS.

Participating in the dedication ceremony will be:

~ Roy D. Bridges, Jr., Director, Kennedy Space Center

~ Stephen M. Francois, Program Manager, Expendable Launch Vehicles and Payload Carriers, KSC

~ Michael J. Benik, Director, Expendable Launch Vehicles Launch Services, KSC

**NOTE: Media may attend the ribbon cutting, tour the new control rooms and interview the dedication ceremony participants. Press representatives who wish to attend the event should be at the KSC Press Site by 9:15 a.m. for transport to Hangar AE.**

-- end --

releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**March 30, 2001**

**Tracy Young**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-9284)**

**KSC Release No. 34-01**

## **NASA HONORS KENNEDY SPACE CENTER EMPLOYEES**

Kennedy Space Center (KSC) honored 48 of its civil service and contractor employees at a special Honoree Event held at the space center in March.

The KSC employees were among 250 NASA and industry employees from around the country who were honored by top NASA and industry leaders for their significant contributions to the nation's space program.

The Honorees attended a special reception in their honor, and were joined by astronauts and senior NASA and industry officials of the Space Shuttle and International Space Station team. They were given a VIP tour of the Kennedy Space Center and participated in various briefings. They also watched the STS-102 launch of the Space Shuttle Discovery on Thursday, March 8, from a special VIP viewing site. STS-102 was the eighth Space Shuttle flight dedicated to the International Space Station.

The Honoree Award is the highest form of recognition bestowed upon an employee by the NASA Space Flight Awareness Program. Recipients are selected for their professional dedication and outstanding achievement in support of the human spaceflight program.

Civil Service employees honored were Daryl L. Frank, Safety, Health & Independent Assessment Directorate; Jeanine M. Hoyle, Administration Office; Gregory T. Horvath, International Space Station & Payload Processing Directorate; Charles E. Jenkins, Shuttle Processing Directorate; Betty J. Kegley, Executive Staff; Andre L. Mack, Shuttle Processing Directorate; Jane A. Mosconi, Shuttle Processing Directorate; Patrick J. O'Rourke, Spaceport Services Directorate; Debra A. Preston, Shuttle Processing Directorate; David D. Reeves, Spaceport Engineering & Technology Directorate; Kristi L. Rouillard, Chief Financial Office; Jimmie E. Rogers, International Space Station & Payload Processing Directorate, and Gerald M. Stahl, Spaceport Engineering & Technology Directorate.

Boeing Human Exploration and Spaceflight employees honored include Carla Anderson, Peter J. Bulgajewski, Thomas R. Fowler, Gordon P. Mion, Ira Kent Pearson, Jill M. Weaver, Darwin Westbrook and Kathleen M. Yohn.

Space Gateway Support employees honored were Matthew Klynoot (United Paradyne Corporation), Raymond M. Lopez, Barbara A. Neil, David G. Petterson (InDyne, Inc.), Irving H. Stenner (United Paradyne Corporation), and Tamara D. Williams.

Other contractor Honorees were Nick Thomas, Delaware North Park Services of Spaceport, Inc., April C. Boody, The Bionetics Corporation, and Wayne A. Crawford, Dynacs Engineering Co.

United Space Alliance employees honored were Michael P. Andrew, Walter E. Andrews,

Charles E. Baldwin, Linda J. Bradley, Robert Bresniker (Pratt & Whitney Chemical Systems Divisions), Hunt C. Culver, Rod Fulmer (Pacific Scientific), Elhanon W. Hall, Marjorie E. Harrison, Daniel D. Hauge, Kyle K. Jensen, Kathleen C. Karmazin-Calin, Robert A. Lewandowski, Julia E. Mathison, Linda M. Moynihan, Claude E. Overfelt, Bradley R. Petty, Marilou R. Richardson, and John A. Williams.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**March 29, 2001**

**Tracy Young**  
Kennedy Space Center, Fla.  
(Phone: 321/867-9284)

**KSC Release No. 35-01**

## **JANE MOSCONI HONORED FOR ROLE IN SPACE PROGRAM**

Jane Mosconi, a native of Dayton, Ohio, and a current resident of Orlando, Fla., was among 48 Kennedy Space Center (KSC) employees honored recently for exemplary work at the nation's spaceport.

At KSC, Mosconi is employed by NASA as a logistics manager for shuttle processing. She is responsible for managing the NASA logistics budget for spare parts and repairs to the Space Shuttle.

The Honoree Award is the highest form of recognition bestowed upon an employee by the NASA Space Flight Awareness Program. The 48 employees selected were part of a contingent of 250 NASA and industry employees from throughout the space agency being honored for their professional dedication and outstanding achievement in support of the human space flight program.

The honorees were given a VIP tour of Kennedy Space Center and attended a special reception. Honoring them were several astronauts and senior NASA and industry officials of the Space Shuttle and International Space Station team. The Honorees also watched the STS-102 launch of the Space Shuttle Discovery from a special VIP viewing site on March 8.

Mosconi graduated in 1978 from Fairmont East High School, Kettering, Ohio. After high school, she went on to receive a bachelor degree in business from Bowling Green State University in 1982. She received a master's degree in management from Florida Institute of Technology, Melbourne, Fla., in 1990. Her parents, Nick, and Janet Mosconi, reside in Kettering.

Kennedy Space Center is the launch site and preferred landing site for NASA's Space Shuttles. STS-102 was the eighth Space Shuttle flight dedicated to the International Space Station.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**March 29, 2001**

**Tracy Young**  
Kennedy Space Center, Fla.  
(Phone: 321/867-9284)

**KSC Release No. 36-01**

## **JIMMIE E. ROGERS HONORED FOR ROLE IN SPACE PROGRAM**

Jimmie E. Rogers, a former resident of Normal, Ill., was among 48 Kennedy Space Center (KSC) employees who were honored recently for their exemplary work at the nation's spaceport.

At KSC, Rogers is employed by NASA and serves as safety manager for ground operations of the International Space Station (ISS). He is responsible for ensuring the safe ground processing of ISS elements and Space Shuttle payloads. Rogers joined NASA in March 1991.

The Honoree Award is the highest form of recognition bestowed upon an employee by the NASA Space Flight Awareness Program. The 48 employees selected were part of a contingent of 250 NASA and industry employees from throughout the space agency being honored for their professional dedication and outstanding achievement in support of the human space flight program.

The honorees were given a VIP tour of Kennedy Space Center and attended a special reception. Honoring them were several astronauts and senior NASA and industry officials of the Space Shuttle and International Space Station team. The honorees also watched the STS-102 launch of the Space Shuttle Discovery from a special VIP viewing site on March 8, 2001.

Rogers graduated in 1966 from University High School in Normal, Ill. After high school, he served in the U.S. Air Force for 25 years, retiring at the rank of Senior Master Sgt. His mother, Margie Maston, resides in Pekin, Ill.

Rogers and his wife, Sar, currently live in Melbourne, Fla.

Kennedy Space Center is the launch site and preferred landing site for NASA's Space Shuttles. STS-102 was the eighth Space Shuttle flight dedicated to the International Space Station.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*





**March 29, 2001**

**Don Savage**  
**NASA Headquarters**  
**202/358-1727**

**George Diller**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-2468)**

**Mary Hardin**  
**Jet Propulsion Laboratory**  
**818/354-5011**

**KSC Release No. 37-01**

**Note to Editors/News Directors:**

## **2001 MARS ODYSSEY SCHEDULED FOR LAUNCH APRIL 7**

The launch of NASA's 2001 Mars Odyssey is scheduled for Saturday, April 7, at 11:02 a.m. EDT. Liftoff will occur aboard a Boeing Delta II launch vehicle from Pad A at Space Launch Complex 17, Cape Canaveral Air Force Station, Fla. A second launch opportunity exists thirty minutes later at 11:32 a.m., if necessary. Should launch be delayed by 24 hours, the two launch times available on Sunday are 10:29 a.m. and 11:29 a.m. EDT. The planetary launch window extends through April 27.

The 2001 Mars Odyssey spacecraft, built by Lockheed Martin Space Systems for the Jet Propulsion Laboratory, is designed to map the Martian surface. It will search for geological features that could indicate the presence of water, now or in the past, and may contribute significantly toward understanding what will be necessary for a more sophisticated exploration of Mars.

### **PRELAUNCH NEWS CONFERENCE AND MISSION SCIENCE BRIEFING**

A prelaunch news conference is scheduled for Friday, April 6, at 1 p.m. EDT in the NASA-KSC News Center auditorium and will be carried live on NASA Television. Participating in the briefing will be:

*Chuck Dovale, NASA Launch Manager*  
*Kennedy Space Center*

*Joy Bryant, Delta II Mission Director*  
*The Boeing Company*

*George Pace, Mars Odyssey Project Manager*  
*Jet Propulsion Laboratory*

*Bob Berry, Mars Odyssey Program Manager*  
*Lockheed Martin Space Systems - Astronautics Operations*

*Joel Tumbiolo, Launch Weather Officer*

*Department of the Air Force*

Following the prelaunch news conference, a 2001 Mars Odyssey Mission Science Briefing will be held at 2 p.m. Participating will be:

*Dr. Ed Weiler, Associate Administrator for Space Science  
NASA Headquarters*

*Dr. Jim Garvin, Mars Program Scientist  
NASA Headquarters*

*Scott Hubbard, Mars Program Director  
NASA Headquarters*

*Dr. Firouz Naderi, Mars Program Manager  
Jet Propulsion Laboratory*

## **ACCREDITATION**

Media who wish to cover the launch of Mars Odyssey including the prelaunch news conference and mission science briefing should send a letter of request to the NASA-KSC News Center on news organization letterhead. It should include name and Social Security number or passport number. By close of business Thursday, April 5, letters should be faxed to 321/867-2692 or addressed to:

Mars Odyssey Launch Accreditation  
NASA XA-E1  
Kennedy Space Center, FL 32899

Mars Odyssey mission badges may be obtained at the NASA-KSC News Center on Wednesday and Thursday, April 4 - 5 between 8 a.m. and 4:30 p.m. On Friday, April 6, badges may be picked up at the News Media Pass & Identification Building at Gate 2 on SR3, Merritt Island, between 10:30 a.m. and 12:30 p.m. On launch day, Saturday, April 7, Mars Odyssey mission badges will be available starting at 9:15 a.m. and will be issued at the Pass & Identification Building on SR 401 outside Gate 1 of Cape Canaveral Air Force Station.

**Departure on launch day from the Gate 1 Pass & Identification Building for Press Site 1 will be at 9:30 a.m. A NASA Mars Odyssey mission badge is required for all media covering the launch at Press Site 1. Annual KSC badges or other Space Shuttle launch credentials will not be honored on Mars Odyssey launch day.**

After launch, media may leave unescorted for the return to Gate 1. An escort is required for all other areas of Cape Canaveral Air Force Station. For further information on 2001 Mars Odyssey launch accreditation contact Patty Beck at the NASA-KSC News Center at 321/867-2468.

## **REMOTE CAMERAS**

Media wishing to establish remote cameras at the launch pad should meet at the NASA-KSC News Center at 9:30 a.m. on Friday, April 6, to be escorted to Space Launch Complex 17.

## **PRESS SITE OPERATING HOURS**

On launch day, Saturday, April 7, the NASA-KSC News Center will be open from 9:30 a.m. - 1:30 p.m.

## **NASA TELEVISION COVERAGE, V CIRCUITS, WEBCAST AND RECORDED LAUNCH**

## STATUS

NASA Television will carry the prelaunch news conference and mission science briefing beginning at 1 p.m. EDT on Friday, April 6. On launch day, Saturday, April 7, countdown coverage will begin at 9:30 a.m. Coverage from Cape Canaveral Air Force Station will conclude shortly after spacecraft separation that occurs 33 minutes after launch. Commentary will then begin from the Jet Propulsion Laboratory for acquisition of the spacecraft's radio signal through the Deep Space Network tracking station at Canberra, Australia. This is anticipated to occur approximately one hour after launch at which time the Mars Odyssey spacecraft's state of health can be reported.

NASA Television is available on satellite GE 2, transponder 9C, located at 85 degrees West longitude. A simulcast of the NASA Television coverage will also be available on the worldwide web at [www.ksc.nasa.gov](http://www.ksc.nasa.gov). Information about the 2001 Mars Odyssey mission is available on-line at [www.jpl.nasa.gov](http://www.jpl.nasa.gov) and [www.ast.lmco.com](http://www.ast.lmco.com).

Audio only of NASA Television coverage of the prelaunch news conference and launch commentary will be available on the "V" circuits which may be dialed directly at 321/867-1220, 867-1240, 867-1260, 867-7135, 867-4003, 867-4920.

The NASA-KSC News Center codaphone will carry Mars Odyssey pre-launch status reports beginning at L-3 days, on Wednesday, April 4, and may be dialed at 321/867-2525.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**March 30, 2001**

**Lisa Malone**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-8504)**

**KSC Release No. 38-01**

**Note to Editors:**

## **NASA ASTRONAUTS TO SPEAK TO FLORIDA LEGISLATORS, REPORTERS ON APRIL 2**

In conjunction with Space Day activities, Tallahassee news media representatives will have a rare opportunity on April 2 to take part in an informal question-and-answer session with NASA astronauts, observe state legislators speaking to the crew aboard the International Space Station and cover a Space Art Contest winner.

Space Day is an annual event in Tallahassee designed to increase awareness of the nation's space program and its importance in Florida.

Astronauts living aboard the International Space Station are scheduled to engage in a conversation, at about 12:30 p.m., with Gov. Jeb Bush, Lt. Gov. Frank Brogan and Speaker of the House Tom Feeny who will be standing on the floor of the House Chamber in Tallahassee.

Following the Space Station conversation, at about 1 p.m., astronauts Ken Cockrell, Mark Polansky and David Brown will be available for an informal brief question-and-answer session at the House Office Building, fifth floor Press Gallery. Cockrell and Polansky are veterans of the Shuttle while Brown is scheduled to make his first flight next year.

At 1:30 p.m., High School Senior Rachel Liles from Dixie County High School in Old Town, Fla., will be recognized as the winner of a state wide art contest sponsored by Kennedy Space Center and several contractors. Astronauts and Florida Commissioner of Education, Charlie Crist, are scheduled to present Liles with a savings bond. Student art work will be displayed on the 22nd floor of the New Capitol Building on April 2.

Meanwhile, the public is invited to learn more about NASA programs through exhibits displayed in front of City Hall on Saturday, March 31 for "Springtime Tallahassee." Displays highlighting the space program will also be open to the public inside the Capitol on April 2.

The Kennedy Space Center is one of NASA's largest centers, employing 13,500 contractor and civil service employees.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---





**April 5, 2001**

**Kirsten Larson**  
Headquarters, Washington, DC  
(Phone: 202/358-0243)

**Bruce Buckingham**  
Kennedy Space Center, FL  
(Phone: 321/867-2468)

**James Hartsfield**  
Johnson Space Center, Houston, TX  
(Phone: 281/483-5111)

**KSC Release No. 40-01**

## **ENDEAVOUR LAUNCH SET FOR APRIL 19; MISSION WILL EXPAND HUMAN REACH IN SPACE WITH CANADIAN INTERNATIONAL SPACE STATION ROBOTICS**

Endeavour will launch April 19, 2001, to deliver a new generation of Canadian space robotics to the International Space Station. The robotic arm is longer, stronger, more flexible and more capable than even the Space Shuttle's venerable arm.

Shuttle managers today set Endeavour's launch for 2:41 p.m. EDT April 19 from the Kennedy Space Center, FL, on an 11-day mission that will continue the assembly that has transformed the orbiting complex during the past eight months into the largest and most sophisticated space laboratory ever built.

"The launch of Endeavour marks a significant milestone for us in that it completes a quick, safe and successful full turnaround of the Space Shuttle fleet dedicated to assembly of the station in only a few months," Space Shuttle Program Manager Ron Dittmore said. "Once Endeavour arrives on this flight, all three shuttles capable of docking with the station will have done so twice in the past eight months. The International Space Station's assembly has relied on our ability to maintain a schedule of regular launches to complete uniquely complex missions, and the shuttle team has come through in safe, successful and spectacular fashion."

In addition to the Canadarm2, which is the centerpiece of Canada's contribution to the International Space Station, Endeavour's flight, designated STS-100, also will carry the second Italian Space Agency logistics carrier, a module named Raffaello. Endeavour's flight is planned to include the most complex and intricate robotics work ever conducted in space to install the arm, as well as to deliver more research equipment and experiments to the station than any previous mission.

Commanded by Kent Rominger, Endeavour's crew represents four space agencies and is the most diverse international crew to ever fly in space. Pilot is Jeff Ashby; and Mission Specialists include John Phillips and Scott Parazynski; Chris Hadfield, a Canadian Space Agency astronaut; Umberto Guidoni, a European Space Agency astronaut; and Yuri Lonchakov, a Russian Aviation and Space Agency cosmonaut.

Endeavour is scheduled to land April 30 at the Kennedy Space Center.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**April 9, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 41-01**

## **KSC DIRECTOR ROY BRIDGES WINS DEBUS AWARD**

Kennedy Space Center Director Roy Bridges was honored as the 2001 Dr. Kurt H. Debus Award Recipient on April 6 in recognition of his progressive, visionary leadership and contributions to space technology and exploration.

The Florida Committee of the National Space Club presented the award during the Twelfth Annual Dr. Kurt H. Debus Award Dinner held at the KSC Visitor-Complex Debus Conference Facility.

The Debus Award was first given in 1980. Created to recognize significant achievements and contributions made in Florida to the American aerospace effort, the award is named for the KSC's first Director, Dr. Kurt H. Debus.

"I am honored to become a recipient of this award," said Bridges. "A number of space program pioneers and innovators I greatly admire have received the Debus Award over the years and I count myself fortunate to be listed among their company. Any success that I have had I attribute to the great team here at Kennedy Space Center and our partners in industry and academia."

During Bridges' tenure as Director, he has created a vision for KSC 25 years into the future; reorganized the management structure to better position KSC for spaceport technology research and development; created and strengthened strategic partnerships with the State of Florida, the 45th Space Wing, academia and industry; and introduced world-class safety practices to the Center.

A veteran NASA astronaut as well as former commander of what is now the 45th Space Wing on Florida's Space Coast, Bridges was nominated by National Space Club Florida Committee members and selected as this year's honoree by a vote of the organization's steering committee.

"Roy Bridges was an easy choice," said Ed Gormel, Executive Director of the Spaceport Florida Authority and chairman of the National Space Club Florida Committee. "I have worked professionally either for or with Roy for some 15 years and have always been impressed by his talents, initiative and vision."

Bridges is the second KSC Director to be so honored during the 12-year history of the award. Forrest McCartney was the first, earning his trophy in 1992.

"The Debus Award honors significant contributions to our nation's space program by someone living and working here in Florida, and that's exactly what Roy Bridges is doing every day as the director of the Kennedy Space Center," Gormel said.

"His commitment to making the Cape Canaveral Spaceport a world-class launch operations center for commercial, government and military users will ensure Florida's leadership in space for many years to come, and that's something the National Space Club Florida Committee is happy to recognize," Gormel said.

The National Space Club originally was organized as the National Rocket Club in October 1957 and was founded to stimulate the exchange of ideas and information about rocketry and astronautics, and to promote the recognition of America's achievements in aerospace. The National Space Club is a non-profit corporation whose membership includes representatives from industry, government, education and the general public.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**April 10, 2001**

**George H. Diller**  
**Kennedy Space Center**  
**321/867-2468**

**Cynthia M. O'Carroll**  
**Goddard Space Flight Center**  
**301/614-5563**

**Pat Viets**  
**NOAA/NESDIS**  
**301/457-5005**

**KSC Release No. 42-01**

## **GOES-M ARRIVES AT KSC FOR FINAL TESTING**

The GOES-M environmental weather satellite, currently targeted for launch July 12, 2001, arrived today by C-5 air cargo plane at the Kennedy Space Center's Shuttle Landing Facility from the manufacturing plant in Palo Alto, Calif.

GOES-M is the fifth and final spacecraft to be launched in the current advanced series of geostationary environmental weather satellites for the National Oceanic and Atmospheric Administration (NOAA). The spacecraft is a three-axis inertial stabilized weather satellite that has the dual capability of providing pictures while performing Earth atmospheric soundings at the same time. A suite of space weather environment monitoring instruments, including a new solar x-ray imager, will also be aboard the satellite. Once in orbit GOES-M is to be designated GOES-12 and will complete checkout in time for the most active portion of the 2001 hurricane season.

The satellite is being transported today to Astrotech in Titusville, Fla., where final testing of the imaging system, instrumentation, communications and power systems will be performed. These tests will take approximately two months to complete. Then the spacecraft will be fueled with propellant for the attitude control system, encapsulated in the nose fairing and prepared for transport to the launch pad. The Lockheed Martin Atlas II booster and its Centaur upper stage, AC-142, are scheduled to arrive at Cape Canaveral Air Force Station in late May to begin erection at Space Launch Complex 36.

The GOES-M satellite was built for NASA and NOAA by Space Systems/LORAL of Palo Alto, Calif. NASA's Goddard Space Flight Center in Greenbelt, Md., is responsible for the procurement of the GOES satellites for NOAA including final testing in Florida and the initial on-orbit checkout. NOAA is responsible for satellite operation, data distribution and management of the program.

As a government civil launch, Kennedy Space Center is responsible for the launch services management that includes NASA oversight of the launch vehicle processing activities, integration of the GOES-M spacecraft with the Atlas II and management of the government role in the launch countdown activities. Lockheed Martin of Denver, Co., is under contract to NASA-KSC to provide the launch services.

GOES satellite images are available on the web at <http://www.goes.noaa.gov>.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**April 10, 2001**

**Tracy Young**  
**Kennedy Space Center**  
**321/867-9284**

**KSC Release No. 43-01**

## **NICK THOMAS HONORED FOR ROLE IN SPACE PROGRAM**

Nick Thomas, a native of Daytona Beach, Fla., and a current resident of Titusville, Fla., was among 48 Kennedy Space Center (KSC) employees who were honored recently for their exemplary work at the nation's spaceport.

At KSC, Thomas is employed by Delaware North Park Services of Spaceport, Inc. He provides briefings on Space Shuttle processing, International Space Station (ISS) processing, and flight operations to members of the public at the KSC Visitor Complex. He also serves as a tour guide, escorting the public to the Mercury, Gemini, and Apollo launch pads.

The Honoree Award is the highest form of recognition bestowed upon an employee by the NASA Space Flight Awareness Program. The 48 employees selected were part of a contingent of some 250 NASA and industry employees from throughout the space agency being honored for their professional dedication and outstanding achievement in support of the human spaceflight program.

The Honorees were given a VIP tour of Kennedy Space Center and attended a special reception. Honoring them were several astronauts and senior NASA and industry officials of the Space Shuttle and International Space Station team. The Honorees also watched the STS-102 launch of the Space Shuttle Discovery from a special VIP viewing site on March 8.

Thomas graduated in 1974 from Father Lopez High School in Daytona Beach, Fla. From 1978 to 1983, he was employed as an actor in New York, appearing in theater, television, and motion pictures. He joined KSC in 1987. His parents, Peter B., and Alice M. Thomas, live in Daytona Beach, Fla.

Kennedy Space Center is the launch site and preferred landing site for NASA's Space Shuttles. STS-102 was the eighth Space Shuttle flight dedicated to the International Space Station.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*





April 12, 2001

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 44-01**

**Note to Editors/News Directors:**

## **MISSION STS-100 EVENTS, NEWS CENTER OPERATING HOURS SET**

News conferences, events and operating hours for KSC's News Center have been set for the launch of the Space Shuttle Endeavour on mission STS-100, the 104th launch in the Shuttle program. The preferred time for launch on April 19 is about 2:41 p.m. EDT at the opening of a window that extends for about 5 minutes. The news conferences and events listed below will be carried live on NASA Television (unless otherwise noted) and originate from the KSC News Center.

The seven-member STS-100 crew will arrive at KSC on Monday, April 16, at about 10:30 a.m. EDT. News media representatives planning to cover the event must be at the KSC News Center by 9:30 a.m. (in the event of a possible early crew arrival) for transportation to the Shuttle Landing Facility.

On launch day, the crew will depart their KSC living quarters and be driven to the launch pad at about 10:55 a.m. Media interested in attending this event should be at the KSC News Center no later than 9:45 a.m.

In addition to daily 9 a.m. countdown status briefings, an International Space Station briefing and a prelaunch press conference will be held two days before launch. The full briefing schedule is listed below.

News media representatives with proper authorization may obtain STS-100 mission credentials at the Pass and Identification Building on State Road 3 (south of KSC) on Merritt Island during published times. Credential and badging hours are listed below.

The KSC coda-phone is updated daily with launch status reports at 321-867-2525.

-- end of general release --

### **STS-100 BRIEFINGS & EVENTS SCHEDULE (all times are EDT)**

*(All briefings are held inside the KSC Press Site auditorium and will be carried live on NASA TV unless otherwise noted)*

#### **L-3 Days - Monday, April 16**

##### **9 a.m. ----- Countdown Status Briefing**

Steve Altemus, NASA Test Director  
Todd Corey, STS-100 Payload Mission Manager  
Ed Priselac, Shuttle Weather Officer

**10:30 a.m. ----- STS-100 Flight Crew Arrival (Live on NASA TV)**  
(6 p.m. - Launch countdown begins)

**L-2 Days - Tuesday, April 17**

**9 a.m. ----- Countdown Status Briefing**

Pete Nickolenko, NASA Test Director  
Todd Corey, STS-100 Payload Mission Manager  
Ed Priselac, Shuttle Weather Officer

**10 a.m. ----- International Space Station News Conference**

Bill Gerstenmaier, Deputy Manager, ISS Program, NASA  
Alain Dubeau, Manager, Canadian Space Station Program, CSA  
Ernst Messerschmid, Head, European Astronaut Center, ESA  
Andrea Lorenzoni, Head, Space Station Division, ASI

**4 p.m. ----- Prelaunch News Conference**

Ron Dittimore, Shuttle Program Manager, NASA, JSC  
Dave King, Director of Shuttle Processing, NASA, KSC  
John Weems, Launch Weather Officer

**L-1 Day - Wednesday, April 18**

**9:15 a.m. ----- Countdown Status Briefing**

Steve Altemus, NASA Test Director  
Todd Corey, STS-100 Payload Mission Manager  
Ed Priselac, Shuttle Weather Officer

**L-0 Day - Thursday, April 19**

*(Tanking begins at about 5:50 p.m.)*

**9 a.m. ----- NASA Television live launch programming and commentary begins**

**Launch Day Crew activities:**

4 a.m. -----Wake up  
5 a.m. -----Breakfast  
\*9:25 a.m. -----Crew Photo  
10:15 a.m. -----Weather briefing  
\*10:35 a.m. -----Suit up photo  
\*10:55 a.m. -----Walkout/depart for pad  
\*11:25 a.m. -----Arrive at pad  
\*12:40 p.m. -----Close hatch  
\*2:41 p.m. -----Launch of Endeavour

(\* Carried live on NASA TV)

**\*3:45 p.m. ----- Post-launch Press Conference**

Jim Halsell, Shuttle Program Launch Integration Manager, KSC  
Mike Leinbach, Shuttle Launch Director, KSC

**KSC News Center office hours for STS-100**

*(Times may be adjusted in real time depending on mission events and timelines.)*

Monday, April 16	8 a.m. - 6:30 p.m.
Tuesday, April 17	8 a.m. - 6:30 p.m.
Wednesday, April 18	8 a.m. - 4:30 p.m.
Thursday, April 19 (Launch day)	4:30 a.m. -- 6:30 p.m.

**[FOR MISSION DAY SCHEDULES SEE NOTE BELOW]**

Monday, April 30 (Landing day)	8 a.m. -- 4:30 p.m.
--------------------------------	---------------------

**NOTE:** The KSC News Center will support media questions for overnight and weekend STS-100 Mission Status Briefings and the in-flight crew news conference. Media interested in attending the briefings that occur after normal office hours (8 a.m.--4:30 p.m. Monday-Friday), MUST make their intentions known to the KSC News Room at least 24-hours in advance, in order to secure proper access to the press site. Times of these briefings are available in the NASA TV schedule at:

<http://www.spaceflight.nasa.gov/realdata/nasatv/schedule.html>

**Pass and Identification Hours**

Monday, April 16 ----- 8 a.m. - 12 noon  
Tuesday, April 17 ----- 8 a.m. - 4:30 p.m.  
Wednesday, April 18 ----- 8 a.m. -- 4:30 p.m.  
Thursday, April 19 (Launch day)----- 8 a.m. -- 1:30 p.m.

News media may obtain STS-100 mission credentials at the Pass and Identification Building at Gate 2 on State Road 3, Merritt Island, during the above published times.

News media with annual Shuttle credentials are reminded to sign the logbook at the query counter in the News Center.

**NEWS MEDIA ARE REQUIRED TO BE UNDER PUBLIC AFFAIRS ESCORT AT ALL TIMES WHILE AT KSC EXCEPT WHEN DRIVING TO THE NEWS CENTER OR THE COMPLEX 39 CAFETERIA.**

**NEWS MEDIA ARE ALLOWED AT THE PRESS SITE ONLY WHEN THE KSC NEWS CENTER IS OPEN.**

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Joel Wells**  
NASA, Kennedy Space Center  
(321) 867-2468

April 13, 2001

**Kathleen Bergen**  
Federal Aviation Administration  
(404) 305-5100

**Ken Warren**  
Air Force, 45th Space Wing  
(321) 494-7731

**KSC Release No. 45-01**

## **AIRSPACE, BRIDGES AND WATERWAY RESTRICTIONS IN EFFECT FOR ALL SPACE SHUTTLE LAUNCHES**

With the STS-100 launch of Space Shuttle Endeavour only days away, NASA managers urge all aircraft pilots and boaters to comply fully with the airspace, bridges and waterway restrictions imposed around KSC during all Shuttle launches and landings.

"As always, we are coordinating with officials from the Eastern Range and Federal Aviation Administration (FAA) to help provide a safe launch environment for the Shuttle crew and for interested spectators. Violating these restrictions is not only unsafe for the astronauts and support crews, it's unsafe for the violator," said KSC Launch Director Mike Leinbach.

Space Shuttle Endeavour's first launch opportunity is on April 19 at 2:41 p.m. EDT and the launch window extends for less than five minutes. At NASA's request, FAA surveillance aircraft will patrol KSC's airspace boundaries on launch day. Violators will be intercepted by patrol forces, thoroughly investigated and will be subject to FAA enforcement action.

A number of restrictions are placed in effect around the Kennedy Space Center (KSC) during the hours immediately preceding and following the launch of a Space Shuttle.

Listed and described below are restrictions that apply to pilots, motor vehicle operators and boaters utilizing airspace, bridges and waterways that lead to KSC.

### **KSC AREA AVIATION RESTRICTIONS**

The airspace immediately above and around KSC will be limited to official aircraft only and will be off-limits to general aviation pilots prior to and during the launch of a Space Shuttle.

NOTAMS must be checked by pilots prior to flights near the KSC area. ***Pilots are warned that a violation of KSC's restricted airspace may likely result in serious penalties, including the suspension or revocation of pilot privileges.***

Official aircraft supporting the launch will be in the air. Private pilots must be aware that wandering into a restricted area is not only forbidden, but that it also creates a safety hazard to support aircraft and the errant pilot.

Anyone wishing to view the launch from the air below 11,000 feet should stay west of the

Indian River. Above 11,000 feet, pilots should stay west of the St. Johns River. Pilots are advised that the airspace in the KSC vicinity is expected to be congested with both controlled and uncontrolled aircraft.

Pilots should also be aware of the Solid Rocket Booster (SRB) exhaust cloud that occurs after launch. They should stay at least five miles away from the cloud, even if it drifts out of the restricted area.

Generally, the airspace restrictions cover a variety of air ranges. In addition to the usual KSC and Cape Canaveral Air Force Station airspace restrictions, the upcoming launch requires that all private aircraft stay out of an area roughly bounded by the west side of the Indian River to the west, the Trident Basin (Port Canaveral) to the south, 10 miles north of Haulover Canal at the Oak Hill, Fla., city limit and a minimum of 50 miles seaward to the east. These restrictions are "surface to unlimited." Launch-specific restrictions begin three hours prior to the planned launch time.

Pilots should consult the most recent editions of the Jacksonville Sectional Aeronautical Chart and the Airman's Information Manual. In addition, they should contact the St. Petersburg Flight Service Station at 1-800-992-7433 (1-800-WX-BRIEF). Advisories will be available from the Space Center Executive Airport Tower (VHF 118.9 megahertz) or the NASA Tower (128.55 megahertz).

Pilots should also refer to the current Patrick Air Force Base news release concerning restricted airspace.

### **BRIDGES CONTROLLED FOR LAUNCH**

The opening and closing of bridges over waterways surrounding KSC will be strictly controlled during the hours immediately before and after the launch period for each Space Shuttle mission.

Bridges affected by the launch include:

- \* **Canaveral Harbor Barge Canal** (SR 401, south of Cape Canaveral Air Force Station's Gate 1);
- \* **Indian River Causeway West or NASA Causeway** (Intracoastal Waterway at Addison Point);
- \* **Merritt Island Barge Canal** (Merritt Island State Road 3);
- \* **Haulover Canal Bridge** (State Road 3, north of KSC).

Restraints on bridge openings for boat traffic begin three hours before launch. The bridges may be opened for five minutes at the following points in the launch countdown: T-180 minutes, T-150 minutes, T-120 minutes, T-90 minutes, and T-65 minutes. Adding 20 minutes to these times and subtracting that amount from the launch time will result in an approximate time of openings.

Bridges will remain closed to boat traffic until 90 minutes after lift-off (T+90). They may then open for five minutes at T+90, T+120 minutes and T+150 minutes. Bridge operations will return to normal three hours (T+180 minutes) after launch.

