

US astronaut to ride Russian spacecraft home during tensions

March 14 2022, by Marcia Dunn



In this photo provided by NASA, U.S. astronaut and Expedition 66 Flight Engineer Mark Vande Hei peers at the Earth below from inside the seven-windowed cupola, the International Space Station's window to the world on Feb. 4, 2022. The Soyuz MS-19 crew ship is docked to the Rassvet module in the background. Vande Hei has made it through nearly a year in space, but in March 2022 faces what could be his trickiest assignment yet: riding a Russian capsule back to Earth in the midst of deepening tensions between the countries. Credit: Kayla Barron/NASA via AP

U.S. astronaut Mark Vande Hei has made it through nearly a year in space, but faces what could be his trickiest assignment yet: riding a Russian capsule back to Earth in the midst of deepening tensions between the countries.

NASA insists Vande Hei's homecoming plans at the end of the month remain unchanged, even as Russia's invasion of Ukraine has resulted in canceled launches, broken contracts and an escalating war of words by the Russian Space Agency's hardline leader. Many worry Dmitry Rogozin is putting decades of a peaceful off-the-planet partnership at risk, most notably at the International Space Station.

Vande Hei—who on Tuesday breaks the U.S. single spaceflight record of 340 days—is due to leave with two Russians aboard a Soyuz capsule for a touchdown in Kazakhstan on March 30. The astronaut will have logged 355 days in space by then, setting a new U.S. record. The world record of 438 continuous days in space belongs to Russia.

Retired NASA astronaut Scott Kelly, America's record-holder until Tuesday, is among those sparring with Rogozin, a longtime ally of Vladimir Putin. Enraged by what's going on in Ukraine, Kelly has returned his Russian medal for space exploration to the Russian Embassy in Washington.

Despite the deadly conflict down here, Kelly believes the two sides "can hold it together" up in space.



Expedition 65 prime crew member NASA astronaut Mark Vande Hei, gives a thumbs up as he heads inside the Soyuz MS-18 spacecraft during a fit check to prepare for launch with fellow Russian cosmonauts Oleg Novitskiy of Roscosmos and Pyotr Dubrov of Roscosmos, Saturday, March 27, 2021 at the Baikonur Cosmodrome in Kazakhstan, for a launch on a Soyuz rocket scheduled for April 9, 2021. Credit: NASA/GCTC/Irina Spector, File

"We need an example set that two countries that historically have not

been on the most friendly of terms, can still work somewhere peacefully. And that somewhere is the International Space Station. That's why we need to fight to keep it," Kelly told The Associated Press.

NASA wants to keep the space station running until 2030, as do the European, Japanese and Canadian space agencies, while the Russians have not committed beyond the original end date of 2024 or so.

The U.S. and Russia are the prime operators of the orbiting outpost, permanently occupied for 21 years. Until SpaceX started launching astronauts in 2020, Americans regularly hitched rides on Russian Soyuz capsules for tens of millions of dollars per seat. The U.S. and Russian space agencies are still working on a long-term barter system in which a Russian would launch on a SpaceX capsule beginning this fall and an American would fly up on the Soyuz. That would help ensure a U.S. and Russian station presence at all times.

Vande Hei, 55, a retired Army colonel, moved into the space station last April, launching on a Soyuz from Kazakhstan with Pyotr Dubrov and another Russian. He and Dubrov stayed twice as long as usual to accommodate a Russian film crew that visited in October.



In this photo released by Roscosmos Space Agency, from left, U.S. astronaut Mark Vande Hei, Russian cosmonauts Oleg Novitsky and Pyotr Dubrov, members of the main crew to the International Space Station (ISS), walk prior to the launch at the Russian leased Baikonur cosmodrome, Kazakhstan, Friday, April 9, 2021. Vande Hei has made it through nearly a year in space, but in March 2022 faces what could be his trickiest assignment yet: riding a Russian capsule back to Earth in the midst of deepening tensions between the countries. Credit: Roscosmos Space Agency via AP, File

