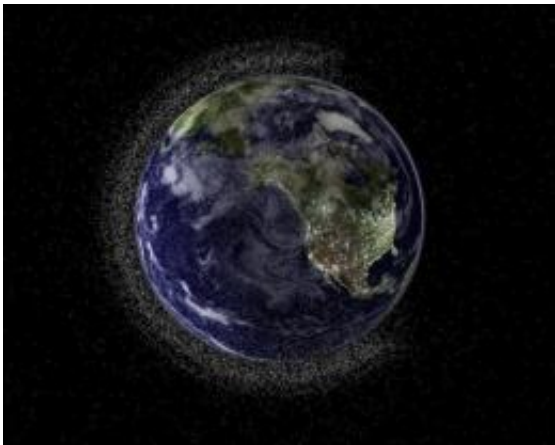


Debris may be on collision course with space lab: NASA

July 11 2011, by Kerry Sheridan



This handout illustration image created by Australia's Electro Optic Systems (EOS) aerospace company shows a view of the Earth with low-orbiting space debris. The US space agency is tracking a piece of space junk that could be on a path toward the International Space Station, where the shuttle Atlantis has just docked on its final mission, NASA said.

NASA is tracking a piece of Soviet space debris that could collide with the International Space Station, the US space agency said Sunday after the shuttle Atlantis docked on its final mission.

The [space junk](#) is part of Cosmos 375, a satellite launched in 1970 by the former Soviet Union and which collided with another satellite and broke apart, but details about the size and exact trajectory of the object were unknown, NASA said.

However, the debris could be on a collision course with the station at around 12 noon (1600 GMT) on Tuesday, the same day that two US astronauts are scheduled to step out on a [spacewalk](#).

"The team expected updated tracking information following today's docking to help determine if a maneuver using the shuttle's thrusters is necessary to avoid the debris," NASA said in a statement.

Word of the debris came shortly after the [shuttle Atlantis](#) docked at the orbiting [International Space Station](#) for one last time, on its final [space voyage](#) before the entire 30-year US shuttle program shuts down for good.

The shuttle docked at 11:07 am (1507 GMT), just over an hour after the spacecraft performed its habitual slow backflip so that the ISS crew could take pictures of Atlantis's [heat shield](#) before clasping onto the lab, NASA said.

Hatches opened between the two spacecraft at 12:47 pm (1647 GMT), and the four Atlantis astronauts floated across to greet their ISS crewmates with hugs and smiles.

A close call between the orbiting outpost and a piece of [space debris](#) happened just two weeks ago, and the astronauts took temporary shelter in their [Soyuz spacecraft](#) docked at the station until it passed.

[Flight controllers](#) are monitoring more than 500,000 pieces of debris in Earth's orbit, NASA said.

"It is not uncommon. There is a lot of junk in orbit and there are a lot of objects that are being tracked," said deputy manager of the [space shuttle program](#) LeRoy Cain.

"What we were told today is very preliminary," Cain said. "It is a potential right now."

Atlantis's flight marks the end of an era for NASA, leaving Americans with no actively operating government-run human spaceflight program and no method for sending astronauts to [space](#) until private industry comes up with a new capsule, likely by 2015 at the earliest.

With the shuttle gone, only Russia's three-seat Soyuz capsules will be capable of carrying astronauts to the ISS at a cost of more than \$50 million per seat.

Asked on CNN Sunday about headlines that proclaim the start of a period of Russian dominance in spaceflight, the US space agency's administrator Charles Bolden said: "I don't think I could disagree more with the headlines."

"We have been the leader for many years, many decades now, and that will -- we will maintain that leadership," said the former astronaut.

Atlantis is carrying 8,000 pounds (3,000 kilograms) of supplies, which the combined crew of 10 -- four aboard the shuttle's STS-135 mission and six aboard the ISS as part of Expedition 28 -- will transfer during the mission.

A failed ammonia pump will then be transferred to the shuttle payload bay for return to Earth.

Monday will be occupied with setting up the transfer of the Raffaello multipurpose module, which holds the extra supplies, from the shuttle to the Earth-facing side of the station's Harmony module.

A spacewalk by American ISS crew members Garan and Mike Fossum

is set for Tuesday.

The duo has already stepped out together on three spacewalks in June 2008 as part of the STS-124 mission that delivered the Japanese Kibo lab to the ISS.

The shuttle's return to Earth is currently scheduled for July 20, though NASA may add an extra day to the mission.

After that, NASA will continue working with private industry on plans to build a next generation spacecraft to tote astronauts and cargo to the ISS, while NASA focuses on a multipurpose crew vehicle that could take astronauts to deep space, Bolden said.

"The president has set the goals: an asteroid in 2025, Mars in 2030. I can't get any more definitive than that," he said.

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