

## Spacewalking astronauts tackle battery, cable work

April 8 2019, by Marcia Dunn



Canadian astronaut David Saint-Jacques, right, and NASA astronaut Anne McClain take part in a spacewalk as seen in the live feed from the Canadian Space Agency headquarters in St. Hubert, Quebec, Monday, April 8, 2019. The pair tackled battery and cable work outside the International Space Station on Monday. (NASA/Canadian Space Agency/The Canadian Press via AP)

Spacewalking astronauts completed battery and cable work outside the International Space Station on Monday despite communication trouble



that sometimes made it hard for them to hear.

During the spacewalk, Canadian astronaut David Saint-Jacques reported that U.S. astronaut Anne McClain's voice was faint at times. The problem worsened as their 6 <sup>1</sup>/<sub>2</sub>-hour excursion drew to a close.

"We know that it's a lot of hard work and a lot of big sighs of relief as soon as this hatch gets closed," McClain said once the pair were inside the air lock.

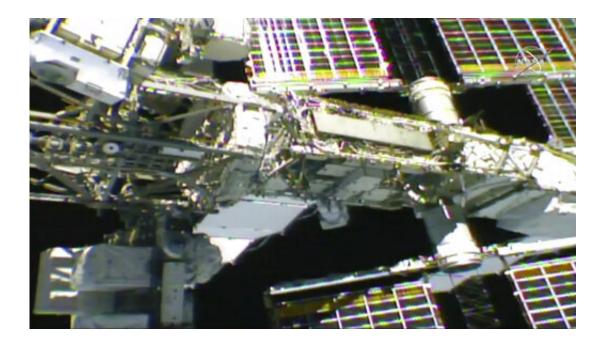
Within moments, the spacewalkers could barely hear their colleagues over the radio loop. They had to shout and repeat words at times, as did the astronauts on the other side of the hatch.

McClain, meanwhile, reported having a thin layer of moisture inside her helmet. The change to her visor was noticeable in the last 15 minutes of the spacewalk, she noted.

NASA is wary about moisture inside helmets ever since an Italian astronaut almost drowned during a spacewalk nearly six years ago because of a water leak in his suit. McClain insisted she wasn't wet, and that the moisture was minimal. A crewmate later noted perspiration.

Earlier, McClain and Saint-Jacques hustled through their part in battery swap-outs that began last month. It was the third spacewalk in just  $2\frac{1}{2}$  weeks for the space station crew.





In this photo provided by NASA, NASA astronaut Anne McClain works outside the International Space Station, Monday, April 8, 2019. McClain and Canadian astronaut David Saint-Jacques got an early start Monday morning as they tackled battery and cable work outside the International Space Station. It's the third spacewalk in just 2 <sup>1</sup>/<sub>2</sub> weeks for the station crew. (NASA via AP)





In this photo provided by NASA, NASA astronaut Anne McClain and Canadian astronaut David Saint-Jacques tackle battery and cable work outside the International Space Station, Monday, April 8, 2019. It's the third spacewalk in just 2 <sup>1</sup>/<sub>2</sub> weeks for the station crew. (NASA via AP)



In this photo provided by NASA, Canadian astronaut David Saint-Jacques, center left, works outside the International Space Station, Monday, April 8, 2019. Saint-Jacques and NASA astronaut Anne McClain got an early start Monday morning as they tackled battery and cable work outside the International Space Station. It's the third spacewalk in just 2 ½ weeks for the station crew. (NASA via AP)





In this photo provided by NASA, NASA astronaut Anne McClain, left center, and Canadian astronaut David Saint-Jacques, center right, float outside the International Space Station, Monday, April 8, 2019, as they begin to tackle battery and cable work. It's the third spacewalk in just 2 <sup>1</sup>/<sub>2</sub> weeks for the station crew. (NASA via AP)

The cable routing took more time, providing a backup power circuit for the station's Canadian-made robot arm and expanding wireless communications. At one point, the spacewalkers had to use a pry bar to loosen a stuck fastener and get behind a protective panel.

The ongoing battery work involved re-installing two old batteries. One of six new lithium-ion batteries did not work, so McClain had to remove an adapter plate she put in.

Last week, flight controllers used the space station's robot arm to remove the failed battery along with an associated charging device. Working remotely, the controllers also installed a spare charging device and one of the old batteries made of nickel hydrogen. The second outdated



battery will go in—robotically—later this week.

NASA said it will send up another new battery, although it's uncertain when. Until then, this combination of old and new batteries is expected to work fine, according to managers.



In this photo provided by NASA, NASA astronaut Anne McClain and Canadian astronaut David Saint-Jacques float outside the International Space Station, Monday, April 8, 2019, as they tackle battery and cable work. It's the third spacewalk in just 2 ½ weeks for the station crew. (NASA via AP)

Because of trouble with a trunnion pin, Saint-Jacques could not complete prep work for a future payload platform.

McClain has now logged two spacewalks and Saint-Jacques one. Their six-month mission began in December.



The next spacewalk will be next month by the two Russians on board. Two other Americans round out the six-person crew.

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