

Russia launches rescue ship to space station after leaks

February 24 2023, by Marcia Dunn



In this handout photo released by Roscosmos State Space Corporation, the new, empty Soyuz MS-23 capsule blasts off at the Russian leased Baikonur cosmodrome in Baikonur, Kazakhstan, on Friday, Feb. 24, 2023. Russia has launched a rescue ship for two cosmonauts and a NASA astronaut whose original ride sprang a dangerous leak at the International Space Station. Credit: Ivan Timoshenko/Roscosmos State Space Corporation via AP

Russia launched a rescue ship on Friday for two cosmonauts and a NASA astronaut whose original ride home sprang a dangerous leak while parked at the International Space Station.

The new, empty Soyuz capsule should arrive at the orbiting lab on Sunday.

The capsule leak in December was [blamed on a micrometeorite](#) that punctured an external radiator, draining it of coolant. The same thing appeared to happen again earlier this month, [this time on a docked Russian cargo ship](#). Camera views showed a small hole in each spacecraft.

The Russian Space Agency [delayed the launch](#) of the replacement Soyuz, looking for any manufacturing defects. No issues were found, and the agency proceeded with Friday's predawn launch from Kazakhstan of the capsule with bundles of supplies strapped into the three seats.

Given the urgent need for this capsule, two top NASA officials traveled from the U.S. to observe the launch in person. To everyone's relief, the capsule safely reached orbit nine minutes after liftoff—"a perfect ride to orbit," NASA Mission Control's Rob Navias reported from Houston.

[Officials had determined it was too risky](#) to bring NASA's Frank Rubio and Russia's Sergey Prokopyev and Dmitri Petelin back in their damaged Soyuz next month as originally planned. With no coolant, the cabin temperature would spike during the trip back to Earth, potentially damaging computers and other equipment, and exposing the suited-up crew to excessive heat.



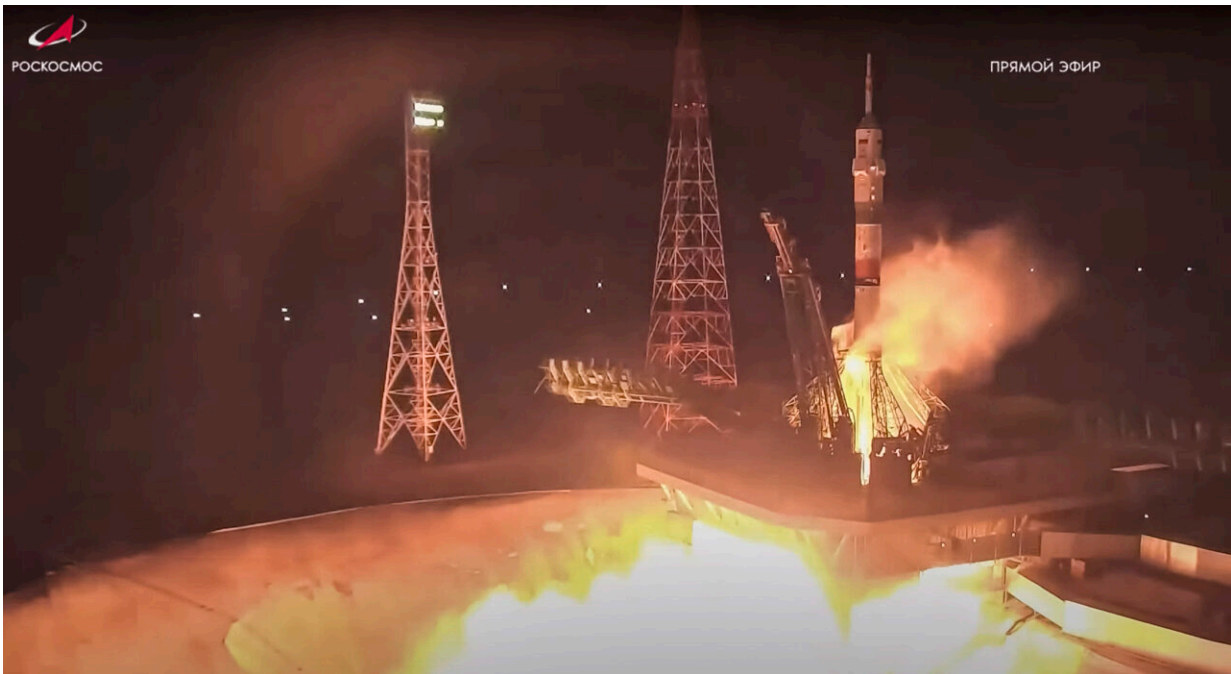
In this handout photo released by Roscosmos State Space Corporation, the new, empty Soyuz MS-23 capsule blasts off at the Russian leased Baikonur cosmodrome in Baikonur, Kazakhstan, on Friday, Feb. 24, 2023. Russia has launched a rescue ship for two cosmonauts and a NASA astronaut whose original ride sprang a dangerous leak at the International Space Station. Credit: Ivan Timoshenko/Roscosmos State Space Corporation via AP