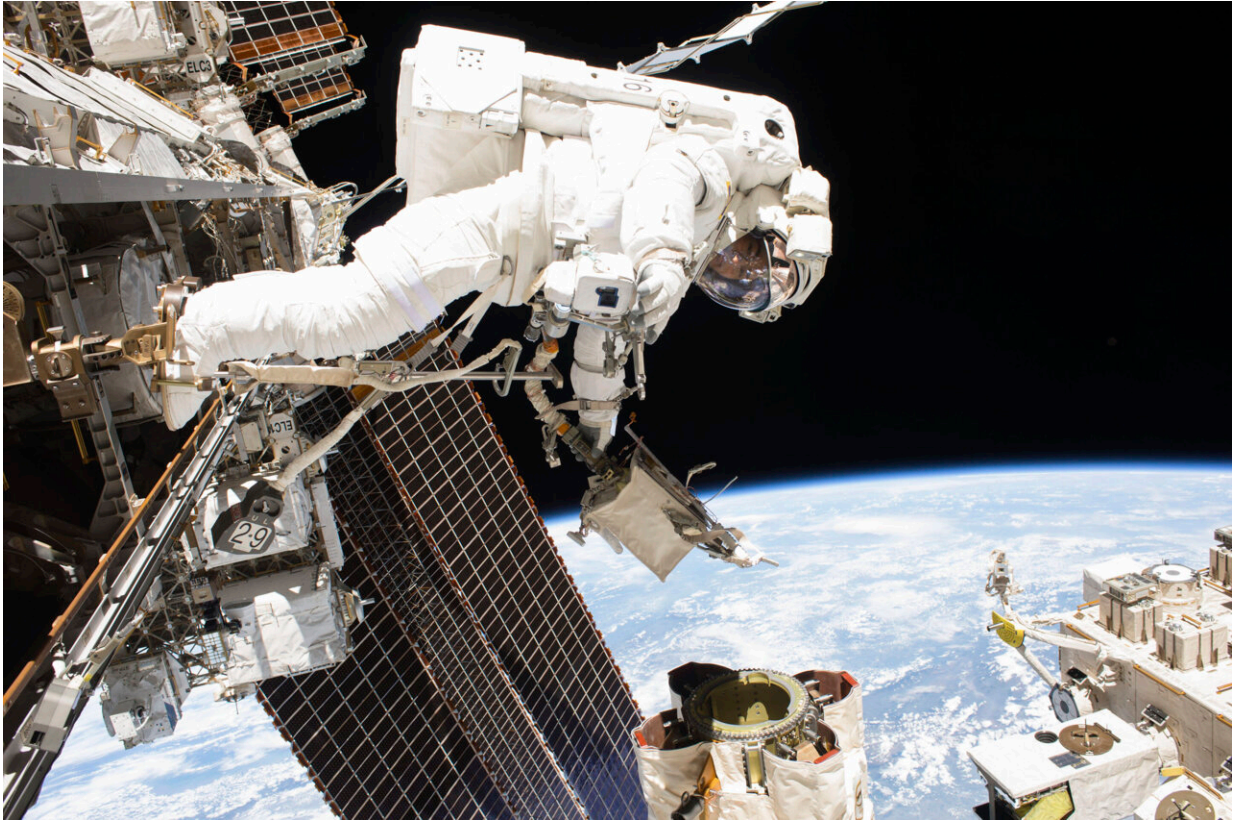
As the situation 260 miles (420 kilometers) below intensified last month, Vande Hei acknowledged he was avoiding conversations about Ukraine with Dubrov and Anton Shkaplerov, their Russian commander. Three more Russians will blast off from Kazakhstan on Friday to replace them.

"We haven't talked about that too much. I'm not sure we really want to go there," Vande Hei told a TV interviewer in mid-February.

Space station operations continue as always—in orbit and on Earth, according to NASA.

"It would be a sad day for international operations if we can't continue to peacefully operate in space," said NASA's human spaceflight chief Kathy Lueders, who noted it would be "very difficult" to go it alone.

