

First Internet, now bay window at space station

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This illustration provided by NASA shows a view of the new Cupola which will be installed on the International Space Station. Life has never been so good off the planet, and it's about to get better. Just two weeks after the arrival of the Internet, the space station astronauts are getting an observation deck that will offer panoramic views of Earth. (AP Photo/NASA)

(AP) -- Life has never been so good off the planet, and it's about to get better.

Just two weeks after the arrival of the Internet, the space station astronauts are getting an observation deck that will offer panoramic

views of Earth.

[Space shuttle Endeavour](#) will deliver the seven-windowed dome to the [International Space Station](#) next week, along with more living space in a chamber called Tranquility.

Endeavour's planned Sunday morning launch with six astronauts - at the wee hour of 4:39 a.m. - comes just days after President Barack Obama's big space station plug in his proposed budget for the coming fiscal year. The countdown clocks began ticking Thursday.

While the White House scrapped NASA's moonward-ho Constellation program, the space station got an extension until at least 2020, with the promise of more relevant research. NASA Administrator Charles Bolden said the goal is to make full use of the space station as "the national lab it was envisioned to be."

"There's so much we need to know before we can venture safely out of low-earth orbit for the long term," Bolden, a former shuttle commander, said after the budget was released Monday.

The dome going up on Endeavour - like a big bay window - should greatly improve the quality of life aboard the space station.

When astronauts exercise in the Italian-built Tranquility, for instance, they will be able to gaze out the nearby dome windows whenever the shutters are open. And when the day's work is done, they will be able to pop their heads and shoulders into the 5-foot-tall cupola, beholding the universe.

The lookout also will provide 360-degree views of the space station, allowing the crew to see directly outside during robotic work. Until now, they've had to rely on TV cameras when they use the [robot arm](#) to move

or install big-ticket items.

"Looking out on the Earth is just inspiring," said space station resident Timothy "TJ" Creamer. In fact, it's the crew's No. 1 pastime in the off hours - at least it was before the Internet came aboard.

Now, "we can actually surf the Internet and find diversions," Creamer told schoolchildren in a TV hookup this week.

The five space station residents - two Americans, two Russians and one Japanese - finally got Internet access late last month, nearly a decade after the first bunch of guys moved in.

"First thing I did on internet? Order my wife some flowers," commander Jeffrey Williams wrote in his online Twitter account. "It was a hit. Commerce from space!"

The dome - nearly 10 feet in diameter and also made in Italy - will ride up in the shuttle attached to Tranquility, but in the wrong place. It will be moved to its proper location once Tranquility is connected to the space station.

During the third and final spacewalk of the mission, two of the astronauts will be outside looking in, while the nine others will be crowded inside, gazing out. They will pop their heads and shoulders into the dome, with their legs floating down into Tranquility.

With weightlessness, shuttle commander George Zamka said, it should be much easier and comfortable than the old how-many-can-fit-into-a-phone booth gag.

The main circular window - 31-inches across - is the biggest window ever bound for space. The six windows on the perimeter are trapezoid-

shaped. For now, NASA wants to keep them shuttered most of the time to protect the fused silica glass from orbital debris. The glass is 1 inch to 1 1/2 inches thick and has four panes.

The name of the 23-foot-long Tranquility chamber pays homage to the Apollo 11 moon landing. The dusty Sea of Tranquility is where Neil Armstrong and Buzz Aldrin landed on July 20, 1969.

Actually, the new space station room should have been named Colbert. TV comedian Stephen Colbert campaigned and won an online vote to have the chamber named after him, but NASA much preferred the historic moniker. Colbert made due with his name on a treadmill that flew up last summer.

The Colbert treadmill will wind up in Tranquility, along with some extraordinary rocks mounted on a plaque aboard Endeavour. The chips of moon rock were collected by the Apollo 11 crew and carried to the top of Mount Everest last spring by a former shuttle astronaut, Scott Parazynski. Also on the plaque: a big rock gathered on the summit of Everest during that same expedition.

After Endeavour's 13-day mission, the space station will be 98 percent complete, with only four shuttle trips remaining. Shuttle flights are supposed to conclude by the end of September, but the White House said they can slip into 2011 if NASA needs to take more time and care.

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