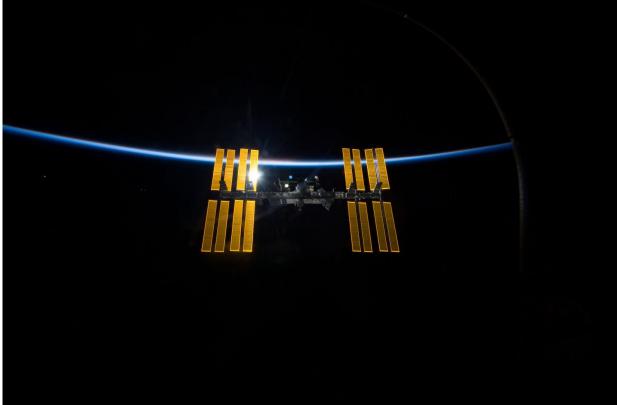


## Crew-7 astronauts depart ISS after nearly 200 days in space

March 11 2024, by Richard Tribou, Orlando Sentinel



S119E010500

ISS. Credit: NASA



After a slightly extended stay on board the International Space Station, four astronauts from four international space agencies climbed aboard the SpaceX Crew Dragon Endurance and began their return trip to Earth.

Crew-7 is made up of NASA astronaut Jasmin Moghbeli, European Space Agency (ESA) astronaut Andreas Mogensen, Japan Aerospace Exploration Agency (JAXA) astronaut Satoshi Furukawa and Roscosmos cosmonaut Konstantin Borisov.

The quartet that launched from Kennedy Space Center back on Aug. 26, 2023 arrived to the ISS one day later to begin their 197-day stay, the second longest among the now eight completed SpaceX Crew Dragon trips so far to the ISS under NASA's Commercial Crew Program. Only Crew-2 in 2021 bested their stay, and by just one day.

They departed the station at 11:20 a.m. EDT and now have a more than 18-hour ride home. Depending on the weather, they are slated to splash down at one of seven target locations off the coast of Florida in either the Atlantic or Gulf of Mexico on Tuesday around 5:50 a.m. EDT with live coverage beginning on NASA TV at 4:30 a.m.

Including the trips to and from the station, Crew-7 will have spent more than 199 days in space.

"Safe travels Crew-7 and we'll see you at home," said SpaceX mission control on departure.

Moghbeli thanked the remaining members of Expedition 70 who will transition to Expedition 71 left on board the ISS. That transition will happen when fellow NASA astronaut Loral O'Hara returns to Earth in early April in a Soyuz spacecraft.



"For those staying on board on Expedition 71 we hope that that's filled with laughter and fulfilling science as our was," Moghbeli said. "And Laurel, we'll see you in a couple of weeks, and we left you some <u>peanut</u> <u>butter</u> and tortillas in Node 1."

It's the second time a departing SpaceX Crew Dragon crew has left behind some peanut butter for O'Hara, who was also the recipient of the treat when the private Axiom Space Ax-3 crew left in February.

"Congrats on the departure. I miss you guys already and thanks for that very generous gift," O'Hara said. "Have a beautiful flight. Enjoy the last few hours in orbit and soft landings. Can't wait to see you guys in a couple of weeks."

The program aims for about 180-day visits by rotational crews, but most have actually been shorter. Crew-7's original target return date was late February, but their relief didn't arrive until last week because of both weather delays and the availability of Kennedy Space Center's Launch Pad 39-A.

A <u>domino effect</u> that goes back to late 2023 meant Crew-8's launch had to wait on both a delayed Falcon Heavy mission for the Space Force and then the Intuitive Machines commercial mission of its lunar lander before 39-A was available.

"I think we're living in a really, really cool part of human spaceflight. We're expanding so fast," said Crew-8 commander Matthew Dominick during a preflight press conference back in January. "You imagine if I had walked up to you five years ago and said our constraints to launch is launchpad availability? Right? You would have thought it was crazy, but we're at a cool spot in spaceflight right now. We've got rockets competing for launch pads. And so you're not waiting on payloads. You're not waiting on rockets. You're waiting on launch pads now."



Plus Crew-7 got an extra day with the leap year.

Endurance is completing its third mission having also flown on Crew-3 and Crew-5. It leaves behind the fleet leader Crew Dragon Endeavour, which arrived with Crew-8 on March 5 to the ISS to begin its fifth mission to space. It's the spacecraft that flew on Demo-2 in 2020 marking the return of NASA human spaceflight from the U.S. for the first time since the end of the space shuttle program in 2011.

SpaceX and Boeing won the commercial crew contracts back in 2014, but both faced hurdles getting test spacecraft operational. SpaceX however surged ahead and has been the sole U.S.-based provider with Crew-1 beginning its rotational crew duties in November 2020.

Boeing's CST-100 Starliner has flown twice without crew, but the first flight had several issues that stopped it from making a rendezvous with the ISS, and while the <u>second flight</u> in May 2021 succeeded in that endeavor, more hardware issues had to be worked through before NASA and Boeing were happy to put humans on board.

That final step dubbed Crew Flight Test (CFT) is now slated for early May, the latest delay that was announced last week from what had been planned for April 22. The delay was due to parking space availability at the station, NASA said.

"We have 17 ISS missions this year," said NASA's Joel Montalbano, the outgoing program manager for the International Space Station in a February press conference. "Sort of like the coolest game of Tetris to try and manage all this."

Its success could finally pave the way for Boeing to join SpaceX in rotational duties to the station as early as February 2025.



The ISS has been continuously populated for more than 23 years since November 2000. NASA has plans to keep it running through at least 2030, after which it will be deorbited. Future low-Earth orbit space efforts will have to rely on commercial space stations, several of which are in the works, but none expected to have any hardware in space before at least 2026.

2024 Orlando Sentinel. Distributed by Tribune Content Agency, LLC.

Citation: Crew-7 astronauts depart ISS after nearly 200 days in space (2024, March 11) retrieved 27 April 2024 from <u>https://phys.org/news/2024-03-crew-astronauts-depart-iss-days.html</u>

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.