

International Space Station status report: SS07-04

by Bend Weekly News Sources

This week, the crew aboard the International Space Station prepared for an unprecedented series of spacewalks. NASA astronauts Mike Lopez-Alegria and Suni Williams are scheduled to begin a 6.5-hour spacewalk from the station around 9 a.m. CST on Wednesday, Jan. 31. It will be the first of a record four spacewalks planned during the next month.

Lopez-Alegria and Williams will conduct other spacewalks on Feb. 4, 8 and 22. The first three spacewalks will originate from the station's Quest airlock and the astronauts will use U.S. spacesuits. Lopez-Alegria and cosmonaut Mikhail Tyurin will use Russian spacesuits for the last spacewalk and will exit the station from the Pirs airlock.

The three U.S. spacewalks will rearrange the station's cooling system, bringing online new portions of the system that were activated during a shuttle mission in December 2006. The Russian spacewalk will free a stuck antenna on the ISS Progress 23 cargo craft docked to the aft end of the station, ensuring that craft can safely undock in April.

The crew began the week unloading some of the more than 2.5 tons of food, fuel and supplies that were delivered to the station on Jan. 19 by the ISS Progress 24 cargo craft, which included fresh produce, gifts from home, new clothing, spare parts, oxygen and water.

The crew's attention quickly turned to preparations for the upcoming spacewalks. On Monday, the crew began working with the U.S. spacesuits. Batteries for the suits were charged, and the suit cooling systems were cleaned.

On Tuesday, Lopez-Alegria and Williams trained using an onboard, laptop computer-based simulation. The training refreshed their skills operating the Simplified Aid for Extravehicular Activity Rescue, or SAFER, jetpack that is worn on spacesuits. The backpack allows spacewalkers to fly back to the station in the event they become separated from the complex.

On Thursday, ground controllers in Houston commanded the station's robotic arm to maneuver into the position it will occupy for the start of the spacewalk. Aboard the station, the crew reviewed the plans for the first spacewalk.

Lopez-Alegria and Williams continued checks of their spacesuits and checks of the SAFER backpacks Friday. The SAFER backpacks are propelled by compressed nitrogen gas, and, during the checkout, the harmless gas was released, depleting the nitrogen in one unit below the usable quantity. Two other usable

SAFER backpacks remain onboard, however, and the loss of the third unit does not affect plans for the upcoming spacewalks.

The crew took time during their work on Monday to speak with television host Martha Stewart. Crew members also took time to field questions by amateur radio from two schools, one in Ottawa, Ontario, Canada, and another in Winnebago, Neb.

For more about the crew's activities and station sighting opportunities, visit: <http://www.nasa.gov/station>

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