Should the Shuttle be required to perform a Return-to-Launch-Site (RTL) landing at KSC, all bridges would remain closed to boat traffic from 45 minutes before landing until at least one hour after landing.

### **KSC AREA BOATING RESTRICTIONS**

Waterways and boating near the Kennedy Space Center will be strictly controlled prior to

and during the launch of the Space Shuttle.

Safety and security requirements, including U.S. Air Force range safety impact limit lines, will go into effect as early as three days before launch. Other requirements will be phased into effect through sunset the night before launch. A general description of the area follows:

**BANANA RIVER:** Security limits begin at the Banana River Barge Canal south of KSC at the State Road 528 crossing and extend north. This restriction is effective roughly 12 hours prior to launch.

**ATLANTIC OCEAN:** Beginning the day before launch, a general exclusion zone will be in effect three miles offshore from the Haulover Canal, near the north end of KSC, and southward to Port Canaveral. Four hours prior to launch, all ocean-going traffic will be restricted from entering an area measured from five miles north and south of the launch pad and extending 30 miles east into the ocean. An additional three-mile-wide exclusion zone will be extended eastward along the projected flight path of the Space Shuttle.

**MOSQUITO LAGOON:** This area south of the Haulover Canal is off limits to all boats beginning the day before launch.

**INDIAN RIVER:** Restrictions apply from the NASA Causeway north to the Haulover Canal and east of the Indian River's main channel. Restrictions begin the day before launch.

All boating restrictions will be lifted approximately one hour after launch.

The U.S. Coast Guard, the U.S. Fish and Wildlife Service, and KSC security forces share responsibility for enforcing the boating guidelines.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



April 13, 2001

Joel Wells  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

KSC Release No. 46-01

## **LAUNCH COUNTDOWN FOR SHUTTLE MISSION STS-100 BEGINS APRIL 16**

NASA will begin the countdown for launch of Space Shuttle Endeavour on mission STS-100 April 16 at 6 p.m. EDT at the T-43 hour mark. This mission marks the 9th Shuttle flight to the International Space Station and the 3rd Shuttle mission this year. The KSC launch team will conduct the countdown from Firing Room 3 of the Launch Control Center.

The countdown includes 25 hours and 35 minutes of built-in hold time leading to a preferred launch time at about 2:41 p.m. on April 19 with a launch window not to exceed 5 minutes. The exact location of the orbiting International Space Station (ISS) will be determined during the T-9 minute built-in hold. The launch director will at that time determine the exact time of launch.

Mission STS-100 is the 16th flight of the orbiter Endeavour and the 104th flight overall in NASA's Space Shuttle program. STS-100 is scheduled to last 10 days, 19 hours and 19 minutes with a planned KSC landing at about 10 a.m. on April 30.

Endeavour rolled into KSC's Orbiter Processing Facility on Dec. 11, 2000, after completing mission STS-97. The orbiter rolled out of OPF bay 2 and into the VAB on March 17. While in VAB high bay 3, Endeavour was mated to the external tank and solid rocket boosters. The entire Space Shuttle stack was transferred to Launch Pad 39A on March 22.

On mission STS-100, the seven-member crew will deliver the Canadian-built Space Station Remote Manipulator System (SSRMS) to the Station to be installed during two planned spacewalks. The Raffaello Multi-Purpose Logistics Module (MPLM) will fly on its first mission and be brought back to Earth for use on future missions. This pressurized module functions as both a cargo carrier and a Space Station module.

STS-100 has an international crew that includes Commander Kent Rominger, Pilot Jeff Ashby, and Mission Specialists Chris Hadfield from Canada representing the Canadian Space Agency, John Phillips, Scott Parazynski, Umberto Guidoni from Italy representing the European Space Agency, and Yuri Lonchakov from Russia representing the Russian Aviation and Space Agency.

-- end of general release --

### **COUNTDOWN MILESTONES**

\*all times are Eastern

#### **Launch-3 Days (Monday, April 16)**

Prepare for the start of the STS-100 launch countdown

Perform the call-to-stations (5:30 p.m.)  
Countdown begins at the T-43 hour mark (6 p.m.)  
Begin final vehicle and facility close-outs for launch  
Check out back-up flight systems  
Review flight software stored in mass memory units and display systems  
Load backup flight system software into Endeavour's general purpose computers

### **Launch-2 Days (Tuesday, April 17)**

Remove mid-deck and flight-deck platforms (2 a.m.)  
Activate and test navigational systems (7 a.m.)  
Complete preparation to load power reactant storage and distribution system (9 a.m.)  
Flight deck preliminary inspections complete (10 a.m.)

**Enter first built-in hold at T-27 hours for duration of 4 hours** (10 a.m.)

Clear launch pad of all non-essential personnel  
Perform test of the vehicle's pyrotechnic initiator controllers (11 a.m.)

**Resume countdown** (2 p.m.)

Begin operations to load cryogenic reactants into Endeavour's fuel cell storage tanks  
(2 p.m. - 9 p.m.)

**Enter 4-hour built-in hold at T-19 hours** (10 p.m.)

Demate orbiter mid-body umbilical unit (10:30 p.m.)

### **Launch-1 Day (Wednesday, April 18)**

**Resume countdown** (2 a.m.)

Final preparations of the Shuttle's three main engines for main propellant tanking and flight  
(2 a.m.)

Begin filling pad sound suppression system water tank (3:30 a.m.)  
Resume orbiter and ground support equipment close-outs  
Pad sound suppression system water tank filling complete (8:30 a.m.)  
Close out the tail service masts on the mobile launcher platform

**Enter planned hold at T-11 hours for 12 hours, 45 minutes** (10 a.m.)

Begin star tracker functional checks (10:30 a.m.)  
Activate orbiter's inertial measurement units  
Activate the orbiter's communications systems  
Install film in numerous cameras on the launch pad (12:20 p.m.)  
Flight crew equipment late stow (2:50 p.m.)  
Move Rotating Service Structure (RSS) to the park position (6:30 p.m.)  
Perform ascent switch list  
Fuel cell flow-through purge complete

**Resume countdown at T-11 hours** (10:45 p.m.)

Activate the orbiter's fuel cells (11:55 p.m.)

### **Launch Day (Thursday, April 19)**

Clear the blast danger area of all non-essential personnel  
Switch Endeavour's purge air to gaseous nitrogen (1 a.m.)

**Enter planned 2-hour built-in hold at the T-6 hour mark** (3:45 a.m.)

Launch team verifies no violations of launch commit criteria prior to cryogenic loading of the external tank

Clear pad of all personnel

Chilldown of propellant transfer lines (5:15 a.m.)

Begin loading the external tank with about 500,000 gallons of cryogenic propellants (about 5:45 a.m.)

**Resume countdown (5:45 a.m.)**

Complete filling the external tank with its flight load of liquid hydrogen and liquid oxygen propellants (about 8:45 a.m.)

Final Inspection Team proceed to launch pad

**Enter planned 2-hour built-in hold at T-3 hours (8:45 a.m.)**

Perform inertial measurement unit preflight calibration

Align Merritt Island Launch Area (MILA) tracking antennas

Perform open loop test with Eastern Range

**Resume countdown at T-3 hours (10:45 a.m.)**

Crew departs Operations and Checkout Building for the pad (10:55 a.m.)

Complete close-out preparations in the white room

Check cockpit switch configurations

Flight crew begins entry into the orbiter (about 11:25 a.m.)

Astronauts perform air-to-ground voice checks with Launch and Mission Control

Close Endeavour's crew hatch (about 12:40 p.m.)

Begin Eastern Range final network open loop command checks

Perform hatch seal and cabin leak checks

Complete white room close-out

Close-out crew moves to fallback area

Primary ascent guidance data is transferred to the backup flight system

**Enter planned 10-minute hold at T-20 minutes (1:25 p.m.)**

NASA Test Director conducts final launch team briefings

Complete inertial measurement unit preflight alignments

**Resume countdown at T-20 minutes (1:35 p.m.)**

Transition the orbiter's onboard computers to launch configuration

Start fuel cell thermal conditioning

Close orbiter cabin vent valves

Transition backup flight system to launch configuration

**Enter estimated 45-minute hold at T-9 minutes (1:46 p.m.)**

Launch Director, Mission Management Team and NASA Test Director conduct final polls for go/no go to launch

**Resume countdown at T-9 minutes (about 2:26 p.m.)**

Start automatic ground launch sequencer (T-9:00 minutes)

Retract orbiter crew access arm (T-7:30)

Start mission recorders (T-6:15)

Start Auxiliary Power Units (T-5:00)

Arm SRB and ET range safety safe and arm devices (T-5:00)

Start liquid oxygen drainback (T-4:55)

Start orbiter aerosurface profile test (T-3:55)

Start main engine gimbal profile test (T-3:30)  
 Pressurize liquid oxygen tank (T-2:55)  
 Begin retraction of the gaseous oxygen vent arm (T-2:55)  
 Fuel cells to internal reactants (T-2:35)  
 Pressurize liquid hydrogen tank (T-1:57)  
 Deactivate SRB joint heaters (T-1:00)  
 Orbiter transfers from ground to internal power (T-0:50 seconds)  
 Ground Launch Sequencer go for auto sequence start (T-0:31 seconds)  
 SRB gimbal profile (T-0:21 seconds)  
 Ignition of three Space Shuttle main engines (T-6.6 seconds)  
 SRB ignition and liftoff (T-0)

## SUMMARY OF BUILT-IN HOLDS FOR STS-100

T-TIME	LENGTH OF HOLD	HOLD BEGINS	HOLD ENDS
T-27 hours	4 hours	10 a.m. Tues.	2 p.m. Tues.
T-19 hours	4 hours	11 p.m. Tues.	2 a.m. Wed.
T-11 hours	12 hours, 45 minutes	10 a.m. Wed.	10:45 p.m. Wed.
T-6 hours	2 hours	3:45 a.m. Thurs.	5:45 a.m. Thurs.
T-3 hours	2 hours	8:45 a.m. Thurs.	10:45 a.m. Thurs.
T-20 minutes	10 minutes	1:25 p.m. Thurs.	1:35 p.m. Thurs.
T-9 minutes	about 45 minutes	1:46 p.m. Thurs.	2:31 p.m. Thurs.

## CREW FOR MISSION STS-100

Commander (CDR): Kent Rominger  
 Pilot (PLT): Jeff Ashby  
 Mission Specialist (MS1): Chris Hadfield  
 Mission Specialist (MS2): John Phillips  
 Mission Specialist (MS3): Scott Parazynski  
 Mission Specialist (MS4): Umberto Guidoni  
 Mission Specialist (MS5): Yuri Lonchakov

## SUMMARY OF STS-100 LAUNCH DAY CREW ACTIVITIES

### Thursday, April 19

4 a.m. Crew wake up and medical checks  
 5 a.m. Breakfast  
 \*9:25 a.m. Photo and Lunch  
 10:15 a.m. Weather Briefing (CDR, PLT, MS2)  
 10:15 a.m. Don flight suits (MS1, MS3, MS4, MS5)  
 \*10:26 a.m. Don flight suits (CDR, PLT, MS2)  
 \*10:55 a.m. Depart for launch pad  
 \*11:25 a.m. Arrive at white room and begin ingress  
 \*12:40 p.m. Close crew hatch  
 \*2:41 p.m. Launch

\* Televised events (times may vary slightly)  
 All times Eastern

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---





April 19, 2001

**Bruce Buckingham**  
Kennedy Space Center, FL  
(Phone: 321/867-2468)

**Debra Rahn**  
Headquarters, Washington, DC  
(Phone: 202/358-1638)

**KSC Release No. 47-01**

**Note to Editors:**

## **NASA ADMINISTRATOR GOLDIN AND ASI PRESIDENT DEJULIO TO SIGN FRAMEWORK FOR COOPERATION**

The NASA Administrator Daniel S. Goldin and Italian Space Agency (ASI) President Sergio DeJulio, will sign a Framework for Cooperation to build the Habitation Module for the International Space Station. The signing will take place on Thursday, on April 19 at 11:45 a.m. at Kennedy Space Center.

News media will have an opportunity to photograph the signing ceremony at the IMAX Theater at the Kennedy Space Center's (KSC) Visitor Complex. A bus will leave the KSC Press Site for this event at 11:15 a.m. Interested media must sign up for this event at the tour desk at the KSC Press Site.

NASA and ASI will hold a briefing on the Framework for Cooperation at the KSC Press Site at 4:30 p.m., following the STS-100 post-launch press conference. Briefing participants will be NASA Administrator Goldin, ASI President DeJulio, and Michael W. Hawes, NASA Deputy Associate Administrator for Space Station. The briefing will be carried live on NASA Television with question and answer capability from participating NASA centers.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



April 19, 2001

**Debra Rahn**  
Headquarters, Washington, DC  
(Phone: 202/358-1638)

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**Kyle Herring**  
Johnson Space Center, Houston, TX  
(Phone: 281/483-5111)

**Francesca Rea**  
Italian Space Agency, Rome, Italy  
(Phone: 39 335 785 4787)

**KSC Release No. 48-01**

**JOINTLY RELEASED BY NASA AND ASI**

## **NASA AND THE ITALIAN SPACE AGENCY SET FRAMEWORK FOR POSSIBLE EXTENDED ISS COOPERATION THAT COULD RESULT IN AN ITALIAN BUILT HABITATION MODULE**

NASA and the Italian Space Agency (ASI) announced their agreement on the framework of a potential bilateral cooperative agreement, that could result in ASI development of a U.S. Habitation Module for the International Space Station. This agreement allows the U.S. to explore an alternative approach to achieve full crew Habitation for the ISS within the constructs of the President's FY2002 budget blueprint guidance and budget run out.

The Habitation Module which was to house crew quarters and other essential habitability functions for three to four additional ISS crew was considered a high cost-risk element, and as such, its funding was redirected to address cost challenges in maintaining the core U.S. assembly elements and high priority ISS objectives. This cooperative proposal will be part of NASA's ongoing program assessment, which includes possible decisions to develop and deploy U.S. elements or enhancements beyond completion of the U.S. core, within available funding. Successful restoration of a habitation capability for six or more crew would significantly increase the availability of crew time to conduct important research.

NASA and ASI are discussing launch services, additional Space Shuttle and ISS astronaut crew opportunities and assignments, ISS utilization, and increased visibility for the Italian role in the ISS partnership as possible consideration for Italy. Any increase in U.S. research utilization to be provided to ASI would be enabled through the increased capabilities realized through the provision of habitation for an expanded crew complement.

A Memorandum of Understanding (MOU) between NASA and ASI will be required to formally document NASA and ASI's respective responsibilities in a legally binding document. The Framework signed today would form the basis for a potential MOU which NASA and ASI would sign after completion of the program assessment and subsequent

negotiations.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



April 20, 2001

**George H. Diller**  
Kennedy Space Center, FL  
321/867-2468

**KSC Release No. 49-01**

**Note to Editors/News Directors:**

## **KODIAK STAR LAUNCH PRESENTATION TO BOROUGH ASSEMBLY SCHEDULED FOR APRIL 24**

NASA, the Starshine Program, the U.S. Air Force and Lockheed Martin will brief the Kodiak Borough Assembly about a mission planned for launch this summer. Kodiak Star will be launched aboard an Athena I launch vehicle from the Kodiak Launch Complex in Alaska. The briefing will occur on Tuesday, April 24 at 7:30 p.m. (local time) at the Borough Assembly Building.

This will be the first mission to be launched into an earth orbit from Kodiak Island, Alaska. Riding atop the Athena I, the Kodiak Star payload will consist of four individual satellites. Starshine 3, whose ride into space is sponsored by NASA, consists of over 1,500 hand-polished mirrors, 31 retro-reflectors and seven clusters of solar cells powering an amateur radio transmitter. The Starshine Program encourages participation from students in kindergarten through high school. This will be the first time that students from Alaska can participate in the project due to the higher orbital inclination.

PICOSat, PCSat and Sapphire are payloads sponsored by the Department of Defense (DoD) Space Test Program. PICOSat, the primary DoD satellite, has four experiments on board. PCSat was designed by midshipmen at the U.S. Naval Academy, and will become part of the amateur radio community's Automatic Position Reporting System. Sapphire is a micro-satellite built by students at Stanford University and Washington University-St. Louis. Sapphire's primary mission is testing infrared sensors for space use.

Participating in the briefing to the Borough Assembly will be:

Chuck Dovale, NASA Launch Director  
Kennedy Space Center, Florida

Gil Moore, Starshine Program Director  
Colorado Springs, Colorado

Lt. Col. Perry Ballard, USAF  
Deputy Program Director, DoD Space Test Program  
Kirtland Air Force Base, New Mexico

Craig Moeller, Athena Mission Manager  
Lockheed Martin Astronautics  
Denver, Colorado

Launch of Kodiak Star is currently scheduled for Friday, Aug. 31 at 5 p.m. local time.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**April 20, 2001**

**Bruce Buckingham**  
Kennedy Space Center, FL  
321-867-2468

**Patti Phelps**  
Kennedy Space Center, FL  
321-867-4843

**KSC Release No. 50-01**

**Note to Editors:**

## **KENNEDY SPACE CENTER TO HOST ANNUAL COMMUNITY LEADERS BRIEFING APRIL 24**

"The Odyssey Continues" is this year's theme for the annual Community Leaders Briefing to be held April 24 at the KSC Visitor Complex.

KSC Director Roy D. Bridges Jr. and Deputy Director James L. Jennings will meet with community leaders from Brevard County and the State of Florida to discuss the long-term viability of KSC and how the space program benefits the community. Leaders will hear KSC's vision for the future, the current KSC budget, employment trends, educational partnerships, future goals and major facility projects.

Attendees will gather at the Dr. Kurt H. Debus Conference Facility at 8 a.m. for registration and a continental breakfast, and proceed to the briefing to begin at 8:30 a.m. Following the briefing, guests will have an opportunity to see NASA astronaut Rick Searfoss at one of the Visitor Complex's newest attractions, "Astronaut Encounter," and see a special exhibit, "Salute to 20 Years of Space Shuttle Launches," at the IMAX Theater.

Several hundred invitations have been sent to community leaders, business executives, and state and local government officials.

Media representatives are invited to attend and should drive directly to the KSC Visitor Complex and proceed to the Debus Conference Facility. Media planning to attend should make their intentions known to the KSC News Center by noon Monday, April 23, for planning purposes. Further information may be obtained by contacting the KSC News Center at 321-867-2468.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*





April 20, 2001

George H. Diller  
Kennedy Space Center, FL  
321/867-2468

KSC Release No. 51-01

## MAP SPACECRAFT ARRIVES AT KSC TO BEGIN LAUNCH PREPARATIONS

NASA's Microwave Anisotropy Probe (MAP) arrived today at the Kennedy Space Center (KSC) in Florida from the Goddard Space Flight Center in Greenbelt, Md. The spacecraft will undergo final readiness preparations for its upcoming launch this summer aboard a Boeing Delta II launch vehicle.

Using a scanning method, MAP will make an accurate, precise, full sky picture of cosmic microwave background radiation, the afterglow of the Big Bang. MAP seeks to answer fundamental questions about the formation and fate of the universe. Among the questions MAP will attempt to answer: How old is the universe? How and when did the first galaxies form? Will the universe expand forever or will it collapse? How rapidly is the universe expanding?

Upon arrival at Kennedy Space Center, MAP was taken to the Spacecraft and Encapsulation Facility-2 (SAEF-2), a payload processing facility located in the KSC Industrial Area. Several milestones must be completed while MAP is at SAEF-2 including antenna installations, solar array installation, solar array deployment and illumination testing, a spacecraft comprehensive performance test, fueling with hydrazine propellant, and a spin balance test. MAP will then be ready for integration with the solid propellant Payload Assist Module upper stage booster.

MAP is scheduled to be transported from SAEF-2 to Space Launch Complex 17 on Cape Canaveral Air Force Station June 19 where it will be hoisted atop the Boeing Delta II launch vehicle at Pad 17-B. The protective fairing will be installed around the spacecraft on June 26. Launch is currently targeted to occur on June 30 at 4 p.m. EDT.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**April 30, 2001**

KSC Contact: Bruce Buckingham  
321-867-2468

For Release: April 30, 2001

**KSC Release No. 52-01**

## **NOTE TO EDITORS: ENDEAVOUR SCHEDULED TO LAND AT KSC MAY 1**

The orbiter Endeavour is scheduled to land at Kennedy Space Center (KSC) Tuesday morning, May 1, at about 9:04 a.m. EDT, completing the nearly 12-day STS-100 mission that was launched from KSC April 19, 2001.

Landing at KSC's Shuttle Landing Facility (SLF) is slated to occur on orbit 184 at mission elapsed time 11 days, 18 hours, 23 minutes. The deorbit burn will occur at about 7:55 a.m. EDT on May 1. The two KSC landing opportunities on May 1 are 9:04 a.m. and 10:39 a.m. EDT.

If managers must keep Endeavour in orbit an additional day, two additional landing opportunities are available on May 2 at KSC at 9:43 a.m. and 11:19 a.m. EDT.

Two landing opportunities also exist at the back-up landing location at Edwards Air Force Base (EAFB), Calif., on both days.

If landing occurs as scheduled, it will be the 55<sup>th</sup> landing at KSC in the history of the program. Following landing, Endeavour will be towed to the Orbiter Processing Facility and preparations made for its next mission, STS-108, later this year.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**May 2, 2001**

Bruce Buckingham  
Kennedy Space Center  
321-867-2468

Jaydeep Mukherjee  
Florida Space Grant Consortium  
321-452-4301

**KSC Release No. 53-01**

## **KSC HOSTS FUTURE MARS PORT ENGINEERING DESIGN COMPETITION**

How will NASA launch spacecraft from the Martian surface? Students and faculty from universities around the country, hoping to make a real contribution in support of human exploration of Mars, will converge on the KSC Visitor Complex for this year's NASA-KSC-sponsored MarsPort Engineering Design Student Competition 2001 organized by the Florida Space Grant Consortium. Innovative design ideas will be presented as part of a two-day conference May 7 - 8 at the Kurt H. Debus Conference Facility.

During the competition, six university teams will present their engineering trade study papers, which include original design configurations for a MarsPort Cryogenics and Consumables Station (MCCS), to a panel of judges composed of engineers and scientists from Kennedy Space Center, the University of Florida, Science Applications International Corporation and The Boeing Co. A winning team will be selected and NASA will incorporate innovations from the work into its engineering trade studies and evaluate them against other leading concepts.

The MarsPort Cryogenics and Consumables Station (MCCS) is a vital element of the complex infrastructure needed to launch spacecraft from the Martian surface.

The MarsPort competition actually began in the fall of 2000 when invitations were sent out to colleges and universities. Participating student teams were required to write and submit a proposal to the NASA MarsPort 2001 design review committee. From all entries, six teams were selected to investigate the MCCS issues and to design solutions addressing them. All six teams received qualifying cash awards of up to \$2000 upon selection and subsequent design reviews.

School teams participating in this year's competition are Cornell University's Odysseus Team, Embry-Riddle Aeronautical University, Georgia Institute of Technology, The George Washington University's Joint Institute for Advancement of Flight Sciences Team, University of Tennessee-Knoxville and the University of Wisconsin-Madison.

This year's MarsPort competition and conference will also feature presentations by Dr. Sam Durrance, former astronaut and director of the Florida Space Grant Consortium; Dr. Story Musgrave, former astronaut; and Dr. Nadine Barlow, an astronomer from the University of Central Florida.

The MarsPort competition is also sponsored by Science Applications International Corporation and Boeing, and jointly administered by the Florida Space Grant Consortium (FSGC) and the Texas Space Grant Consortium.

The FSGC was formed in 1989 when NASA implemented the National Space Grant College and Fellowship Program. FSGC is a voluntary association of 17 universities and colleges along with Kennedy Space Center, Spaceport Florida Authority, Astronaut Memorial Foundation and Higher Education Consortium for Math and Sciences. The FSGC represents Florida in NASA's Space Grant College and Education Program. It serves more than 230,000 university students in Florida.

The MarsPort Engineering Design Competition 2001 and conference hours are 8 a.m. - 6:30 p.m., Monday, May 7, and 8 a.m. - 2 p.m., Tuesday, May 8. Further information on the NASA-KSC-sponsored MarsPort competition may be obtained by calling the Florida Space Grant Consortium at 321-452-4301.

Media representatives are invited to attend and should drive directly to the KSC Visitor Complex and proceed to the Debus Conference Facility.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



May 11, 2001

George H. Diller  
Kennedy Space Center  
321/867-2468

KSC Release No. 55-01

Note to Editors/News Directors:

## **MEDIA INVITED TO ATTEND LAUNCH VEHICLE DATA CENTER DEDICATION EVENT AT NASA HANGAR AE**

This year begins a new era in the monitoring of expendable vehicle data with the advanced capability of the upgraded Launch Vehicle Data Center (LVDC). Contained within NASA's historic Hangar AE on Cape Canaveral Air Force Station, this new facility will be recognized with a ceremonial open house on Tuesday, May 15.

The new facility's three individual control rooms replace a single LVDC control room in use since the mid-1970's. Developed by NASA-KSC to support multiple test operations in parallel or a single large launch operation, the new LVDC allows up to 100 launch vehicle engineers to monitor the voice, data and video systems that support the checkout and launch of an expendable vehicle. This facility can also be linked with NASA's control rooms at Vandenberg Air Force Base, Calif. used for launching polar-orbiting spacecraft.

State-of-the-art displays provide enhanced capability to engineers and the voice communications capability has also been upgraded for each of the new consoles. These monitoring systems have been almost six years in development. The first use of the new LVDC occurred successfully with the launch Mars Odyssey in April.

Participating in the dedication ceremony will be:

Roy D. Bridges, Jr.  
Director, Kennedy Space Center

Stephen M. Francois,  
Program Manager, Expendable Vehicles and Payload Carriers

Michael J. Benik  
Director, Expendable Vehicle Launch Services, Kennedy Space Center

**NOTE:** Media may attend the open house, tour the new control rooms and interview the ceremony participants. The associated Mission Directors Center and Hangar AE Telemetry Station used for all NASA launches of expendable vehicles will also be available for the press to tour. Food will be served. Those press representatives who wish to attend the event should be at the KSC Press Site no later than 9:15 a.m. on Tuesday for transportation to Hangar AE.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the*

*message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**May 14, 2001**

Bruce Buckingham  
Kennedy Space Center  
321-867-2468

**KSC Release No. 56-01**

## **KSC DIRECTOR BRIDGES RECEIVES HONORARY DOCTORATE**

Roy D. Bridges, Jr., Director of NASA's John F. Kennedy Space Center (KSC), was awarded an honorary doctorate of engineering degree from Purdue University during commencement exercises on May 12 at West Lafayette, Ind.

Bridges, a 1966 graduate of Purdue, was named KSC Director in March 1997. Prior to this position, he served in the U. S. Air Force, retiring with the rank of Major General in July 1996.

Bridges served in several key space-related roles throughout his military career. Prior to his last assignment as director of requirements, Headquarters Air Force Material Command, at Wright-Patterson AFB, Ohio, he served as commander, Air Force Flight Test Center, Edwards AFB, Calif.; commander, Eastern Space and Missile Center, Patrick AFB, Fla.; and commander, 6510th Test Wing, Edwards AFB, Calif.

He was selected to the NASA astronaut corps in 1980 and served as pilot of Space Shuttle Challenger on mission STS-51F in July 1985.

Throughout his career, Bridges has received numerous awards and honors. He is the recipient of the Distinguished Service Medal; Defense Superior Service Medal with oak leaf cluster; Legion of Merit with oak leaf cluster; Distinguished Flying Cross with two oak leaf clusters; Meritorious Service Medal; Air Medal with 14 oak leaf clusters; Air Force Commendation Medal; NASA Space Flight Medal; NASA Certificate of Commendation; and most recently, the Dr. Kurt H. Debus Award.

Bridges was a distinguished graduate of the U.S. Air Force Academy, Colorado Springs, Colo., where he earned a bachelor degree in engineering science in 1965. He received a master's degree in astronautical engineering from Purdue University. Also, he was the top graduate of the Air Force Test Pilot School in 1971.

Bridges was born in Atlanta, Ga., but grew up in Gainesville, Ga. He and his wife, Benita, currently reside in Cocoa Beach, Fla.

Media representatives are invited to attend and should drive directly to the KSC Visitor Complex and proceed to the Debus Conference Facility.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the*

*message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**May 15, 2001**

**Bruce Buckingham**  
321/867-2468

**KSC Release No. 57-01**

## **KSC HOSTS ADVANCED SPACEPORT TECHNOLOGY EVENT**

Kennedy Space Center today hosted the successful kick-off meeting of the Advanced Spaceport Technology Working Group (ASTWG). The group's visionary efforts are expected to help shape spaceports and spaceport technologies of the future.

About 150 leaders from NASA, other federal agencies, state agencies, state spaceports, commercial spaceports, industry and academia met to share information and address potential needs for next-generation spaceport technology.

The group, chaired by NASA/KSC's Randy Eastman, discussed how they could work together to identify, develop and demonstrate new spaceport technologies that will be required to provide ground systems for future vehicles. They also discussed fundamental needs for spaceport master planning, environmental assessments and business management.

While the space industry market currently is not generating a demand for more spaceports, Eastman said, government and industry leaders must begin planning for the time when low-earth-orbit space tourism and suborbital business travel and commerce generate the need for multiple spaceports.

"That way, you'll be that much farther ahead in making the most of the emerging markets," Eastman said.

Kennedy Space Center Director Roy Bridges applauded participants for taking a key role in fostering future spaceports. "We are here to make sure we understand what our technology needs are and to be supportive of them," Bridges said. "If we want to move forward, we have to joint together."

Because of KSC's unique history and expertise in developing spaceport technologies, KSC is in a position to help states plan and get ready for their own spaceports, Bridges said. In turn, KSC values input from the states so that the Center can continue to create technologies that can be applied to a variety of changing spaceport needs.

ASTWG's companion working group is the Advanced Range Technology Working Group, which had its kick-off meeting March 1. Phil Weber of Advanced Space Transportation Projects in KSC's Spaceport Engineering and Technology Directorate manages the two groups.

The major impetus for the KSC-based working groups came from findings of the Interagency Working Group (IWG) co-chaired by the Office of Science and Technology Policy and the National Security Council.

The IWG determined that more focus on the development of range technology to support

next-generation reusable launch vehicles and expendable launch vehicles would be needed if the ground systems were to keep pace with the development of the flight systems.

"KSC understands the challenges of running a spaceport," Bridges said. "Our goal is to do what is right for future space transportation."

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**May 16, 2001**

**George H. Diller**  
321/867-2468

**KSC Release No. 58-01**

**Note to Editors/News Directors:**

## **MEDIA EVENT SCHEDULED MAY 17 AT SSPF FOR SPACE STATION AIR LOCK AND INTERNATIONAL SPACE STATION FLIGHT HARDWARE**

The Joint Airlock Module--the gateway from which crew members aboard the International Space Station (ISS) will enter and exit the 470-ton orbiting research facility--has reached a milestone in processing. On Thursday, May 17, at the Space Station Processing Facility (SSPF) the airlock will be installed into the payload canister for transportation to the launch pad. The airlock is currently scheduled for launch June 14 aboard Space Shuttle Atlantis on STS-104.

Media are invited to witness the installation activity as the Joint Airlock Module is placed into the payload canister. Also, media will receive a tour of the Space Station Processing Facility to observe the largest amount of ISS hardware that has been in the facility to date. Much of the flight hardware is now electrically connected undergoing complex integrated electrical and software testing as the various stages of processing continues.

Available to talk to the media will be Scott Higginbotham, STS-104 payload mission manager, NASA; Scott Chandler, Multi-Element Integrated Test (MEIT) Manager, NASA; Randy Galloway, International Space Station engineering division chief, NASA; Mike Smith, Inboard Truss Cargo Element manager, The Boeing Company.

###

**NOTE:** Media will depart from the KSC Press Site at 9 a.m. on Thursday, May 17, for the SSPF.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**May 17, 2001**

**Tracy Young**  
Kennedy Space Center, Fla.  
321/867-9284

**KSC Release No. 59-01**

## **NASA HONORS KENNEDY SPACE CENTER EMPLOYEES**

Kennedy Space Center (KSC) honored 46 of its civil service and contractor mid-management employees at a special Honoree Event in commemoration of the 20th Anniversary of the first Space Shuttle mission, STS-1. The event was held in Washington, DC, from April 10-12.

The KSC employees were among 250 NASA and industry employees from around the country who were honored by top NASA and industry leaders for their significant contributions to the nation's space program.

The Honorees attended a special reception in their honor, and were joined by astronauts and senior NASA and industry officials of the Space Shuttle and International Space Station team. They were given a VIP tour of the National Air & Space Museum's Paul Garber Facility and participated in various briefings.

The Honoree Award is the highest form of recognition bestowed upon an employee by the NASA Space Flight Awareness Program. Recipients are selected for their professional dedication and outstanding achievement in support of the human spaceflight program.

Civil Service employees honored were Calvin L. Burch, Deborah J. Hahn, Douglas G. Hendriksen, Ira L. Kight, III, Joseph J. Lackovich, Kirk D. Loughheed, Lisa A. Malone, Constance F. Milton, Larry L. Schultz, Terry L. Smith, James G. Tatum, and Gary D. Thompson.

Boeing Human Space Flight & Exploration employees honored include Donald W. Ely, Donald E. Ewers, Robert W. Kurrus, Gerald D. Sheehan, Timothy W. Weyant, and Steven A. Zimfus.

Space Gateway Support employees honored were Richard L. Campbell (United Paradyne Corporation), Arthur D. Carraway, Jan F. Seinkner, David C. Severance (InDyne, Inc.), and Barbara Ivey White.

Other contractor Honorees were Jeffrey C. Ake, Dynacs Engineering, Inc., Dr. Thomas W. Dreschel, Dynamac Corporation, and Jim R. McMahon, Lockheed Martin Space Operations.