To mark Tuesday's milestone, NASA turned to Twitter to gather questions for video-recorded responses, and some asked whether Vande Hei might switch to an American ride home. SpaceX is taking three wealthy businessmen and their ex-astronaut escort to the space station at the end of March for a brief visit. Then in mid-April, SpaceX will deliver four astronauts for NASA before bringing back four who have been on board since November.



In this photo provided by NASA, astronaut Mark Vande Hei performs a spacewalk to lubricate the Canadarm2 on Oct. 10, 2017. Credit: NASA via AP

NASA's space station program manager Joel Montalbano, during a press briefing Monday, said Russia's space agency has confirmed that they're ready to bring all three back—Vande Hei and the two Russians. A NASA plane and small team will be on hand in Kazakhstan, as usual, to whisk Vande Hei back home to Houston.

Former NASA astronaut Heidemarie Stefanyshyn-Piper, whose father was born in Ukraine, concedes it's a difficult situation.

"We're sanctioning Russia. Companies are pulling out of doing business in Russia. But then yet you still have the U.S. government—the space

agency—doing business with the Russians," she said. "You can't push a button and separate the two" sides of the space station.

Besides threatening to pull out of the space station and drop it on the U.S., Europe or elsewhere, Rogozin had the flags of other countries covered on a Soyuz rocket awaiting liftoff with internet satellites earlier this month. The launch was called off, after the customer, London-based OneWeb, refused his demands that the satellites not be used for military purposes and the British government halt its financial backing.



In this photo provided by NASA, astronaut and Expedition 65 Flight Engineer Mark Vande Hei peers into near-infrared medical-imaging gear, or optical coherence tomography, for detailed views of his retina as part of regularly scheduled eye checks aboard the International Space Station. Credit: Shane Kimbrough/NASA via AP

The European Space Agency also is reeling. After missing a 2020 launch deadline for its Mars rover—a joint European-Russian effort—the project was on track for a September liftoff from Kazakhstan. Now it's most likely off until 2024, the next opportunity for Earth and Mars to be properly aligned. And Russia has pulled its staff out of the French-run launch site in South America, suspending Soyuz launches of European satellites.

All this comes on top of the Russian government's antisatellite missile test in November that added countless pieces of junk to the debris already encircling Earth and put the space station's four Americans, two Russians and one German on alert for days.

Jeffrey Manber, now with the private Voyager Space company, helped forge U.S. and Russian ties back in the mid-1990s, with the first piece of the space station launching in 1998. He sees the outpost as "one of the final holdouts of collaboration" between the two countries. But, he added, "there is no going back if the partnership is ended and the result is a premature ending of the ISS program."

Regardless of how things play out at the space station, John Logsdon, professor emeritus at George Washington University, expects it will mark the end of large-scale space cooperation between Russia and the West.



In this Aug. 17, 2021 photo made available by NASA, astronaut and Expedition 65 Flight Engineer Mark Vande Hei inspects a spacesuit in preparation for a spacewalk at the International Space Station. Credit: NASA via AP, File



In this photo provided by NASA, astronaut and Expedition 65 Flight Engineer Mark Vande Hei sets up the International Space Station's exercise bicycle, also known as the Cycle Ergometer with Vibration Isolation and Stabilization (CEVIS), inside the U.S. Destiny laboratory module on June 22, 2021. Credit: NASA via AP

"Russia has been moving toward China already, and the current situation will probably accelerate that move," he said.

While Vande Hei has been silent on Twitter, Kelly and others have gone into overdrive, taking offense at Rogozin's threats.

Elon Musk's private SpaceX took a swipe at Rogozin after he said Russia would stop supplying rocket engines to U.S. companies—Northrop

Grumman and United Launch Alliance—adding they could use broomsticks to get to orbit.

At a launch last week, a SpaceX official responded: "Time to let the American broomstick fly and hear the sounds of freedom."

© 2022 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: US astronaut to ride Russian spacecraft home during tensions (2022, March 14)
retrieved 17 April 2024 from

<https://phys.org/news/2022-03-astronaut-russian-spacecraft-home-tensions.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.