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SPACE HARPOON THAT CAPTURES JUNK TESTED

Relevant for: Science & Technology | Topic: Space Technology & related matters

A harpoon striking a square target mounted 5 feet from the spacecraft.

A harpoon flung from a satellite has successfully captured a piece of pretend space junk, like a whale.

The British-led experiment is part of an effort to clean up debris in orbit, hundreds of miles above the Earth.

The University of Surrey's Guglielmo Aglietti said on Friday that the steel-tipped harpoon scored a bull's-eye last Friday.

The harpoon no bigger than a writing pen pierced an aluminum panel the size of a table tennis racket attached to the end of a satellite boom. The distance was just 5 feet, but researchers were delighted.

A video shows the harpoon slamming into the target and knocking it off its perch, and then the harpoon cable becoming entangled around the boom.

Mr. Aglietti said a much bigger harpoon will be needed in order to snare a real dead satellite "Moby Dick style." Thousands of old satellite and rocket parts, and other junk circle the Earth, a potential threat to working spacecraft, including the International Space Station (ISS).

The same team used a net to capture a piece of space junk, in a test last September. And in December, they tracked a tiny satellite ejected from the mother ship, using lasers.

"We are very happy because so far, we have done three experiments and all three have been working," Mr. Aglietti said by phone from England.

All that remains is for the 400-km-high satellite to re-enter the atmosphere and burn up. If all goes according to plan, a sail will inflate in March and eventually drag the satellite down, its mission accomplished.

Mr. Aglietti said the next step for the consortium, which includes Airbus, would be to offer this as a real service and go after real space debris.

The experiment was launched to the space station last April and released from the station last June.

What is mutualism? How many carbon atoms does a Furan ring have? For answers, and more interesting questions, take this quiz.

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