United Space Alliance employees honored were Mark S. Barns, Dennis J. Bobik, Clifford D. Byrd, Jeffery A. Floyd, Joseph R. Granger, Mark J. Greby, Robert S. Herman, Carol A. Lacey, Michael H. Leppert, Maria Metcalf, Bruce W. Moran, Lester R. Osborne, Larry R. Ostarly, Janiene L. Pape, Kenneth P. Revay, James W. Rudolph, Phillip R. Taylor, Constance R. Vondrell, Richard Walls, and Robert A. Wright.

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**May 17, 2001**

**Tracy Young**  
Kennedy Space Center, Fla.  
321/867-9284

**KSC Release No. 60-01**

## **GARY D. THOMPSON HONORED FOR ROLE IN SPACE PROGRAM**

Gary D. Thompson, a native of Philadelphia, Miss., was among 46 Kennedy Space Center (KSC) employees recently honored at a special event in Washington, DC, for their exemplary work at the nation's spaceport .

At KSC, Thompson is employed by NASA as branch chief of the shuttle processing, flight and ground electrical systems branch. He is responsible for the planning, coordination, and management of the integration, test, checkout, and final launch preparations of the Space Shuttle flight and ground control systems. He is the project lead for the research and development of new generation computer-based launch equipment.

The Honoree Award is the highest form of recognition bestowed upon an employee by the NASA Space Flight Awareness Program. The 46 employees selected were part of a contingent of 250 NASA and industry employees from throughout the space agency being honored for their professional dedication and outstanding achievement in support of the human spaceflight program.

The Honorees were given a VIP tour of the National Air & Space Museum's Paul Garber facility and attended a special reception commemorating the 20th anniversary of STS-1, the first Space Shuttle mission. Honoring them were several astronauts and senior NASA and industry officials of the Space Shuttle and International Space Station team.

Thompson's other awards include the NASA Silver Snoopy Award and NASA Certificate of Commendation.

Thompson graduated in 1963 from Neshoba Central High School. After high school, he went on to receive a bachelor degree in aerospace engineering from Mississippi State University in 1967. After graduation, he joined NASA in June 1967. He is the son of the late Forest Thompson, and Eula Thompson, of Philadelphia, Miss.

Thompson and his wife, Charlene, currently live in Titusville, Fla. They have two adult children, Kimberly age 30, a stockbroker, and Chris age 26, an electrical engineer.

Kennedy Space Center is the launch site and preferred landing site for NASA's Space Shuttles. STS-1, the first Space Shuttle flight, launched on April 12, 1981.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each*

*subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**May 17, 2001**

**Tracy Young**  
Kennedy Space Center, Fla.  
321/867-9284

**KSC Release No. 61-01**

## **LARRY L. SCHULTZ HONORED FOR ROLE IN SPACE PROGRAM**

Larry L. Schultz, a long time resident and the Mayor of the city of Rockledge, Fla., was among 46 Kennedy Space Center (KSC) employees recently honored at a special event in Washington, DC, for their exemplary work at the nation's spaceport.

At KSC, Schultz is employed by NASA and serves as project manager and senior advisor for programs and projects on safety, mission assurance, and risk management issues.

The Honoree Award is the highest form of recognition bestowed upon an employee by the NASA Space Flight Awareness Program. The 46 employees selected were part of a contingent of 250 NASA and industry employees from throughout the space agency being honored for their professional dedication and outstanding achievement in support of the human spaceflight program.

The Honorees were given a VIP tour of the National Air & Space Museum's Paul Garber facility and attended a special reception commemorating the 20th anniversary of STS-1, the first Space Shuttle mission. Honoring them were several astronauts and senior NASA and industry officials of the Space Shuttle and International Space Station team.

Schultz graduated in 1962 from Miami Jackson High School. After high school, he went on to receive a bachelor degree in aerospace engineering from Georgia Institute of Technology in 1966. He earned a master's degree from the University of Central Florida in 1992.

Schultz joined NASA in 1967. His mother Elaine Schultz resides in Rockledge, Fla. He has two adult children, John age 27, and Tom age 25.

Kennedy Space Center is the launch site and preferred landing site for NASA's Space Shuttles. STS-1, the first Space Shuttle flight, launched on April 12, 1981.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**May 22, 2001**

**George H. Diller**  
Kennedy Space Center, FL  
321/867-2468

**Cynthia M. O'Carroll**  
Goddard Space Flight Center, MD  
301/286-6943

**Pat Viets**  
NOAA  
Suitland, MD  
301/457-5005

**KSC Release No. 62-01**

## **GOES-M MEDIA OPPORTUNITY SET FOR WEDNESDAY, MAY 23**

The Geostationary Operational Environmental Satellite-M (GOES-M) weather satellite, to be lofted into orbit for NASA by International Launch Services on an Atlas II rocket next month, will be the subject of a news media photo opportunity on Wednesday, May 23. The event will be held at the Astrotech Space Operations facility in Titusville starting at 10 a.m.

GOES-M is the last in the current series of advanced geostationary weather satellites in service. Once in orbit it will become GOES-12, joining GOES-8, GOES-9, GOES-10 and GOES-11 in space. GOES-M has a new instrument not on the other spacecraft, a Solar X-ray Imager that can be used in forecasting space weather, the effects of solar storms that create electromagnetic disturbances on earth that affect other satellites, communications and power grids. For its other systems, GOES-M will provide a redundant capability for the geostationary weather satellite network ready to be activated when one of the currently operational spacecraft must be retired.

For the media event, procedures for optically sensitive spacecraft must be followed for individuals entering the cleanroom where the spacecraft is being processed. Guidelines for controlled access to the cleanroom have been developed by quality control personnel and will be monitored prior to entering the facility. Cleanroom attire will be furnished. Photographers may be requested to clean cameras or accessories using alcohol wipes, which will be provided.

Long pants and closed toe shoes must be worn -- no shorts or skirts. Non-essential equipment such as camera bags or other carrying cases should be left outside the cleanroom. No pencils or felt-tipped pens can be permitted inside the cleanroom; only ballpoint pens may be used. Due to the sensitivity of the spacecraft's solar arrays, flash photography will not be allowed. There is adequate metal halide lighting in the facility for photography (white with slight green cast).

On Wednesday, media may proceed directly to Astrotech located in the Spaceport Florida Industrial Park, 1515 Chaffee Drive, Titusville. Spokespeople available will be:

**Marty Davis, GOES Project Manager, NASA**

**Goddard Space Flight Center**

**Steve Kirkner, GOES Acquisition Manager  
National Oceanic and Atmospheric Administration**

The Atlas II rocket, built by Lockheed Martin, is tentatively scheduled to arrive at Cape Canaveral on May 31. The vehicle erection activities at Pad 36-A are currently scheduled to begin June 4. Launch is scheduled for Sunday, July 15 at the opening of a launch window that extends from 2:59 - 4:24 a.m. EDT.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**May 31, 2001**

**George Diller/Bruce Buckingham**  
**Kennedy Space Center**  
**321/867-2468**

**Martha Heil**  
**Jet Propulsion Laboratory**  
**818/354-0850**

**KSC Release No. 63-01**

## **GENESIS SPACECRAFT ARRIVES AT KSC FOR LATE JULY LAUNCH**

NASA's Genesis spacecraft, to be launched aboard a Boeing Delta II vehicle on July 30, arrived at 3:30 a.m. today at the Kennedy Space Center (KSC) Shuttle Landing Facility from Denver, Colo., aboard an Air Force C-17 aircraft. The spacecraft was later transported to the Payload Hazardous Servicing Facility (PHSF) in KSC's industrial area and installed into the cleanroom, where it will be processed for launch.

Genesis will capture a piece of the Sun: a sample of the ions and elements in the solar wind and bring the samples back to Earth so that scientists can study the exact composition of the Sun and probe the solar system's origin. By studying the solar wind, scientists will find clues to the formation of the solar system as we know it today.

Genesis' samples will return to Earth in a spectacular helicopter capture. As the sample return capsule glides to the ground in Utah's Air Force Testing and Training Range, specially trained helicopter pilots will catch it. The samples will then be analyzed to provide a basis, a solar matter "Rosetta Stone," for comparing the solar nebula's composition to those of the planets and other solar system bodies.

Now that the Genesis spacecraft is at KSC, processing will begin with a functional test, an electrical systems test of the entire spacecraft and the solar arrays will be deployed. This will be followed on June 7 with a Deep Space Network compatibility test to verify the spacecraft's communications systems and the radio links associated with the worldwide network of tracking stations.

Beginning June 11, Science Performance Tests will begin. These tests will verify that all of the science instruments will operate as designed. On June 12, the solar arrays will have a final cleaning and be stowed for launch. Upon completion of this activity, the spacecraft will be ready for hydrazine propellant loading activities scheduled the week of June 22. A spin-balance test will follow on June 29.

Finally in the PHSF, Genesis will be mated to a Star 37 upper stage booster on July 17 before being transported to Space Launch Complex 17 the following day. Once mated to the Delta II, a spacecraft functional test will be performed. The payload fairing is to be installed around Genesis on July 25.

Stacking of the Boeing Delta 7326 launch vehicle began at Pad 17-A is scheduled to begin on June 12. Launch is scheduled for July 30 at 12:36 p.m. EDT.

The Jet Propulsion Laboratory, Pasadena, Calif., manages NASA's Genesis project. Lockheed Martin Astronautics, Denver, Colo., built the Genesis spacecraft.

**NOTE TO EDITORS:** For additional information on the Genesis mission visit <http://genesismission.jpl.nasa.gov/>

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



June 8, 2001

**George Diller**  
Kennedy Space Center  
321/867-2468

**KSC Release No. 64-01**

**Note to Editors/News Directors:**

## **GENESIS MEDIA OPPORTUNITY TO BE HELD AT KSC JUNE 13**

NASA's Genesis spacecraft, planned for launch next month, will be featured in a news media opportunity on Wednesday, June 13, at 9:30 a.m.

Genesis will capture a piece of the Sun -- a sample of the ions and elements in the solar wind -- and bring the samples back to Earth so that scientists can study the exact composition of the Sun and probe the solar system's origin. By studying the solar wind, scientists will find clues to the formation of the solar system as we know it today.

In 2004, Genesis' samples will return to Earth in a spectacular helicopter capture. As the sample return capsule parachutes to the ground in Utah's Air Force Test and Training Range, specially trained helicopter pilots will catch it. The samples will then be analyzed to provide a "Rosetta Stone" of solar material, for comparing the Sun's original ingredients to those of the planets and other solar system bodies.

During the press opportunity, media will be taken to KSC's Payload Hazardous Servicing Facility (PHSF) to view the Genesis spacecraft with fully deployed solar arrays. Before entering the high bay, Chet Sasaki, Genesis Project Manager from the Jet Propulsion Laboratory and Richard Bennett, Missions Systems Engineer from Lockheed Martin will give a short presentation on the role of the spacecraft. Genesis spokespersons will then be available inside the PHSF high bay for questions and interviews about the spacecraft and its mission.

Before entering the high bay clean room area, media must submit to a routine security search of camera and utility bags. Due to clean room requirements, media planning to attend are requested to wear long pants and closed-toe shoes. No shorts, tank tops or sandals can be permitted. Media will don clean room attire (bunny suits) that will be provided. No suede, leather or vinyl attire or accessories are permitted. Participants are asked not to wear makeup or lotions.

Quality control personnel will request photographers to clean camera equipment with alcohol wipes and place accessories in special plastic bags which will be provided. No food, chewing gum, tobacco, lighters, matches, pocket knives or pencils will be permitted inside the clean room.

Electronic flash photography and wireless microphones are permitted. The lighting in the facility is high-pressure sodium (orange).

Media representatives needing accreditation should contact the NASA-KSC News Center at 321/867-2468 by the close of business Tuesday, June 12. **Media will depart the KSC News Center at 9:30 a.m. for the PHSF.** Media will be returned to the NASA-KSC News Center by 11:30 a.m.

Genesis is scheduled for launch on Monday, July 30 at 12:36 p.m. EDT. Liftoff will occur aboard a Boeing Delta II rocket from Pad A at Launch Complex 17 on Cape Canaveral Air Force Station.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



June 12, 2001

**George H. Diller**  
Kennedy Space Center  
321/867-2468

**KSC Release No. 65-01**

**Note to Editors/News Directors:**

## **MAP SPACECRAFT PRESS OPPORTUNITY SET FOR FRIDAY, JUNE 15**

NASA's Microwave Anisotropy Probe (MAP), to be launched later this month, will be featured in a news media opportunity at Kennedy Space Center on Friday, June 15, at 1:30 p.m.

Using a scanning method, MAP will make an accurate, precise, full sky picture of cosmic microwave background radiation, the afterglow of the Big Bang. MAP seeks to answer fundamental questions about the formation and fate of the universe. Among the questions MAP will attempt to answer: How old is the universe? How and when did the first galaxies form? Will the universe expand forever or will it collapse? How rapidly is the universe expanding?

For this event, standard clean room protocol will be observed. Those planning to attend are requested to wear long pants. Shorts or tank tops are not permitted. Closed-toe shoes are also required. Clean room attire (bunny suits) will be furnished. Quality control personnel may request cleaning of photographic equipment with alcohol wipes that will be provided. No suede, leather or vinyl attire or accessories are permitted. Please do not wear perfume, cologne or makeup. No graphite pencils, food, tobacco, lighters, matches, or pocketknives will be permitted inside the clean room. Electronic flash photography is permitted. The lighting in the facility is mercury vapor.

**The MAP spacecraft is highly sensitive to radio frequency (RF) transmissions. Therefore, for this spacecraft showing, no cellular telephones, pagers, wireless microphones, or two-way radios can be allowed inside the SAEF-2 cleanroom.**

KSC annual badges will be in effect for this event. Those needing accreditation should contact the NASA News Center at 321/867-2468 by the close of business Thursday, June 14. Departure for SAEF-2 will be at 1:30 p.m. on Friday, June 15.

MAP is scheduled to be launched on June 30 at 3:46 p.m. aboard a Boeing Delta II rocket from Pad 17-B on Cape Canaveral Air Force Station.

Additional information on the MAP mission can be found at:

<http://www.gsfc.nasa.gov/gsfsc/spacesci/map/map.htm>

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each*

*subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



June 15, 2001

**Tracy Young**  
Kennedy Space Center  
321/867-2468

**KSC Release No. 66-01**

## **JAMES R. HEALD NAMED DIRECTOR, SPACEPORT ENGINEERING AND TECHNOLOGY AT KSC**

James R. Heald has been named director of the Spaceport Engineering and Technology organization at Kennedy Space Center (KSC), effective June 11, 2001.

In this position, Heald is responsible for leading the center's efforts for integrated engineering and spaceport technology development. Also, he will lead KSC's spaceport engineering and technology organizational efforts in building KSC into a premier spaceport science and engineering organization.

Prior to joining NASA, Heald served 26 years in the U. S. Air Force. His most recent assignment was as vice commander, Air Force Research Laboratory, Wright-Patterson Air Force Base, Ohio. There, he played a key role in directing the Air Force's science and technology program.

Heald is a distinguished graduate of the U.S. Air Force Academy, Colorado Springs, Colo., earning a bachelor degree in computer science and mathematics in 1975. Upon graduation, he was commissioned as a second lieutenant. He received a master's degree in computer science from University of California at Los Angeles in 1976.

He is a distinguished graduate of the U.S. Air Force Test Pilot School, Edwards AFB, Calif., distinguished graduate, Air Command and Staff College, Maxwell AFB, Ala., and an outstanding graduate of the Air War College.

Heald is rated as a master navigator and has logged over 2300 hours of flying time in more than 30 different types of aircraft. He served as the director of student training, U.S. Air Force Test Pilot School, Edwards AFB, Calif., from July 1989-July 1991. Prior to his assignment at Wright-Patterson, AFB, Ohio, he served as commander, 46th Operations Group, Air Force Development Test Center, Eglin AFB, Fla.

Heald is a native of Fort Leavenworth, Kan. He is married to the former Patricia K. McCollum of Scottsdale, Ariz . They have two adult children, Mike and Greg.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---





**June 19, 2001**

**Dolores Beasley**  
NASA Headquarters  
202/358-1753

**George H. Diller**  
Kennedy Space Center  
321/867-2468

**Susan Hendrix**  
Goddard Space Flight Center  
301/286-7745

**Barron Beneski**  
Orbital Sciences Corporation  
703/406-5528

**KSC Release No. 67-01**

## **LAUNCH OF HESSI SPACECRAFT POSTPONED**

The launch of NASA's High Energy Solar Spectroscopic Imager (HESSI) spacecraft aboard an Orbital Sciences air-launched Pegasus XL vehicle has been postponed.

NASA's Expendable Vehicle Program Office at the Kennedy Space Center has concluded that it would be prudent to wait until the X 43 failure board has released preliminary results and findings. This decision was reached in consultation with the Explorer Project at Goddard Space Flight Center, Greenbelt, MD.

Once the failure review board has completed its analysis, the conclusions can be evaluated to determine if any aspects are relevant to the Pegasus/HESSI vehicle. A final engineering review will begin at that time after which a launch date can be established.

The Orbital Sciences L-1011 aircraft carrying the Pegasus/HESSI vehicle will return to Vandenberg Air Force Base, Calif., on Thursday, June 21.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**June 22, 2001**

**Dolores Beasley**  
**NASA Headquarters**  
**202/358-1753**

**George H. Diller**  
**Kennedy Space Center**  
**321/867-2468**

**Nancy Neal**  
**Goddard Space Flight Center**  
**301/286-0039**

**KSC Release No. 68-01**

**Note to Editors/News Directors:**

## **NASA'S MAP SPACECRAFT SCHEDULED FOR LAUNCH JUNE 30**

The launch of NASA's Microwave Anisotropy Probe (MAP) is scheduled for Saturday, June 30. The launch window is 3:46 - 3:58 p.m. EDT. Liftoff will occur aboard a Boeing Delta II launch vehicle from Pad B at Space Launch Complex 17, Cape Canaveral Air Force Station. Should launch be delayed by 24 hours, the launch window on July 1 is 3:40 - 3:55 p.m. EDT.

Using a scanning method, MAP will make an accurate, precise, full-sky picture of cosmic microwave background radiation -- the afterglow of the Big Bang. MAP seeks to answer fundamental questions about the formation and fate of the universe. Among the questions MAP will attempt to answer are: How old is the universe? How and when did the first galaxies form? Will the universe expand forever or will it collapse? How rapidly is the universe expanding?

### **PRELAUNCH NEWS CONFERENCE AND MISSION SCIENCE BRIEFING**

A prelaunch news conference is scheduled for Friday, June 29, at 1 p.m. EDT in the NASA-KSC News Center auditorium and will be carried live on NASA Television. Participating in the briefing will be:

Chuck Dovale, NASA Launch Manager  
NASA Kennedy Space Center, Fla.

Joy Bryant, Delta II Mission Director  
The Boeing Company

Elizabeth Citrin, MAP Project Manager  
NASA Goddard Space Flight Center, Greenbelt, Md.

Joel Tumbiolo, Launch Weather Officer  
Department of the Air Force

Immediately following the prelaunch news conference, a MAP Mission Science Briefing will

be held. Participating will be:

Dr. Alan Bunner, Director, Structure and Evolution of the Universe Theme  
NASA Headquarters, Washington, D.C.

Dr. Charles Bennett, MAP Principal Investigator  
NASA Goddard Space Flight Center, Greenbelt, Md.

Dr. David Spergel, MAP Science Team  
Princeton University, Princeton, N.J.

## **ACCREDITATION**

Media who wish to cover the launch of MAP including the prelaunch news conference and mission science briefing should send a letter of request to the NASA-KSC News Center on news organization letterhead. It should include name, date of birth, and Social Security number or passport number. By close of business Thursday, June 28, letters should be faxed to 321/867-2692 or addressed to:

MAP Launch Accreditation  
NASA XA-E1  
Kennedy Space Center, FL 32899

MAP mission badges may be obtained at the NASA-KSC News Center beginning on Wednesday, June 27, between 8 a.m. and 4:30 p.m. On launch day, Saturday, June 30, MAP mission badges will be available starting at 2:15 p.m. and will be issued at the Pass & Identification Building on SR 401 outside Gate 1 of Cape Canaveral Air Force Station.

Departure on launch day from the Gate 1 Pass & Identification Building for Press Site 1 will be at 2:30 p.m. A NASA MAP mission badge is required for all media covering the launch at Press Site 1. Annual KSC badges or other Space Shuttle launch credentials will not be honored on MAP launch day. After launch, media may leave unescorted for the return to Gate 1. At all other times, an escort is required for all other areas of Cape Canaveral Air Force Station. For further information on 2001 MAP launch accreditation, contact Patti Beck at the NASA-KSC News Center at 321/867-2468.

## **REMOTE CAMERAS**

Media wishing to establish remote cameras at the launch pad should meet at the NASA-KSC News Center at 2:30 p.m. on Friday, June 29, to be escorted to Space Launch Complex 17.

## **PRESS SITE OPERATING HOURS**

On launch day, Saturday, June 30, the NASA-KSC News Center will be open from 2:00 p.m. - 6:00 p.m.

## **NASA TELEVISION COVERAGE, "V" CIRCUITS, WEBCAST AND RECORDED LAUNCH STATUS**

NASA Television will carry the prelaunch news conference and mission science briefing beginning at 1 p.m. EDT on Friday, June 29. On launch day, Saturday, June 30, countdown coverage will begin at 2 p.m. EDT. Coverage will conclude shortly after spacecraft separation that occurs approximately one hour, twenty-five minutes after launch.

NASA Television is available on satellite GE-2, transponder 9C, located at 85 degrees West longitude. A simulcast of the NASA Television coverage will also be available on the World Wide Web at <http://www.ksc.nasa.gov>. Additional Information about MAP is available at <http://map.gsfc.nasa.gov>.

Audio only of NASA Television coverage of the prelaunch news conference and launch commentary will be available on the "V" circuits which may be dialed directly at 321/867-1220, 867-1240, 867-1260, 867-7135, 867-4003, 867-4920.

The NASA-KSC News Center codaphone will carry MAP prelaunch status reports beginning at L-3 days, on Wednesday, June 27, and may be dialed at 321/867-2525.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



June 27, 2001

**George Diller**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 69-01**

**Note to Editors:**

## **MEDIA OPPORTUNITY WITH STS-104 CREW SET FOR THIS WEEK'S COUNTDOWN TEST**

The crew of Space Shuttle mission STS-104, the 105th mission in the history of Shuttle flight, will be at Kennedy Space Center this week for a Terminal Countdown Demonstration Test (TCDT). The crew arrived at KSC's Shuttle Landing Facility on Tuesday, June 26, and will remain through the end of the test activities Friday.

Media representatives have an opportunity on Thursday, June 28, to speak informally with and photograph the entire STS-104 crew at Launch Pad 39B. Media interested in participating in this question-and-answer session should be at the KSC Press Site by 8:30 a.m. for transport to the pad. This event will be carried live on NASA TV; however, media must be present in order to participate.

The TCDT is held at KSC prior to each Space Shuttle flight, providing crews an opportunity to participate in simulated countdown activities. The TCDT ends with a mock launch countdown culminating in a simulated main engine cut-off. The astronauts also spend time undergoing emergency egress training exercises at the pad and have opportunities to view and inspect the payloads in the orbiter's payload bay.

On Friday, the crew will enter the orbiter Atlantis fully suited for the final hours of the practice countdown, including the simulated Shuttle main engine ignition and cut-off.

Following TCDT activities Friday, the crew will depart KSC for final mission preparations in Houston, Texas.

Mission STS-104 is targeted for launch from Kennedy Space Center at 5:04 a.m. July 12. The flight is scheduled to last 11 days and will feature Atlantis delivering the Joint Airlock to the International Space Station where it will be attached to the station's Unity Node. Another priority of the mission is to transfer supplies and water from Atlantis to the station to sustain the Expedition Two crew until the next resupply opportunity.

Crew members for mission STS-104 are Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt (MS1), Janet Kavandi (MS2) and James Reilly (MS3).

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each*

*subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



June 28, 2001

George Diller  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

KSC Release No. 70-01

**NOTE TO EDITORS/NEWS DIRECTORS:  
TOWER ROLLBACK PHOTO OPPORTUNITY SCHEDULED FOR  
DELTA/MAP**

Setting the stage to begin the terminal countdown for the launch of NASA Microwave Anisotropy Probe (MAP) on June 30, the mobile service tower (MST) at Pad 17-B is scheduled to be retracted from around the Boeing Delta II rocket. The MST provides the primary access to the vehicle for pad workers and provides environmentally controlled conditions for the MAP spacecraft until it is enclosed in the payload fairing.

Media wishing to observe rollback of the tower from around the Delta will be escorted to the perimeter of Launch Complex 17 early Saturday morning. Those attending should be at the Gate 1 Pass & Identification Building on Cape Canaveral Air Force Station at 8:15 a.m. for accreditation. Departure for Complex 17 will be at 8:30 a.m.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



June 28, 2001

George Diller  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

KSC Release No. 71-01

## SHUTTLE ATLANTIS TO LAUNCH JULY 12 ON MILESTONE FLIGHT TO DELIVER STATION'S NEW DOORWAY TO SPACE

The Space Shuttle Atlantis will launch July 12 to carry a new airlock to the International Space Station, a mission that will bring the orbiting outpost an unprecedented degree of self-reliance, providing it with a new doorway to space for maintenance and construction.

Atlantis is scheduled for liftoff at 5:04 a.m. EDT July 12 from the Kennedy Space Center, the beginning of an approximately five minute launch window. Atlantis' mission, designated STS-104, will be the fourth shuttle flight this year and the 10th shuttle mission dedicated to assembly of the International Space Station.

"This mission will be a milestone for both the station and shuttle as we complete a major phase of the station's assembly," Space Shuttle Program Manager Ron Dittmore said. "A year ago, I said we would fly the most complex series of missions NASA has undertaken since landing on the moon -- now we're nearing completion of the first phase. The team has truly done an excellent job to get us here safely, successfully and on schedule."

Atlantis' mission includes three space walks to install and outfit the station's new Joint Airlock, including the first-ever outside space walk to originate from the station. Atlantis' crew will be commanded by Air Force Lt. Col. Steve Lindsey. Marine Corps Maj. Charlie Hobaugh will serve as pilot. The crew also includes astronauts Mike Gernhardt, Janet Kavandi and Jim Reilly. Gernhardt and Reilly will perform the planned space walks. The mission will be the second shuttle to visit the station during the stay of the second station crew - Commander Yuri Usachev and Flight Engineers Jim Voss and Susan Helms - now in their fourth month aboard the complex

Atlantis is scheduled to land at the Kennedy Space Center at 12:56 a.m. EDT July 23.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**June 29, 2001**

**Tracy Young**  
**Kennedy Space Center, Fla.**  
**(Phone: 321/867-9284)**

**KSC Release No. 72-01**

## **JAMES A. DEVAULT HONORED BY NASA ASTRONAUT**

James A. Devault, a native of Milan, Tenn., was recently presented with NASA's prestigious Silver Snoopy Award for service to the Space Shuttle astronauts.

Astronaut Jeff Ashby presented the award to Devault in May at Kennedy Space Center (KSC). Devault joined NASA in 1968 and is responsible for the engineering and operation of radio communications systems.

Devault was honored for his exceptional engineering and management of operational communication systems at KSC, Dryden Flight Research Center, Calif., and Transatlantic Space Shuttle landing sites.

"Improvements you have made to those systems help ensure the safe processing, launch, and landing of the orbiter and crew," said Ashby. "The exceptional manner in which you have carried out your responsibilities exceeds normal requirements and demonstrates pride in your work."

Devault graduated from McKenzie High School, McKenzie, Tenn., in 1960. After high school, he went on to receive a bachelor degree in electrical engineering from Tennessee Technological University in 1965.

Devault currently resides in Merritt Island, Fla. He is the son of the late Julian H., and the late Mary Ruth Devault.

Snoopy of the comic strip "Peanuts" has been the unofficial mascot of NASA's astronaut corps since the earliest days of human space flight. The Silver Snoopy Award was created by the astronauts to honor individuals who contribute most to the safety and success of human space flight.

The award is presented to no more than 1 percent of the space center's work force each year. Recipients are given a silver pin depicting the famous beagle wearing a space suit. All the pins have flown on a previous Space Shuttle mission. The awardees also receive a framed certificate and a congratulatory letter signed by the presenting astronaut.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---





**June 30, 2001**

**George Diller**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 74-01**

**Note to Editors/News Directors:**

## **SPACE SHUTTLE DISCOVERY TO ROLL OUT TO LAUNCH PAD 39A ON MONDAY**

The Space Shuttle Discovery is scheduled to roll out to Kennedy Space Center's Launch Pad 39A on Monday, July 2.

The 3-mile trip will begin at about 2 a.m. from the Vehicle Assembly Building, marking a major milestone in the final preparations for launch of Shuttle mission, STS-105, currently targeted for no earlier than August 5, 2001.

Accredited news media interested in covering a planned photo opportunity of roll out should be at the KSC News Center at 8 a.m. However, it is suggested that media call the KSC recorded status line (321/867-2525) for the latest updates.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**David Steitz**  
NASA Headquarters  
202/358-1730

**For Release: July 6, 2001**

**George H. Diller**  
Kennedy Space Center  
321/867-2468

**Cynthia O'Carroll**  
Goddard Space Flight Center  
301/614-5563

**Pat Viets**  
NOAA  
301/457-5005

**KSC Release No: 75-01**

## **LAUNCH OF GOES-M WEATHER SATELLITE SCHEDULED FOR JULY 15**

The launch of the GOES-M weather satellite for NASA and the National Oceanic and Atmospheric Administration (NOAA) aboard a Lockheed Martin Atlas IIA rocket (AC-142) is scheduled for Sunday, July 15. Liftoff is targeted for the opening of a launch window that extends from 2:59 - 4:24 a.m. EDT, a duration of one hour and 25 minutes. Launch will occur from Pad A at Complex 36 on Cape Canaveral Air Force Station.

GOES-M is the fifth and last spacecraft to be launched in the current advanced series of geostationary weather satellites for NOAA, however, it is the first to have a Solar X-ray Imager. The spacecraft is a three-axis internally stabilized weather satellite that has the dual capability of providing pictures while performing atmospheric sounding at the same time. Once in orbit the spacecraft will be designated GOES-12.

The new Solar X-ray Imager is a solar storm detection instrument. It will take a full-disk image of the sun's atmosphere once every minute. The images will be used to monitor and forecast the sources of space weather disturbances from the sun. This will enable forecasters to predict disturbances to Earth's space environment that can fry satellite electronics, disrupt satellite, navigation and radio signals, and create surges in power grids. This will also benefit astronauts, high-altitude pilots and scientists.

### **NASA/NOAA Pre-launch Press Conference**

The pre-launch press conference will be held at the NASA-KSC News Center on Friday, July 13 at 1 p.m. EDT. Participating in the briefing will be:

Gerry Dittberner, GOES program manager, NOAA

Chuck Dovale, NASA launch director, Kennedy Space Center

Adrian Laffitte, director, Atlas Launch Operations, Lockheed Martin

Marty Davis, GOES project manager, NASA Goddard Space Flight Center

Jerry Zwirn, GOES program executive director, Space Systems/LORAL

Steve Hill, lead, Solar X-ray Imager, NOAA Space Environment Center

James Sardonia, launch weather officer, 45th Weather Squadron, USAF

No post-launch news conference is planned.

### **Press Coverage**

There will be a tower-rollback photo opportunity for the news media. Press representatives should be at the Gate 1 Pass and Identification Building on Cape Canaveral Air Force Station located on State Road 401 at 11:30 p.m., July 14. Departure for Launch Complex 36 will be promptly at 11:45 p.m.

Media only covering launch should assemble at the Gate 1 Pass and Identification Building at 1:30 a.m., Sunday, July 15. The convoy to Press Site 1 will depart at 1:45 a.m.

Media who wish to cover the pre-launch press conference and the launch of GOES-M should send a letter of request on news organization letterhead. Include the full names, Social Security numbers and birth dates of those desiring accreditation. Letters should be faxed to 321/867-2692 or may be addressed to:

GOES-M Launch Accreditation  
NASA XA-E1  
Kennedy Space Center, FL 32899

GOES-M/AC-142 mission badges may be picked up at the NASA-KSC News Center beginning on Wednesday, July 11. Badges may also be obtained on launch day, Sunday, July 15 at the Gate 1 Pass and Identification Building starting at 1:30 a.m. All media are required to have a GOES-M mission badge to cover the launch. STS-104 mission badges will not be valid.

### **Remote Camera Placement**

On Saturday, July 14 at 9:30 a.m., a van will depart from the NASA-KSC News Center for Complex 36 for media photographers to establish remote cameras at the pad. There will be no access or transportation from Gate 1 for remote camera set-ups.

### **Television Coverage**

NASA Television will carry live the GOES-M/AC-142 pre-launch press conference on Friday, July 13 at 1:00 p.m. The press conference will allow two-way question and answer from other NASA field centers.

A complete GOES-M video package will be broadcast during the NASA TV Video File on July 12-13 at 12 noon EDT.

**On launch day, Sunday, July 15, live coverage will not be on NASA Television, but instead will be on Skynet's Telstar 5, Transponder C-20 located at 97 degrees West. Launch commentary begins at 1:30 a.m. EDT and will continue through spacecraft separation at L+27 minutes.**

**The unabridged countdown and launch will be re-shown on NASA Television at 8 a.m. EDT and will begin with launch replays.**

The pre-launch press conference and launch coverage will be carried live on the NASA "V" audio circuits which may be accessed by dialing 321/867-7135, 4003, and 4920. NASA Television is available on the GE-2 satellite, transponder 9C, located at 85 degrees West.

**Status Reports**

Recorded status reports on the launch of GOES-M/AC-142 will be available on the KSC news media codaphone starting on Thursday, July 12. The telephone number is 321/867-2525.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**July 5, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**Dennis Armstrong**  
321/867-4493

**KSC Release No. 76-01**

**Note to Editors/News Directors:**

## **KSC WEB SITE EXPANDS LAUNCH COVERAGE**

Starting with the next Shuttle launch, the Kennedy Space Center Web site will officially expand its launch coverage to include downloadable video of launch-related activities, allowing Web site visitors to view clips from NASA TV as well as some KSC Web-exclusive videos.

