

Spacewalk for Thomas Pesquet

December 19 2016



ESA astronaut Thomas Pesquet on the International Space Station with the spacesuits he and commander Shane Kimbrough will wear during their January spacewalk. Credit: ESA/NASA

ESA astronaut Thomas Pesquet will be the 11th European to perform a spacewalk when he ventures outside the International Space Station next month.

Lasting up to seven hours on 13 January, its goal is to ensure the [power supply](#) of the International Space Station from the 2500 sq m of [solar panels](#).

The Station commander, Shane Kimbrough, will lead the spacewalk, accompanied by Thomas.

At NASA's [mission control](#) in Houston, ESA astronaut Luca Parmitano will direct the duo as lead communicator – a recognition of ESA's expertise in Station operations.

Luca is an experienced spacewalker himself, undertaking two sorties during his six-month mission in 2013.

Luca will guide the pair in space through their complex tasks, offering radio support.

Two January spacewalks are needed as part of an upgrade to replace older-technology batteries with newer lithium-ion designs. Batteries store power for supplying the Station as it flies through Earth's shadow.

Adapter plates that arrived on Japan's HTV cargo ferry this week will be moved to an external platform by the Station's robotic arm before the spacewalk.

When Shane and Thomas head outside, they will collect the adapters, install them, and reattach the batteries.

Preparations for these complex operations started well in advance, Thomas noted on his Facebook page: "We have started well in advance to prepare for the spacewalks of January. It is a lot of work to service the suits and get them ready, get familiar with the choreography and prepare the tools and equipment. Not even mentioning the thousands of hours of

work for all the personnel on the ground."



ESA astronaut Luca Parmitano during his first spacewalk for the Volare mission on the International Space Station, 9 July 2013. Credit: ESA/NASA



NASA astronaut Shane Kimbrough and ESA astronaut Thomas Pesquet captured and berthed Japan's HTV-6 supply craft on 14 December using the International Space Station's 17 m-long Canadarm2 robotic arm. Credit: European Space Agency



ESA astronaut Thomas Pesquet travelled the world to prepare for his six-month adventure on the International Space Station. At NASA's Johnson Space Center, in Houston, USA, Thomas put his spacesuit to the ultimate test on Earth: all the air was pumped out from the Space Station Airlock Test Article to create a vacuum like he would encounter in outer space. Credit: NASA–Bill Stafford

Provided by European Space Agency

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