

International Space Station status report: SS07-08

by Bend_Weekly_News_Sources

An unexpected circuit breaker trip early Sunday caused a power outage on the International Space Station. All systems were back up by Monday morning with no impact to operations on board. The safety of the Expedition 14 crew and the complex was never an issue.

The first indications of a problem came with the loss of communications between the station and mission control just after 12:00 a.m. CST Sunday when an electrical switching unit experienced a brief malfunction that appropriately caused a breaker to trip, protecting the electrical system of the station much like a circuit breaker protects electrical systems and equipment in a home.

Expedition 14 Commander Mike Lopez-Alegria and Flight Engineers Mikhail Tyurin and Suni Williams -- awake since mid-evening Saturday -- took immediate action and followed procedures on board to recover the communications link with mission control, Houston, at about 1:35 a.m.

During the remainder of Sunday and through early Monday, restoration of systems continued. The systems affected included:

- One of two redundant communications systems
- One of four gyroscopes used to maintain the station's position, or orientation
- Several scientific facilities, including the freezer containing experiment samples
- The Ku Band high data rate and television system
- Several smoke detectors and various heaters that maintain a thermal balance of external components, including the robotic arm and its mobile base

None of these systems was permanently affected, and the equipment's temporary shut down did not impact research work or upcoming planned activities.

In addition to the recovery from the power outage, the crew also began early preparations for the next spacewalk by Tyurin and Lopez-Alegria. During that spacewalk scheduled for Feb. 22, the two will free a stuck antenna on the ISS Progress 23 supply craft and survey navigation systems for the European Automated Transfer Vehicle's docking capability to the Zvezda Service Module. They will try to secure or remove the antenna to preclude any interference during undocking in April. The spacewalk will be the 10th for Lopez-Alegria, which will be a U.S. astronaut record. The two will wear Russian Orlan suits for the excursion out of the Pirs docking compartment.

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