

ISS moves to avoid space debris

September 23 2020

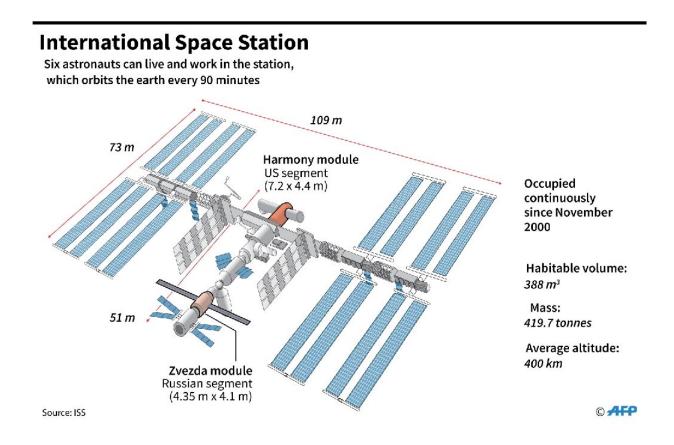


Diagram of the International Space Station (ISS).

Astronauts on the International Space Station carried out an "avoidance maneuver" Tuesday to ensure they would not be hit by a piece of debris, said US space agency NASA, urging better management of objects in Earth's orbit.



Russian and US flight controllers worked together during a two-and-a-half-minute operation to adjust the station's orbit and move further away, avoiding collision.

The debris passed within about 1.4 kilometers (nearly one mile) of the ISS, NASA said.

The three <u>crew members</u>—two Russians and an American—relocated to be near their Soyuz spacecraft as the maneuver began so they could evacuate if necessary, NASA said, adding that the precaution was taken "out of an abundance of caution."

The astronauts were able to return to their normal activities after the procedure, according to NASA.

"Maneuver Burn complete. The astronauts are coming out of safe haven," NASA chief Jim Bridenstine said on Twitter.

The threatening scrap was actually a piece of a 2018 Japanese rocket, astronomer Jonathan McDowell said on Twitter. The rocket broke up into 77 different pieces last year.

The ISS usually orbits roughly 260 miles (420 kilometers) above the Earth, at a speed of about 17,000 miles per hour.

At such a velocity, even a small object could seriously damage a solar panel or other facet of the station.





The International Space Station—seen here on August 26, 2020—performed a maneuver on September 22, 2020 to ensure it gets out of the way of a piece of space debris

This type of maneuver is necessary on a regular basis. NASA said 25 such maneuvers had occurred between 1999 and 2018.

Bridenstine wrote on Twitter that this was the third such <u>maneuver</u> on the ISS just this year.

The operations could become even more frequent as Earth's orbit becomes littered with pieces of satellites, rockets and other objects launched into <u>space</u> over the last sixty years.



Accidental or deliberate collisions, including anti-satellite missile launches by India in 2019 and China in 2007, can break objects apart even further and create added risk.

"Debris is getting worse! Time for Congress to provide @CommerceGov with the \$15 mil requested by @POTUS for the Office of Space Commerce," Bridenstine tweeted.

The Office of Space Commerce is a civilian organization that supporters want to take over the surveillance of space junk, a job currently occupied by the military.

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