

Astronauts deal with flooded toilet in orbit

July 19 2009, By MARCIA DUNN , AP Aerospace Writer



This image provided by NASA shows the underside of the crew cabin near the nose cap of the Space Shuttle Endeavour taken by an Expedition 20 crewmember during a survey of the approaching vehicle prior to docking with the International Space Station Friday July 17, 2009. Endeavour crew performed a back-flip for the rendezvous pitch maneuver. Mission Control said Saturday Endeavour looks to be in fine shape for re-entry at the end of the month. Areas where the heat tiles were dinged during Wednesday's launch can be seen in this image. (AP Photo/NASA)

(AP) -- The bathroom lines at the already crowded space shuttle and space station complex got a lot longer Sunday because of a flooded toilet. One of two commodes aboard the international space station malfunctioned, right in the middle of complicated robotic work being conducted by the two crews. The pump separator apparently flooded.

Mission Control advised the astronauts to hang an "out of service" sign on the [toilet](#) until it could be fixed. In the meantime, the six space station residents had to get in line to use their one good toilet. And Endeavour's seven astronauts were restricted to the shuttle bathroom.

There have never been so many people - 13 - together in space. The toilet repair work fell to Belgian Frank De Winne, who had to don goggles, gloves and a mask.

Read also: [Space station astronauts fix broken toilet: NASA](#)

Flight director Brian Smith declined to speculate whether overuse caused the toilet trouble.

"We don't yet know the extent of the problem," Smith told reporters. "It may turn out to be of no consequence at all. It could turn out to be significant. It's too early to tell right now."

Teams of specialists in Houston and Moscow hurriedly convened to discuss the problem. The Russian-built, multimillion-dollar toilet flew up on a shuttle last November.

Smith said there is no urgency to the bathroom situation, at least for now. But he said if the toilet remains out of action for several days, "then we'll readdress the situation and see what we have to do."

Going into this mission, NASA wanted at least four of Endeavour's crew to use the space station's bathrooms, so the shuttle [waste water](#) tank would not fill up.

As long as Endeavour is docked to the space station, it cannot eject any waste water. The nozzle is located near the newly installed porch on the Japanese lab; the attach mechanisms for experiments could corrode if

sprayed by water.

Two bathrooms ultimately are needed for a full station crew of six. Smith said he did not know how long six occupants could rely on a single toilet.

Both the shuttle and station are equipped with other ways for the astronauts to relieve themselves, Smith said, including Apollo-era urine collection bags.

Much of Sunday - the eve of the 40th anniversary of man's first moon landing - was spent using a pair of robot arms to move a large cargo carrier, loaded with batteries and spare parts, from the shuttle to the station. It was a relatively quiet day sandwiched between spacewalks.

The 13-by-8-foot platform holds an antenna, pump and engine for the station's rail car, all of which will be removed and secured to the space station during a spacewalk Monday. NASA wants to store as many big spare parts as possible at the space station, before shuttles stop flying at the end of next year.

Also on the carrier are six batteries that will be plugged into the station by spacewalking [astronauts](#) later in the week, replacing old batteries.

In all, five spacewalks are planned during Endeavour's 1 1/2-week space station visit.

As for the Apollo 11 anniversary, Smith noted that the Mercury, Gemini and Apollo programs contributed to today's [international space station](#). He observed that he wasn't born when Neil Armstrong and Buzz Aldrin walked on the moon July 20, 1969; neither were two of the 13 spacefarers.

On the Net:

NASA:

[http://www.nasa.gov/mission\(underscore\)pages/shuttle/main/index.html](http://www.nasa.gov/mission(underscore)pages/shuttle/main/index.html)

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