

New Spacewalk Mission is Scheduled

August 3 2004



International Space Station crewmembers left the Pirs Docking Compartment at 2:58 a.m. EDT Tuesday to begin a spacewalk focused on preparations to receive the new Automated Transfer Vehicle and retrieve materials and contamination experiments.

The spacewalk by ISS Commander Gennady Padalka and [NASA ISS](#) Science Officer Mike Fincke, is scheduled to last almost six hours. The spacewalkers are using Russian Orlan spacesuits. Padalka's suit is marked with red stripes, Fincke's with blue stripes.

The ATV is an unpowered cargo carrier like the Russian Progress supply vehicles, but has a cargo capacity about 2-1/2 times that of Progress. During the Aug. 3 spacewalk Padalka and Fincke will install antennas and laser reflectors to help the ATV dock to the rear of the Zvezda

Service Module.

The European Space Agency's ATV is scheduled for its first launch in the fall of 2005 aboard an ESA Ariane 5 rocket from French Guiana. In addition to carrying cargo, including fuel, water, oxygen and nitrogen, it also can reboost the Station. Like the Progress, the ATV will burn up when it re-enters the atmosphere.

Padalka is making his fifth spacewalk. This is the third spacewalk for Fincke.

The spacewalkers will move to the rear of Zvezda, vacated by ISS Progress 14 last Friday. Their first task is to replace an SKK experiment container that exposes materials to the space environment and replace it with another. Next they will replace a Kromka experiment, which measure contamination from thruster firings.

Then attention turns to ATV-related devices. Padalka and Fincke will install two antennas, then replace three laser reflectors with three more advanced versions than the ones launched with Zvezda in 2000. One three-dimensional reflector will replace three other old reflectors. Additional ATV preparations will be done during a subsequent spacewalk.

They'll remove another materials experiment, Platan, and photograph the MPAC&SEED experiment. Before returning to the airlock, they also will disconnect a cable to a camera that will be replaced in a future spacewalk.

Several U.S. tools will be used by the spacewalkers, including a body-restraint tether used in their most recent spacewalk, and a tool carrier.

This is the 55th spacewalk for ISS assembly and maintenance. It is the

30th from the Station itself and the 12th from Pirs.

Source: [NASA](#)

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