

# Astronauts take 2nd spacewalk, overcome stiff bolt (Update)

April 11 2010, By MARCIA DUNN , AP Aerospace Writer



In this image provided by NASA-TV astronauts Rick Mastracchio, left, and Clay Anderson work on the International Space Station early Sunday morning April 11, 2010. Mastracchio and Anderson earlier had trouble bolting down the new ammonia tank assembly on the sprawling framework that serves as the backbone of the space station. The 215-mile-high action unfolded on the 40th anniversary of the launch of Apollo 13. (AP Photo/NASA)

(AP) -- Spacewalking astronauts had to pull out a hammer and pry bar while attaching a big, new tank full of ammonia coolant to the International Space Station on Sunday, successfully driving in a stiff bolt after two frustrating hours.

The 215-mile-high action unfolded on the 40th anniversary of the launch of Apollo 13.

Making their second spacewalk in three days, Rick Mastracchio and Clayton Anderson banged and pulled and shoved, with no success, on the stuck bolt. They undid the good bolts and jostled the 1,700-pound, refrigerator-size tank in case it was misaligned. Finally, after they maneuvered the tank from a different angle, the troublesome bolt slid into place.

"You got to be kidding me!" shouted Anderson.

"Did it go in?" astronaut Dorothy Metcalf-Lindenburger asked from inside.

"Yes, yes. You got to be kidding me," Anderson replied. "It is in there." Then he paused for effect. "Now what do we do?"

As he turned the 6-inch bolt a dozen times, Anderson urged, "Come on, baby. Get on there. Yeah, get 'er done."

The astronauts inside kept urging the spacewalkers to take a break and rest their hands. But they insisted they weren't too tired. Nevertheless, Mission Control put off the fluid line hookups for the tank and a few other chores, saying they could be completed in the third and final spacewalk Tuesday.

Even with that, the spacewalk ran long at 7 1/2 hours. By then, the two were beat.

Shuttle Discovery's commander, Alan Poindexter, urged his two crewmen to "take it slow and easy" as they headed back inside. And Metcalf-Lindenburger promised them a good dinner. Anderson, a Nebraskan, got a hankering for corn - and steak - after Metcalf-Lindenburger complimented him with a baseball term.

"Clay makes turning bolts look like a can of corn," she said, referring to an easily caught fly ball. "That was a long, long day, and you did a really good job."

The lead spacewalk officer in Mission Control, David Coan, later said mental fatigue was the main concern.

The slot for the fresh tank was emptied earlier in the spacewalk, when Mastracchio and Anderson popped out a spent ammonia tank that had been on the space station for eight years. The ammonia is circulated through radiators to cool space station electronics.

Removing the old tank also proved difficult.

One side of the boxy container got hung up on a mechanism, and Anderson had to tug it loose. Then as the spacewalkers were moving the old tank toward the robot arm for capture, Anderson got caught on a pit pin and lanyard. "Jiminy Christmas," he grumbled, freeing himself.

With the spacewalkers serving as lookouts, the robot arm placed the old tank on a space station rail cart for storage. The tank was moved to another temporary location a few hours later, after the spacewalkers attached another handle on it.

During Tuesday's spacewalk, the empty tank will be placed into the docked shuttle for return to Earth. NASA plans to refill the ammonia tank and fly it back to the space station this summer as a spare. That will be the next-to-last shuttle flight.

As Mastracchio and Anderson worked outside Sunday morning, their colleagues unloaded more supplies out of the cargo carrier delivered by Discovery last week and stuffed it with old equipment and trash. The new ammonia tank also flew up on the shuttle.

The astronauts inside also did some repair work on the space station's water-recycling system, which was shut down the past few weeks by a leak.

Discovery will remain at the space station until Saturday. Landing is scheduled for April 19.

Apollo 13's three-man crew blasted off April 11, 1970. An oxygen tank ruptured two days later as the astronauts made their way to the moon. The rescue became one of the most dramatic ever seen by the world and remains one of NASA's shining moments.

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