

Russian spacecraft leaks coolant, station crew reported safe

February 12 2023, by Vladimir Isachenkov



This undated photo released by Roscosmos State Space Corporation shows the International Space Station (ISS). An uncrewed Russian supply ship docked at the International Space Station has lost cabin pressure, the Russian space corporation said Saturday, noting that the incident doesn't pose any danger to the station's crew. Credit: Roscosmos State Space Corporation via AP

An uncrewed Russian supply ship docked at the International Space Station has leaked coolant, the Russian space corporation and NASA reported Saturday, saying the incident doesn't pose any danger to the station's crew.

Roscosmos said the hatch between the station and the Progress MS-21 had been locked so the incident didn't affect the orbiting outpost.

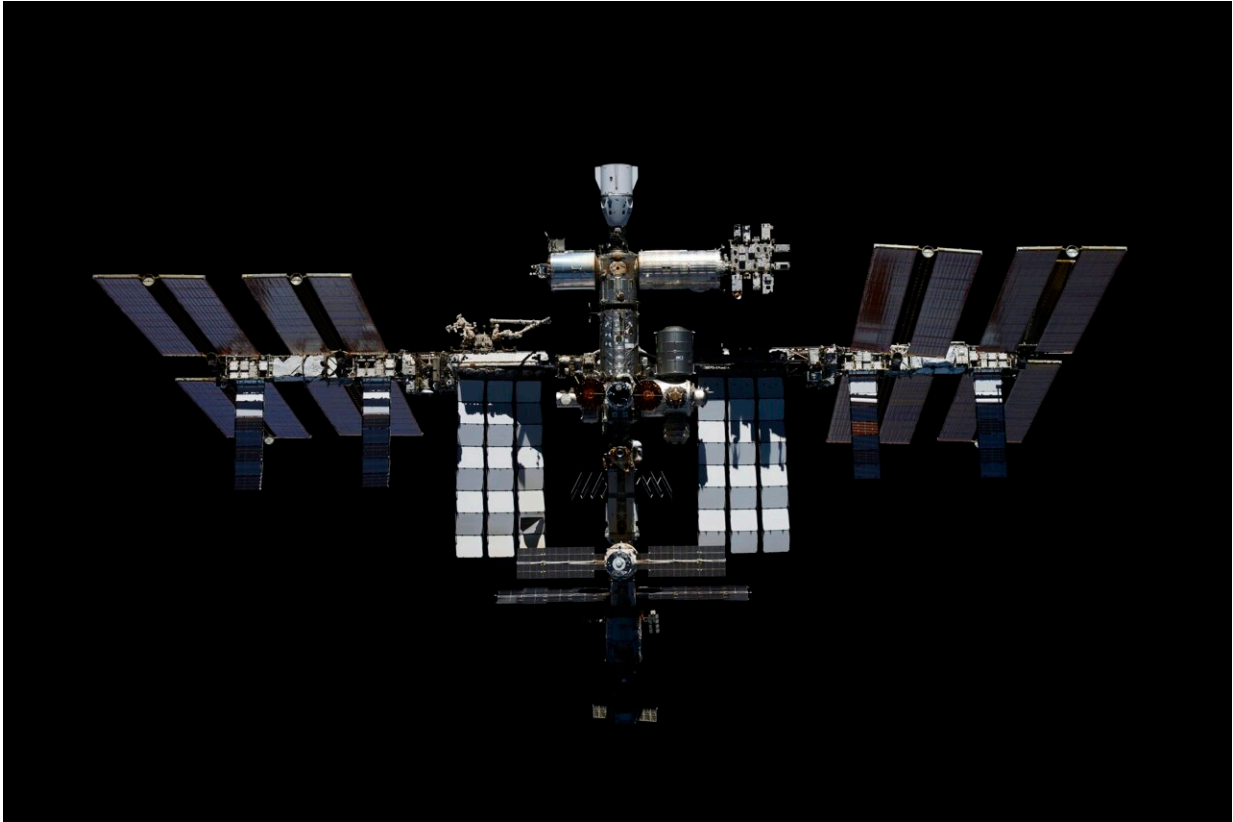
"The temperature and pressure on board the station are within norms and there is no danger to health and safety of the crew," it said in a statement.

The initial statement from Roscosmos left it unclear whether the entire cargo ship or just some of its systems lost pressure, but Sergei Krikalev, head of Roscosmos' crewed programs, later clarified that there was depressurization of the craft's coolant loop.

NASA said its specialists are assisting their Russian counterparts in the troubleshooting of the coolant leak.

"Officials are monitoring all International Space Station systems and are not tracking any other issues," NASA said. "The crew, which was informed of the cooling loop leak, is in no danger and continuing with normal space station operations."

The depressurization of the cargo craft's coolant loop follows a similar incident in December with the Soyuz crew capsule, which Russian space officials said had been caused by a tiny meteoroid that left a small hole in the exterior radiator and sent coolant spewing into space.



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Roscosmos has launched a probe into a possible cause of the cooling loop leak, and Krikalev said that experts will closely look at materials and technologies used in spacecraft manufacturing as part of the probe.

"We need to conduct a thorough analysis to make sure that it wouldn't affect similar components that will be used in the future," Krikalev said. "This is the most important task."

Roscosmos noted that before the leak the cargo ship had already been loaded with waste prior to its scheduled disposal. The craft is set to be undocked from the station and deorbit to burn in the atmosphere on Feb. 18.

The announcement came shortly after a new Russian cargo ship docked smoothly at the station on Saturday. The Progress MS-22 delivered almost three tons of food, water and fuel along with scientific equipment for the crew.

Roscosmos said that the incident didn't affect the docking of the new cargo ship and "will have no impact on the future station program."



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Russian Cosmonauts Sergey Prokopyev and Dmitri Petelin, and NASA astronaut Frank Rubio were supposed to use the Soyuz crew capsule to return to Earth in March, but Russian space officials decided that higher temperatures resulting from the coolant leak could make it dangerous to use.

They decided to launch a new Soyuz capsule on Feb. 20 so the crew have a lifeboat in the event of an emergency. But since it will travel in automatic mode to expedite the launch, a replacement crew will now have to wait until late summer or fall when another capsule is ready. It means that Prokopyev, Petelin and Rubio will have to stay several extra months at the station, possibly pushing their mission to close to a year.

NASA took part in all the discussions and agreed with the plan.

Besides Prokopyev, Petelin and Rubio, the space station is home to NASA astronauts Nicole Mann and Josh Cassada; Russian Anna Kikina; and Japan's Koichi Wakata. The four rode up on a SpaceX capsule last October.

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