Until the new Soyuz pulls up, emergency plans call for Rubio to switch to a SpaceX crew capsule that's docked at the space station. Prokopyev and Petelin remain assigned to their damaged Soyuz in the unlikely need for a fast getaway. Having one less person on board would keep the temperature down to a hopefully manageable level, Russian engineers concluded.

The damaged Soyuz will return to Earth with no one aboard by the end of March, so engineers can examine it.

The three men launched in this Soyuz last September on what should have been a six-month mission. They'll now stay in [space](#) for a full year, until a new capsule is ready for their crew replacements for liftoff in September. It was their Soyuz that just launched with no one on board.

The damaged supply ship was filled with trash and cut loose over the weekend, burning up in the atmosphere as originally planned.



In this handout photo taken from video released by Roscosmos State Space Corporation, the new, empty Soyuz MS-23 capsule blasts off at the Russian leased Baikonur cosmodrome in Baikonur, Kazakhstan, on Friday, Feb. 24, 2023. Russia has launched a rescue ship for two cosmonauts and a NASA astronaut whose original ride sprang a dangerous leak at the International Space Station. Credit: Roscosmos State Space Corporation via AP



In this handout photo released by Roscosmos State Space Corporation, the new, empty Soyuz MS-23 capsule blasts off at the Russian leased Baikonur cosmodrome in Baikonur, Kazakhstan, on Friday, Feb. 24, 2023. Russia has launched a rescue ship for two cosmonauts and a NASA astronaut whose original ride sprang a dangerous leak at the International Space Station. Credit: Ivan Timoshenko/Roscosmos State Space Corporation via AP



In this handout photo released by Roscosmos State Space Corporation, the new, empty Soyuz MS-23 capsule blasts off at the Russian leased Baikonur cosmodrome in Baikonur, Kazakhstan, on Friday, Feb. 24, 2023. Russia has launched a rescue ship for two cosmonauts and a NASA astronaut whose original ride sprang a dangerous leak at the International Space Station. Credit: Ivan Timoshenko/Roscosmos State Space Corporation via AP

"The Russians are continuing to take a really close look" at both spacecraft leaks, NASA's deputy [space station](#) program manager Dana Weigel told reporters earlier this week. "They're looking at everything ... to try to understand that."

NASA has a fresh crew of four launching atop a SpaceX rocket early Monday morning from Florida's Kennedy Space Center. SpaceX's

William Gerstenmaier said the four astronauts returning to Earth in a few weeks already have inspected the Dragon [capsule](#) that will carry them home and "it all checked out fine."

© 2023 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Russia launches rescue ship to space station after leaks (2023, February 24) retrieved 26 April 2024 from <https://phys.org/news/2023-02-russia-ship-space-station-leaks.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.