Site managers experimented with the process during the launch of STS-100, available at <http://www-pao.ksc.nasa.gov/kscpao/shuttle/countdown/sts100/milestones.html>. Now that the video procedure has been tested and refined, it is being included as a permanent part of KSC's online launch coverage.

Using downloadable video clips rather than streaming video allows KSC Web developers to archive the clips, so that future visitors to the Web site can explore past footage. The videos will be available in RealMedia format in three sizes for 28.8K modems, 56K modems, and Cable/broadband visitors.

Video coverage will begin with the closure of the Shuttle's payload bay doors, typically a few days before launch. On launch day, crew activities covered will include breakfast, suit-up, departure for the launch pad, entry into the Orbiter, and closure of the hatch. Coverage will continue through the final moments of the countdown, culminating with the launch of the Shuttle and the separation of the solid rocket boosters about two minutes into the flight.

Most of the video provided on the KSC Web site is taken directly from NASA TV. However, the KSC video team may also cover events at the VIP viewing areas and inside the Launch Control Center, which NASA TV does not typically cover. Animations and other footage will be included when they are available.

"We're very pleased that we have the ability to make these videos available to those who follow our online coverage," said KSC Internet Services Manager Dennis Armstrong. "We serve a global audience, and we're continuing to enhance the site for those who depend on it as their source for timely launch information."

KSC maintains the Shuttle Countdown Online, available at <http://www-pao.ksc.nasa.gov/kscpao/shuttle/countdown/>. Shuttle Countdown Online provides information about the current Shuttle mission as well as links to photos and videos, technical information, launch guest briefings, and mission posters. A real-time countdown clock is activated at T-43 hours prior to scheduled launch time, and round-the-clock coverage begins at T-6 hours and counting, about eight to nine hours before launch.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**July 6, 2001**

**Joel Wells**  
**321/867-2468**

**KSC RELEASE NO. 77- 01**

## **LAUNCH COUNTDOWN FOR SHUTTLE MISSION STS-104 BEGINS JULY 9**

NASA will begin the countdown for launch of Space Shuttle Atlantis on mission STS-104 July 9 at 8 a.m. EDT at the T-43 hour mark. This mission marks the 10th Shuttle flight to the International Space Station and the 4th Shuttle mission this year. The KSC launch team will conduct the countdown from Firing Room 3 of the Launch Control Center.

The countdown includes 26 hours and 3 minutes of built-in hold time leading to a preferred launch time at about 5:04 a.m. on July 12 with a launch window of less than 5 minutes. The exact location of the orbiting International Space Station (ISS) will be determined during the T-9 minute built-in hold. The launch director will at that time determine the exact time of launch.

Mission STS-104 is the 24th flight of the orbiter Atlantis and the 105th flight overall in NASA's Space Shuttle program. STS-104 is scheduled to last 10 days, 19 hours and 53 minutes with a planned KSC landing at about 12:57 a.m. on July 23.

Atlantis rolled into KSC's Orbiter Processing Facility on March 6, 2001, after completing mission STS-98. The orbiter rolled out of OPF bay 3 and into the VAB on May 29. While in VAB high bay 1, Atlantis was mated to the external tank and solid rocket boosters. The entire Space Shuttle stack was transferred to Launch Pad 39B on June 21.

On mission STS-104, the five-member crew will deliver the Joint Airlock Module to the Station to be installed during two planned spacewalks.

STS-104 has crew that comprises Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Janet Lynn Kavandi, Michael Gernhardt and James Reilly.

(end of general release)

-- 2 --

## **COUNTDOWN MILESTONES**

\*all times are Eastern

### **Launch-3 Days (Monday, July 9)**

- Prepare for the start of the STS-104 launch countdown
- Perform the call-to-stations (7:30 a.m.)
- Countdown begins at the T-43 hour mark (8 a.m.)
- Begin final vehicle and facility close-outs for launch
- Check out back-up flight systems

- Review flight software stored in mass memory units and display systems
- Load backup flight system software into Atlantis' general purpose computers
- Remove mid-deck and flight-deck platforms (4 p.m.)
- Activate and test navigational systems (9 p.m.)
- Complete preparation to load power reactant storage and distribution system (11 p.m.)

### **Launch-2 Days (Tuesday, July 10)**

- Complete flight deck preliminary inspections (12:01 a.m.)

#### **Enter first built-in hold at T-27 hours for duration of 4 hours (12:01 a.m.)**

- Clear launch pad of all non-essential personnel
- Perform test of the vehicle's pyrotechnic initiator controllers

#### **Resume countdown (4 a.m.)**

- Begin operations to load cryogenic reactants into Atlantis' fuel cell storage tanks (5:30 - 10:30 a.m.)

#### **Enter 4-hour built-in hold at T-19 hours (12 noon)**

- Demate orbiter mid-body umbilical unit (12:30 p.m.)

#### **Resume countdown (4 p.m.)**

- Final preparations of Shuttle's main engines for propellant tanking and flight
- Begin filling pad sound suppression system water tank (5:30 p.m.)
- Resume orbiter and ground support equipment close-outs
- Pad sound suppression system water tank filling complete (10:30 p.m.)
- Close out the tail service masts on the mobile launcher platform

### **Launch-1 Day (Wednesday, July 11)**

#### **Enter planned hold at T-11 hours for 13 hours, 08 minutes (12:01 a.m.)**

- Begin star tracker functional checks (1 a.m.)
- Activate orbiter's inertial measurement units
- Activate the orbiter's communications systems
- Install film in numerous cameras on the launch pad (3 a.m.)
- Stow flight crew equipment (5:20 a.m.)
- Move Rotating Service Structure (RSS) to the park position (9 a.m.)
- Perform ascent switch list
- Complete fuel cell flow-through purge

#### **Resume countdown at T-11 hours (1:08 p.m.)**

- Activate the orbiter's fuel cells (2:18 p.m.)
- Clear the blast danger area of all non-essential personnel
- Switch Atlantis' purge air to gaseous nitrogen (3:23 p.m.)

#### **Enter planned 2-hour built-in hold at the T-6 hour mark (6:08 p.m.)**

- Launch team verifies no violations of launch commit criteria prior to cryogenic loading of the external tank
- Clear pad of all personnel
- Chilldown of propellant transfer lines
- Begin loading the external tank with about 500,000 gallons of cryogenic propellants (as early as 7:38 p.m.)

### **Resume countdown (8:08 p.m.)**

- Complete filling the external tank with its flight load of liquid hydrogen and liquid oxygen propellants (as early as 10:38 p.m.)
- Final Inspection Team proceed to launch pad

### **Enter planned 2-hour built-in hold at T-3 hours (11:08 p.m.)**

- Perform inertial measurement unit preflight calibration
- Align Merritt Island Launch Area (MILA) tracking antennas

## **Launch Day (Thursday, July 12)**

- Perform open loop test with Eastern Range

### **Resume countdown at T-3 hours (1:08 a.m.)**

- Crew departs Operations and Checkout Building for the pad (1:13 a.m.)
- Complete close-out preparations in the white room
- Check cockpit switch configurations
- Flight crew begins entry into the orbiter (about 1:43 a.m.)
- Astronauts perform air-to-ground voice checks with Launch and Mission Control
- Close Atlantis' crew hatch (about 2:58 a.m.)
- Begin Eastern Range final network open loop command checks
- Perform hatch seal and cabin leak checks
- Complete white room close-out
- Close-out crew moves to fallback area
- Primary ascent guidance data is transferred to the backup flight system

### **Enter planned 10-minute hold at T-20 minutes (3:48 a.m.)**

- NASA Test Director conducts final launch team briefings
- Complete inertial measurement unit preflight alignments

### **Resume countdown at T-20 minutes (3:58 a.m.)**

- Transition the orbiter's onboard computers to launch configuration
- Start fuel cell thermal conditioning
- Close orbiter cabin vent valves
- Transition backup flight system to launch configuration

### **Enter estimated 45-minute hold at T-9 minutes (4:09 a.m.)**

- Launch Director, Mission Management Team and NASA Test Director conduct final polls for go/no go to launch

### **Resume countdown at T-9 minutes (about 4:54 a.m.)**

- Start automatic ground launch sequencer (T-9:00 minutes)
- Retract orbiter crew access arm (T-7:30)
- Start mission recorders (T-6:15)
- Start Auxiliary Power Units (T-5:00)
- Arm SRB and ET range safety safe and arm devices (T-5:00)
- Start liquid oxygen drainback (T-4:55)
- Start orbiter aerosurface profile test (T-3:55)
- Start main engine gimbal profile test (T-3:30)
- Pressurize liquid oxygen tank (T-2:55)
- Begin retraction of the gaseous oxygen vent arm (T-2:55)
- Fuel cells go to internal reactants (T-2:35)
- Pressurize liquid hydrogen tank (T-1:57)
- Deactivate SRB joint heaters (T-1:00)
- Transfer orbiter power from ground to internal (T-0:50 seconds)
- Ground Launch Sequencer go for auto sequence start (T-0:31 seconds)
- SRB gimbal profile (T-0:21 seconds)
- Ignition of three Space Shuttle main engines (T-0:06.6 seconds)
- SRB ignition and liftoff (T-0)

-- more --

-- 5 --

## SUMMARY OF BUILT-IN HOLDS FOR STS-104

### T-TIME LENGTH OF HOLD HOLD BEGINS HOLD ENDS

T-27 hours	4 hours	12 a.m. Tues.	4 a.m. Tues.
T-19 hours	4 hours	12 noon Tues.	4 p.m. Tues.
T-11 hours	13 hours, 8 minutes	12 a.m. Wed.	1:08 p.m. Wed.
T-6 hours	2 hours	6:08 p.m. Wed.	8:08 p.m. Wed.
T-3 hours	2 hours	11:08 p.m. Wed.	1:08 a.m. Thurs.
T-20 minutes	10 minutes	3:48 a.m. Thurs.	3:58 a.m. Thurs.
T-9 minutes	about 45 minutes	4:09 a.m. Thurs.	4:54 a.m. Thurs.

## CREW FOR MISSION STS-104

Commander (CDR):	Steven Lindsey	
Pilot (PLT):	Charles Hobaugh	

Mission Specialist (MS1):	Janet Kavandi	
Mission Specialist (MS2):	Michael Gernhardt	
Mission Specialist (MS3):	James Reilly	

## SUMMARY OF STS-104 LAUNCH DAY CREW ACTIVITIES

### **Wed., July 11**

5 p.m. Crew wake up  
5:45 p.m. Breakfast  
6:30 p.m. Medical checks  
10 p.m. Photo and Lunch (to be recorded and televised later)

### **Thurs., July 12**

12:33 a.m. Weather Briefing (CDR, PLT, MS2)  
12:33 a.m. Don flight suits (MS1 and MS3)  
\*12:43 a.m. Don flight suits (CDR, PLT, MS2)  
\*1:13 a.m. Depart for launch pad  
\*1:43 a.m. Arrive at white room and begin ingress  
\*2:58 a.m. Close crew hatch  
\*5:04 a.m. Launch

\* Televised events (times may vary slightly)

All times Eastern

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**KSC Contact: Bruce Buckingham**  
**(321) 867-2468**

**July 6, 2001**

**KSC Release No. 78- 01**

**NOTICE TO EDITORS/ NEWS DIRECTORS:**  
**MISSION STS-104 EVENTS, NEWS CENTER OPERATING HOURS SET**

News conferences, events and operating hours for KSC's News Center have been set for the launch of the Space Shuttle Atlantis on mission STS-104, the 105th launch in the Shuttle program. The preferred time for launch on July 12 is about 5:04 a.m. EDT at the opening of a window that extends for less than 5 minutes. The news conferences and events listed below will be carried live on NASA Television (unless otherwise noted) and originate from the KSC News Center.

The five-member STS-104 crew will arrive at KSC on Sunday, July 8, at about 9:30 p.m. EDT. News media representatives planning to cover the event must be at the KSC News Center by **8:30 p.m.** (in the event of a possible early crew arrival) for transportation to the Shuttle Landing Facility.

On launch day, the crew will depart their KSC living quarters and be driven to the launch pad at about **1:13 a.m.** Media interested in attending this event should be at the KSC News Center no later than **12:10 a.m.**

In addition to daily 9 a.m. countdown status briefings, an International Space Station briefing and a prelaunch press conference will be held two days before launch. The full briefing schedule is listed below.

News media representatives with proper authorization may obtain STS-104 mission credentials at the Pass and Identification Building on State Road 3 (south of KSC) on Merritt Island during published times. Credential and badging hours are listed below.

The KSC coda-phone is updated daily with launch status reports at 321-867-2525.

-- end of general release --

**STS-104 BRIEFINGS & EVENTS SCHEDULE** *(all times are EDT)*  
*(All briefings are held inside the KSC Press Site auditorium and will be carried live on NASA TV unless otherwise noted)*

**L-4 Days - Sunday - July 8**

**9:30 p.m. ----- STS-104 Flight Crew Arrival (Live on NASA TV)**

**L-3 Days - Monday, July 9**

**8. a.m. - Launch countdown begins**

**9 a.m. ----- Countdown Status Briefing**  
**-- Jeff Spaulding, NASA Test Director**

- Gregory Horvath, STS-104 Mission Integration Engineer
- Ed Priselac, Shuttle Weather Officer

**L-2 Days - Tuesday, July 10**

9 a.m. ----- Countdown Status Briefing

- Pete Nickolenko, NASA Test Director
- Scott Higginbotham, STS-104 Mission Manager
- Ed Priselac, Shuttle Weather Officer

4 p.m. ----- Prelaunch News Conference

- Ron Dittmore, Shuttle Program Manager, NASA, JSC
- Tommy Holloway, ISS Program Manager, NASA, JSC
- Dave King, Director of Shuttle Processing, NASA, KSC
- John Weems, Launch Weather Officer

**L-1 Days - Wednesday, July 11**

9 a.m. ----- Countdown Status Briefing

- Jeff Spaulding, NASA Test Director
- Louie Garcia, STS-104 Operations Engineer
- Ed Priselac, Shuttle Weather Officer

**L-0 Day - Thursday, July 12**

*Midnight ----- NASA Television live launch programming and commentary begins*

**Launch Day Crew activities:**

*(Wednesday)*

5:00 p.m. -----Wake up

5:45 p.m. -----Breakfast

10 p.m. -----Crew Photo

*(Thursday)*

12:33 a.m. -----Weather briefing

\*12:43 a.m. ----Suitup photo

\*1:13 a.m. ----- Walkout/depart for pad

\*1:43 a.m. ----- Arrive at pad

\*2:58 a.m. -----Close hatch

\*5:04 a.m. ----- **Launch of Atlantis**

(\* Carried live on NASA TV)

6:00 a.m. ----- Post-launch Press Conference

- Jim Halsell, Shuttle Program Launch Integration Manager, KSC
- Mike Leinbach, Shuttle Launch Director, KSC

**KSC News Center office hours for STS-104**

*(Times may be adjusted in real time depending on mission events and timelines.)*

	<u>OPEN</u>	<u>CLOSE</u>
Sunday, July 8.....	7:30 p.m.	- 10:30 p.m.
Monday, July 9.....	8 a.m.	- 4:30 p.m.
Tuesday, July 10.....	8 a.m.	- 6:30 p.m.
Wednesday, July 11.....	8 a.m.	around-the-clock
Thursday, July 12 (Launch Day)...		- 4:30 p.m.

**FOR MISSION DAY SCHEDULES SEE NOTE BELOW**

Sunday, July 22 (Landing)... **Midnight - 4:30 p.m., July 23**

**NOTE:** The KSC News Center will support media questions for overnight and weekend STS-104 Mission Status Briefings and the in-flight crew news conference. Media interested in attending the briefings that occur after normal office hours (8 a.m. - 4:30 p.m. Monday-Friday), **MUST** make their intentions known to the KSC News Room at least 24 hours in advance, in order to secure proper access to the press site. Times of these briefings are available in the NASA TV schedule at:  
<http://www.spaceflight.nasa.gov/realdata/nasatv/schedule.html>

*News media may obtain STS-104 mission credentials at the Pass and Identification Building at Gate 2 on State Road 3, Merritt Island, during the below published times.*

**Pass and Identification Hours**

	<u>OPEN</u>	<u>CLOSE</u>
Monday, July 9 -----	Noon	- 4:30 p.m.
Tuesday, July 10 -----	8 a.m.	- 3 p.m.
Wednesday, July 11 -----	8 a.m.	- 4:30 p.m./10 p.m. -
Thursday, July 12 (Launch day)-----	4 a.m.	

News media with annual Shuttle credentials are reminded to sign the logbook at the query counter in the News Center.

**NEWS MEDIA ARE REQUIRED TO BE UNDER PUBLIC AFFAIRS ESCORT AT ALL TIMES WHILE AT KSC EXCEPT WHEN DRIVING TO THE NEWS CENTER OR THE COMPLEX 39 CAFETERIA.**

**NEWS MEDIA ARE ALLOWED AT THE PRESS SITE ONLY WHEN THE KSC NEWS CENTER IS OPEN.**

-- end --

*Status reports and other NASA publications are available on the World Wide Web at:  
<http://www-pao.ksc.nasa.gov/kscpao/kscpao.htm> .*

*Information about the countdown and mission can be accessed electronically via the Internet at:  
<http://www.ksc.nasa.gov/shuttle/countdown/> and at <http://spaceflight.nasa.gov/>*

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



July 10, 2001

David Steitz  
NASA Headquarters  
202/358-1730

George Diller  
Kennedy Space Center  
321/867-2468

Cynthia O'Carroll  
Goddard Space Flight  
301/614-5563

Pat Viets  
NOAA  
301/457-5005

KSC Release No. 79-01

## LAUNCH OF GOES-M WEATHER SATELLITE POSTPONED

The launch of the GOES-M environmental satellite for NASA and the National Oceanic and Atmospheric Administration (NOAA) aboard a Lockheed Martin Atlas IIA rocket (AC-142) has been postponed one week to no earlier than July 22.

This new launch date is pending the repair and delivery of the Remote Control Unit, a portion of the launch vehicle guidance system on the Centaur upper stage.

When the repaired unit is reinstalled on the rocket, the vehicle will then undergo a combined electrical readiness test to ensure all systems are functioning properly.

The launch window on July 22 is 3:01 - 4:25 a.m. EDT.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



July 10, 2001

**Dwayne Brown**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 80-01**

**Note to Editors/News Directors:**

## **MEDIA INVITED TO PREVIEW NEVER-BEFORE-SEEN IMAX FOOTAGE**

Media representatives are invited to attend a viewing this evening of footage from an upcoming new epic adventure movie, *Space Station*, the first IMAX film to be produced in 3D, at the Kennedy Space Center Visitor Complex.

Produced by the IMAX Corp. and the Lockheed Martin Corp., in cooperation with NASA, the film features footage from various Space Shuttle missions to the International Space Station.

In addition to the preview of the IMAX footage, representatives from NASA, the IMAX Corp., and the Lockheed Martin Corp. will explain the technology and logistics behind the filming.

NOTE: Media representatives wishing to attend the presentation should report directly to the ticket gate at the KSC Visitor Complex at 7 p.m. for escort to the IMAX Theater.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**July 16, 2001**

**David Steitz**  
NASA Headquarters  
202/358-1730

**George H. Diller**  
Kennedy Space Center  
321/867-2468

**Cynthia O'Carroll**  
Goddard Space Flight Center  
301/614-5563

**Pat Viets**  
NOAA  
301/457-5005

**KSC Release No. 82-01**

## **LAUNCH OF GOES-M WEATHER SATELLITE RESCHEDULED FOR JULY 22**

The launch of the GOES-M weather satellite for NASA and the National Oceanic and Atmospheric Administration (NOAA) aboard a Lockheed Martin Atlas IIA rocket (AC-142) has been re-scheduled for Sunday, July 22. Liftoff is targeted to occur at the opening of a launch window that extends from 3:01 - 4:25 a.m. EDT, a duration of one hour and 24 minutes. Launch will occur from Pad A at Complex 36 on Cape Canaveral Air Force Station.

GOES-M is the fifth and last spacecraft to be launched in the current advanced series of geostationary weather satellites for NOAA, however, it is the first to have a Solar X-ray Imager. The spacecraft is a three-axis internally stabilized weather satellite that has the dual capability of providing pictures while performing atmospheric sounding at the same time. Once in orbit the spacecraft will be designated GOES-12.

The new Solar X-ray Imager is a solar storm detection instrument. It will take a full-disk image of the sun's atmosphere once every minute. The images will be used to monitor and forecast the sources of space weather disturbances from the sun. This will enable forecasters to predict disturbances to Earth's space environment that can fry satellite electronics, disrupt satellite, navigation and radio signals, and create surges in power grids. This will also benefit astronauts, high-altitude pilots and scientists.

### **NASA/NOAA Pre-launch Press Conference**

The prelaunch press conference will be held at the NASA-KSC News Center on Friday, July 20 at 12:30 p.m. EDT. Participating in the briefing will be:

Gerry Dittberner, GOES program manager, NOAA  
Chuck Dovale, NASA launch director, Kennedy Space Center  
Adrian Laffitte, director, Atlas Launch Operations, Lockheed Martin

Marty Davis, GOES project manager, NASA Goddard Space Flight Center  
Jerry Zwirn, GOES program executive director, Space Systems/LORAL  
Steve Hill, lead, Solar X-ray Imager, NOAA Space Environment Center  
James Sardonia, launch weather officer, 45th Weather Squadron, USAF

No post-launch news conference is planned.

### **Press Coverage**

There will be a tower-rollback photo opportunity for the news media. Press representatives should be at the Gate 1 Pass and Identification Building on Cape Canaveral Air Force Station located on State Road 401 at 11:30 p.m., July 21. Departure for Launch Complex 36 will be promptly at 11:45 p.m.

Media covering launch only should assemble at the Gate 1 Pass and Identification Building at 1:30 a.m., Sunday, July 22. The convoy to Press Site 1 will depart at 1:45 a.m.

Media who wish to cover the pre-launch press conference and the launch of GOES-M should send a letter of request on news organization letterhead. Include the full names, Social Security numbers and birth dates of those desiring accreditation. Letters should be faxed to 321/867-2692 or may be addressed to:

GOES-M Launch Accreditation  
NASA XA-E1  
Kennedy Space Center, FL 32899

GOES-M/AC-142 mission badges may be picked up at the NASA-KSC News Center beginning on Wednesday, July 18. Badges may also be obtained on launch day, Sunday, July 22 at the Gate 1 Pass and Identification Building starting at 1:30 a.m. All media are required to have a GOES-M mission badge to cover the launch. STS 104 mission badges will not be valid.

### **Remote Camera Placement**

On Saturday, July 21 at 9:30 a.m., a van will depart from the NASA-KSC News Center for Complex 36 for media photographers to establish remote cameras at the pad. There will be no access or transportation from Gate 1 for remote camera set-ups.

### **Television Coverage**

NASA Television will carry live the GOES-M/AC-142 pre-launch press conference on Friday, July 20 at 12:30 p.m. A two-way question and answer capability will be available from other NASA field centers.

A complete GOES-M video package will be broadcast during the NASA TV Video File on July 20 at 12 noon EDT.

**On launch day, Sunday, July 22, live coverage on NASA Television will begin at 1:30 a.m. and continue through spacecraft separation at L+27 minutes. If launch should be postponed 24 hours to Monday, July 23, launch coverage will not be on NASA Television, but instead will be on Skynet's Telstar 5, Transponder C-20 located at 97 degrees West.**

The pre-launch press conference and all launch coverage will be carried live on the NASA "V" audio circuits which may be accessed by dialing 321/867-7135, 4003, and 4920. NASA Television is available on the GE-2 satellite, transponder 9C, located at 85 degrees West.

### **Status Reports**

Recorded status reports on the launch of GOES-M/AC-142 will be available on the KSC

news media codaphone starting on Thursday, July 19. The telephone number is 321/867-2525.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



July 16, 2001

**Bill Johnson**  
Kennedy Space Center  
321/867-2468

**KSC Release No. 83-01**

**Note to Editors:**

## **MEDIA OPPORTUNITIES WITH STS-105 CREW SET FOR THIS WEEK'S COUNTDOWN TEST**

The crew of Space Shuttle mission STS-105, the 106th mission in the history of Shuttle flight, will be at Kennedy Space Center this week for the Terminal Countdown Demonstration Test (TCDT). The crew is scheduled to arrive at KSC Tuesday evening.

The TCDT is held at KSC prior to each Space Shuttle flight, providing the crew an opportunity to participate in simulated countdown activities. The TCDT ends with a mock launch countdown culminating in a simulated main engine cut-off. The crew also spends time undergoing emergency egress training exercises at the pad and has an opportunity to view and inspect the payloads in the orbiter's payload bay.

The following events are available for media to attend during the STS-105 TCDT:

**Wednesday, July 18** -- Media are invited to attend a photo event featuring the crew of STS-105 as they practice driving an armored personnel carrier (M113). This transport is designed to assist the crew if an emergency egress is required away from the pad. Media should be at the KSC Press Site at 8:30 a.m. for transport to the M113 location.

**Thursday, July 19** -- Media representatives will have an opportunity to speak informally with and photograph the crew at Launch Pad 39A. Media interested in participating in this question-and-answer session should be at the KSC Press Site by 9:00 a.m. for transport to the pad. This question-and-answer session will be a local media event only. However, the session will be covered live on NASA TV beginning at about 10:00 a.m.

On Friday, the crew will enter the orbiter Discovery fully suited for the final hours of the practice countdown, including the simulated Shuttle main engine ignition and cut-off.

Following TCDT, the crew will depart KSC on Friday for final mission preparations in Houston, Texas.

Discovery, on mission STS-105, is targeted for launch from Kennedy Space Center no earlier than Aug. 9. The flight is scheduled to last 11 days, 19 hours and will feature Discovery docking with the International Space Station (ISS). Discovery will carry the Multi-Purpose Logistics Module Leonardo and accomplish the expedition crew exchange.

Crew members for mission STS-105 are Commander Scott Horowitz; Pilot Rick Sturckow; and Mission Specialists Patrick Forrester and Daniel Barry. The Expedition Three crew members on their way to the Station are Commander Frank Culbertson, Vladimir Dezhurov and Mikhail Turin. The Expedition Two crew members returning from the Station are Commander Yuri Usachev, James Voss and Susan Helms.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



July 20, 2001

George Diller  
Kennedy Space Center  
321/867-2468

KSC Release No. 84-01

Note to Editors/News Directors:

## **TELEVISION COVERAGE OF GOES-M LAUNCH REVISED FOR JULY 22**

Unabridged television coverage of the launch of GOES-M will be carried on Skynet's Telstar 5, Transponder C-7 located at 97 degrees West longitude beginning at 1:30 a.m. EDT on Sunday, July 22.

Abbreviated coverage will be carried on NASA Television beginning at 2:45 a.m. EDT. NASA Television is carried on GE-2, Transponder 9C located at 85 degrees West longitude.

Full audio coverage of launch will also be available on the NASA "V" circuits which may be accessed by dialing 321/867-7135, 4003, and 4920.

Unabridged launch coverage will also be webcast on the NASA-KSC Home Page at [www.ksc.nasa.gov](http://www.ksc.nasa.gov).

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**July 20, 2001**

**Bruce Buckingham**  
**Kennedy Space Center**  
**321/867-2468**

**KSC Release No. 85-01**

**Note to Editors:**

## **ATLANTIS SCHEDULED TO LAND AT KSC JULY 24**

The orbiter Atlantis is scheduled to land at Kennedy Space Center (KSC) Tuesday morning, July 24, at about 12:34 a.m. EDT completing the nearly 12-day STS-104 mission that was launched from KSC July 12, 2001.

Landing at KSC's Shuttle Landing Facility (SLF) is slated to occur on orbit 185 at mission elapsed time 11 days, 19 hours, 30 minutes. The deorbit burn will occur at about 11:31 p.m. EDT on July 23. The first two KSC landing opportunities on July 24 are 12:34 a.m. and 2:10 a.m. EDT.

If managers must keep Atlantis in orbit an additional day, two additional landing opportunities are available at KSC: on July 24 at 11:33 p.m. EDT and on July 25 at 1:09 a.m. EDT.

Landing opportunities also exist at the back-up landing location at Edwards Air Force Base (EAFB), Calif., on both days.

If landing occurs as scheduled, it will be the 55th landing at KSC in the history of the program. Following landing, Atlantis will be towed to the Orbiter Processing Facility and preparations made for its next mission, STS-110 to the International Space Station, early next year.

Following landing, the crew will be taken to their quarters in the O&C Building, meet with their families and undergo physical examinations. A post-mission press conference with select members of the STS-104 crew is scheduled to occur at the KSC News Center about six hours after touchdown. The crew is scheduled to depart for Johnson Space Center later in the day on landing day.

If Atlantis lands at Edwards, an augmented KSC convoy team will be on-site to safe the vehicle, disembark the crew and move the orbiter to the Mate/Demate Device. The turnaround team will be deployed to Edwards by charter aircraft on landing day.

###

**NOTICE TO EDITORS:** The KSC press site will open for landing activities at 9:30 p.m. Monday, July 23. Accredited news media wishing to view Atlantis' landing should be at the KSC News Center prior to 11:30 p.m. for transport to the SLF. Additional information regarding landing photo opportunities, post-landing press conferences with the STS-104 crew, and News Center operational hours is available by calling the KSC News Center at 321-867-2468.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



July 22, 2001

**Bruce Buckingham**  
Kennedy Space Center  
321/867-2468

**KSC Release No. 86-01**

**Note to Editors:**

## **GOES-M LAUNCH DELAYED AT LEAST 24 HOURS**

Launch of the GOES-M spacecraft aboard an Atlas Ila vehicle (scheduled for July 22 from Cape Canaveral Air Force Station, Fla.) has been postponed at least 24 hours.

In the early evening as a thunderstorm was passing through the Cape Canaveral area, a lightning strike occurred on the adjacent pad to where the Atlas rocket was being prepared for launch. Procedures require a recheck be conducted of vehicle systems when a lightning strike occurs in the vicinity of the rocket.

As a result, mission managers called off the countdown for launch on Sunday morning.

Additional assessments will be conducted through the night. Following these checks, managers will announce the next launch opportunity. Once this information is known, the KSC codaphone will be updated with the new launch date. The codaphone can be reached at 321-867-2525.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



July 24, 2001

**Don Savage**  
NASA Headquarters  
202/358-1727

**George H. Diller**  
Kennedy Space Center  
321/867-2468

**Martha Heil**  
Jet Propulsion Laboratory  
818/354-0850

**KSC Release No. 88-01**

**Note to Editors/News Directors:**

## **GENESIS SCHEDULED FOR LAUNCH JULY 30 ABOARD BOEING DELTA II**

The launch of NASA's Genesis spacecraft is scheduled for Monday, July 30 at 12:36:01 p.m. EDT. The launch window is two minutes in duration. Liftoff will occur aboard a Boeing Delta II launch vehicle from Space Launch Complex 17A, Cape Canaveral Air Force Station, Fla. Should launch be postponed for 24 hours for any reason, the launch time on July 31 is 12:32:34 p.m. EDT.

Genesis, designed and built by Lockheed Martin Space Systems for NASA and the Jet Propulsion Laboratory, will catch a piece of the Sun -- a sample of the elements and ions in the solar wind and bring them back to Earth. Scientists can then study the exact composition of the Sun and probe the solar system's origin. By studying the solar wind, scientists will have a detailed view of the factors that went into building the solar system as we know it today.

Genesis' samples will return to Earth in a capsule in September 2004. As the capsule parachutes toward the ground in the Air Force's Utah Testing and Training Range, it will be captured by a helicopter to prevent the samples from being disturbed by impact with the ground. The samples will then be analyzed to provide a basis for comparing the Sun and the solar nebula's compositions to those of the planets and the other solar system bodies. This makes these samples a "Rosetta Stone" of data.

### **PRELAUNCH NEWS CONFERENCE**

A prelaunch news conference is scheduled for Sunday, July 29, at 1 p.m. EDT in the NASA-KSC News Center auditorium and will be carried live on NASA Television. Participating in the briefing will be:

- Jay Bergstralh, Chief Scientist, Solar System Exploration, NASA Headquarters
- Omar Baez, NASA Launch Manager, Kennedy Space Center
- Rich Murphy, Mission Director, The Boeing Company
- Chet Sazaki, Genesis Project Manager, Jet Propulsion Laboratory
- Lloyd Oldham, Genesis Program Manager, Lockheed Martin Space Systems -

## Astronautics Operations

- Don Burnett, Principal Investigator, California Institute of Technology
- Joel Tumbiolo, Launch Weather Officer, Department of the Air Force

## **ACCREDITATION**

Media who wish to cover the launch of Genesis including the prelaunch news conference should send a letter of request to the NASA-KSC News Center on news organization letterhead by the close of business on Friday, July 27. It should include name and Social Security number or passport number, and be faxed to 321/867-2692 or addressed to:

Genesis Launch Accreditation  
NASA XA-E1  
Kennedy Space Center, FL 32899

Genesis mission badges may be obtained at the NASA-KSC News Center beginning on Friday, July 27, between 8 a.m. and 4:30 p.m. On launch day, Monday, July 30, Genesis mission badges will be available starting at 11 a.m. and will be issued at the Pass & Identification Building on SR 401 outside Gate 1 of Cape Canaveral Air Force Station.

Departure on launch day from the Gate 1 Pass & Identification Building for Press Site 1 will be at 11:15 a.m. A NASA Genesis mission badge is required for all media covering the launch at Press Site 1. Annual KSC badges or other Space Shuttle launch credentials will not be honored on Genesis launch day. After launch, media may leave unescorted for the return to Gate 1. An escort is required for all other areas of Cape Canaveral Air Force Station. For further information on Genesis launch accreditation contact Patti Beck at the NASA-KSC News Center at 321/867-2468.

