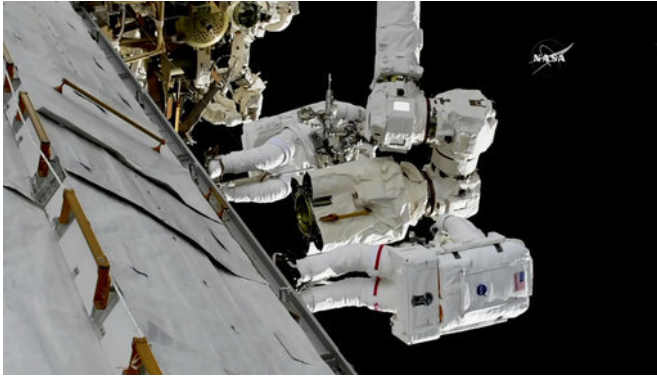


# Spacewalkers install new hand on station's robot arm (Update)

5 October 2017, by Marcia Dunn



In this frame from NASA TV, Astronauts Mark Vande Hei and Randy Bresnik, bottom, work on the International Space Station on Thursday, Oct. 5, 2017. The astronauts went out on a spacewalk to give the International Space Station's big robot arm a new hand. (NASA TV via AP)

Spacewalking astronauts gave the International Space Station's big robot arm a new hand Thursday.

Commander Randy Bresnik and Mark Vande Hei accomplished the job on the first of three NASA spacewalks planned over the next two weeks.

"One down, two to go," Bresnik said as the seven-hour spacewalk came to a close. The pair will go back out Tuesday to lubricate the new arm attachment.

The latching mechanism on one end of the 58-foot robot arm malfunctioned in August. It needed to be replaced before the arrival of an Orbital ATK supply ship in November.

Hustling through their work, the spacewalkers unbolted the old mechanism and promptly installed the spare. Initial testing by ground controllers indicated success.

"All right, gentlemen, we show a good arm," Mission Control radioed.

"That is great news, Houston," Bresnik said. "Much rejoicing."

This bulky bundle of latches—more than 3 feet (a meter) long—is used to grab visiting spacecraft, and provides power and data. The arm can also move like an inchworm across the space station by grabbing onto special fixtures.

The Canadian-built arm has been in orbit for 16 years. Engineers attribute the recent trouble to wear and tear. The original latching mechanisms, one on each end of the arm, have been used nearly 400 times.



In this frame from NASA TV, Astronauts Mark Vande Hei, left, and Randy Bresnik work on the International Space Station on Thursday, Oct. 5, 2017. The astronauts went out on a spacewalk to give the International Space Station's big robot arm a new hand. (NASA TV via AP)

The latching mechanism on the opposite end will be replaced early next year.

It was the first spacewalk for Vande Hei, a rookie astronaut who arrived at the orbiting outpost a few

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"Congratulations, my friend, on becoming the 221st human to exit in your own personal spacecraft into the void of space," said Bresnik, a veteran spacewalker.

"That's it for all of the tender moments you'll get from me," Bresnik joked. "Now back to work."

As the duo worked, they marveled over the views of Earth below and the full moon above. They also cranked out some extra chores. As he packed up an insulating cover from outdoor electronic equipment, Bresnik noted how his son, a new Boy Scout, was working on rolling up sleeping bags back home.

Mission Control assured Bresnik he wouldn't have to camp outside the space station.



In this frame from NASA TV, Astronaut Mark Vande Hei works on the International Space Station on Thursday, Oct. 5, 2017. Hei and Randy Bresnik went out on a spacewalk to give the International Space Station's big robot arm a new hand. (NASA TV via AP)

"It would be worth it," Bresnik replied.

Six men currently live at the 250-mile-high outpost: three Americans, two Russians and an Italian.

On Wednesday, they marked the 60th anniversary of the Soviet launch of Sputnik, the world's first artificial satellite, and the beginning of the Space Age.

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