

# Spacewalking astronauts stymied by sticky bolts

August 30 2012, by Marcia Dunn

---

(AP)—Sticky bolts proved too much for spacewalking astronauts Thursday, forcing them to leave a new power-switching box dangling from the International Space Station instead of bolted down.

It was a major disappointment for NASA's Sunita Williams and Japan's Akihiko Hoshide, who spent hours struggling with the bolts. They used all sorts of tools and tactics as the spacewalk went into overtime, but nothing worked.

With time running out, Mission Control finally told them to tie down the box and head back inside. The work will be left for a future spacewalk, presumably sometime soon.

"We'll figure this out another day," Mission Control radioed.

Thursday's spacewalk was supposed to last 6½ hours but stretched past eight hours. It ended up in NASA's top 10 list for longest spacewalks—at the No. 3 spot.

The power router is one of four, and NASA stressed that the other three—all of them redundant—are working fine. Nonetheless, the electrical system will need to be reconfigured at the 260-mile-high lab given Thursday's failed effort.

The old box started acting up last fall, and NASA decided to replace it before it failed altogether. This was the first spacewalk by Americans

since the final shuttle flight a year ago.

Williams and Hoshide had trouble getting the old unit out because of two sticky bolts, and they found metal shavings in the area. They squirted in compressed nitrogen gas to clear the holes, and some debris came out. But still, the bolts wouldn't go back in to secure the new box. None of the tools seemed to do the trick.

The frustration level mounted as the minutes and hours ticked by. At one point, Mission Control radioed, "We've tried almost every backup we have on this stupid bolt."

Putting in a new switching box was the No. 1 priority of the spacewalk. In separate work, the astronauts managed to hook up one power cable and get another cable halfway connected. They never got around to replacing a bad camera on the space station's big robotic arm.

Mission Control did its best to cheer up the spacewalkers as they re-entered the space station. "You guys are rock stars, just so you know," Mission Control said.

It was the second spacewalk in less than two weeks. On Aug. 20, two Russians worked outside the orbiting complex, installing shields to protect against micrometeorite strikes.

It's no longer common for astronauts to step into the vacuum of space. That's because after almost 14 years, the space station is virtually complete. Plus NASA's shuttles are retired and now museum pieces.

Williams is the lone woman among the space station's current six-person crew. She and Hoshide arrived at the space station a month ago, launching from Kazakhstan aboard a Russian rocket.

Copyright 2012 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Spacewalking astronauts stymied by sticky bolts (2012, August 30) retrieved 20 June 2024 from <https://phys.org/news/2012-08-spacewalking-astronauts-cope-sticky.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.