## **REMOTE CAMERAS**

Media wishing to establish remote cameras at the launch pad should meet at the NASA-KSC News Center at 2 p.m. on Sunday, July 29 to be escorted to Space Launch Complex 17.

## **TOWER ROLLBACK PHOTO OPPORTUNITY**

A photo opportunity to view rollback of the mobile service tower will be available on launch day. Media will depart from the Gate 1 Pass & Identification Building at 6:15 a.m. on Monday, July 30.

## **PRESS SITE OPERATING HOURS**

On launch day, the NASA-KSC News Center will be open from 8 a.m. - 4:30 p.m.

## **NASA TELEVISION COVERAGE, V CIRCUITS, WEBCAST AND RECORDED LAUNCH STATUS**

NASA Television will carry the prelaunch news conference beginning at 1 p.m. EDT on Sunday, July 29. On launch day, Monday, July 30, countdown coverage will begin at 11 a.m. Coverage from Cape Canaveral Air Force Station will conclude shortly after spacecraft separation that occurs 64 minutes after launch. Commentary will then begin from the Jet Propulsion Laboratory for acquisition of the spacecraft's radio signal through the Deep Space Network tracking station at Goldstone, Calif. This is anticipated to occur approximately 20 minutes after spacecraft separation. At that time the Genesis spacecraft's state of health can be reported.

NASA Television is available on satellite GE 2, transponder 9C, located at 85 degrees West longitude. A simulcast of the NASA Television coverage will also be available on the worldwide web at [www.ksc.nasa.gov](http://www.ksc.nasa.gov). Information about the Genesis mission is available on-line at [www.jpl.nasa.gov](http://www.jpl.nasa.gov) and [www.ast.lmco.com](http://www.ast.lmco.com).

Audio only of NASA Television coverage of the prelaunch news conference and launch commentary will be available on the "V" circuits which may be dialed directly at 321/867-1220, 867-1240, 867-1260, 867-7135, 867-4003, 867-4920.

The NASA-KSC News Center codaphone will carry Genesis prelaunch status reports beginning at L-3 days, on Friday, July 27, and may be dialed at 321/867-2525.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



July 29, 2001

**George H. Diller**  
Kennedy Space Center  
321/867-2468

**Joan Underwood**  
Lockheed Martin  
303/594-7073

**KSC Release No. 89-01**

## **LAUNCH OF GENESIS SPACECRAFT POSTPONED 24 HOURS**

The launch of NASA's Genesis spacecraft aboard a Boeing Delta II rocket has been postponed at least 24 hours.

The spacecraft contains a power supply component within the Startracker unit which is similar to a component that recently failed during a simulated space environment test not related to the Genesis mission. NASA and the Genesis project decided late this afternoon that additional time was needed to further evaluate the available data to assure that there will be no effect on the Genesis mission.

Pending review of the data, the launch of the Genesis spacecraft has been rescheduled for no earlier than Tuesday, July 31, with the two-minute launch window at 12:32:34 p.m. EDT.

###

**NOTES TO EDITORS:** On launch day, Tuesday, July 31, media desiring to attend the photo opportunity for the rollback of the Mobile Service Tower at Pad 17-A should be at the Gate 1 Pass & Identification Building at 6 a.m. Media covering launch should be at the Gate 1 Pass & Identification Building at 11 a.m. Genesis launch coverage on NASA Television begins at 11 a.m. EDT.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



July 30, 2001

**George H. Diller**  
Kennedy Space Center  
321/867-2468

**Martha Heil**  
Jet Propulsion Laboratory  
321/867-2468

**Joan Underwood**  
Lockheed Martin  
303/594-7073

**KSC Release No. 90-01**

## **LAUNCH OF GENESIS POSTPONED TO NO EARLIER THAN AUG. 1**

The launch of NASA's Genesis spacecraft aboard a Boeing Delta II rocket has been postponed to no earlier than Wednesday, Aug. 1.

The spacecraft contains two power supply components, one within each of the two Startrackers, similar to components that recently failed during a simulated space radiation environment test unrelated to Genesis. NASA and the Genesis project decided today that additional time is needed for further test and evaluation to provide assurance that the flight hardware on Genesis will be able to meet the requirements of the mission.

"We feel confident that the components on the spacecraft will meet the mission requirements," said Chet Sasaki, Genesis Project Manager from the Jet Propulsion Laboratory.

"The testing being done at Lockheed Martin in Denver will subject the components to higher doses of radiation than they would normally be expected to see in space. We anticipate the tests will give us confidence that the Genesis spacecraft has adequate margins," added Sasaki.

On Aug. 1, the two-minute launch window opens at 12:31:38 p.m. EDT.

###

**NOTES TO EDITORS:** On launch day, Wednesday, Aug. 1, media desiring to attend the photo opportunity for the rollback of the Mobile Service Tower at Pad 17-A should be at the Gate 1 Pass & Identification Building at 6 a.m. Media covering launch should be at the Gate 1 Pass & Identification Building at 11 a.m. Genesis launch coverage on NASA Television begins at 11 a.m. EDT.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-*

release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**August 1, 2001**

**Joel Wells**  
**Kennedy Space Center**  
**321/867-2468**

**KSC Release No. 91-01**

## **GENESIS LAUNCH POSTPONED AT LEAST 24 HOURS DUE TO WEATHER**

The launch of NASA's Genesis spacecraft aboard a Boeing Delta II rocket was postponed today because of thick cloud conditions in the flight path of the launch vehicle. Launch will now occur no earlier than 12:27:09 p.m. EDT, Thursday Aug. 2.

Mission managers will assemble for a weather update at about 10 p.m. tonight to determine the feasibility of a launch attempt tomorrow. The current forecast indicates an 80 percent chance of weather violation Thursday, a 60 percent chance of violation Friday and a 40 percent chance of violation Saturday. The primary concerns are rain showers, thick clouds and thunderstorms.

No significant technical issues were worked during the countdown and the Delta II rocket and Genesis spacecraft remain in excellent health. The two-minute launch window opens Friday at 12:23:53 p.m. EDT and Saturday at 12:23:40 p.m. EDT.

The thick cloud rule prohibits launch if the vehicle's flight path travels through nontransparent clouds greater than 4,500 feet thick. Updates from the weather reconnaissance aircraft reported clouds 8,000 feet thick in the Delta's flight path during the final built-in hold at T-4 minutes.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**August 1, 2001**

**Joel Wells**  
**Kennedy Space Center**  
**321/867-2468**

**KSC Release No. 92-01**

## **NASA ANNOUNCES AUG. 9 AS OFFICIAL LAUNCH DATE FOR STS-105**

The Space Shuttle Discovery will launch a new crew, a host of scientific equipment and supplies to the International Space Station Aug. 9, beginning a new phase of station assembly that will expand the complex as research work grows.

Launch of Discovery on mission STS-105 has been set for 5:38 p.m. EDT Aug. 9 on the 12-day flight.

"This flight is representative of many shuttle missions to come as station assembly and operations enter a new phase," Space Shuttle Program Manager Ron Dittmore said. "Although extremely complex and challenging assembly flights will continue, they'll be interspersed with missions dedicated to changing station crews, experiments and supplies. Discovery is set to launch only about two weeks after Atlantis' return from the station, and the team has done a tremendous job."

Discovery will be commanded by Scott Horowitz (Col., USAF). Frederick "Rick" Sturckow (Major, USMC) will be pilot. The shuttle crew also includes Patrick G. Forrester (Lt. Col., USA) and Dr. Daniel T. Barry, members that will perform two space walks during the mission to install logistical equipment and prepare for future station assembly. Launching to the station aboard Discovery will be the third crew for the complex: Commander Frank Culbertson, Pilot Vladimir Dezhurov and Flight Engineer Mikhail Tyurin. The station's second crew -- Commander Yury Usachev and Flight Engineers Jim Voss and Susan Helms -- will return to Earth aboard Discovery, ending more than five months in orbit.

Discovery is planned to land at about 1:17 p.m. EDT Aug. 21 at the Kennedy Space Center, Fla.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**August 2, 2001**

**Joel Wells**  
**Kennedy Space Center**  
**321/867-2468**

**KSC Release No. 93-01**

## **NEXT GENESIS LAUNCH OPPORTUNITY AUG. 3**

The launch of NASA's Genesis spacecraft aboard a Boeing Delta II rocket was postponed again this morning because of unacceptable weather conditions. Launch will now occur no earlier than 12:23:53 p.m. EDT, Friday, Aug. 3.

Workers at Launch Complex 17 tonight will prepare for fuel loading efforts on the Delta's 1st stage, currently scheduled to begin at about 2 a.m. Friday. Mission managers will assemble for a weather update at about 5:45 a.m. Friday to determine if a launch attempt is feasible. The current forecast indicates a 70 percent chance of weather violation at launch time on Friday. The primary concerns are thick clouds, rain showers, and thunderstorms.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**August 3, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**KSC Release No. 94-01**

**Note to Editors/News Directors:**

## **MISSION STS-105 EVENTS, KSC NEWS CENTER OPERATING HOURS SET**

News conferences, events and operating hours for KSC's News Center have been set for the launch of the Space Shuttle Discovery on mission STS-105, the 106th launch in the Shuttle program. The preferred time for launch on Thursday, Aug. 9 is about 5:38 p.m. EDT at the opening of a window that extends for about 5 minutes. The news conferences and events listed below will be carried live on NASA Television (unless otherwise noted) and originate from the KSC News Center.

The four-member STS-105 crew and the three-member Expedition Three crew will arrive at KSC on Sunday, Aug. 5, at about 12:30 p.m. EDT. News media representatives planning to cover the event must be at the KSC News Center by 11:30 a.m. (in the event of a possible early crew arrival) to be transported to the Shuttle Landing Facility.

On launch day, the crew will depart their KSC living quarters and be driven to the launch pad at about 1:47 p.m. Media interested in attending this event should be at the KSC News Center no later than 12:45 p.m.

In addition to daily 9 a.m. countdown status briefings, a prelaunch press conference will be held two days before launch. The full briefing schedule is listed below.

News media representatives with proper authorization may obtain STS-105 mission credentials at the Pass and Identification Building on State Road 3 (south of KSC) on Merritt Island during published times. Credential and badging hours are listed below.

The KSC codaphone is updated daily with launch status reports at 321-867-2525.

-- end of general release --

### **STS-105 BRIEFINGS & EVENTS SCHEDULE** *(all times are EDT)*

*(All briefings are held inside the KSC Press Site auditorium and will be carried live on NASA TV unless otherwise noted)*

#### **L-4 Days - Sunday, August 5**

**12:30 p.m.** ----- STS-105 Flight Crew Arrival *(Live on NASA TV)*

#### **L-3 Days - Monday, August 6**

**9 a.m.** ----- Countdown Status Briefing

Steve Altemus, NASA Test Director  
Glenn Chin, STS-105 Mission Manager  
Ed Priselac, Shuttle Weather Officer

**5 p.m. - Launch countdown begins**

**L-2 Days - Tuesday, August 7**

**9 a.m. ----- Countdown Status Briefing**

Pete Nickolenko, NASA Test Director  
Glenn Chin, STS-105 Mission Manager  
Ed Priselac, Shuttle Weather Officer

**4 p.m. ----- Prelaunch News Conference**

Ron Dittmore, Shuttle Program Manager, NASA, JSC  
Bill Gerstenmaier, Deputy Manager, ISS Program, NASA, JSC  
Dave King, Director of Shuttle Processing, NASA, KSC  
John Weems, Launch Weather Officer

**L-1 Day - Wednesday, August 8**

**9 a.m. ----- Countdown Status Briefing**

Steve Altemus, NASA Test Director  
Glenn Chin, STS-105 Mission Manager  
Ed Priselac, Shuttle Weather Officer

**L-0 Day - Thursday, August 9**

*(Tanking begins at about 8:42 a.m.)*

**12 noon ----- NASA Television live launch programming and commentary begins**

**Launch Day Crew activities:**

7:30 a.m. -----Wake up  
8 a.m. -----Breakfast  
12 noon -----Lunch  
\*12:30 p.m. -----Crew Photo  
1:07 p.m. -----Weather briefing  
\*1:30 p.m. -----Suit-up photo  
\*1:47 p.m. -----Walkout/depart for pad  
\*2:17 p.m. -----Arrive at pad  
\*3:32 p.m. -----Close hatch  
\*5:38 p.m. -----Launch of Discovery

(\* Carried live on NASA TV)

**6:30 p.m. ----- Post-launch Press Conference**

Jim Halsell, Shuttle Program Launch Integration Manager, KSC  
Mike Leinbach, Shuttle Launch Director, KSC

**KSC News Center office hours for STS-105**

*(Times may be adjusted in real time depending on mission events and timelines.)*

Sunday, Aug. 5	11 a.m. - 2 p.m.
Monday, Aug. 6	8 a.m. - 4:30 p.m.
Tuesday, Aug. 7	8 a.m. - 7 p.m.
Wednesday, Aug. 8	8 a.m. - 10 p.m.
Thursday, Aug. 9 (Launch Day)	7 a.m. - 8 p.m.

**[FOR MISSION DAY SCHEDULES SEE NOTE BELOW]**

Tuesday, Aug. 21 (Landing day) 8 a.m. -- 7 p.m.

**NOTE:** The KSC News Center will support media questions for overnight and weekend STS-105 Mission Status Briefings and the in-flight crew news conference. Media interested in attending the briefings that occur after normal office hours (8 a.m.--4:30 p.m. Monday-Friday), **MUST** make their intentions known to the KSC News Room at least 24 hours in advance, in order to secure proper access to the press site. Times of these briefings are available in the NASA TV schedule at:

**Pass and Identification Hours**

Sunday, Aug. 5 ----- 10 - 11:30 a.m.  
Monday, Aug. 6 ----- 8 a.m. - 12 noon  
Tuesday, Aug. 7 ----- 8 a.m. - 12 noon  
Wednesday, Aug. 8 ----- 8 a.m. - 3:30 p.m.  
Thursday, Aug. 9 (Launch day)----- 7 a.m. - 4:30 p.m.

News media may obtain STS-105 mission credentials at the Pass and Identification Building at Gate 2 on State Road 3, Merritt Island, during the above-published times.

News media with annual Shuttle credentials are reminded to sign the logbook at the query counter in the News Center.

**NEWS MEDIA ARE REQUIRED TO BE UNDER PUBLIC AFFAIRS ESCORT AT ALL TIMES WHILE AT KSC EXCEPT WHEN DRIVING TO THE NEWS CENTER OR THE COMPLEX 39 CAFETERIA.**

**NEWS MEDIA ARE ALLOWED AT THE PRESS SITE ONLY WHEN THE KSC NEWS CENTER IS OPEN.**

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**August 3, 2001**

**Joel Wells**  
**Kennedy Space Center**  
**321/867-2468**

**KSC Release No. 95-01**

## **GENESIS NEXT PLANNED LAUNCH OPPORTUNITY AUG. 12**

The launch of NASA's Genesis spacecraft aboard a Boeing Delta II rocket was postponed again today because of unacceptable weather conditions. Launch is now scheduled to occur at 12:08:13 p.m. EDT, Sunday, Aug.12.

Mission managers today officially reserved Aug. 12 and 13 on the Eastern Range and will consider any earlier opportunities that become available. The near-term Genesis launch period extends to Aug. 15. The Delta II rocket and Genesis spacecraft remain in excellent health.

Genesis will be NASA's first sample return mission of this millennium, when it captures a piece of the Sun and returns to Earth. It will travel to a point where the Sun and Earth gravities are balanced, open its collector arrays and capture elements in the solar wind. The samples will help scientists learn about the beginnings of our solar system.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**August 3, 2001**

**Joel Wells**  
**Kennedy Space Center**  
**321/867-2468**

**KSC Release No. 96-01**

## **LAUNCH COUNTDOWN FOR SHUTTLE MISSION STS-105 BEGINS AUGUST 6**

NASA will begin the countdown for launch of Space Shuttle Discovery on mission STS-105 Aug. 6 at 5 p.m. EDT at the T-43 hour mark. This mission marks the 11th Shuttle flight to the International Space Station and the 5th Shuttle mission this year. The KSC launch team will conduct the countdown from Firing Room 3 of the Launch Control Center.

The countdown includes 29 hours and 32 minutes of built-in hold time leading to a preferred launch time at about 5:38 p.m. on Aug. 9 with a launch window not to exceed 5 minutes. The exact location of the orbiting International Space Station (ISS) will be determined during the T-9 minute built-in hold. The launch director will at that time determine the exact time of launch.

Mission STS-105 is the 30th flight of the orbiter Discovery and the 106th flight overall in NASA's Space Shuttle program. STS-105 is scheduled to last about 12 days with a planned KSC landing at about 1:17 p.m. on Aug. 21.

Discovery rolled into KSC's Orbiter Processing Facility on March 21, 2001, after completing mission STS-105. The orbiter rolled out of OPF bay 2 and into the VAB on June 13. While in VAB high bay 3, Discovery was mated to the external tank and solid rocket boosters. The entire Space Shuttle stack was transferred to Launch Pad 39A on July 2.

On mission STS-105, the seven-member crew will berth the 4.5-ton Leonardo Multi-Purpose Logistics Module (MPLM) to the International Space Station. Leonardo, which will be used to carry laboratory racks filled with equipment, experiments and supplies to and from the Station, will be attached to the Station using the Shuttle's robot arm. The Early Ammonia Servicer (EAS) tank, which will provide intermediate ammonia resupply to the Station's cooling system, will be installed during two spacewalks. The three-member Expedition Two ISS crew will return to Earth following eight days of docked operations and will be replaced by the three-member Expedition Three crew.

The STS-105 crew includes Commander Scott Horowitz, Pilot Rick Sturckow, and Mission Specialists Patrick Forrester and Daniel Barry, as well as Frank Culbertson, Vladimir Nikolaevich Dezhurov and Mikhail Tyurin, the Expedition Three crew members.

(end of general release)

### **COUNTDOWN MILESTONES**

*\*all times are Eastern*

**Launch-3 Days (Monday, Aug. 6)**

Prepare for the start of the STS-105 launch countdown  
Perform the call-to-stations (4:30 p.m.)  
Countdown begins at the T-43 hour mark (5 p.m.)  
Begin final vehicle and facility close-outs for launch  
Check out back-up flight systems  
Review flight software stored in mass memory units and display systems  
Load backup flight system software into Discovery's general purpose computers

### **Launch-2 Days (Tuesday, Aug. 7)**

Remove mid-deck and flight-deck platforms (12 a.m.)  
Activate and test navigational systems (10 a.m.)  
Complete preparation to load power reactant storage and distribution system (1 p.m.)  
Flight deck preliminary inspections complete (1 p.m.)

### **Enter first built-in hold at T-27 hours for duration of 8 hours (9 a.m.)**

Clear launch pad of all non-essential personnel  
Perform test of the vehicle's pyrotechnic initiator controllers (2 p.m.)

### **Resume countdown (5 p.m.)**

Begin operations to load cryogenic reactants into Discovery's fuel cell storage tanks  
(5 p.m. - 12 a.m.)

### **Launch-1 Day (Wednesday, Aug. 8)**

### **Enter 4-hour built-in hold at T-19 hours (1 a.m.)**

Demate orbiter mid-body umbilical unit (1:30 a.m.)

### **Resume countdown (5 a.m.)**

Final preparations of the Shuttle's three main engines for main propellant tanking and flight  
(5 a.m.)  
Begin filling pad sound suppression system water tank (7:30 a.m.)  
Resume orbiter and ground support equipment close-outs  
Pad sound suppression system water tank filling complete (12:30 p.m.)  
Close out the tail service masts on the mobile launcher platform

### **Enter planned hold at T-11 hours for 12 hours, 42 minutes (1 p.m.)**

Begin star tracker functional checks (1:30 p.m.)  
Activate orbiter's inertial measurement units  
Activate the orbiter's communications systems  
Install film in numerous cameras on the launch pad (3:30 p.m.)  
Flight crew equipment late stow (5:30 p.m.)  
Move Rotating Service Structure (RSS) to the park position (9:30 p.m.)  
Perform ascent switch list  
Fuel cell flow-through purge complete

### **Launch Day (Thursday, Aug. 9)**

### **Resume countdown at T-11 hours (1:42 a.m.)**

Activate the orbiter's fuel cells (2:52 a.m.)  
Clear the blast danger area of all non-essential personnel  
Switch Discovery's purge air to gaseous nitrogen (3:57 a.m.)

**Enter planned 2-hour built-in hold at the T-6 hour mark (6:42 a.m.)**

Launch team verifies no violations of launch commit criteria prior to cryogenic loading of the external tank

Clear pad of all personnel

Chilldown of propellant transfer lines (8:12 a.m.)

Begin loading the external tank with about 500,000 gallons of cryogenic propellants (about 8:42 a.m.)

**Resume countdown (8:42 a.m.)**

Complete filling the external tank with its flight load of liquid hydrogen and liquid oxygen propellants (about 11:42 a.m.)

Final Inspection Team proceed to launch pad

**Enter planned 2-hour built-in hold at T-3 hours (11:42 a.m.)**

Perform inertial measurement unit preflight calibration

Align Merritt Island Launch Area (MILA) tracking antennas

Perform open loop test with Eastern Range

**Resume countdown at T-3 hours (1:42 p.m.)**

Crew departs Operations and Checkout Building for the pad (1:47 p.m.)

Complete close-out preparations in the white room

Check cockpit switch configurations

Flight crew begins entry into the orbiter (about 2:17 p.m.)

Astronauts perform air-to-ground voice checks with Launch and Mission Control

Close Discovery's crew hatch (about 3:32 p.m.)

Begin Eastern Range final network open loop command checks

Perform hatch seal and cabin leak checks

Complete white room close-out

Close-out crew moves to fallback area

Primary ascent guidance data is transferred to the backup flight system

**Enter planned 10-minute hold at T-20 minutes (4:22 p.m.)**

NASA Test Director conducts final launch team briefings

Complete inertial measurement unit preflight alignments

**Resume countdown at T-20 minutes (4:32 p.m.)**

Transition the orbiter's onboard computers to launch configuration

Start fuel cell thermal conditioning

Close orbiter cabin vent valves

Transition backup flight system to launch configuration

**Enter estimated 40-minute hold at T-9 minutes (4:43 p.m.)**

Launch Director, Mission Management Team and NASA Test Director conduct final polls for go/no go to launch

**Resume countdown at T-9 minutes (about 5:23 p.m.)**

Start automatic ground launch sequencer (T-9:00 minutes)

Retract orbiter crew access arm (T-7:30)

Start mission recorders (T-6:15)

Start Auxiliary Power Units (T-5:00)

Arm SRB and ET range safety safe and arm devices (T-5:00)

Start liquid oxygen drainback (T-4:55)

Start orbiter aerosurface profile test (T-3:55)  
 Start main engine gimbal profile test (T-3:30)  
 Pressurize liquid oxygen tank (T-2:55)  
 Begin retraction of the gaseous oxygen vent arm (T-2:55)  
 Fuel cells to internal reactants (T-2:35)  
 Pressurize liquid hydrogen tank (T-1:57)  
 Deactivate SRB joint heaters (T-1:00)  
 Orbiter transfers from ground to internal power (T-0:50 seconds)  
 Ground Launch Sequencer go for auto sequence start (T-0:31 seconds)  
 SRB gimbal profile (T-0:21 seconds)  
 Ignition of three Space Shuttle main engines (T-6.6 seconds)  
 SRB ignition and liftoff (T-0)

## SUMMARY OF BUILT-IN HOLDS FOR STS-105

T-TIME	LENGTH OF HOLD	HOLD BEGINS	HOLD ENDS
T-27 hours	8 hours	9 a.m. Tues.	5 p.m. Tues.
T-19 hours	4 hours	1 a.m. Wed.	5 a.m. Wed.
T-11 hours	12 hours, 42 minutes	1 p.m. Wed.	1:42 a.m. Thurs.
T-6 hours	2 hours	6:42 a.m. Thurs.	8:42 a.m. Thurs.
T-3 hours	2 hours	11:42 a.m. Thurs.	1:42 p.m. Thurs.
T-20 minutes	10 minutes	4:22 p.m. Thurs.	4:32 p.m. Thurs.
T-9 minutes	about 40 minutes	4:43 p.m. Thurs.	5:23 p.m. Thurs.

## CREW FOR MISSION STS-105

Commander (CDR): Scott Horowitz  
 Pilot (PLT): Rick Sturckow  
 Mission Specialist 1: Patrick Forrester  
 Mission Specialist 2: Daniel Barry  
 Expedition Three CDR: Frank Culbertson  
 Expedition Three: Mikhail Tyurin  
 Expedition Three: Vladimir Dezhurov

## SUMMARY OF STS-105 LAUNCH DAY CREW ACTIVITIES

### Thursday, August 9

7:30 a.m. Crew wake up  
 8 a.m. Breakfast  
 9:30 a.m. Medical checks  
 12:00 p.m. Lunch  
 \*12:30 p.m. Photo opportunity  
 1:07 p.m. Weather Briefing (CDR, PLT, MS2)  
 1:07 p.m. Don flight suits (MS1, MS3, MS4, MS5)  
 \*1:17 p.m. Don flight suits (CDR, PLT, MS2)  
 \*1:47 p.m. Depart for launch pad  
 \*2:17 p.m. Arrive at white room and begin ingress  
 \*3:32 p.m. Close crew hatch  
 \*5:38 p.m. Launch

\* Televised events (times may vary slightly)  
 All times Eastern

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*





**August 6, 2001**

**Tracy Young**  
**Kennedy Space Center**  
**321/867-9284**

**KSC Release No. 97-01**

## **FIFTEEN KSC WORKERS HONORED BY NASA ASTRONAUTS**

Fifteen Kennedy Space Center (KSC) employees were recently presented with NASA's prestigious Silver Snoopy Award for service to the Space Shuttle astronauts.

Employees honored were Joseph F. Fasula, NASA, Procurement Office; Priscilla C. Stanley, NASA, Spaceport Engineering & Technology Directorate; Craig T. Bennett and Michael J. Smutek, Defense Contract Management Agency; Mark Guseman, Rodney V. Olson, and Agnes V. Vargas, Boeing Space Flight & Human Exploration; Edward M. Carillion, Stephan M. Cisewski, Robert L. Dodier, Edgar L. Jarrell, Richard L. Maples, Brian A. Monborne, Albert F. Schricker, and Roy S. Uyematsu, United Space Alliance.

Awards were presented at KSC in June 2001. Astronaut Neil Woodward presented awards to Fasula, Stanley, Bennett, and Smutek. Astronaut Gregory Johnson presented awards to Cisewski, Jarrell, Maples, and Schricker. Astronaut Jim Wetherbee presented awards to Carillion, Dodier, Monborne, and Uyematsu. Astronaut Jim Kelly presented awards to Olson and Guseman. STS-102 crew members, Jim Wetherbee, Jim Kelly, Andy Thomas and Paul Richards presented the award to Vargas.

Snoopy, of the comic strip "Peanuts," has been the unofficial mascot of NASA's astronaut corps since the earliest days of human space flight. The Silver Snoopy Award was created by the astronauts to honor persons who contribute most to the safety and success of human space flight.

The award is presented to no more than 1 percent of the space center's work force each year. Recipients are given a silver pin depicting the famous beagle wearing a space suit. All the pins have flown on a previous Space Shuttle mission. The awardees also received a framed certificate and a congratulatory letter signed by the presenting astronaut.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**August 6, 2001**

**Joel Wells**  
**Kennedy Space Center**  
**321/867-2468**

**KSC Release No. 98-01**

## **GENESIS NEXT PLANNED LAUNCH OPPORTUNITY AUG. 8**

The launch of NASA's Genesis spacecraft aboard a Boeing Delta II rocket has now been scheduled to occur at 12:13:40 p.m. EDT, Wednesday, Aug. 8.

Mission managers met with Eastern Range officials today to assess the availability of the Aug. 8 launch day. Range officials confirmed their ability to support the Genesis launch attempt with no impact to Space Shuttle mission STS-105, currently slated for Aug. 9.

The Delta II launch vehicle and Genesis spacecraft are both in excellent condition and ready to support the new launch date. The near term Genesis launch period extends to Aug. 15. Genesis mission managers will convene a follow-up launch readiness review Tuesday morning as part of standard prelaunch preparations.

Genesis will be NASA's first sample return mission of this millennium, when it captures a piece of the Sun and returns to Earth. It will travel to a point where the Sun and Earth gravities are balanced, open its collector arrays and capture elements in the solar wind. The samples will help scientists learn about the beginnings of our solar system.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**August 20, 2001**

**Bruce Buckingham**  
**Kennedy Space Center**  
**321/867-2468**

**KSC Release No. 100-01**

**Note to Editors:**

## **DISCOVERY SCHEDULED TO LAND AT KSC AUGUST 22**

The orbiter Discovery is scheduled to land at Kennedy Space Center (KSC) Wednesday, Aug. 22, at about 12:46 p.m. EDT completing the nearly 12-day STS-105 mission to the International Space Station that launched from KSC Aug. 10, 2001.

Landing at KSC's Shuttle Landing Facility (SLF) is slated to occur on orbit 185 at mission elapsed time 11 days, 19 hours, 36 minutes. The deorbit burn will occur at about 11:41 a.m. EDT on Aug. 22. The first two KSC landing opportunities on Aug. 22 are at 12:46 p.m. EDT and at 2:23 p.m. EDT.

If managers must keep Discovery in orbit an additional day, two landing opportunities are available on Thursday, Aug. 23, at KSC at 11:48 a.m. EDT and at 1:24 p.m. EDT.

Landing opportunities also exist at the back-up landing location at Edwards Air Force Base (EAFB), Calif., on both days. The opportunities on Aug. 22 are at 2:17 p.m. EDT and at 3:53 p.m. EDT. On Aug. 23, landing opportunities at EAFB are possible at 2:55 p.m. EDT and at 4:32 p.m. EDT.

If landing occurs as scheduled, it will be the 56th landing at KSC in the history of the program. Following landing, Discovery will be towed to the Orbiter Processing Facility for post-mission servicing.

Following landing, the crew will be taken to their quarters in the O&C Building, meet with their families and undergo physical examinations. A post-mission press conference with select members of the STS-105 crew is scheduled to occur at the KSC News Center about six hours after touchdown. The crew is scheduled to depart for Johnson Space Center the day following landing.

If Discovery lands at Edwards, an augmented KSC convoy team will be on-site to safe the vehicle, disembark the crew and move the orbiter to the Mate/Demate Device. The turnaround team will be deployed to Edwards by charter aircraft on landing day.

-- end of general release --

**NOTICE TO EDITORS:** The KSC press site will open for landing activities at 8 a.m. Wednesday, Aug. 22. Accredited news media wishing to view Discovery's landing should be at the KSC News Center prior to 11:45 a.m. for transport to the SLF. Additional information regarding landing photo opportunities, post-landing press conferences with the STS-105 crew, and News Center operational hours is available by calling the KSC News Center at 321-867-2468.

## SLF and KSC Ground Operations

The Shuttle Landing Facility was built in 1975. It is 300 feet wide and 15,000 feet long with 1,000-foot overruns at each end. The strip runs northwest to southeast and is located about three miles northwest of the 525-foot tall Vehicle Assembly Building.

Once the orbiter is on the ground, safing operations will commence and the flight crew will prepare the vehicle for post-landing operations. The Crew Transport Vehicle (CTV) will be used to assist the crew, allowing them to leave the vehicle and remove their launch and re-entry suits easier and quicker.

The CTV and other KSC landing convoy operations have been "on-call" since the launch of Discovery. The primary functions of the Space Shuttle recovery convoy are to provide immediate service to the orbiter after landing, assist crew egress, and prepare the orbiter for towing to the Orbiter Processing Facility about three hours following touchdown.

Convoy vehicles are stationed at the SLF's mid-point. About two hours prior to landing, convoy personnel will don SCAPE suits, or Self-Contained Atmospheric Protective Ensemble, and communications checks are made. A warming-up of coolant and purge equipment is conducted and nearly two-dozen convoy vehicles are positioned to move onto the runway as quickly and as safely as possible once the orbiter coasts to a stop. When the vehicle is deemed safe of all potential explosive hazards and toxic gases, the purge and coolant umbilical access vehicles move into position at the rear of the orbiter.

Following purge and coolant operations, flight crew egress preparations will begin and the CTV will be moved into position at the crew access hatch located on the orbiter's port side. A physician will board the Shuttle and conduct a brief preliminary examination of the astronauts. The crew will then make preparations to leave the vehicle.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



April 12, 2001

**Ken Thornsley**  
Kennedy Space Center, Fla.  
(Phone: 321/867-7819)

**Note to Editors/News Directors:**  
**STS-100 PHOTO OPPORTUNITIES**

All times are EDT for launch at 2:41 p.m. on Thursday, April 19.

**L-3 DAYS MONDAY APRIL 16**

9:30 AM DEPART PRESS SITE FOR CREW ARRIVAL AT SLF.

**L-2 DAYS TUESDAY APRIL 17**

6:30 AM DEPART PRESS SITE FOR STA FLIGHT CDR & PILOT SUITED.  
(WIRE NEWS SERVICE ONLY)

**L-1 DAYS WEDNESDAY APRIL 18**

10:30 AM PHOTOGRAPHERS WITH REMOTE CAMERAS AND EQUIPMENT BE AT  
THE BUS LOADING AREA IN THE PARKING LOT.

11:00 AM DEPART PRESS SITE FOR REMOTE CAMERA SET UP.

1:00 PM DEPART PRESS SITE FOR ORIENTATION TOUR.

5:30 PM DEPART PRESS SITE FOR RSS ROLLBACK, SUNSET AND NIGHTTIME  
PHOTOGRAPHY.

**LAUNCH DAY THURSDAY APRIL 19**

9:55 AM DEPART PRESS SITE FOR STS-100 CREW WALKOUT, O&C BLDG.

