

## No sweat: Shuttle's exercise gear on the fritz

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Space junk from a Soviet satellite no longer poses a threat to Discovery shuttle, but astronauts face a vexing new problem: the spacecraft's exercise equipment is on the fritz, NASA said Monday.

Space officials said during a press conference that Discovery's "ergometer" -- a stationary bike-like contraption specially designed for use in zero gravity -- was not functioning properly.

The snag means that Discovery's astronauts now may have to improvise to stay in tip-top shape during the 13-day mission.

"If we can't fix it, we've got some rubber bungee-type <u>exercise</u> <u>equipment</u> that they can use to get some exercise," Paul Dye, flight director at Johnson <u>Space</u> Center in Houston, told reporters.

The deleterious effects of <u>microgravity</u> on the body makes exercise vitally important in helping astronauts maintain bone density and muscle mass, even during a relatively short space flight.

"It's important to get exercise while you're in space, because your muscles aren't working the way they normally do, just to keep you upright and moving around like they do on the Earth," Dye said.

He added that Discovery's space crew may be able to use equipment on the ISS to stave off the physical ravages of space.

"They've got different exercise equipment aboard the station that we can



look at possibly using," he said.

"Even if this ergometer is jammed up the folks will still be able to get some exercise while they're on orbit, I'm not seeing that as a problem," Dye said.

Discovery is due to dock with the International <u>Space Station</u> at 2113 GMT on Tuesday. During their nearly two-week long mission, the sevenmember shuttle crew will deliver and install two final pairs of <u>solar panels</u> to the space station, one of the last major tasks of the more than decade-long effort to construct the orbiting laboratory.

The shuttle will also deliver the first Japanese crewmember, Koichi Wakata, to the ISS, where he will replace US astronaut Sandra Magnus, who has been on the ISS for four months.

Other than the malfunctioning exercise equipment, Dye said the mission so far has been virtually flawless.

"I'm really, really happy with the way this vehicle came out of the gate," said Dye, who added that an earlier concern about a possible strike by floating space debris was no longer a worry.

"The latest tracking info showed the debris was outside our area of concern," he told reporters.

The piece of cell-phone sized <u>space junk</u> was believed to be from the Soviet-era Kosmos 1275 satellite, which disintegrated shortly after it was launched in 1981.

Initial projections put the object on a trajectory that would take it to within three-quarters of a kilometer (2,600 feet) of the International Space Station, which caused teams in Houston and Moscow to prepare a



plan to move the ISS from its orbit if necessary.

But NASA called off the "debris avoidance maneuver" after new information showed that the rubble was outside the ISS's danger zone.

The space junk threat was the second in as many weeks to threaten the ISS. Last week, the space station's three-member crew had to temporarily evacuate the space station and seek shelter in a Soyuz capsule when a small piece of debris passed about 4.5 kilometers (2.7 miles) from the ISS.

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