

French, US astronauts install batteries outside space station (Update)

January 13 2017



French astronaut Thomas Pesquet (pictured) and American Shane Kimbrough went on a spacewalk on January 13 to finish power maintenance work to the International Space Station

French astronaut Thomas Pesquet floated into space on his first-ever spacewalk Friday, and helped install three new, refrigerator-sized lithium-ion batteries to upgrade the power system at the International Space Station.

Wearing a white spacesuit with the French flag emblazoned on one shoulder, Pesquet and US astronaut Shane Kimbrough switched on their spacesuits' internal battery power to mark the official start of the spacewalk at 6:22 am (1122 GMT).

"This is Pesquet's first foray into the vacuum of space," a NASA commentator said as a live broadcast from the US space agency showed Pesquet's booted feet dangling out of the airlock as he made his way outside.

The pair made speedy progress. About three hours into the spacewalk, they had finished their main goal of connecting adapter plates for the three lithium-ion batteries.

Then, they carried out a series of maintenance jobs, performing six extra tasks in all, before the spacewalk ended five hours and 58 minutes later at 12:20 pm (1720 GMT).

A NASA commentator described the outing as "completely successful," as the two men, clad in bulky white spacesuits and gloves, grasped hands and high-fived each other inside the space station.

New batteries

The new batteries weigh about 428 pounds (194 kilograms) each, and replace older, but far lighter, nickel hydrogen batteries.

The batteries store energy and supply the solar-powered orbiting lab when it flies in Earth's shadow.

The space station travels at a speed of more than 17,000 miles (27,350 kilometers) per hour, and circles the Earth about every 90 minutes, periodically moving through light and darkness.

After a spacewalk earlier this month by Kimbrough, 49, and veteran US astronaut Peggy Whitson, 56, a total of six lithium-ion batteries are now installed.



Italian astronaut Luca Parmitano orchestrated the latest spacewalk from the mission control in Houston, Texas

Eventually, all 48 of the old batteries on board will be replaced with new ones.

First outing for Pesquet

Pesquet, 38, is the fourth French astronaut to perform a spacewalk, and the 11th European.

It was Kimbrough's fourth career spacewalk.

The spacewalk was the 197th for maintenance and assembly at the orbiting outpost, a global science collaboration of more than a dozen nations including Russia, the United States and Japan.

Back at mission control in Houston, Texas, Italian astronaut Luca Parmitano orchestrated the spacewalk, giving the men directions and asking them periodically to check their gloves and helmets.

The European Space Agency described Parmitano's role as lead communicator as "a recognition of ESA's expertise in station operations."

Parmitano went on two spacewalks during his six-month mission in 2013.

Shortly after the start of one of those spacewalks, Parmitano's helmet began filling with a water leak and he had to be rushed back inside the station for emergency aid.

Parmitano is also a friend of Pesquet. They trained together for six years in the European astronaut corps.

Parmitano said that ahead of Friday's spacewalk, he gave Pesquet some words of advice: go slow and take plenty of pictures.

When it was over, Parmitano told the men from his seat at mission control: "Thank you for your hard work. It has been a privilege."

© 2017 AFP

Citation: French, US astronauts install batteries outside space station (Update) (2017, January 13)

retrieved 24 April 2024 from

<https://phys.org/news/2017-01-power-spacewalk-french-astronauts.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.