1:10 PM DEPART PRESS SITE FOR BANANA CREEK VIEWING SITE.

1:10 PM DEPART PRESS SITE FOR FIRE TOWER ROAD.

1:40 PM DEPART PRESS SITE FOR ASTRONAUT ROAD.

2:41 PM LAUNCH.

-- end --

*For automatic e-mail subscriptions to this daily Shuttle status report or KSC-originated press releases, send an Internet electronic mail message to [domo@news.ksc.nasa.gov](mailto:domo@news.ksc.nasa.gov). In the body of the message (not the subject line) type the words "subscribe shuttle-status", or "subscribe ksc-press-release" (do not use quotation marks). The system will reply with a confirmation via e-mail of each subscription.*



**George H. Diller**  
**Kennedy Space Center**  
321/867-2468

**August 22, 2001**

**Julie Andrews**  
**Lockheed Martin**  
321/853-1567

**Annette Wells**  
**Department of Defense Space Test Program**  
310/363-6827

**KSC Release No. 101-01**

## **KODIAK STAR SCHEDULED FOR LAUNCH FROM ALASKA SEPT. 17**

The launch of Kodiak Star aboard a Lockheed Martin Athena I launch vehicle from Alaska's Kodiak Launch Complex is scheduled for Monday, Sept. 17 at the opening of a launch window that extends from 5 - 7 p.m. ADT (9 -11 p.m. EDT). This will be the first mission to be launched into an earth orbit from Kodiak Island. Riding atop the Athena I, the Kodiak Star payload consists of four individual satellites.

Starshine 3, whose ride into space is sponsored by NASA, consists of over 1,500 hand-polished mirrors, 31 retro-reflectors and seven clusters of solar cells powering an amateur radio transmitter. The spherical satellite, one meter in diameter and weighing 200 pounds, can be used to study orbital decay.

It will be deployed into a 300-mile-high orbit at an inclination of 67 degrees. Flashes from the satellite will occur every two seconds. They will be visible just after sunset and just before sunrise as far north as Point Barrow, Alaska and as far south as McMurdo Station, Antarctica. The Starshine Program involves participation from students in kindergarten through high school. This will be the first time that students from Alaska, and nations at high latitudes, can participate in the project due to the higher orbital inclination.

PICOSat, PCSat and Sapphire are payloads sponsored by the Department of Defense (DoD) Space Test Program. PICOSat, the primary DoD satellite, is a technology demonstration satellite with four experiments on board. PCSat was designed by midshipmen at the U.S. Naval Academy, and will become part of the amateur radio community's Automatic Position Reporting System. It will receive identity and position data from amateur radio operators and re-transmit it to ground stations. Sapphire is a micro-satellite built by students at Stanford University and Washington University - St. Louis. Sapphire's primary mission is testing infrared sensors for space use.

## **LAUNCH MINUS 1 DAY PRELAUNCH PRESS CONFERENCE AND TOUR**

The prelaunch press conference will be held on Sunday, Sept. 16 at 1:30 p.m. ADT (5:30 p.m. EDT) in the launch control center conference room at the Kodiak Launch Complex . Participating in the press conference will be:

Chuck Dovale, NASA Launch Manager, Kodiak Star  
John F. Kennedy Space Center, Florida

Rick Malone, Athena Mission Director  
Lockheed Martin Astronautics  
Denver, Colorado

Gil Moore, Starshine Program Director  
Rocky Mountain NASA Space Grant Consortium  
Monument, Colorado

Lt. Col Perry Ballard, USAF  
Deputy Program Director, DoD Space Test Program  
Kirtland Air Force Base, New Mexico

Jim Sardonia, Launch Weather Officer  
Department of the Air Force, 45th Weather Squadron  
Cape Canaveral Air Force Station

At the conclusion of the press conference, news media representatives will be given a tour of the Kodiak Launch Complex, owned by the Alaska Aerospace Development Corporation.

### **PRESS ACCREDITATION**

Media desiring to cover the launch of Kodiak Star should send a letter of request for accreditation to:

Press Accreditation, Kodiak Star  
NASA XA-E1  
Kennedy Space Center, FL 32899

Letters may also be faxed to 321/867-2692.

The request should be written on news organization letterhead and contain the full name, Social Security number and birth date of those planning to cover the launch. For further information, contact the NASA News Center at 321/867-2468.

### **KODIAK STAR MEDIA DESK AND LAUNCH COMPLEX TRANSPORTATION**

A Kodiak Star Media Desk will be established in the lobby of the Buskin River Inn, located adjacent to the Kodiak Island Airport. Press badges for accredited news media may be picked up on L-1 day, Sunday, Sept. 16, beginning at 11 a.m. Transportation to and from the Kodiak Launch Complex will be provided. The press bus for the prelaunch news conference and launch complex tour will depart from the Buskin River Inn at 11:45 a.m. Due to significant parking limitations and security reasons, no privately owned vehicles are permitted at the launch site.

On launch day, Sept. 17, press credentials may also be picked up beginning at 1 p.m. at the Kodiak Star Media Desk. The press bus for launch will depart from the Buskin River Inn at 2 p.m.

### **NASA TELEVISION, V CIRCUIT AND WEB COVERAGE**

The Kodiak Star prelaunch press conference from the Kodiak Launch Complex will be carried live on NASA Television beginning at 1:30 p.m. ADT on Sunday, Sept. 16. Remote question and answer capability from other NASA field centers is not possible. However, if time permits, some questions may be answered by press conference participants if received not later than 24 hours in advance. These should be faxed on news organization letterhead to 907/487-2823.

On launch day, Sept. 17, live launch coverage on NASA Television will begin at 3:30 p.m. ADT (7:30 p.m. EDT) and continue until it has been confirmed that Kodiak Star's four

satellites have deployed. The final deployment confirmation, that of Starshine, is expected to be communicated from Antarctica approximately 2 hours, 10 minutes after launch.

NASA Television is located on the GE-2 satellite, transponder 9 (C band), located at 85 degrees West. In Alaska, the Kodiak Star launch will also be carried on Galaxy 10, transponder 23 (Ku band), located at 123 West.

Audio of the prelaunch press conference and launch will be provided on the "V" circuits. These can be accessed directly by dialing 321/867-1220, 1240, 1260, 7135, 4003.

Full coverage of Kodiak Star activities will be webcast and may be accessed via the NASA Kennedy Space Center home page at <http://www.ksc.nasa.gov>.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**George H. Diller**  
**Kennedy Space Center**  
**321/867-2468**

**August 29, 2001**

**KSC Release No. 102-01**

**Note to Editors/News Directors:**

## **INTERVIEW OPPORTUNITY SCHEDULED AT KSC ON FRIDAY, AUG. 31 WITH KODIAK STAR LAUNCH PERSONNEL**

Local news media representatives will have an opportunity to interview principal members of NASA's Kodiak Star launch team from Kennedy Space Center on Friday, Aug. 31 at 2:30 p.m. The team leaves next week for final launch preparations in Alaska.

Launch of the four Kodiak Star satellites for NASA and Department of Defense will be into a 300-mile-high polar orbit aboard a Lockheed Martin Athena I expendable launch vehicle. The launch is scheduled to occur from Kodiak Island, Alaska on Sept. 17, 2001 at 5 p.m. ADT (9 p.m. EDT).

Members of the KSC launch team available to talk to the media at the KSC Press Site will be:

Craig M. Whittaker, Launch Service Manager  
Cheryl A. Malloy, Mission Integration Manager  
Garrett L. Skrobot, Athena I/Kodiak Star Integration Engineer  
Charles A. Tatro, Launch Site Integration Manager  
James E. Sardonia, Launch Weather Officer, 45th Weather Squadron  
Charles P. Dovale, NASA Launch Manager

This is a local event only, informal in nature, and will not be carried on NASA Television.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Tracy Young**  
**Kennedy Space Center**  
**321/867-9284**

**Sept. 4, 2001**

**KSC Release No. 103-01**

## **NASA HONORS KENNEDY SPACE CENTER EMPLOYEES**

Kennedy Space Center (KSC) honored 50 of its civil service and contractor employees at a special Honoree Event held at the space center in August.

The KSC employees were among 250 NASA and industry employees from around the country who were honored by top NASA and industry leaders for their significant contributions to the nation's space program.

The Honorees attended a special reception in their honor, and were joined by astronauts and senior NASA and industry officials of the Space Shuttle and International Space Station team. They were given a VIP tour of the Kennedy Space Center and participated in various briefings. They also watched the STS-105 launch of the Space Shuttle Discovery on Friday, August 10, from a special VIP viewing site. STS-105 was the eleventh Space Shuttle flight dedicated to the International Space Station.

The Honoree Award is the highest form of recognition bestowed upon an employee by the NASA Space Flight Awareness Program. Recipients are selected for their professional dedication and outstanding achievement in support of the human space flight program.

Civil Service employees honored were Raoul E. Caimi, Spaceport Engineering & Technology Directorate; Catherine A. Deane, Spaceport Services Directorate; Shaun L. Green; Shuttle Processing Directorate; Gordon B. Grooms, Shuttle Processing Directorate; A. Sue Gross, Shuttle Processing Directorate; Andrew O. Kelly, Shuttle Processing Directorate; James H. Norman, Administration Office; John F. Poppert, Jr., Spaceport Engineering & Technology Directorate; Timothy W. Pugh, Procurement Office; Patti J. Skipper, International Space Station & Payload Processing Directorate; Pamela P. Steel, External Relations & Business Development Directorate; Douglas A. Younger, Spaceport Services Directorate, and Kevin J. Zari, International Space Station & Payload Processing Directorate.

Boeing Human Space Flight and Exploration employees honored include Rodger N. Capps, Joan M. Carcciolo, Joel Davidson, Michael s. Gisondi, Julie L. Dodich, Jacqueline I. Grillion, James L. Jackson, Stevan E. Keeler, Jonathan P. Mesenbourg, Kevin E. Parmentier, and Donna L. Waln.

Space Gateway Support employees honored were Julio C. DelCastillo, James E. Farmer, Ronald L. Funk (InDyne, Incl.), Lucille Nead (InDyne, Inc.), David P. Slade (InDyne, Inc.), and Ronald D. Traylor.

Other contractor Honorees were Joseph J. Curran, Dynacs Engineering, Co., Dr. Gregory D. Goins, Dynamac Corporation, and Brian C. Hooker, Lockheed Martin Space Operations.

United Space Alliance employees honored were David A. Andrews, Helen M. Draper, Charles J. Hannas, William L. Hardy, Linda S. Huffman, Thomas M. Ingram, Naren D.

Jadeja, Elizabeth A. Kline, Maurice G. Ledoux, John M. Meister, Eugene J. Oliver, Ella A. Schaffer, John T. Tabera, Richard R. Thawley, Carl A. Vita, Harvey L. Wilcox, Richard Worm, and Carson L. Yates.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**George H. Diller, NASA**  
**Kodiak Launch Complex**  
**907/868-1574**

**Sept. 18, 2001**

**Julie Andrews, Lockheed Martin**  
**Buskin River Inn**  
**907/487-2700**

**KSC Release No. 104-01**

**Note to Editors/News Directors:**

## **LAUNCH OF KODIAK STAR FROM ALASKA ABOARD ATHENA I RESCHEDULED FOR SEPT. 21**

The launch of Kodiak Star for NASA and the Department of Defense aboard a Lockheed Martin Athena I launch vehicle has been rescheduled for Friday, Sept. 21. The launch window is 5 - 7 p.m. ADT (9 - 11 p.m. EDT).

Additional time has been necessary to assemble the launch team in Alaska due to the recent events that grounded commercial flights throughout the country. The Flight Readiness Review was held on Sunday, Sept. 16. At the conclusion of the fully successful review, it was determined that personnel essential for the launch preparations are now in Alaska. It was also determined that the network of tracking stations around the world will be fully capable of launch support and spacecraft tracking on Friday.

The prelaunch press conference and the launch of Kodiak Star will be covered on NASA Television found on GE-2, transponder 9 (C band), located at 85 degrees West. In Alaska, the satellite transponder for launch coverage has changed to Galaxy 10, transponder 20 (Ku band), located at 123 degrees West. Audio is also available on the "V" circuits that may be accessed directly by dialing 321/867-1220, 1240, 1260, 7135, 4003. Coverage will also be webcast and may be accessed via the NASA Kennedy Space Center home page at [www.ksc.nasa.gov](http://www.ksc.nasa.gov).

The prelaunch press conference will be held on Thursday, Sept. 20, at 1:30 p.m. (5:30 p.m. EDT). Launch coverage on Friday, Sept. 21, begins at 3:30 p.m. ADT (7:30 p.m. EDT) and continues until it has been confirmed that Kodiak Star's four satellites have been deployed. The final deployment confirmation, that of Starshine, is expected to be communicated from Antarctica approximately 2 hours, 10 minutes after launch.

A Kodiak Star Media Desk will be established in the lobby of the Buskin River Inn, located adjacent to the Kodiak Island Airport. Press badges for accredited news media may be picked up on L-1 day, Thursday, Sept. 20, beginning at 11 a.m. Transportation to and from the Kodiak Launch Complex will be provided. Due to significant parking limitations and for security reasons, no privately owned vehicles are permitted at the launch site. The press bus for the prelaunch news conference and associated tour of the launch complex will depart from the Buskin River Inn at 11:45 a.m.

On launch day, Sept. 21, press credentials may also be picked up at the Kodiak Star Media Desk beginning at 1 p.m. The press bus for launch will depart from the Buskin River Inn at 2 p.m.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Bruce Buckingham**  
Kennedy Space Center, Fla.  
321/867-2468

Sept. 21, 2001

**KSC Release No. 105-01**

## **CENTRAL FLORIDA STUDENTS EAGERLY AWAIT STARSHINE LAUNCH FROM KODIAK, ALASKA**

Students from around Central Florida are eagerly awaiting the launch of the Starshine 3 spacecraft today -- they helped build the NASA-sponsored satellite by polishing some of its 1,500 aluminum "mirrors."

Launching on an Athena I rocket from Kodiak Island, Alaska, this will be the second flight of the student-built satellite. Its one-inch mirrors were machined by technology students in Utah, with the grinding and polishing of the mirrors being accomplished by students in kindergarten through twelfth grade in schools all over the world.

Students from Michael Martin's fifth-grade classes at Sebastian Elementary School contributed mirrors to each of the first three Starshine satellites.

"When the students look into the sky, they'll think, 'My name is up there.' This made them interested in science and space again," Martin said. "The students helped with over 16 disks, this time. If NASA approves, we want to help with Starshine 4 and 5, too."

Thomas Sarnoski's class at Osceola Magnet Elementary School in Vero Beach also helped with Starshine 3. The fourth- and fifth-graders enrolled in the Challenge Center, the school's gifted program, polished two disks for over two weeks.

"The students benefited from this project because they got to work as a team," Sarnoski said. "I don't think they realized that they were contributing to something so important-they were just having fun because they knew it was a project for NASA."

The Starshine 3 spacecraft is a hollow aluminum sphere almost a meter in diameter (37 inches) and weighing 90 kilograms (197 pounds). It consists of 31 retro-reflectors and seven clusters of solar cells powering an amateur radio transmitter, as well as the 1,500 student-polished mirrors.

Participating students will visually track Starshine 3 and log their findings on the project's web site at <http://azinet.com/starshine/>. The satellite will produce a flash every two seconds, and students will use these flashes to track the satellite's movements. The flashes will be visible just after sunset and just before sunrise as far north as Point Barrow, Alaska, and as far south as McMurdo Station, Antarctica. The data collected will help NASA improve forecasts of satellite orbital decay.

The Starshine 1 satellite flew aboard Discovery in May 1999 on mission STS-96. Starshine 2 is scheduled to launch aboard Endeavour on mission STS-108 in November 2001. If Starshine 4 and 5 are approved, the knowledge gained from the Starshine 3 project will be used in the design for these satellites.

Schools with questions about participating in the program may contact Project Starshine's

director, Gil Moore, at the Rocky Mountain NASA Space Grant Consortium, 3855 Sierra Vista Road, Monument, CO 80132, (telephone: 719/488-0721; email: [gilmoore12@aol.com](mailto:gilmoore12@aol.com)).

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Bruce Buckingham, NASA**  
Kennedy Space Center, Fla.  
321/867-2468

**Sept. 21, 2001**

**George H. Diller, NASA**  
Kodiak Launch Complex  
907/868-1574

**Julie Andrews, Lockheed Martin**  
Buskin River Inn  
907/487-2700

**KSC Release No. 106-01**

## **LAUNCH OF KODIAK STAR POSTPONED TO SATURDAY, SEPT. 22**

The launch of Kodiak Star aboard a Lockheed Martin Athena I rocket from Alaska has been postponed 24-hours due to weather.

"The combination of gusty winds, low clouds and rain precluded a launch attempt today," said Jim Sardonia, launch weather officer.

The launch is now scheduled for Saturday, Sept. 22 at the opening of a launch window extending from 5 - 7 p.m. ADT (9-11 p.m. EDT.) Launch coverage on NASA Television begins at 3:30 p.m. ADT (7:30 p.m. EDT) and will continue until the last of the four Kodiak Star spacecraft for NASA and the Department of Defense have been deployed. The final deployment confirmation, that of Starshine, is expected to be communicated from Antarctica approximate 2 hours, 10 minutes after launch.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**George H. Diller, NASA**  
**Kodiak Launch Complex**  
**907/868-1574**

**Sept. 24, 2001**

**Julie Andrews, Lockheed Martin**  
**Buskin River Inn**  
**907/487-2700**

**KSC Release No. 107-01**

## **NEXT LAUNCH ATTEMPT OF KODIAK STAR PLANNED FOR SEPT. 24**

The next launch attempt of Kodiak Star aboard a Lockheed Martin Athena I launch vehicle is currently scheduled for Monday, Sept. 24 at 5:30 p.m. ADT, (9:30 p.m. EDT).

The downrange C-band radar located at Cordova, AK, that failed to operate properly on Saturday has been repaired and retested.

The launch weather forecast on Monday calls for a 70% chance of not meeting the launch weather criteria due to a low-pressure system that is drifting slowly to the east. This system brought rain and low clouds to Kodiak Island on Sunday. The probability of not having acceptable launch weather on Tuesday is 20%.

Live coverage of the Kodiak Star launch on NASA Television will begin at 4 p.m. ADT (8 p.m. EDT).

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Bruce Buckingham**  
Kennedy Space Center, Fla.  
321/867/2468

**Sept. 24, 2001**

**George H. Diller, NASA**  
Kodiak Launch Complex  
907/868-1574

**Julie Andrews, Lockheed Martin**  
Buskin River Inn  
907/487-2700

**KSC Release No. 108-01**

## **LAUNCH OF KODIAK STAR POSTPONED DUE TO SOLAR FLARE**

The launch of Kodiak Star has been postponed for at least an additional 24 hours. A solar flare of significant magnitude occurred this morning at 7a.m ADT (11 a.m. EDT) producing a "proton flux" exceeding the allowable launch criteria for the Athena I. These high levels of charged particles can cause a "data upset" in the launch vehicle guidance system affecting its reliability.

The data from today's solar flare was observed by the NOAA GOES-8 weather satellite with the capability to monitor solar weather. The levels monitored are approximately three times the allowable launch criteria. The proton flux is expected to decrease slowly but may take 48 hours to be within allowable limits.

Yesterday, work was completed to remove and replace a encoder unit on a down range C-band radar at Cordova, AK necessary for Range Safety tracking of the Athena I. The radar has been successfully retested and is ready to support the next Kodiak Star launch attempt.

For images, data and information on today's solar flare, the following web sites are suggested:

[www.spaceweather.com](http://www.spaceweather.com)  
[www.sec.noaa.gov/today.html](http://www.sec.noaa.gov/today.html)  
[sohowww.nascom.nasa.gov](http://sohowww.nascom.nasa.gov)

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Bruce Buckingham**  
Kennedy Space Center, Fla.  
321/867-2468

Sept. 25, 2001

**George H. Diller, NASA**  
Kodiak Launch Complex  
907/868-1574

**Julie Andrews, Lockheed Martin**  
Buskin River Inn  
907/487-2700

**KSC Release No. 109-01**

## **KODIAK STAR LAUNCH POSTPONEMENT EXTENDED DUE TO INTENSITY OF SOLAR FLARE**

The launch of Kodiak Star for NASA and the Department of Defense on a Lockheed Martin Athena 1 vehicle has been postponed an additional 48 hours. The effects of Monday morning's solar flare have continued to increase in intensity throughout the day.

Space weather experts believe that based on historical data for a solar flare of this magnitude, it will require approximately 3.5 days after the solar flare reaches its peak before the level of "proton flux" will decrease to allowable launch criteria for the Athena 1.

Based on this information, launch is now planned for no earlier than Thursday, Sept. 27, at 5:30 p.m. ADT (9:30 p.m. EDT).

For images, data and information on today's solar flare, the following web sites are suggested:

[www.spaceweather.com](http://www.spaceweather.com)  
[www.sec.noaa.gov/today.html](http://www.sec.noaa.gov/today.html)  
[sohowww.nascom.nasa.gov](http://sohowww.nascom.nasa.gov)

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Bruce Buckingham**  
Kennedy Space Center, Fla.  
321/867/2468

**Sept. 28, 2001**

**KSC Release No. 110-01**

## **PATENTED PROCESS PROMISES INCREASED POTATO PRODUCTION**

A research team at the NASA/Kennedy Space Center lead by Dynamac Corporation has been issued a patent on a process for producing a vegetative and tuber growth regulator based on a Tuber Induction Factor (TIF) growth hormone that regulates growth in potato tubers. (Potato tubers are the buds from which new plant shoots arise.)

Dynamac's Dr. Gary Stutte, a plant scientist, and Neil Yorio, a research scientist, both in the Advanced Life Support and Gravitational Biology office at KSC, studied several generations of a redskin variety of potato under laboratory conditions to determine their candidacy for growth and consumption in space. The research tracked the growth rate, energy and space consumption, and crop yield of the potatoes.

"The use of a tuber growth regulator could increase seed potato production by 15 to 20 percent, and decrease the time to harvest by 20 percent," stated Stutte. "This process could be used for long-duration missions, such as a mission to Mars. The goal is to learn how to manage this natural compound efficiently and use it effectively to get less volume and more mass, reduce the cost for water and resources, and reduce the growth cycle."

During the study, potato plants were grown hydroponically in a specially lighted and temperature-controlled plant growth chamber called the Biomass Production Chamber. The leafy green vegetation was exposed to light on top, while the roots remained under a cover in special trays containing a solution of water and nutrients necessary for growth. The "underground" stems, called stolons, developed small seed tubers that developed into potatoes and were harvested. Several generations of potatoes have grown over in this research chamber and the result is disease- and pesticide-free potatoes harvested almost every 21 days.

Dr. Raymond Wheeler, a NASA plant physiologist who is working closely with Dynamac on the study explained, "The more we can understand the influence of growth regulating factors, such as the TIF, the better we can manage the systems for life support applications.

"We have to ask ourselves questions regarding what the life support options are and what they will cost. One of the real driving factors is what the energy requirements will be for lighting. In our present studies with potatoes our goal is to try and gain the most efficient use of space and lighting."

During the research, the potatoes were harvested, and the fluid used in the first growth was retained and reused for subsequent generations of potatoes. The research team found that the next generation of plants developed tubers faster because of the TIF, and produced less leafy vegetation. A 21-day cycle in the first generation became, in essence, a cycle representing 42 days of growth in the next generation.

According to Stutte, the growth regulator could also be used here on Earth to produce certified virus-free potato seed stock that could be planted directly using commercial seeding equipment.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Tracy Young**  
**Kennedy Space Center**  
**321/867-9284**

**Sept. 28, 2001**

**KSC Release No. 111-01**

## **JOSEPH F. FASULA HONORED BY NASA ASTRONAUT**

Joseph F. Fasula, a native of Rockford, Ill., and current resident of Merritt Island, Fla., was recently presented with NASA's prestigious Silver Snoopy Award for service to the Space Shuttle astronauts.

Astronaut Neil Woodward presented the award to Fasula in June at Kennedy Space Center (KSC). Fasula joined NASA in 1998.

Fasula was honored for establishing a functional and contractually accountable process for the transportation and receiving of flight critical Redesigned Solid Rocket Motor (RSRM) segments.

"Once the decision to place the requirement on the Space Flight Operations Contract (SFOC) was made, you negotiated with the contractor to get the requirement formally on contract and ensured that the hardware responsibility and accountability were covered by documented processes," said Woodward. "The exceptional manner in which you have carried out your responsibilities exceeds normal requirements and demonstrates pride in your work."

Fasula joined NASA in 1998 as a procurement analyst. At the time of the award, he served as the contracting officer for the Space Flight Operations Contract (SFOC). In July, he accepted a position as a procurement analyst with the NASA, Office of Inspector General.

Fasula graduated from Rockford West High School, Rockford, Ill., in 1977. After high school, he went on to receive a bachelor degree from Western Illinois University in 1989. He earned a master's degree in government administration in 1996 from the University of Maryland, College Park, Md.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**George H. Diller, NASA**  
**Kodiak Launch Complex**  
**907/868-1574**

**Sept. 28, 2001**

**Julie Andrews, Lockheed Martin**  
**Buskin River Inn**  
**907/487-2700**

**KSC Release No. 112-01**

**Note to Editors/News Directors:**

## **LAUNCH OF KODIAK STAR FROM ALASKA PLANNED FOR SATURDAY, SEPT. 29**

The launch of Kodiak Star for NASA and the DoD Space Test Program aboard a Lockheed Martin Athena 1 launch vehicle is scheduled for Saturday, Sept. 29. There is a three-hour launch window extending from 5:30 - 8:30 p.m.

The effect of solar flare activity is being monitored. It continues a gradual decline and may be within the acceptable limit at some time during the launch window. As of late Thursday, the weather forecast for Saturday was favorable for a launch attempt with approximately a 15% chance of weather criteria violation. However, after solar flare activity was factored in, the chance of not meeting the criteria was 60%.

Launch coverage on NASA Television will begin at 4 p.m. ADT (8 p.m. EDT). NASA Television is found on GE-2, transponder 9 (C band), located at 85 degrees West. In Alaska, the satellite transponder for launch coverage has changed to Galaxy 10, transponder 21 (Ku band), located at 123 degrees West. Audio is also available on the "V" circuits that may accessed directly at 321/867-1220, 1240, 1260, 7135, 4003. Coverage will also be webcast and may be accessed via the NASA Kennedy Space Center home page at [www.ksc.nasa.gov](http://www.ksc.nasa.gov).

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**NASA Contact:**  
**Bruce Buckingham**  
**(321) 867-2468**

**Oct. 12, 2001**

**Boeing Contact:**  
**Ann Beech**  
**(321) 264-8582**

**KSC Release No. 113-01**

## **ISS PROCESSING HIT HIGH IN FY 2001**

Payload processing at KSC hit a record high in the past fiscal year, with eight Space Station components prepared for first flight, a feat not likely to be soon duplicated.

"There has never been a year of activity like the last 12 months," said Dave Bethay, Boeing director of ISS Operations.

The processing utilized every skill in NASA and Boeing concerned with payload processing, including support from the design centers, Marshall Space Flight Center, Huntington Beach, Canoga Park and the program management center in Houston. The year-long undertaking involved hundreds of KSC workers, with the support of thousands across the country. The components - the Z1 truss, the P6 truss, the U.S. Lab Destiny, the Canadian robotic arm, three Multi-Purpose Logistics Modules, and the Joint Airlock Module (named Quest) - underwent final assembly, system level qualification testing, acceptance testing and pre-flight preparations.

"Our payload processing team has once again proven that no challenge is too large or too complex," said Bruce Melnick, Boeing vice president and senior site executive for Florida Operations. "This outstanding achievement would not have been possible without the dedication and professionalism of every member of the team whether they worked in Florida, California, Huntsville or elsewhere. As we move forward with ISS assembly, this team will prove, again and again, how valuable their contribution is to the safety of our astronauts and the Human Space Flight Program."

Requiring the most time for processing were the P6 truss and the Destiny module.

"Both are exceptionally complex with a requirement for very high reliability," said Bethay. "The P6 provides primary power and cooling for the Station and includes the large solar wings. Destiny is the centerpiece of the Station with command and control capabilities and a unique laboratory for experiments.

"Yet each component brings something completely new to the program. P6 had the solar array wings and thermal radiators; Destiny is the brains of the station with a one-of-a-kind research facility; the Canadian Robotic arm is a wonder of new technology; and Quest needed to provide access to space for both U.S. and Russian crew members utilizing their own space suits."

The MPLMs presented their own challenge. They were built to deliver racks of equipment, supplies and experiments to the Space Station. On orbit, the racks can be floated through the MPLM and onto the Station, and vice versa. On Earth, a different method is needed. To easily move the supplies into and out of the modules, Boeing engineers designed and built

a rack insertion device. Controlled remotely, the device's robot-like arm grasps the racks and moves them into the modules, placing the racks along the module walls.

"Exercising new processes for cargo and MPLM processing was challenging enough; doing two the first time through added to the challenge," said Mark Hutchins, Boeing resupply/return technical lead. "The people made the difference. We're now challenging ourselves. Process improvement initiatives are going full throttle."

At this date, missions targeted for 2002 involve delivery of six elements to the Space Station, including three trusses and the Mobile Base System that joins the Canadarm2 as part of the Mobile Servicing System. Challenges for the processing team, according to Hutchins, range from use of late-access equipment in the Payload Changeout Room at the pad, and a series of tests on a Shuttle convoy vehicle assuring it works properly to protect cold science returning from the Space Station.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Tracy Young**  
**Kennedy Space Center**  
**(321) 867-9284**

**Oct. 30, 2001**

**KSC Release No. 114-01**

## **SEVENTEEN KSC WORKERS HONORED BY NASA ASTRONAUTS**

Seventeen Kennedy Space Center (KSC) employees were recently presented with NASA's prestigious Silver Snoopy Award for service to the Space Shuttle astronauts.

NASA Civil Service employees honored were Samuel G. Haddad, Spaceport Engineering and Technology Directorate; Michael E. Haddad, International Space Station/Payload Processing Directorate; John T. Halsema, External Relations and Business Development Directorate; Emery W. Lamar, Space Shuttle Processing Directorate; Richard A. Mizell, Space Shuttle Processing Directorate; Ronald B. Morris, International Space Station/Payload Processing Directorate; Henry Schwarz, Space Shuttle Processing Directorate; Diane Stees, Space Shuttle Processing Directorate, and Lorene B. Williams, Administration Office.

Contractor employees honored were Edward G. Baglioni, Ellen L. Brown, William D. Jones, Stephanie Hopper, and James D. Stewart, Boeing - Human Space Flight and Exploration; Andrew J. Knight, Michael J. Olejarski and Karen C. Pardy, United Space Alliance.

Awards were presented at KSC in October 2001. Astronaut Susan Helms presented awards to Halsema, Baglioni, Brown, Jones, and Hopper. Astronaut Jim Voss presented awards to Knight, Olejarski, Pardy, Stewart and Williams. Astronaut Janice Voss presented awards to Sam Haddad, Mike Haddad, Lamar, Mizell, Morris, Schwarz, and Stees.

Snoopy, of the comic strip "Peanuts," has been the unofficial mascot of NASA's astronaut corps since the earliest days of human space flight. The Silver Snoopy Award was created by the astronauts to honor persons who contribute most to the safety and success of human space flight.

The award is presented to no more than one percent of the space center's work force each year. Recipients are given a silver pin depicting the famous beagle wearing a space suit. All the pins have flown on a previous Space Shuttle mission. The awardees also received a framed certificate and a congratulatory letter signed by the presenting astronaut.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Bruce Buckingham**  
**Kennedy Space Center**  
**(321) 867-2468**

**Oct. 31, 2001**

**KSC Release No. 115-01**

## **SHUTTLE ENDEAVOUR ROLLS OUT TO LAUNCH PAD**

Space Shuttle Endeavour rolled out from the Vehicle Assembly Building (VAB) to Launch Pad 39B early today to begin final preparations for the launch of NASA's STS-108 mission to the International Space Station (ISS), scheduled for Nov. 29.

The crawler-transporter carrying the orbiter Endeavour, the twin Solid Rocket Boosters (SRBs) and the External Tank (ET) departed the VAB early this morning and was hard down on the pad by mid-morning.

Endeavour spent the past week in the VAB undergoing space vehicle interface tests after the Orbiter was mated to the SRB/ET assembly stacked on the Mobile Launcher Platform.

Space Shuttle Endeavour remains on schedule for the 12th mission to the ISS, which will feature the third on-board crew exchange, with Cosmonaut Yury Onufrienko and Astronauts Carl Walz and Daniel Bursch replacing the Expedition 3 crew of Astronaut Frank Culbertson and Cosmonauts Mikhail Tyurin and Vladimir Dezhurov after their four-month stay on orbit.

Endeavour, making its 17th space flight, also will deliver more experiments and supplies aboard the Raffaello Multi Purpose Logistics Module and will carry 6,000 American flags to be presented to the families of the victims of the Sept. 11 terrorist attacks.

STS-108 is commanded by Dominic L. Gorie. Crew members are Pilot Mark E. Kelly and Mission Specialists Linda M. Godwin and Daniel M. Tani.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Tracy Young**  
**Kennedy Space Center**  
**(321) 867-9284**

**Oct. 31, 2001**

**KSC Release No. 116-01**

## **ROBERT F. SPEECE HONORED FOR ROLE IN SPACE PROGRAM**

Robert F. Speece, a former resident of Iuka, Miss., was recently presented the NASA Space Flight Awareness Flight Safety Award.

The award is presented to honor employees who make significant contributions or improvements to human flight safety.

Speece was recognized for discovering debris on flight hardware during preparations for the mating of the Space Shuttle orbiter to the external tank for Space Shuttle mission STS-101, preventing a possible safety mishap.

