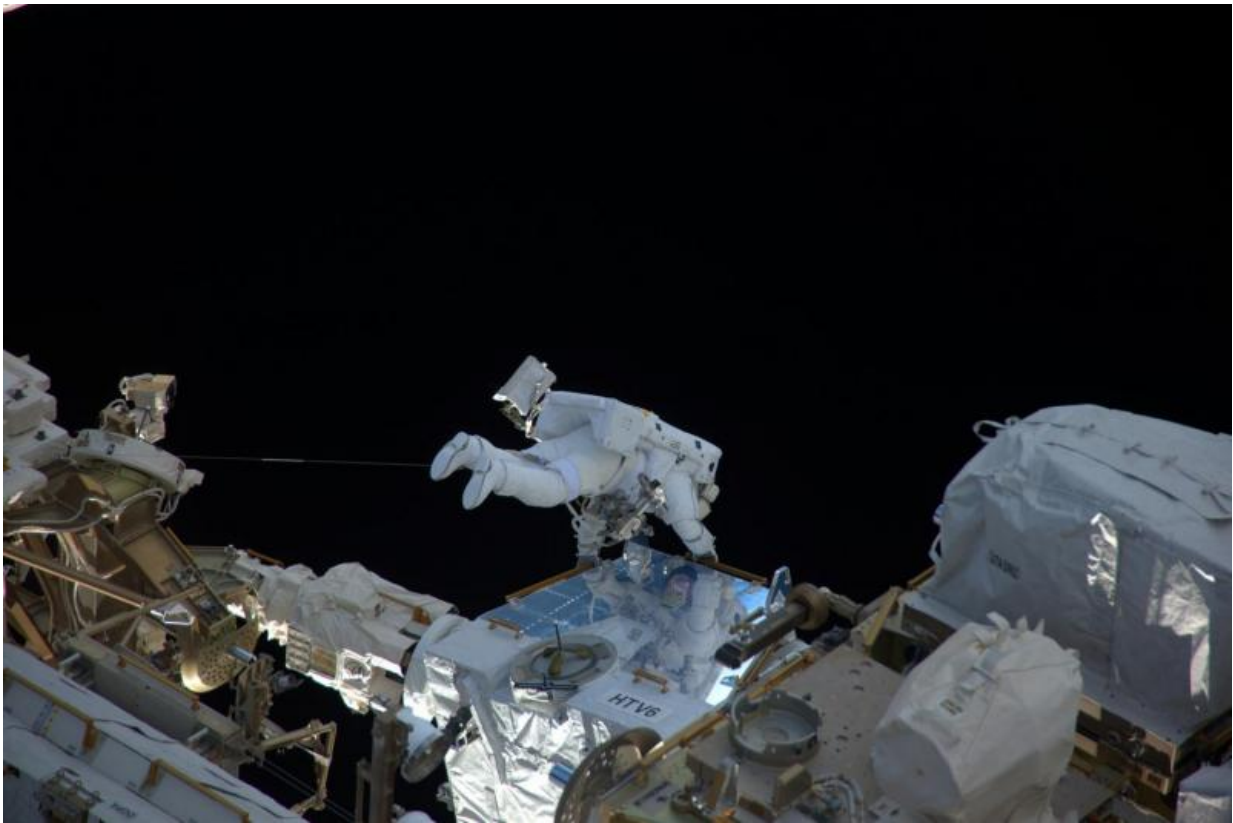


Image: ESA astronaut Thomas Pesquet's first spacewalk

January 18 2017



Credit: Roscosmos–O. Novitsky

ESA astronaut Thomas Pesquet completed his first spacewalk last Friday together with NASA astronaut Shane Kimbrough to complete a battery upgrade to the outpost's power system.

Thomas is seen here at the external pallet of Japan's HTV-6 supply ship retrieving battery adapters to install closer to the Station's [solar arrays](#).

Thomas commented on the picture: "I was holding on carefully to the International Space Station: I grew attached to it."

One of the impracticalities of a spacewalk is that everything must be secured or tied down or it will float away – including the astronauts themselves. For any work requiring two hands astronauts must install a restraint for their feet in order to stay in contact with the Space Station.

Astronauts on a spacewalk have two tethers, much like rock climbers, to stop them from floating away if they ever lose hold. A belt tether is clipped from rail to rail as they 'walk' across the Station's exterior. A second self-reeling tether connects them to the airlock, seen in this picture extending from behind Thomas' left foot. If need be, they can follow this tether back to the airlock – ESA astronaut Luca Parmitano used this to return inside after his helmet filled with water and he was unable to see properly [during a spacewalk in 2013](#).

Thomas is wearing a third backup – the SAFER backpack, bearing the number 16. If he were to lose hold and both tethers failed, Thomas could fire the jetpack's nitrogen thrusters to push him back to the Station. SAFER is a last resort and has never been used outside of testing purposes.

The [spacewalk](#) went as planned and, even better, Shane and Thomas performed a number of extra tasks once they had installed the batteries. They retrieved a failed camera, installed a protective cover on an unused docking port, moved handrails in preparation for future spacewalks and took pictures of external facilities for ground control.

The duo spent five hours and 58 minutes outside the International Space

Station.

Provided by European Space Agency

Citation: Image: ESA astronaut Thomas Pesquet's first spacewalk (2017, January 18) retrieved 27 April 2024 from <https://phys.org/news/2017-01-image-esa-astronaut-thomas-pesquet.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.