

'Very serious' ammonia leak outside ISS, Russian officials report (Update 2)

10 May 2013



NASA handout image captured by astronaut Chris Hadfield on board the ISS on April 2, 2013, shows the sun getting ready to set over southwestern Australia. The ISS has suffered a small leak of ammonia used to cool its power system, but there is no danger to the crew, NASA says.

Russian and US space experts were scrambling to address a "very serious" ammonia leak outside the International Space Station that may require astronauts to perform an emergency spacewalk, a Russian official said on Friday.

Update: [ISS crew ready for spacewalk after 'serious' ammonia leak](#)

"Indeed, they have a serious defect, very serious," Vladimir Solovyov, flight director for the Russian segment of the space station was quoted as saying by the Interfax news agency.

The US space agency NASA earlier said the leak of ammonia used to cool the station's power system did not pose a danger to astronauts on board.

Solovyov said officials from both countries were

considering whether to send ISS crew members into open space to fix the leak, and would discuss the problem later Friday.

"The decision has not been taken yet," he was quoted as saying.

Interfax, citing a space industry source, said US astronauts Tom Mashburn and Chris Cassidy are likely to step into open space on Saturday to find the source of the leak.

Another Russian official however played down the danger from the leak, saying it only affected the US segment of the station and that the Russian segment was operating as usual.

"This is not critical," the state RIA Novosti news agency quoted Alexei Krasnov, head of manned flight programs at the Russian Space Agency, as saying.

"It's not the first time such a situation has happened, unfortunately," Krasnov said.

Solovyov said Russians also used the US segment of the station.

There was no official statement from the Russian Space Agency.

The space news website Spaceflight101 called the leak "major", adding that flight engineers Mashburn and Cassidy would perform a six-hour spacewalk on Saturday.

"Cassidy and Marshburn have previous spacewalking experience together," said the website.

Mission Control appears to know a potential location of the leak, and the US astronauts' task on Saturday will be to confirm it, said the site.

In a statement earlier Friday, NASA said crew members had spotted small white flakes floating away from an area outside the craft before reporting the incident.

The space agency said on its website that while the rate of ammonia leaking from the station's truss structure had increased, the "station continues to operate normally otherwise and the crew is in no danger."

"Ammonia is used to cool the station's power channels that provide electricity to station systems," NASA said, revealing that the leak was coming from the same general area it did in a previous episode last year.

"This ammonia loop is the same one that spacewalkers attempted to troubleshoot a leak on during a spacewalk on November 1, 2012," the statement said.

"It is not yet known whether this increased ammonia flow is from the same leak, which at the time, was not visible."

The ISS is currently crewed by six staff, under the command of Canadian Chris Hadfield.

Since 2009 there have been teams of six astronauts and cosmonauts aboard the space station, whose capacity was previously limited to only three people.

Russia has suffered several recent setbacks in its space programme, notably losing expensive satellites and an unmanned supply ship to the ISS but the manned missions have been flawless.

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