It's alive! Space station's humanoid robot awake

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In this Aug. 4, 2010 file photo provided by NASA, astronaut Michael Barratt shakes hands with Robonaut 2, also known as R2, during a news conference in the Space Vehicle Mock-up Facility at NASA's Johnson Space Center in Houston. NASA ground controllers turned on the robot Monday, Aug. 22, 2011, for the first time since it was delivered to the International Space Station in February. (AP Photo/NASA, Lauren Harnett, File)

NASA's humanoid robot has finally awakened in space.

Ground controllers turned Robonaut on Monday for the first time since it was delivered to the International Space Station in February. The test involved sending power to all of Robonaut's systems. The robot was not commanded to move; that will happen next week.

"Those electrons feel GOOD! One small step for man, one giant leap for tinman kind," Robonaut posted in a Twitter update. (All right, so a Robonaut team member actually posted Monday's tweets under AstroRobonaut.)

The four visible light cameras that serve as Robonaut's eyes turned on in the gold-colored head, as did the infrared camera, located in the robot's mouth and needed for depth perception. One of Robonaut's tweets showed the view inside the American lab, Destiny.

"Sure wish I could move my head and look around," Robonaut said in the tweet.

Robonaut - the first humanoid robot in space - is being tested as a possible astronaut's helper.

The robot's handlers at Mission Control in Houston cheered as everything came alive. The main computers - buried inside Robonaut's stomach - kicked on, as did the more than 30 processors embedded in the arms for controlling the joints.

"Robonaut behaved himself," said deputy project manager Nicolaus Radford. "Oh, Robonaut definitely got an 'A.' He won't be held back a grade, if that's what you want to know."

"It was just very exciting," he said. "It's been a long time coming to get this thing turned on."

The robot was delivered on space shuttle Discovery's final flight. It took this long for the operating software to get up there, and for the astronauts to have enough time to help with the experiment

On Sept. 1, controllers will command Robonaut to move its fingers,

hands and arms.

"It's been asleep for about a year, so it kind of has to stretch out a little bit," Radford told The Associated Press. "Just like a crew member has to kind of acclimate themselves to zerogravity, our robot has to do a very similar thing, kind of wiggle itself and learn how it needs to move" in weightlessness.

For now, Robonaut exists from the waist up. It measures 3 feet 4 inches tall and weighs 330 pounds. Each arm is 2 feet 8 inches long.

A pair of legs currently are being designed and should be launched in 2013.

Radford said if everything continues to check out well, the robot may be able to take on a few mundane chores - like taking air velocity measurements inside the space station - early next year.

For now, Robonaut - also called R2 - is designed to stay inside the space station. Future versions might venture out on spacewalks, saving astronauts time while keeping them safe.

During Monday's two-hour test, U.S. astronaut Michael Fossum and Japanese spaceman Satoshi Furukawa took Robonaut from its sleeping bag, placed it on its fixed pedestal, then floated away as ground controllers took over. The robot went back into its bag following the test.

Because Robonaut has some flammable parts, NASA wants it stored in its fireproof bag.

Controllers were tempted to make the robot move, but held off.

"We want to be respectful," Radford said. "It's a very complicated piece

of hardware."

More information: NASA: http://robonaut.jsc.nasa.gov/default.asp