

Spacewalking 'cable guys' wrap up work outside station (Update)

21 February 2015



A close-up view of the International Space Station photographed by an STS-133 crew member on space shuttle Discovery on March 7, 2011

A pair of American astronauts Saturday wrapped up the first of three spacewalks to route cables outside the International Space Station so commercial spaceships carrying crew can dock there in the coming years.

The spacewalk began at 7:45 am (1245 GMT) when Barry "Butch" Wilmore and flight engineer Terry Virts placed their suits on internal battery power, NASA said.

Moments later, the pair—each carrying two suitcase-like bags of cables and tools—floated outside the airlock to begin the first of several spacewalks aimed at preparing the orbiting outpost for the arrival of US commercial crew capsules, bringing astronauts to low-Earth orbit in the coming years.

"Pretty cool," said Virts as he emerged, with the space station soaring about 270 miles (435 kilometers) over the South Pacific.

The spacewalk was Virts' first ever, and the second for Wilmore. It was also the 185th in the

history of the space station.

The team finished work after six hours and 41 minutes, and even managed one "get-ahead" task for their next spacewalk on Wednesday, which is to be followed by a third one on Sunday, NASA said. Both will begin at 1210 GMT.

"Welcome back, guys," said European Space Agency astronaut Samantha Cristoforetti, who helped orchestrate the spacewalk from inside the station.

The team routed 364 feet (110 meters) of cable. The total length of cable to be set up by next week is about 700 feet.



In this image from television astronaut Barry "Butch" Wilmore begins the spacewalk Saturday morning Feb. 21, 2015 to wire the International Space Station in preparation for the arrival in July of the international docking port for the Boeing and Space-X commercial crew vehicles. (AP Photo/NASA-TV)

These spacewalks, along with several more outings in the coming months, are designed to prepare the station and the robotic arm for a pair of international docking adapters (IDAs), which will be delivered later this year. A replacement part that was on board the space station was installed in the suit Virts is wearing, and a new spacesuit was shipped to the [space station](#) for Wilmore.

When the new docking ports are eventually completed, up to two cargo ships and two crew ships will be able to latch on to the space station at the same time.

Boeing has said it hopes to send an astronaut and pilot for the first time in late 2017 to the International Space Station, aboard its crew capsule called CST-100.

SpaceX is aiming to follow soon after with its Dragon V2 crew capsule, modeled on the Dragon cargo carrier that is currently making trips back and forth to space carrying supplies, food and material for science experiments.

NASA lost its ability to send astronauts to space when it closed the 30-year space shuttle program in 2011.

The world's astronauts must now rely on Russia's Soyuz capsules for transport to low-Earth orbit, at a cost of about \$70 million per seat.

Spacesuit problem

The spacewalk was initially planned for Friday but was postponed for a day to allow NASA more time to wrap up an investigation into a problem with a piece of equipment inside certain spacesuits.

The breakdown in the fan pump separator—which helps control the suit's temperature—in two of the American spacesuits was part of the same system that failed in 2013 when water flooded the helmet of a spacewalking Italian astronaut, nearly drowning him.

In December, when astronauts were doing spacesuit maintenance, they found that the fan pump separator in one suit did not speed up as expected. The same problem with another spacesuit was detected in January.

At mission control in Houston, NASA commentator Rob Navias said both suits were "healthy" and in good working order.

"All suit systems are reported to be in excellent condition," Navias said.

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APA citation: Spacewalking 'cable guys' wrap up work outside station (Update) (2015, February 21)
retrieved 21 January 2022 from <https://phys.org/news/2015-02-spacewalking-cable-guys-station.html>

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