

Astronaut may get Christmas wish for spacewalk (Update)

December 13 2013, by Marcia Dunn



In this image provided by NASA the International Space Station is shown with the backdrop of Earth. The image was photographed by an STS-132 crew member on space shuttle Atlantis after the station and shuttle began their post-undocking relative separation on May 23, 2010. The astronauts aboard the International Space Station dimmed the lights, turned off unnecessary equipment and put off science work Thursday Dec. 12, 2013 as NASA scrambled to figure out what's wrong with one of two identical cooling loops that shut down Wednesday. (AP Photo/NASA)

Space station astronaut Rick Mastracchio may get his Christmas wish for a spacewalk or two because of a broken cooling system.

Mastracchio, an experienced spacewalker, said he's more than ready to go out and make repairs, if deemed necessary by Mission Control.

"Any time you have something like this, it's good news, bad news," Mastracchio told The Associated Press on Friday.

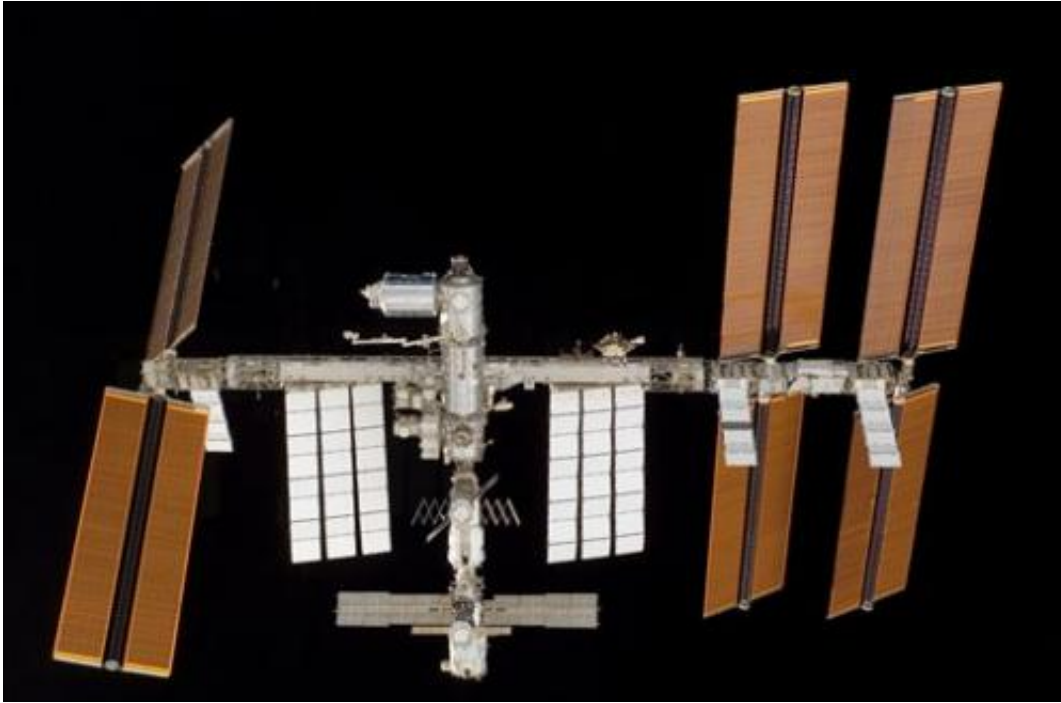
"Of course, the bad news is the station's having problems and we have to go out and do a repair. The good news is we have the spare parts. We have the training. We have the skills and, of course, going out and doing a spacewalk is always very exciting—yet very challenging."

One of two cooling loops on the space station shut down Wednesday after it got too cold. Flight controllers suspect a bad valve inside an external pump.

It's a serious situation that needs to be remedied quickly, officials said, in case there are additional failures.

On Friday, engineers in Houston spent a third day working on the issue. They want to see if they can solve the problem remotely, before ordering up a series of spacewalks to replace the entire pump. Three spacewalks were required to install this pump in 2010.

The space station cooling system uses ammonia to dissipate heat generated by on-board equipment.



This file photo provided by ESA (European Space Agency) Tuesday Feb. 19, 2008 shows a view of the International Space Station from Atlantis, Monday Feb. 18 2008. The astronauts aboard the International Space Station dimmed the lights, turned off unnecessary equipment and put off science work Thursday Dec. 12, 2013 as NASA scrambled to figure out what's wrong with one of two identical cooling loops that shut down Wednesday. (AP Photo/ESA/NASA)

The six astronauts have turned off all nonessential equipment to reduce the heat load, including some science experiments. That's resulted in extra free time for Mastracchio and his U.S., Japanese and Russian crewmates. Otherwise, life has not changed much a couple hundred miles up, he noted.

"We still have lights. We still have the toilet working. We still have food, and we're still very comfortable up here," Mastracchio said. "So the biggest problem is that we're just not taking the time during our schedule to do as much science as we normally would."

An upcoming delivery mission may be delayed because of the cooling system trouble. The commercial Cygnus capsule, currently scheduled for a Wednesday launch from Wallops Island, Virginia, almost certainly holds holiday surprises for the astronauts, along with the usual stash of supplies.

At least Mastracchio doesn't have to cram in any last-minute Christmas shopping, using the space station's Internet phone or online capability. The 53-year-old engineer said he bought presents for his wife before he rocketed into orbit at the beginning of November for a six-month mission.



This Wednesday Sept. 5, 2012 image provided by NASA and made with a fisheye lens shows NASA astronaut Sunita Williams, bottom, during the mission's third session of extravehicular activity. On Wednesday, Dec. 11, 2013, one of two identical cooling loops shut down when the line got too cold because of a faulty valve. The system uses ammonia to dissipate heat from on-board equipment. Mission Control ordered the six-man crew to turn off some science

experiments and other non-critical equipment; the powerdown continued Thursday, Dec. 12, 2013. (AP Photo/NASA)

"Being away from your friends and family during the holidays is not optimal," he told the AP. "But if you have to be away from your family on Christmas, then this is sure not a bad place to be."

And children, stay tuned.

"We're always on the lookout for Santa up here," Mastracchio said with a smile.

© 2013 The Associated Press. All rights reserved.

Citation: Astronaut may get Christmas wish for spacewalk (Update) (2013, December 13)
retrieved 15 June 2024 from <https://phys.org/news/2013-12-astronaut-christmas-spacewalk.html>

<p>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.</p>
--