

NASA debates space station fix

WASHINGTON, USA - NASA debated whether to go ahead with a planned cargo mission to the International Space Station or postpone it so astronauts can do spacewalks for urgent repairs.



Astronauts aboard the ISS may need to venture outside the craft to repair a fault in the cooling system. Image: Wiki Images

Last week, NASA learned that a faulty valve had interfered with the cooling loops that regulate equipment temperature aboard the orbiting space lab.

The six-man crew was never in danger from the problem, but NASA said it would like the system fixed for good, and soon.

As anticipation built and the hours ticked down, Orbital Sciences rolled its Antares rocket out to the launch pad at Wallops Island, Virginia in preparation for the launch of its Cygnus supply ship.

Meanwhile, NASA television showed images of astronauts preparing their white spacesuits in case they are called upon to get out and repair the broken cooling system.

A US space agency spokesman told AFP a final decision could come later this week.

"We are trying to figure out all the details we need to make a good decision," NASA spokesman Kelly Humphries said.

Multiple spacewalks needed

At some point, multiple spacewalks will be needed to fix the problem. But in recent days, engineers have reported some success in manipulating the system from the ground.

If the agency decides its temporary fix - which has involved the shutting down of some equipment - is stable, the Orbital launch could go ahead.

Orbital Sciences' privately-owned cargo ship would then start its journey on its first regular commercial mission to supply the orbiting outpost, berthing at the space station on Sunday(22 December) at 09.52 GMT.

The company did a demonstration launch and berthing at the ISS in September, showing it was capable of the mission and paving the way for more supply trips.

When NASA lost its capacity to reach space with the retirement of the 30-year shuttle program in 2011, Orbital Sciences and SpaceX stepped in to fill the void with their privately-made supply spacecraft.

Both companies have lucrative contracts with the US space agency to ferry supplies to the ISS.

SpaceX, the California-based company owned by Internet entrepreneur Elon Musk, became the first private company to reach the ISS in 2012 and has a US\$1.6bn contract for 12 missions with its Dragon space capsule.

Orbital has a US\$1.9bn contract with NASA for eight cargo missions to the ISS, totting supplies, food, science experiments and spare parts.



A supply mission to the orbiting ISS may have to be delayed until repairs to space station's cooling system have been completed. Image: Wiki Images

To go or not to go?

If NASA decides that engineers on the ground have not been able to fix the ISS cooling system in a way that would be stable for the coming weeks, the Orbital launch would be delayed until next year.

The first of a series of spacewalks by the astronauts at the ISS would then begin later this week.

The last time astronauts stepped out to replace a faulty ammonia pump was in 2010, and the repair took three spacewalks to complete.

If spacewalks are called for this time, they would mark the first time astronauts have ventured outside the orbiting lab since a helmet leak brought an early end to a European astronaut's outing in July.

Italian Luca Parmitano was wearing a US-made spacesuit when a water leak flooded his helmet and risked drowning him.

Two Russians aboard the station are scheduled to step out on a spacewalk for maintenance work on their own module at the lab on December 27.

Commander Oleg Kotov and Flight Engineer Sergey Ryazanskiy are slated for the outing to install cameras and other equipment on a platform outside the Russian segment of the station.

Source: AFP via I-Net Bridge

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