The award was presented by Frederick Gregory, former astronaut and NASA Associate Administrator for safety and mission assurance in August 2001 at the Kennedy Space Center (KSC).

"Your discovery is a tribute to the thoroughness and attention to detail that you bring to each task performed," said Gregory. "I commend you for your personal interest in your work and the personal commitment you have made to America's space program."

At KSC, Speece is employed by NASA as an engineer, aerospace technologist, in the external tank and solid rocket booster mechanical systems section of the shuttle processing directorate. He is responsible for the checkout, assembly, and closeout inspections of the Space Shuttle external tank and solid rocket booster systems. He joined NASA in 1987.

Speece began his career at KSC in 1979 as a fluid systems design engineer for Planning Research Corp. In 1981, he joined the Martin Marietta Corp. as an external tank thermal protection system engineer where he was instrumental in the safe and successful launch of STS-1, the first space shuttle mission. He transitioned to Lockheed Space Operations Co. in 1984 where he served as the lead engineer for the Space Shuttle ice/debris inspection team.

Speece graduated in 1975 from Iuka High School. After high school, he went on to receive a bachelor degree in chemical engineering from the University of Mississippi in 1979. He is the son of Frankie Speece of Iuka.

Speece and his wife, Debbie, currently live in Port St. John, Fla. They have three children, Robbie, 17, Joshua, 15, and Lindsey, 13.

-- end --





**Tracy Young**  
**Kennedy Space Center**  
**(321) 867-9284**

**Nov. 2, 2001**

**KSC Release No. 117-01**

## **FIVE KENNEDY SPACE CENTER SENIOR EXECUTIVES RECEIVE PRESTIGIOUS AWARD**

Five Kennedy Space Center (KSC) senior executives were recently awarded the prestigious Meritorious Executive Presidential rank award.

The award is presented each year to a small group of career senior executives within the federal government who demonstrate strength in leadership and a personal commitment to excellence in public service.

KSC recipients include Roy D. Bridges, Jr., Center Director; Larry C. Ellis, Acting Deputy Director, International Space Station and Payload Processing; James E. Hattaway, Jr., Director, Procurement Office; David A. King, Director, Shuttle Processing; John J. (Tip) Talone, Jr., Director, International Space Station and Payload Processing.

Awardees were nominated by NASA Administrator Daniel S. Goldin. Their nominations were reviewed and evaluated by a panel of private citizens and approved by the president.

The Meritorious Executive Presidential rank award is presented to only 5 percent of government career Senior Executive Service (SES) members each year.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Bruce Buckingham**  
Kennedy Space Center  
(321) 867-2468

Nov. 5, 2001

**KSC Release No. 119-01**

**Note to Editors:**

## **MEDIA OPPORTUNITIES WITH STS-108 CREW SET FOR THIS WEEK'S COUNTDOWN TEST**

The crew of Space Shuttle mission STS-108, the 107th mission in the history of Shuttle flight, will be at Kennedy Space Center this week for the Terminal Countdown Demonstration Test (TCDT).

The following events are available to media.

**Tuesday, Nov. 6** - To cover the arrival of the STS-108 and Expedition Four crews, media must be at the KSC Press Site by 3 p.m. Crew arrival will occur later in the afternoon and will not be carried live on NASA TV.

**Thursday, Nov. 8** -- Media representatives have an opportunity to speak informally with and photograph the entire STS-108 crew. Media interested in participating in this question-and-answer session should be at the KSC Press Site by 11:30 a.m. This is a local media event only. No live NASA TV coverage is planned.

The TCDT is held at KSC prior to each Space Shuttle flight, providing flight crews an opportunity to participate in simulated countdown activities. The TCDT ends with a mock launch countdown culminating in a simulated main engine cut-off. The astronauts also spend time undergoing emergency egress training exercises at the pad and have opportunities to view and inspect the payloads in the orbiter's payload bay.

Following TCDT activities, the crew will depart KSC for final mission preparations in Houston, Texas.

Mission STS-108 is targeted for launch from Kennedy Space Center on Nov. 29. The flight is scheduled to last about 11 days and will feature Endeavour docking with the International Space Station (ISS). In Endeavour's payload bay will be the Raffaello Multi-Purpose Logistics Module.

Crew members for mission STS-108 are Commander Dominic Gorie; Pilot Mark Kelly; and Mission Specialists Linda Godwin (MS1) and Daniel Tani (MS2). The Expedition Four members being flown to the International Space Station are Carl Walz (MS3), Yuri Onufrienko (MS4) and Daniel Bursch (MS5).

**NOTE:** Media are reminded that previously issued annual badges are no longer valid. Media without newly issued credentials who desire to cover TCDT events should contact the KSC Press Site for instructions.

-- end --

[news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Tracy Young**  
**Kennedy Space Center**  
**(321) 867-9284**

**Nov. 7, 2001**

**KSC Release No. 121-01**

## **JOHN J. TALONE, JR., RECEIVES PRESTIGIOUS AWARD**

John J. (Tip) Talone, Jr., a former resident of Knoxville, Tenn., was recently awarded the Meritorious Executive Presidential rank award.

The award is presented each year to a small group of career senior executives within the federal government who have demonstrated exceptional leadership and a personal commitment to excellence in public service.

Talone was nominated for the award by NASA Administrator Daniel S. Goldin. His nomination was reviewed and evaluated by a panel of private citizens and approved by the president.

Talone serves as the Director of the International Space Station/Payloads Processing Directorate at Kennedy Space Center (KSC). He is responsible for the management of launch site support, ground processing, and integration of space shuttle payloads, international space station (ISS) assembly components, and payload carriers.

Talone began his NASA career in 1965 and has held several key managerial positions. He has served as Shuttle flow director for the Space Shuttles Columbia, Discovery, and Endeavour and as special assistant to the Director of KSC.

Talone was appointed a member of the Senior Executive Service in 1997 and has served in his current position since May 2000.

Talone is a graduate of Knoxville Catholic High School, Knoxville, Tenn. After high school, he went on to receive a bachelor degree in industrial engineering from the University of Tennessee, Knoxville, Tenn., in 1964. He is the son of Geraldine Johnson of Oak Ridge, Tenn.

Talone, his wife Cindy, and her three children, Audra, Phillip, and Sarah reside in Indialantic, Fla.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Bruce Buckingham**  
**Kennedy Space Center**  
**(321) 867-2468**

**Nov. 7, 2001**

**KSC Release No. 122-01**

## **COMBINED FEDERAL CAMPAIGN CONTRIBUTIONS SET RECORD AT KSC**

NASA employees at the John F. Kennedy Space Center, Florida, set an all time giving record during their recently concluded Combined Federal Campaign. Eighty-one percent of the Federal employees at KSC generously contributed more than \$300,000, far exceeding the Campaign goal of \$250,000. More than a third of the contributions, \$105,000, will be distributed to local charities within Brevard County.

The Combined Federal Campaign is the annual solicitation of employees in the Federal workplace on behalf of local, national and international charitable organizations. This year's list of charitable organizations included many involved in disaster relief operations.

KSC Director Roy D. Bridges Jr., said, "Once again, our KSC team rose to the occasion, and in the midst of the tragedy of September 11, lived up to this year's campaign slogan: 'United We Care!' "

Campaign Chairperson Todd Arnold, of the International Space Station/Payload Processing Directorate, was beaming with joy as the final tally came in. "This was the most outstanding campaign in the history of the program," Arnold said. "Many lives will be touched by the generosity of the KSC workforce."

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Bruce Buckingham**  
**Kennedy Space Center**  
**(321) 867-2468**

**Nov. 13, 2001**

**KSC Release No. 123-01**

## **NASA KSC RECEIVES PRESTIGIOUS COVEY AWARD**

NASA's Kennedy Space Center was awarded the prestigious Franklin Covey Team Award for Synergy and Impact for 2001. KSC Director Roy D. Bridges and several members of the KSC Change Leaders Network, attended the Franklin Covey 8th Annual International Symposium in Salt Lake City, Utah, in October, to receive the award.

KSC was among only six organizations worldwide to receive the award in the category. The Team Award for Synergy and Impact was awarded to KSC for its "outstanding effectiveness in the workplace and community," according to Bob Whitman, CEO of FranklinCovey.

In 1997, under the leadership of Bridges, a Change Leaders Network (CLN) was formed consisting of more than 35 employee leaders from the Center's NASA civil service workforce, as part of the new strategic direction, "KSC 2020" Vision Plan. The CLN members were appointed by the Center Director and their organizational directors, trained and certified as facilitators in the acclaimed Covey workshop, "The 7 Habits of Highly Effective People."

"The Change Leaders Network is a vital team of 'change agents' that is helping our Center move toward our vision as a Spaceport Technology Center," Bridges said. The CLN has expanded to over 60 members and now includes CLN alumni. Bridges envisions the group to be as large as 300 to facilitate KSC's strategic future.

"It is an honor to be recognized by a world-renowned organization such as Franklin Covey, Bridges acknowledged. "It is a reflection of the dedication and the hard work of our entire KSC family."

One of the goals of the "KSC 2020" Vision Plan was to train 1,100 KSC employees in the "7 Habits" with the intention of helping the employees prepare for large-scale change associated with the new vision. The success of this collaborative effort has resulted in sustained momentum in the change initiative at KSC and more effective use of the workforce to compete and thrive in competitive industry challenges. Among other services provided by the CLN are: change facilitation, peer coaching, strategic communications, and teambuilding.

The Change Leaders Network goals are to be effective facilitators, communicators and role models for KSC's strategic change leadership activities within and among organizations across the Center. The Network encourages, educates and facilitates the acceptance and practice of positive change to influence and lead others towards a more rewarding personal and professional life.

-- end --

<http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Bruce Buckingham**  
**Kennedy Space Center**  
**(321) 867-2468**

**Nov. 13, 2001**

**KSC Release No. 124-01**

## **NASA/KSC CENTER FOR SPACE EDUCATION BOOK GRANT TO BENEFIT AREA LIBRARIES**

NASA's Center for Space Education at the Kennedy Space Center Visitor Center has awarded a collection of aerospace and science books to the library systems of Brevard, Orange and Volusia Counties. KSC Director Roy Bridges and Pam Biegert, chief of KSC's Education Programs and University Research Office, presented the books to the library directors during a special presentation at the Center for Space Education on Nov. 6.

The books were awarded as part of NASA's Partnering Librarians and NASA (PLAN) program. The PLAN program goal is to help libraries update the information they have regarding NASA's Space Program, science and technology. The Center for Space Education used a \$25,000 grant from NASA to purchase more than 30 books for each of the 50 libraries.

"As more students use the library system to do their research for classes, we felt that it was important that the libraries be knowledgeable of NASA's programs and have up-to-date materials for their use," commented Biegert.

"We are very excited to be receiving these books that will fulfill so many needs for our patrons and especially those students who have an interest in space exploration and our space program," said Catherine Schweinsberg, director of Brevard County Libraries.

According to Steve Dutczak, lead for K-12 Education Services at the Center for Space Education, the PLAN program evolved from a similar education workshop for teachers that has been in place at KSC for more than 40 years.

Directors and librarians from the three counties' libraries were invited to attend five-day workshops during the summer of 2000. At the seminars, the librarians were provided with useful information and materials about KSC and NASA. They took this information back to their libraries and used the materials as exhibits for the general public.

When the grant money became available, the librarians who attended these seminars were canvassed as to what aerospace books were needed to update the libraries. Some of the titles include, The History of NASA, John Glenn's Return to Space, NASA Space Vehicles: Capsules, Shuttles and Space Stations, The International Space Station and Into the Final Frontier: A History of Manned Spaceflight.

Kathryn Robinson, director of the Orange County Library System, commented, "The partnership between Orange County Library System and the Kennedy Space Center, consisting of a one week training program for librarians and the donation of library materials, has enriched library programs and has enhanced our ability to make science accessible and interesting to children and young adults."

"The education workshop was one of the best I've experienced. The generosity of the staff

and their accessibility and knowledge was an overwhelming contribution to our library system," said Mike Knievel, director of the Volusia County Public Library. "Families moving into Volusia County are looking for quality schools and education. The contribution of these aerospace and science books is outstanding."

Biegert added, "Educating the librarians through this program has proven to be very beneficial in our education and outreach efforts and they have become great assets in providing resources to the students and public."

Bridges, during the presentation, said, "Educating the future engineers, scientists and leaders of tomorrow is a big part of our job. We need to find other good ideas like this."

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Bruce Buckingham**  
Kennedy Space Center  
(321) 867-2468

Nov. 14, 2001

**Dennis Armstrong**  
Kennedy Space Center, Fla.  
321-867-2468

**KSC Release No. 125-01**

## **KENNEDY SPACE CENTER HOME PAGE UNDERGOES TRANSFORMATION**

Kennedy Space Center's public home page has wrapped up an extensive redesign that will provide a more visitor-friendly interface while making it easier to locate information. The new site premieres today.

Visitor input was a driving factor in the look and functionality of the new design. Since May 2000, the last time the site underwent a design change, hundreds of comments were submitted via an online survey form. Patterns began to emerge and KSC Web managers designed the new home page using these suggestions as a guide. The result is an organized, compact page that serves as a portal to other parts of the site. The primary links are arrayed around a large round graphic that changes each time the page is reloaded. Upcoming launch and landing information is provided at a glance in the upper left corner. With about a third fewer links, there is more room for a larger font and additional news content.

Information contained on the site was divided into several categories, all of which have their own new portal pages created to match the new home page design scheme. Like the home page, each of these new pages has a prominent navigation bar, informative link descriptions and colorful graphics.

"We've had teams of subject-matter experts and Web developers working on this new design and layout for more than nine months," said Dennis Armstrong, KSC's public Web site manager. "Our new pages load quickly, navigation is greatly improved, and we have added some great new content and functionality. We appreciate the time that so many of our site visitors took to tell us what they thought."

KSC is also introducing a new multimedia gallery, through which the Center's extensive still photo archives can be searched by a wide variety of methods. Web managers hope to add the capability to search for video and audio files in the future.

The Kennedy Space Center Web site, launched in 1993, has traditionally focused on KSC-specific information such as Space Shuttle missions, Space Station processing, and expendable launch vehicles. Recently, however, several new links to other online NASA resources have also been added. In the first five months of 2001, the KSC Web site received over 200 million hits and three million unique visitors. The KSC home page is located at <http://www.ksc.nasa.gov>.

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**George Diller**  
Kennedy Space Center  
(321) 867-2468

**Nov. 15, 2001**

**James Hartsfield**  
Johnson Space Center  
281/483-5111

**KSC Release No. 126-01**

## **ENDEAVOUR LAUNCH TO COMPLETE RECORD YEAR IN SPACE**

The Flight Readiness Review for STS-108 was held today at the Kennedy Space Center. At its conclusion, the Space Shuttle Endeavour was given a go to proceed toward launch on Nov. 29. The mission will take a fourth crew to the International Space Station, finishing a record-breaking year of missions that completed the first phase of the station's orbital assembly.

"In the past 12 months, we've completed some of the most challenging space flights in history, setting records for the number of space walks that have been conducted and the amount of hardware we've assembled in orbit," Space Shuttle Program Manager Ron Dittmore said. "In the next year those challenges will continue with missions just as complex to service the Hubble Space Telescope and expand the station. The team continues to excel safely and successfully. Endeavour is ready to fly."

Endeavour will be commanded by Dom Gorie (Capt., USN). Mark Kelly (Lt. Cdr., USN) will serve as Pilot, and mission specialists will be Linda Godwin and Dan Tani. Traveling to the station aboard Endeavour to begin a five-month stay will be Expedition Four Commander Yury Onufrienko and flight engineers Carl Walz and Dan Bursch. Coming home on Endeavour after almost four months on the station will be Expedition Three Commander Frank Culbertson, Pilot Vladimir Dezhurov and Flight Engineer Mikhail Tyurin.

Endeavour will carry an Italian-built logistics module named Raffaello to the station loaded with supplies and experiments. During the shuttle's stay at the orbiting complex, one space walk is planned by Godwin and Tani to add insulation to mechanisms that rotate the station's solar arrays.

Endeavour is planned to land Dec. 10 at the Kennedy Space Center.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Kirsten Larson**  
Headquarters, Washington, DC  
(Phone: 202/358-0243)

**Nov. 16, 2001**

**George H. Diller**  
Kennedy Space Center  
321/867-2468

**James Hartsfield**  
Johnson Space Center  
281/483-5111

**KSC Release No. 126-01, revised**

## **ENDEAVOUR LAUNCH TO COMPLETE RECORD YEAR IN SPACE**

The Space Shuttle Endeavour is set to launch Nov. 29 at approximately 7:42 p.m. EST on a mission that will take a fourth crew to the International Space Station, finishing a record-breaking year of missions that completed the first phase of the station's orbital assembly.

"In the past 12 months, we've completed some of the most challenging space flights in history, setting records for the number of space walks that have been conducted and the amount of hardware we've assembled in orbit," Space Shuttle Program Manager Ron Dittemore said. "In the next year those challenges will continue with missions just as complex to service the Hubble Space Telescope and expand the station. The team continues to excel safely and successfully. Endeavour is ready to fly."

Endeavour will be commanded by Dom Gorie (Capt., USN). Mark Kelly (Lt. Cdr., USN) will serve as Pilot, and mission specialists will be Linda Godwin (Ph.D.) and Dan Tani. Traveling to the station aboard Endeavour to begin a five-month stay will be Expedition Four Commander Yury Onufrienko and flight engineers Carl Walz (Col., USAF) and Dan Bursch (Capt. USN). Coming home on Endeavour after almost four months on the station will be Expedition Three Commander Frank Culbertson, Pilot Vladimir Dezhurov and Flight Engineer Mikhail Tyurin.

Endeavour will carry an Italian-built logistics module named Raffaello to the station loaded with supplies and experiments. During the shuttle's stay at the orbiting complex, one space walk is planned by Godwin and Tani to add insulation to mechanisms that rotate the station's solar arrays.

Endeavour is planned to land Dec. 10 at 3:16 p.m. EST at the Kennedy Space Center.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Tracy Young**  
**Kennedy Space Center**  
**(321) 867-9284**

**Nov. 20, 2001**

**KSC Release No. 127-01**

## **SAMUEL G. HADDAD HONORED BY NASA ASTRONAUT**

Samuel G. Haddad, a native of Garfield Heights, Ohio, was recently presented with NASA's prestigious Silver Snoopy Award for service to the Space Shuttle astronauts.

Astronaut Janice Voss presented the award to Haddad in October at Kennedy Space Center (KSC). Haddad joined NASA in 1974 and is responsible for labor relations at KSC. He coordinates with the Department of Labor, National Labor Relations Board, and the Federal Mediation service and advises KSC senior management on all matters maintaining to industry relations.

Haddad was honored for his work in resolving a labor issue between the Space Shuttle processing contractor, United Space Alliance (USA), and the International Association of Machinists, consequently preventing a strike and an impact on space shuttle processing.

"Though you never set foot near a Space Shuttle element, you were instrumental in assuring shuttle safety through your negotiating and communication skills," said Voss. "Your personal efforts were one element in resolving a difficult labor management conflict. The exceptional manner in which you have carried out your responsibilities exceeds normal requirements and demonstrates pride in your work."

Haddad graduated from Titusville High School, Titusville, Fla., in 1972. After high school, he went on to receive a bachelor degree in business administration from Florida Technological University, Orlando, Fla., in 1978. He earned a master's degree in business administration in 1983 from the Florida Institute of Technology, Melbourne, Fla.

Haddad, and his wife, Eliana, currently live in Titusville, Fla. They have three children, Eliana, 17, Sammy, 16, and Michael, 13. His parents Fredrick, and Frances Haddad, also reside in Titusville.

Haddad's other awards include the KSC Center Director's Gold Quality Dollar Award, numerous performance awards, certificates of appreciation, and group achievement awards.

Snoopy, of the comic strip "Peanuts," has been the unofficial mascot of NASA's astronaut corps since the earliest days of human space flight. The Silver Snoopy Award was created by the astronauts to honor persons who contribute most to the safety and success of human space flight.

The award is presented to no more than 1 percent of the space center's work force each year. Recipients are given a silver pin depicting the famous beagle wearing a space suit. All the pins have flown on a previous Space Shuttle mission. The awardees also receive a framed certificate and a congratulatory letter signed by the presenting astronaut.

-- end --

releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Tracy Young**  
**Kennedy Space Center**  
**(321) 867-9284**

**Nov. 20, 2001**

**KSC Release No. 128-01**

## **MICHAEL E. HADDAD HONORED BY NASA ASTRONAUT**

Michael E. Haddad, a native of Garfield Heights, Ohio, was recently presented with NASA's prestigious Silver Snoopy Award for service to the Space Shuttle astronauts.

Astronaut Janice Voss presented the award to Haddad in October at Kennedy Space Center (KSC). Haddad joined NASA in 1979 and is responsible for the review and approval of procedures used for preflight testing of extravehicular (EVA) tasks. He participates in the preflight EVA tasks, which are the same tasks performed by the astronauts during space walks, and proposes solutions to any problems that arise.

Haddad was honored for his role in the development and implementation of test aids used in the on-orbit constraints tests.

"For over five years, you have been working International Space Station (ISS) fit checks and crew interface verifications to ensure that those interfaces work and work easily," said Voss. "You understand the importance of precision and perfection required in crew interfaces and are recognized as one who will go the extra mile to achieve these goals."

Throughout his career, Haddad has received numerous performance, achievement, and appreciation awards. He is a member of the American Institute of Aeronautics and Astronautics (AIAA) and the American Society of Mechanical Engineers (ASME).

Haddad graduated from Titusville High School, Titusville, Fla., in 1976. He earned a bachelor degree in mechanical and aerospace engineering in 1982, and a master's degree in industrial engineering and management systems in 1994, both from the University of Central Florida, Orlando, Fla.

Haddad lives in Cocoa Beach, Fla. He is engaged to Kathy Esquivel of Titusville, Fla. They will reside in Titusville, along with her two children, Chad, 15, and Casey, 12. His parents, Fredrick, and Frances Haddad, live in Titusville.

Snoopy, of the comic strip "Peanuts," has been the unofficial mascot of NASA's astronaut corps since the earliest days of human space flight. The Silver Snoopy Award was created by the astronauts to honor persons who contribute most to the safety and success of human space flight.

The award is presented to no more than 1 percent of the space center's work force each year. Recipients are given a silver pin depicting the famous beagle wearing a space suit. All the pins have flown on a previous Space Shuttle mission. The awardees also receive a framed certificate and a congratulatory letter signed by the presenting astronaut.

-- end --

[news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



Nov. 19, 2001

**David E. Steitz**  
NASA Headquarters  
(202) 358-1730

**Dolores Beasley**  
NASA Headquarters  
(202) 358-1753

**George H. Diller**  
Kennedy Space Center  
(321) 867-2468

**Master Sgt. Lloyd Conley**  
30th Space Wing Public Affairs  
(805) 606-3595

**Susan M. Hendrix**  
Goddard Space Flight Center  
(301) 286-7745

**Kristi Marren**  
JHU Applied Physics Laboratory  
(240) 228-6268

**Alan Buis**  
Jet Propulsion Laboratory  
(818) 354-0474

**Larry P. Salazar**  
The Boeing Company  
(714) 372-4734

**KSC Release No. 129-01**

**Note to Editors/News Directors:**

## **JASON/TIMED READY FOR LAUNCH ON DELTA II ROCKET DEC. 7**

The launch of the Jason 1 and TIMED satellites aboard a Boeing Delta II rocket is scheduled to occur on Friday, Dec. 7 from NASA's Space Launch Complex 2 at Vandenberg Air Force Base, Calif. The 20-minute launch window extends from 6:58 - 7:18 a.m. PST.

Jason 1 is a joint U.S./French oceanography mission. The spacecraft will build on the heritage of the venerable Topex/Poseidon satellite in continuing observations of the global climate interaction occurring between the sea and the atmosphere. Jason 1 will monitor world ocean circulation, study interactions of the oceans and atmosphere, improve climate predictions and observe events like El Nino. The project is managed by the Jet Propulsion Laboratory for NASA and the French space agency.

NASA's TIMED spacecraft will conduct the first global study of a critical region of Earth's atmosphere, known as the mesosphere, lower thermosphere and ionosphere. The two-year mission will study the influences of the sun as well as humans on this least explored and understood region located between 40 - 110 miles (60 - 180 kilometers) above the Earth's surface. Data provided by TIMED will improve our understanding of this "gateway region" and its effects on satellites, communications, and spacecraft re-entering the Earth's atmosphere. TIMED is a NASA satellite managed by the Goddard Space Flight Center.

### **ACCREDITATION**

U.S. news media desiring accreditation for the launch of Jason/TIMED should fax their request on news organization letterhead to:

NASA Vandenberg Resident Office  
Vandenberg Air Force Base, Calif.  
Attention: George Diller

FAX: 805/605-3380

Foreign news media requesting accreditation must also fax a request not later than Nov. 30 to:

30th Space Wing Public Affairs Office  
Vandenberg Air Force Base, Calif.  
Attention: Master Sgt. Lloyd Conley  
FAX: 805/606-8303

For further information on NASA launch accreditation procedures call 321/867-2468. For foreign media, call the 30th Space Wing Public Affairs Office at 805/606-3595.

### **PRELAUNCH PRESS CONFERENCE**

The Jason/TIMED prelaunch press conference will be held on Thursday, Dec. 6, at 11 a.m. PST in the main conference room of the NASA Vandenberg Resident Office, Building 840, Vandenberg Air Force Base, Calif. Participants will be:

Chuck Dovale, NASA Launch Manager  
Kennedy Space Center

Joy Bryant, Delta II Mission Director  
The Boeing Company

Bruce Campbell, TIMED Project Manager  
NASA Goddard Space Flight Center

Gary Kuntzmann, Jason 1 Project Manager  
Jet Propulsion Laboratory

The launch weather officer from the 30th Weather Squadron at Vandenberg Air Force Base will also participate. Two-way question and answer capability will be available from NASA field centers including Kennedy Space Center, Goddard Space Flight Center, Jet Propulsion Laboratory and NASA Headquarters.

Media desiring to cover the prelaunch press conference should meet at the south gate of Vandenberg Air Force Base on California State Road 246 at 10:30 a.m. They will be escorted to the NASA Vandenberg Resident Office.

### **REMOTE CAMERAS**

Following the prelaunch press conference, media desiring to establish sound-activated remote cameras at the launch pad will be escorted to Space Launch Complex 2. Departure from the south gate of Vandenberg Air Force Base on California State Road 246 will be at noon on Thursday, Dec. 6.

### **TOWER ROLLBACK PHOTO OPPORTUNITY**

The night before launch, Dec. 6, there will be a photo opportunity at Space Launch Complex 2 for news media to witness rollback of the mobile service tower from around the Delta II launch vehicle.

Media desiring to participate should so indicate in their request for accreditation since attendance is limited for security and safety reasons.

Those attending should be at the Vandenberg Air Force Base main gate at 9 p.m.

### **LAUNCH DAY PRESS COVERAGE**

On launch day, Dec. 7, media covering the launch of Jason/TIMED should be at the main gate located on California State Road 1 at 5:30 a.m. to be escorted to the press site located on north Vandenberg Air Force Base. After launch, media will be escorted back to the main gate. A post-launch press conference will not be held.

### **NASA TELEVISION, VOICE "V" CIRCUIT COVERAGE, WEBCAST**

NASA Television is being coordinated for coverage of STS-108 and Jason/TIMED. The prelaunch news conference will be carried starting at 11 a.m. PST on Thursday, Dec. 6. On launch day, Dec. 7, NASA TV coverage of the countdown will begin at 5:50 a.m. PST following STS-108 astronaut wake-up activities. Coverage will conclude after Jason/TIMED spacecraft separation events have occurred. During the extended coast phase between the separation of Jason and TIMED, STS-108 on-orbit activities will be covered during a 45-minute interim period.

NASA Television is carried on GE-2, transponder 9C located at 85 degrees West longitude. Audio only will be available on the "V" circuits that may be reached by dialing 321/867-1220, 1240, 1260, or 7135.

A webcast of the launch will also be available on the NASA Kennedy Space Center home page at [www.ksc.nasa.gov](http://www.ksc.nasa.gov).

The Jason/TIMED News Center at the NASA Vandenberg Resident Office will be staffed beginning Tuesday, Dec. 4, and may be reached at 805/605-3051. A recorded status report will also be available starting at that time by dialing 805/734-2693.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Bruce Buckingham**  
**Kennedy Space Center**  
**(321) 867-2468**

**Nov. 19, 2001**

**KSC Release No. 130-01**

**Note to Editors/News Directors:**

## **KSC BADGING REQUIREMENTS AND NEWS CENTER OPERATING HOURS SET FOR STS-108 LAUNCH ACTIVITIES**

News media badging requirements and operating hours for KSC's News Center have been established for the launch of the Space Shuttle Endeavour on mission STS-108.

Media are reminded that the earlier distributed annual badges are no longer valid. Media must request current credentials in writing via fax to the KSC News Room (321-867-2692) on the letterhead of their current affiliation. The request must include name (as it appears on drivers license or passport), social security number, date-of-birth, valid address (no P.O. box), and phone number. Foreign journalists must submit their requests one week in advance of the events.

News media representatives with proper authorization may obtain STS-108 mission credentials at the Pass and Identification Building (PIDs) on State Road 3 (south of KSC) on Merritt Island during published times. Due to heightened security, media will not be permitted to drive into the secured KSC areas. Once badges are distributed, media will be directed to a remote parking location (at KARS 1) and bused to the KSC News Center. Media buses will run between the Press Site and the remote parking location periodically each day through launch time. Be advised, due to heightened security, media should add appropriate time to their schedules.

Credential and badging hours are listed below.

### **KSC News Center office hours for STS-108**

(Times may be adjusted in real time depending on mission events and timelines.)

Sunday, Nov 25..... 1 - 6 p.m.  
Monday, Nov. 26..... 8 a.m. - 4:30 p.m.  
Tuesday, Nov. 27..... 8 a.m. - 7 p.m.  
Wednesday, Nov. 28..... 8 a.m. - 4:30 p.m.  
Thursday, Nov. 29 (Launch Day)... 8 a.m. - 12 midnight  
\*[FOR MISSION DAY SCHEDULES SEE NOTE BELOW]  
Monday, Dec. 10 (Landing day)... 8 a.m. -- 10 p.m.

**\*NOTE:** The KSC News Center will support media questions for overnight and weekend STS-108 Mission Status Briefings and the in-flight crew news conference. Media interested in attending the briefings that occur after normal office hours, **MUST** make their intentions known to the KSC News Room at least 24 hours in advance, in order to secure proper access to the press site. Times of these briefings are available in the NASA TV schedule at: <http://www.spaceflight.nasa.gov/realdata/nasatv/schedule.html>

### **Pass and Identification Hours**

Sunday, Nov. 25 ----- 1 - 2:30 p.m.

Monday, Nov. 26 ----- 8 a.m. - 12 noon  
Tuesday, Nov. 27 ----- 8 a.m. - 2 p.m.  
Wednesday, Nov. 28 ----- 8 a.m. -- 3:30 p.m.  
Thursday, Nov. 29 (Launch day)----- 8 a.m. -- 6:30 p.m.

News media may obtain STS-108 mission credentials at the Pass and Identification Building at Gate 2 on State Road 3, Merritt Island, during the above published times.

**NEWS MEDIA ARE REQUIRED TO BE UNDER PUBLIC AFFAIRS ESCORT AT ALL TIMES WHILE AT KSC. MEDIA ARE NOT PERMITTED AT THE COMPLEX 39 CAFETERIA.**

**NEWS MEDIA ARE ALLOWED AT THE PRESS SITE ONLY WHEN THE KSC NEWS CENTER IS OPEN.**

Status reports and other NASA publications are available on the World Wide Web at:  
<http://www-pao.ksc.nasa.gov/kscpao/kscpao.htm> .

Information about the countdown and mission can be accessed electronically via the Internet at: <http://www-pao.ksc.nasa.gov/kscpao/shuttle/countdown/> and at <http://spaceflight.nasa.gov/>

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Bruce Buckingham**  
**Kennedy Space Center**  
**(321) 867-2468**

**Nov. 20, 2001**

**KSC Release No. 131-01**

**Note to Editors/News Directors:**

## **MISSION STS-108 KSC BRIEFINGS AND EVENTS SET**

News conferences and other events have been set for the launch of the Space Shuttle Endeavour on mission STS-108, the 107th launch in the Shuttle program. The preferred time for launch on Thursday, Nov. 29 is about 7:41 p.m. EST at the opening of a window that extends for about 5 minutes. News conferences and events listed below will be carried live on NASA Television (unless otherwise noted) and originate from the KSC News Center.

The four-member STS-108 crew and the three-member Expedition Four crew will arrive at KSC on Sunday, Nov. 25 at about 4 p.m. EST. News media representatives planning to cover the event must be at the KSC News Center by 3 p.m. (in the event of a possible early crew arrival) to be transported to the Shuttle Landing Facility.

On launch day, the crew will depart their KSC living quarters and be driven to the launch pad at about 3:41 p.m. Due to heightened security, media will not be permitted to attend this event. The event will be covered live on NASA TV.

In addition to daily 9 a.m. countdown status briefings, a prelaunch press conference will be held two days before launch. The full briefing schedule is listed below.

