



Padalka, Fincke prepare for Sept. 3 spacewalk to add antennas on Zvezda module

▲ **ISS Update:** Expedition 9 Commander Gennady Padalka and NASA Flight Engineer-ISS Science Officer Mike Fincke are preparing for a spacewalk Sept. 3. They will use Russian spacesuits and exit through the Russian Pirs airlock. Their work outside includes installing three antennas on the exterior of the Zvezda living quarters module that will aid the navigation of a new Station supply craft, called the European Automated Transfer Vehicle, during its maiden flight next year.

Other tasks include replacement of a pump panel on the Zarya module that is part of the Russian segment's cooling system; installation of guides for spacesuit tethers on Zarya handrails; and the installation of handrail covers near the Pirs hatch.

Success was the key word last week as maintenance efforts by the Expedition 9 crew paid off on several major equipment items. Fincke performed the most complex spacesuit repair job ever conducted in flight on a U.S. spacesuit, replacing a water pump in the suit's cooling system.

The 4-1/2-hour replacement job Aug. 23 was followed by several hours of tests Aug. 24. The tests showed the new pump worked perfectly, and engineers on the ground will now determine whether to declare the spacesuit usable in the

future. If so, the Space Station would have a complement of two operational U.S. spacesuits.

A third suit is aboard as well, but has a cooling problem. However, a second spare water pump is aboard the Space Station in the event managers choose to attempt similar maintenance on the third suit.

Flight controllers praised Fincke's work for providing not only a better understanding for future Space Station operations, but also important data for all future long-duration space travels.

▲ **ELV Update:** On the Swift spacecraft, testing of the Burst Alert Telescope instrument is underway. Testing of the X-Ray Telescope and Ultraviolet Telescope is scheduled this week with the Mission Operations Center at Penn State University. Observatory testing with the Tracking and Data Relay Satellite System was completed last week.

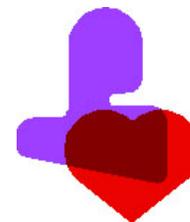
The stacking of the Boeing Delta II launch vehicle on Pad 17-A, CCAFS, begins Wednesday with the hoisting of the first stage into the pad launcher mechanism. Attachment of the three Solid Rocket Boosters is scheduled to begin Sept. 2.

■ **NASA Science** — It's hard enough staying the right weight here on Earth. In space, it might be even harder. According to NASA-supported researchers, altered gravity

Swift launches Oct. 7 from Cape Canaveral Air Force Station

somehow disrupts the natural ability of animals to maintain the appropriate weight. Read the full story at

http://science.nasa.gov/headlines/y2004/27aug_fatrat.htm



■ **How's Your Heart?** Did you know that 87 percent of women in North Brevard County between the ages of 40 and 70 are at risk for

their first heart attack? Heart disease is the No. 1 killer of women. A presentation Sept. 7 by Kathy Myers of the Parrish Medical Center will help you learn how to take control of your own heart health. You will also receive a free heart health kit and "Action" card at the presentation.

For your convenience, the Federal Women's Program Working Group is hosting two 45-minute presentations: one at 10:30 a.m. in the LCC Conference Room 4P10; and another at 12:30 p.m. in the KSC Training Auditorium. All civil service and contractor personnel are invited. For additional information, contact Kandy Warren at 867-7711.

■ **Did You Know? The Hurricane Hotline at KSC is 861-7900. Hurricane Frances is threatening Florida's east coast – please keep aware and be prepared.**