### **STS-108 BRIEFINGS & EVENTS SCHEDULE** *(all times are EST)*

*(All briefings are held inside the KSC Press Site auditorium and will be carried live on NASA TV unless otherwise noted)*

#### **L-4 Days - Sunday, Nov. 25**

**4 p.m. ----- STS-108 Flight Crew Arrival (Live on NASA TV)**

#### **L-3 Days - Monday, Nov. 26**

**(11 p.m. - Launch countdown begins)**

#### **L-2 Days - Tuesday, Nov. 27**

**9 a.m. ----- Countdown Status Briefing**

**Jeff Spaulding**, NASA Test Director

**Todd Corey**, STS-108 Mission Manager

**Ed Priselac**, Shuttle Weather Officer

**4 p.m. ----- Prelaunch News Conference**

**Ron Dittmore**, Shuttle Program Manager, NASA, JSC

**Tommy Holloway**, ISS Program Manager, NASA, JSC

**Dave King**, Director of Shuttle Processing, NASA, KSC

**TBD**, Launch Weather Officer

#### **L-1 Day - Wednesday, Nov. 28**

**9 a.m. ----- Countdown Status Briefing**  
**Pete Nickolenko**, NASA Test Director  
**Todd Corey**, STS-108 Mission Manager  
**Ed Priselac**, Shuttle Weather Officer

**L-0 Day - Thursday, Nov. 29**

*(Tanking begins at about 10:49 a.m.)*

**2:30 p.m. ----- NASA Television live launch programming and commentary begins**

**Launch Day Crew activities:**

**10:30 a.m. -----**Wake up

**11 a.m. -----**Breakfast

**2 p.m. -----**Lunch

**\*2:41 p.m. -----**Crew Photo

**3:11 p.m. -----**Weather briefing

**\*3:21 p.m. -----**Suit-up photo

**\*3:51 p.m. -----**Walkout/depart for pad

**\*4:21 p.m. -----**Arrive at pad

**\*5:39 p.m. -----**Close hatch

**\*7:41 p.m. -----**Launch of Endeavour

(\* Carried live on NASA TV)

**8:45 p.m. ----- Post-launch Press Conference**

**Jim Halsell**, Shuttle Program Launch Integration Manager, KSC

**Mike Leinbach**, Shuttle Launch Director, KSC

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Bruce Buckingham**  
Kennedy Space Center  
(321) 867-2468

**Nov. 26, 2001**

**KSC Release No. 132-01**

## **LAUNCH COUNTDOWN FOR SHUTTLE MISSION STS-108 BEGINS NOV. 26**

NASA will begin the countdown for launch of Space Shuttle Endeavour on mission STS-108 Nov. 26 at 11 p.m. EST at the T-43 hour mark. This mission marks the 12th Shuttle flight to the International Space Station and the 6th Shuttle mission this year. The KSC launch team will conduct the countdown from Firing Room 3 of the Launch Control Center.

The countdown includes 25 hours and 39 minutes of built-in hold time leading to a preferred launch time at about 7:41 p.m. on Nov. 29 with a launch window of about 5 minutes. The exact location of the orbiting International Space Station (ISS) will be determined during the T-9 minute built-in hold. The flight director will at that time determine the exact time of launch.

Mission STS-108 is the 17th flight of the orbiter Endeavour and the 107th flight overall in NASA's Space Shuttle program. STS-108 is scheduled to last about 11 days with a planned KSC landing at about 3:16 p.m. on Dec. 10.

Endeavour rolled into KSC's Orbiter Processing Facility on May 10, 2001, after completing mission STS-100. The orbiter rolled out of OPF bay 1 and into the Vehicle Assemble Building on Oct. 24. While in VAB high bay 1, Endeavour was mated to the external tank and solid rocket boosters. The entire Space Shuttle stack was transferred to Launch Pad 39B on Oct. 31.

STS-108 is the first Utilization Flight (UF1) of the Station program. The STS-108 crew will berth the 4.5-ton Raffaello Multi-Purpose Logistics Module (MPLM) to the International Space Station. Raffaello, which will be attached to the Station using the Shuttle's robot arm, will deliver experiments and hardware to the Station for use by the Expedition Four crew. One spacewalk is planned to perform preventative maintenance on the Beta Gimbal Assembly of one of the Station's solar wings. The three-member Expedition Three ISS crew will return to Earth following more than 118 days in space and will be replaced by the three-member Expedition Four crew.

The STS-108 crew includes Commander Dominic L. Gorie, Pilot Mark E. Kelly, and Mission Specialists Linda M. Godwin and Daniel M. Tani, as well as Expedition Four crew members Yuri Onufrienko, Daniel Bursch and Carl Walz.

(end of general release)

### **COUNTDOWN MILESTONES**

\*all times are Eastern

#### **Launch-3 Days (Monday, November 26)**

Prepare for the start of the STS-108 launch countdown

Perform the call-to-stations (10:30 p.m.)  
Countdown begins at the T-43 hour mark (11 p.m.)  
Begin final vehicle and facility close-outs for launch  
Check out back-up flight systems  
Review flight software stored in mass memory units and display systems  
Load backup flight system software into Endeavour's general purpose computers

### **Launch-2 Days (Tuesday, November 27)**

Remove mid-deck and flight-deck platforms (7 a.m.)  
Activate and test navigational systems (12 p.m.)  
Complete preparation to load power reactant storage and distribution system (1 p.m.)  
Flight deck preliminary inspections complete (3 p.m.)

### **Enter first built-in hold at T-27 hours for duration of 8 hours (3 p.m.)**

Clear launch pad of all non-essential personnel  
Perform test of the vehicle's pyrotechnic initiator controllers (4 p.m.)

### **Resume countdown (7 p.m.)**

Begin operations to load cryogenic reactants into Endeavour's fuel cell storage tanks  
(7 p.m. - 2 a.m.)

### **Launch-1 Day (Wednesday, November 28)**

### **Enter 4-hour built-in hold at T-19 hours (3 a.m.)**

Demate orbiter mid-body umbilical unit (3:30 a.m.)

### **Resume countdown (7 a.m.)**

Final preparations of the Shuttle's three main engines for main propellant tanking and flight  
(7 a.m.)  
Begin filling pad sound suppression system water tank (8:30 a.m.)  
Resume orbiter and ground support equipment close-outs  
Pad sound suppression system water tank filling complete (1:30 p.m.)  
Close out the tail service masts on the mobile launcher platform

### **Enter planned hold at T-11 hours for 12 hours, 49 minutes (3 p.m.)**

Begin star tracker functional checks (3:30 p.m.)  
Activate orbiter's inertial measurement units  
Activate the orbiter's communications systems  
Install film in numerous cameras on the launch pad (5:30 p.m.)  
Flight crew equipment late stow (7:50 p.m.)  
Move Rotating Service Structure (RSS) to the park position (11:30 p.m.)  
Perform ascent switch list  
Fuel cell flow-through purge complete

### **Launch Day (Thursday, November 29)**

### **Resume countdown at T-11 hours (3:49 a.m.)**

Activate the orbiter's fuel cells (5:09 a.m.)  
Clear the blast danger area of all non-essential personnel  
Switch Endeavour's purge air to gaseous nitrogen (5:19 a.m.)

### **Enter planned 2-hour built-in hold at the T-6 hour mark (8:49 a.m.)**

Launch team verifies no violations of launch commit criteria prior to cryogenic loading of the external tank

Clear pad of all personnel

Chilldown of propellant transfer lines (10:19 a.m.)

Begin loading the external tank with about 500,000 gallons of cryogenic propellants (about 10:49 a.m.)

**Resume countdown (10:49 a.m.)**

Complete filling the external tank with its flight load of liquid hydrogen and liquid oxygen propellants (about 1:49 p.m.)

Final Inspection Team proceed to launch pad

**Enter planned 2-hour built-in hold at T-3 hours (1:49 p.m.)**

Perform inertial measurement unit preflight calibration

Align Merritt Island Launch Area (MILA) tracking antennas

Perform open loop test with Eastern Range

Crew departs Operations and Checkout Building for the pad (3:44 p.m.)

**Resume countdown at T-3 hours (3:49 p.m.)**

Complete close-out preparations in the white room

Check cockpit switch configurations

Flight crew begins entry into the orbiter (about 4:24 p.m.)

Astronauts perform air-to-ground voice checks with Launch and Mission Control

Close Endeavour's crew hatch (about 5:39 p.m.)

Begin Eastern Range final network open loop command checks

Perform hatch seal and cabin leak checks

Complete white room close-out

Close-out crew moves to fallback area

Primary ascent guidance data is transferred to the backup flight system

**Enter planned 10-minute hold at T-20 minutes (6:29 p.m.)**

NASA Test Director conducts final launch team briefings

Complete inertial measurement unit preflight alignments

**Resume countdown at T-20 minutes (6:39 p.m.)**

Transition the orbiter's onboard computers to launch configuration

Start fuel cell thermal conditioning

Close orbiter cabin vent valves

Transition backup flight system to launch configuration

**Enter estimated 40-minute hold at T-9 minutes (6:50 p.m.)**

Launch Director, Mission Management Team and NASA Test Director conduct final polls for go/no go to launch

**Resume countdown at T-9 minutes (about 7:32 p.m.)**

Start automatic ground launch sequencer (T-9:00 minutes)

Retract orbiter crew access arm (T-7:30)

Start mission recorders (T-6:15)

Start Auxiliary Power Units (T-5:00)

Arm SRB and ET range safety safe and arm devices (T-5:00)

Start liquid oxygen drainback (T-4:55)

Start orbiter aerosurface profile test (T-3:55)

Start main engine gimbal profile test (T-3:30)

Pressurize liquid oxygen tank (T-2:55)  
 Begin retraction of the gaseous oxygen vent arm (T-2:55)  
 Fuel cells to internal reactants (T-2:35)  
 Pressurize liquid hydrogen tank (T-1:57)  
 Deactivate SRB joint heaters (T-1:00)  
 Orbiter transfers from ground to internal power (T-0:50 seconds)  
 Ground Launch Sequencer go for auto sequence start (T-0:31 seconds)  
 SRB gimbal profile (T-0:21 seconds)  
 Ignition of three Space Shuttle main engines (T-6.6 seconds)  
 SRB ignition and liftoff (T-0)

## SUMMARY OF BUILT-IN HOLDS FOR STS-108

T-TIME	LENGTH OF HOLD	HOLD BEGINS	HOLD ENDS
T-27 hours	4 hours	3 p.m. Tues.	7 p.m. Tues.
T-19 hours	4 hours	3 a.m. Wed.	7 a.m. Wed.
T-11 hours	12 hours, 49 minutes	3 p.m. Wed.	3:49 a.m. Thurs.
T-6 hours	2 hours	8:49 a.m. Thurs.	10:49 a.m. Thurs.
T-3 hours	2 hours	1:49 p.m. Thurs.	3:49 p.m. Thurs.
T-20 minutes	10 minutes	6:29 p.m. Thurs.	6:39 p.m. Thurs.
T-9 minutes	about 40 minutes	6:50 p.m. Thurs.	7:32 p.m. Thurs.

## CREW FOR MISSION STS-108

Commander (CDR): Dominic Gorie  
 Pilot (PLT): Mark Kelly  
 Mission Specialist 1: Linda Godwin  
 Mission Specialist 2: Daniel Tani  
 Expedition Four: Yuri Onufrienko  
 Expedition Four: Daniel Bursch  
 Expedition Four: Carl Walz

## SUMMARY OF STS-108 LAUNCH DAY CREW ACTIVITIES

### Thursday, November 29

10:30 a.m. Crew wake up  
 11 a.m. Breakfast  
 12:30 p.m. Medical checks  
 2:00 p.m. Lunch  
 \*2:45 p.m. Photo opportunity  
 3:14 p.m. Weather Briefing (CDR, PLT, MS2)  
 3:14 p.m. Don flight suits (MS1, MS3, MS4, MS5)  
 \*3:24 p.m. Don flight suits (CDR, PLT, MS2)  
 \*3:44 p.m. Depart for launch pad  
 \*4:24 p.m. Arrive at white room and begin ingress  
 \*5:39 p.m. Close crew hatch  
 \*7:41 p.m. Launch

\* Televised events (times may vary slightly)  
 All times Eastern

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.





**George Diller**  
Kennedy Space Center  
(321) 867-2468

**Dec. 13, 2001**

**KSC Release No. 135-01**

**Note to Editors/News Directors:**

**HUBBLE SPACE TELESCOPE SERVICING MISSION 3B FLIGHT  
HARDWARE AVAILABLE FOR MEDIA VIEWING AT KSC TUESDAY,  
DEC. 18**

The STS-109 flight hardware to be taken into space for maintenance of the Hubble Space Telescope (HST) will be the focus of a news media event at the Kennedy Space Center on Dec. 18. Media will be able to view and photograph the four principal payload carriers and the Advanced Camera for Surveys (ACS) and also interview HST Servicing Mission 3B personnel.

Media representatives will be taken inside the clean room at the Vertical Processing Facility (VPF) facility located in the KSC Industrial Area. Because of the stringent contamination controls in effect for this spacecraft, only small groups of people can be allowed into the clean room for a limited period. Therefore, media should allow additional time for this press opportunity since turns will have to be taken inside the high bay. Mission spokespersons will discuss the STS-109 mission in the VPF conference room while waiting.

Available to the news media for explanation of the flight hardware and for interviews will be:

- § Pam Sullivan, ACS Instrument Manager, NASA Goddard Space Flight Center
- § Frank Cepollina, HST Servicing Project Manager, NASA Goddard Space Flight Center
- § Mark Erickson, ACS Integration Manager, Ball Aerospace
- § Dr. Holland Ford, Principal Investigator, Johns Hopkins University
- § Cliff Lanham, HST Ground Operations Manager, Orbital Sciences Corporation
- § Scott Higginbotham, STS-109 Mission Manager, NASA Kennedy Space Center

Those planning to attend are requested to wear long pants and closed-toe shoes. All will don clean room attire (full bunny suits) before entering the high bay. This will include hood, coveralls, booties, facemask and gloves. No suede, leather, vinyl attire or vinyl accessories will be permitted. To meet the stringent contamination controls in effect, those attending are asked not to wear hairspray, deodorant, cosmetics, jewelry, aftershave or perfume. No food, tobacco, lighters or matches, chewing gum, hair combs, pocket knives, paper or pencils will be permitted inside the clean room. Special writing materials will be furnished.

**For this event, all photography equipment must be precision cleaned in advance of the press opportunity by HST personnel. Equipment to be taken inside the high bay should be delivered to the KSC Gate 2 Pass & Identification building at 8:30 a.m. on Dec. 18. The equipment will then be delivered to the VPF for cleaning and can be picked up upon entering the high bay.**

**Media attending the press opportunity should be at Gate 2 at 12:30 p.m. to be escorted to the VPF. Only camera equipment delivered earlier for cleaning will be allowed.**

Electronic flash photography is permitted. The lighting in the facility is mercury vapor.

Those needing accreditation should contact the NASA News Center at 321/867-2468 by the close of business Monday, Dec. 17. Should the landing of STS-108 be postponed for 24 hours, media will be taken from the KSC Press Site to the VPF 90 minutes after landing. However, camera equipment to be used in the high bay must still be delivered to Gate 2 at 8:30 a.m. for cleaning.

STS-109/HST Servicing Mission 3B, is planned for launch aboard Space Shuttle Columbia from Pad 39-A on Feb. 14, 2002. Landing at KSC occurs Feb. 25 after an 11-day mission.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Bruce Buckingham**  
**Kennedy Space Center**  
**(321) 867-2468**

**Dec. 14, 2001**

**KSC Release No. 136-01**

**Note to Editors:**

## **ENDEAVOUR SCHEDULED TO LAND AT KSC DEC. 17**

The orbiter Endeavour is scheduled to land at Kennedy Space Center (KSC) Monday, Dec. 17, at about 12:55 p.m. EST completing the nearly 12-day STS-108 mission to the International Space Station that launched from KSC Dec. 5, 2001.

Landing at KSC's Shuttle Landing Facility (SLF) is slated to occur on orbit 186 at mission elapsed time 11 days, 19 hours, 36 minutes. The deorbit burn will occur at about 11:52 a.m. EST on Dec. 17. The first two KSC landing opportunities on Dec. 17 are at 12:55 p.m. EST and at 2:31 p.m. EST.

If managers must keep Endeavour in orbit an additional day, two landing opportunities are available on Tuesday, Dec. 18, at KSC at 11:44 a.m. EST and at 1:19 p.m. EST. Landing opportunities also exist at the back-up landing location at Edwards Air Force Base (EAFB), Calif., on both days.

If landing occurs as scheduled, it will be the 57th landing at KSC in the history of the program. Following landing, Endeavour will be towed to the Orbiter Processing Facility for post-mission servicing.

About an hour after touchdown, the crew will be taken to their quarters in the O&C Building, meet with their families and undergo physical examinations. A post-mission press conference with select members of the STS-108 crew is scheduled to occur at the KSC News Center about six hours after touchdown. The Shuttle crew is scheduled to depart for Johnson Space Center the day following landing. The Expedition Three crew will be flown back to JSC two days after landing.

If Endeavour lands at Edwards, an augmented KSC convoy team will be on-site to safe the vehicle, disembark the crew and move the orbiter to the Mate/Demate Device. The turnaround team will be deployed to Edwards by charter aircraft on landing day.

-- end of general release --

### **SLF and KSC Ground Operations**

The Shuttle Landing Facility was built in 1975. It is 300 feet wide and 15,000 feet long with 1,000-foot overruns at each end. The strip runs northwest to southeast and is located about three miles northwest of the 525-foot tall Vehicle Assembly Building.

Once the orbiter is on the ground, safing operations will commence and the flight crew will prepare the vehicle for post-landing operations. The Crew Transport Vehicle (CTV) will be used to assist the crew, allowing them to leave the vehicle and remove their launch and re-entry suits easier and quicker.

The CTV and other KSC landing convoy operations have been "on-call" since the launch of Endeavour. The primary functions of the Space Shuttle recovery convoy are to provide immediate service to the orbiter after landing, assist crew egress, and prepare the orbiter for towing to the Orbiter Processing Facility about three hours following touchdown.

Convoy vehicles are stationed at the SLF's mid-point. About two hours prior to landing, convoy personnel will don SCAPE suits, or Self-Contained Atmospheric Protective Ensemble, and communications checks are made. A warming-up of coolant and purge equipment is conducted and nearly two-dozen convoy vehicles are positioned to move onto the runway as quickly and as safely as possible once the orbiter coasts to a stop. When the vehicle is deemed safe of all potential explosive hazards and toxic gases, the purge and coolant umbilical access vehicles move into position at the rear of the orbiter.

Following purge and coolant operations, flight crew egress preparations will begin and the CTV will be moved into position at the crew access hatch located on the orbiter's port side. A physician will board the Shuttle and conduct a brief preliminary examination of the astronauts. The crew will then make preparations to leave the vehicle.

-- end --

**NOTICE TO EDITORS:** The KSC press site will open for landing activities at 8 a.m. Monday, Dec. 17. Accredited news media wishing to view Endeavour's landing should be at the KSC News Center by 11:30 a.m. for transport to the SLF. STS-108 launch badging requirements and security restrictions for the media remain in effect. Media parking will **NOT** be at KARS Park but at Gate 2 on SR 3. Additional information regarding accreditation, transportation to the KSC Press Site, landing photo opportunities, post-landing press conferences with the STS-108 crew, and News Center operational hours is available by calling the KSC News Center at 321-867-2468.

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Bruce Buckingham**  
Kennedy Space Center  
(321) 867-2468

**Dec. 17, 2001**

**KSC Release No. 137-01**

## **NORTH STATE ROAD 3 OPENS FOR ACCESS TO THE KENNEDY SPACE CENTER VISITOR COMPLEX**

Modifications to the existing Threat Condition Charlie security procedures, put in place at Kennedy Space Center following the Sept. 11 attacks, will be implemented now that Endeavour from mission STS-108 has safely landed at KSC.

Security checks will be re-established at the center's inner gates, Gates 2B and 2C, between the hours of 9:30 a.m. and 6:30 p.m. EST. This change will allow visitors easier access to the Visitor Complex from State Road 3 south of KSC during the Visitor Complex's normal hours of operation.

Employees arriving before 9:30 a.m. or after 6:30 p.m. will find the entry procedures at the outer gates, Gates 2 and 3, unchanged. Hands-on badge checks and vehicle searches will still be conducted routinely. Guests to the center with temporary access badges will still be required to be in the presence of a permanently badged escort at all times.

At the same time, the public will once again be allowed access to Playalinda Beach, managed by the U.S. Park Service, and to the wildlife refuge's visitor center, managed by the U.S. Fish and Wildlife Service, via State Road 402 along the north boundary of KSC. Employees arriving from the north will go through security checks at Gate 4.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Bruce Buckingham**  
Kennedy Space Center  
321/867-2468

**Dec. 18, 2001**

**Eileen Hawley**  
NASA/Johnson Space Center, Houston, TX  
281/483-5111

**KSC Release No. 138-01**

## **STATEMENT BY EXPEDITION THREE COMMANDER FRANK L. CULBERTSON**

"After a successful and very busy mission, Vladimir, Mikhail and I are extremely glad to be home and with our families again. In light of the significant events that have occurred since our departure in August, we feel even more fortunate to be able to spend the holidays with those we care about most. We know that these past few months have been difficult for many people around the world, including our family and friends. We are happy that the time has arrived for us to be with them while the world faces such difficult challenges.

We believe that the example of international cooperation that we and all others who participated in the International Space Station program have set, will encourage all nations to communicate and work better together for peaceful solutions for the problems that face us here on Earth. Education, technology, and knowledge are far more powerful tools for influencing people to make change than the alternatives we have witnessed recently. It was a privilege for us to serve on the station and an honor to be a part of such a significant international endeavor."

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Dec. 20, 2001**

**Bill Johnson**  
Kennedy Space Center  
321/867-2468

**KSC Release No. 139-01**



## **SANTA CLAUS EXPECTED TO VISIT KSC TO INSTALL X-MAS ROBOTIC ARM**

KSC officials have learned that Santa Claus is planning a late-night landing at the Shuttle Landing Facility (SLF) to install a new robotic toy distribution aid on his sleigh. Although KSC employees will be at home enjoying the holidays, the SLF will be left in full operational mode to accommodate the world-renowned sleigh commander, who has been granted special security clearance.

In response to a touch of arthritis in his joints, Santa spent months creating an EXtra-Manual Aid System (X-MAS). While the reindeer propulsion team is grazing in the lush grass adjacent to the runway, Santa will install X-MAS on the sleigh's midsection, directly between the cockpit and the cargo area. X-MAS will allow Santa to select the most appropriate toy at each child's home without having to reach backward, preventing arthritis flare-ups brought on by overextending his elbows in the chill night air.

X-MAS was inspired by the Canadian-built Space Station Remote Manipulator System (SSRMS), installed on the International Space Station in April 2001 during Mission STS-100. A longer, stronger and more flexible version of the Shuttle's robotic arm, the SSRMS is 56 feet long when fully extended and has seven motorized joints. It is self-relocatable with a special latching end effector that can be attached to complementary ports located throughout the Station's exterior surfaces.

"If all goes according to plan, Santa will perform the Ground Integrated Functional Test (GIFT) immediately after installation of the X-MAS just to ensure that it works," said Tip Talone, director of the ISS/Payload Processing Directorate. "Our folks here gave Santa some pointers on testing methods. This means the families in the local area could be the first to receive their Christmas gifts with the new system."

Cloaked in darkness and miles away from the prying eyes of children, the SLF is an ideal North American rest stop for Santa and his team of reindeer. First opened for flights in 1976, it was specially designed for returning Space Shuttle orbiters. With its 15,000-foot-long and 300-foot-wide paved runway, the SLF is longer and wider than runways found in most commercial airports. Typically, 16 powerful xenon lights, each producing up to 1 billion candlepower, light the SLF during nighttime landing operations. However, so that Santa can retain his anonymity, the lights are always left off on Christmas Eve.

"It doesn't cost the government or taxpayers a penny," said a security supervisor who wished to remain anonymous. "We don't know for sure that he stops here every year. But there's too much ice in the North Pole for him to properly install the X-MAS. And since he did contact our security office to request clearance to land this Christmas Eve, I wouldn't be a bit surprised if he stops here."

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.

---

[KSC Home](#) | [Search](#) | [News](#) | [KSC Press Releases](#) | [Media Resources](#)

---



**Kirsten Larson**  
Headquarters, Washington  
(Phone: 202/358-0243)

**Dec. 20, 2001**

**Bill Johnson**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**NASA Release No. C01-bb**

## **NASA EXTENDS BOEING PAYLOAD GROUND OPERATIONS CONTRACT**

NASA's Kennedy Space Center, Fla., has extended the period of performance of the Payload Ground Operations Contract (PGOC) held for the last 15 years by The Boeing Company at Kennedy Space Center. The contract expires Dec. 31, 2001.

This cost-plus-award-fee extension through March 2002 (with one-month options until July 2002) is valued at \$59.5 million and brings the total contract value to almost \$1.9 billion.

The extension provides for coverage of payload ground support, test, integration and de-integration for space shuttle and expendable launch vehicle payloads. This action ensures uninterrupted program support through the PGOC and bridges the gap in performance between Dec. 31, 2001, and the awards of the follow-on contracts to PGOC -- the Checkout, Assembly and Payload Processing Services (CAPPS) contract and the Expendable Launch Vehicle Integrated Services (ELVIS) contract.

The original PGOC contract was initiated in January 1987 with McDonnell Douglas Space and Defense Systems.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Kirsten Larson**  
Headquarters, Washington  
(Phone: 202/358-0243)

Sept. 21, 2001

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

Release No. c01-u

## **LOCKHEED MARTIN SPACE OPERATIONS CONTRACT EXPANDED**

NASA's Kennedy Space Center, Fla., will exercise a \$47.5 million cost-plus-award-fee option under the existing agency-wide Consolidated Space Operations Contract (CSOC) with

Lockheed Martin Space Operations Co. of Houston. This is not a new contract but covers work already addressed under the CSOC as options.

The work includes the provision of continuing voice communications system services, video distribution systems services, transmission services, cable system services, communication support services, and telephone and computer networks. There are also sustaining engineering services and maintenance of facilities services covered under the statement of work.

The work will be done at Kennedy Space Center and NASA facilities located on Cape Canaveral Air Force Station, Fla., which are currently covered by the Joint Base Operations Support Contract (JBOSC), the Payloads Ground Operations Contract (PGOC) and the Space Flight Operations Contract (SFOC). No new jobs are being created.

The initial CSOC contract, worth \$1.9 billion over five years, was awarded through the competitive procurement process and began with a three-month phase-in period on Oct. 1, 1998. After the five-year base effort, the contract includes options totaling \$1.54 billion for a five-year extension to Dec. 31, 2008. Although some CSOC elements have been operating at Kennedy since the start of the contract, this option is the first major CSOC undertaking at Kennedy.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Dwayne Brown**  
Headquarters, Washington  
(Phone: 202/358-1726)

**Dec. 11, 2001**

**Bruce Buckingham**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**Release: c01-y**

## **NASA AWARDS LIFE SCIENCE SERVICES CONTRACT**

NASA's Kennedy Space Center, Fla., has awarded a cost-plus-award-fee/performance-based contract to Dynamac Corp., Rockville, Md., to perform a variety of life science and personnel services at the center.

Under the contract, Dynamac will provide services that include medical planning operations for the Space Shuttle and International Space Station; environmental compliance and stewardship; life sciences payloads operations; agency occupational health services; biological sciences; life sciences payload development; workforce protection, fitness and musculoskeletal rehabilitation; and education outreach.

The contract features a three-year, nine-month basic period of performance beginning Jan. 1, 2002, with two options for a potential seven-year, nine-month contract term. The basic contract's estimated cost plus award-fee is more than \$54 million with a potential value that exceeds \$119 million over the entire period, inclusive of both options.

The work will be performed at Kennedy and at NASA facilities located on Cape Canaveral Air Force Station, Fla. Dynamac is the incumbent contractor currently performing this work under the Life Science Support Contract.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**Sonja Alexander**  
Headquarters, Washington  
(Phone: 202/358-1761)

**Nov. 2, 2001**

**Crystal Gathers**  
Kennedy Space Center, Fla.  
(Phone: 321/867-9169)

**Note to Editors: N01-65**

## **NASA TO "SHARE THE OPPORTUNITIES" WITH MINORITY UNIVERSITY PRESIDENTS AND ADMINISTRATORS**

NASA officials from across the agency will meet with minority university presidents and administrators to discuss issues facing the minority university community.

"Share the Opportunities" is the principle theme for a NASA conference hosted by the Kennedy Space Center, Fla., for university presidents and top administrators from Historically Black Colleges and Universities, Hispanic Serving Institutions, and Tribal Colleges and Universities. The conference is scheduled for Nov. 29 to Dec. 1, 2001, at the Renaissance Orlando Resort in Orlando, Fla.

Dr. Louis W. Sullivan, president of Morehouse School of Medicine in Atlanta and Secretary of Health and Human Services under former President George H. W. Bush, will be one of the keynote speakers. Kennedy Space Center Director Roy Bridges and Deputy Director James L. Jennings also will attend the conference.

By gathering suggestions from the leadership of the minority institutions represented, NASA hopes to take positive steps to forge partnerships with the universities.

NASA will "Share The Opportunities" by identifying and describing competitive research opportunities in NASA's five strategic enterprises; by providing opportunities to network with each of NASA's 10 centers to explore areas of mutual expertise; and by discussing competitive funding opportunities available through research announcements and education announcements and activities. NASA also will identify potential opportunities in small and disadvantaged business announcements and activities, and technology transfer and commercialization initiatives.

Conference attendees will have the added bonus of viewing the launch of Space Shuttle Endeavour, currently targeted for Nov. 29.

**EDITORS NOTE:** Media representatives wishing to attend the conference should contact Crystal Gathers in Kennedy's Equal Opportunity Office at 321/867-9169 or Juan McCraney at 321/861-8930.

-- end --





**Sonja Alexander**  
Headquarters, Washington  
(Phone: 202/358-1761)

**Nov. 20, 2001**

**Crystal Gathers**  
Kennedy Space Center, Fla.  
(Phone: 321/867-9169)

**Note to Editors: N01-65a**

## **UPDATE: NASA TO SHARE KNOWLEDGE AND COMPETITIVE FUNDING OPPORTUNITIES WITH MINORITY INSTITUTIONS**

Key NASA officials will meet with Minority University Presidents and Administrators from Historically Black Colleges and Universities, Hispanic Serving Institutions and Tribal Colleges and Universities for a 2 1/2 day conference to highlight opportunities and partnerships available with the agency.

NASA's Minority University Presidents "SHARE THE OPPORTUNITIES" Conference is scheduled for Nov. 29 to Dec 1, 2001 at the Renaissance Orlando Resort in Orlando, Fla.

NASA will identify competitive research opportunities available through research announcements and education announcements and activities. NASA also will identify the potential opportunities in small and disadvantaged business announcements and activities, and technology transfer and commercialization initiatives.

"This is a great opportunity for NASA to get to know the capabilities of America's minority universities and for the minority universities to learn more about NASA's research needs. We look forward to a sharing information with all involved in this historic event," said James Jennings, Deputy Director, NASA Kennedy Space Center, Fla.

Dr. Louis W. Sullivan, President of Morehouse School of Medicine in Atlanta and former Secretary of Health and Human Services in the George H. W. Bush administration, and Dr. James Shanley, President of the American Indian Higher Education Consortium in Virginia, are the keynote speakers.

Conference attendees will have the added bonus of viewing the launch of Space Shuttle Endeavour, currently targeted for Nov. 29 from the Kennedy Space Center.

**EDITORS NOTE:** Media representatives wishing to attend the conference should contact Sonja Alexander at 202/358-1761. Media wishing to cover the launch should contact the Kennedy Space Center press office at 321/867-2468.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.





**Michael Braukus/Kyle Herring**  
Headquarters, Washington  
(Phone: 202/358-1979/4504)

Nov. 20, 2001

**Bill Johnson**  
Kennedy Space Center, Fla.  
(Phone: 321/867-2468)

**Eileen Hawley**  
Johnson Space Center, Houston  
(Phone: 281/483-5111)

**Leslie Williams**  
Dryden Flight Research Center, Edwards, Calif.  
(Phone: 661/276-3449)

**NOTE TO EDITORS: N01-70**

## **PRESS BADGING FOR STS-108 LAUNCH, LANDING, MISSION COVERAGE**

Members of the news media planning to cover Space Shuttle Endeavour's mission (STS-108) to the International Space Station should expect, and plan for, changes in NASA badging and escorting procedures for media at the Kennedy Space Center, Fla.; Johnson Space Center, Houston; and Dryden Flight Research Center, Edwards, Calif.

Media wishing to cover the launch, landing and/or the mission should contact each NASA center newsroom at the numbers above for specific badging and escorting procedures.

Following are Web links to new badging requirements for mission coverage:

Kennedy Space Center Press Site:

<http://www-pao.ksc.nasa.gov/kscpao/release/2001/130-01.htm>

Johnson Space Center Newsroom:

<http://www.jsc.nasa.gov/pao/media/rel/2000/J01-113.html>

Dryden Flight Research Center:

<http://www.dfrc.nasa.gov/PAO/PressReleases/2001/01-66.html>

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release\\_subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release_subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.



**George H. Diller, NASA**  
**Kodiak Launch Complex**  
**907/868-1574**

**Sept. 22, 2001**

**Julie Andrews, Lockheed Martin**  
**Buskin River Inn**  
**907/487-2700**

**KSC Release**

## **RADAR PROBLEM FORCES POSTPONEMENT OF KODIAK STAR LAUNCH**

The launch of Kodiak Star has been postponed 48 hours to Monday, Sept. 24. The launch was scrubbed just prior to the closing of today's launch window. Difficulty arose with a Range Safety C-band radar located down range at Cordova, AK, and could not be fixed in time for launch. A failed component must be removed and replaced, and the radar retested. Also, the weather forecast is unfavorable for a launch attempt on Sunday.

A launch window for Monday, Sept. 24 will be determined on Sunday.

-- end --

The Kennedy Space Center (KSC) Newsroom offers an electronic subscription service for status reports and news releases issued from KSC. There are two possible ways to subscribe. You may send a blank e-mail message to [ksc-news\\_release-subscribe@kscnews.ksc.nasa.gov](mailto:ksc-news_release-subscribe@kscnews.ksc.nasa.gov) or follow the instruction on the Web site at <http://kscnews.ksc.nasa.gov>. The system will confirm the request via e-mail.