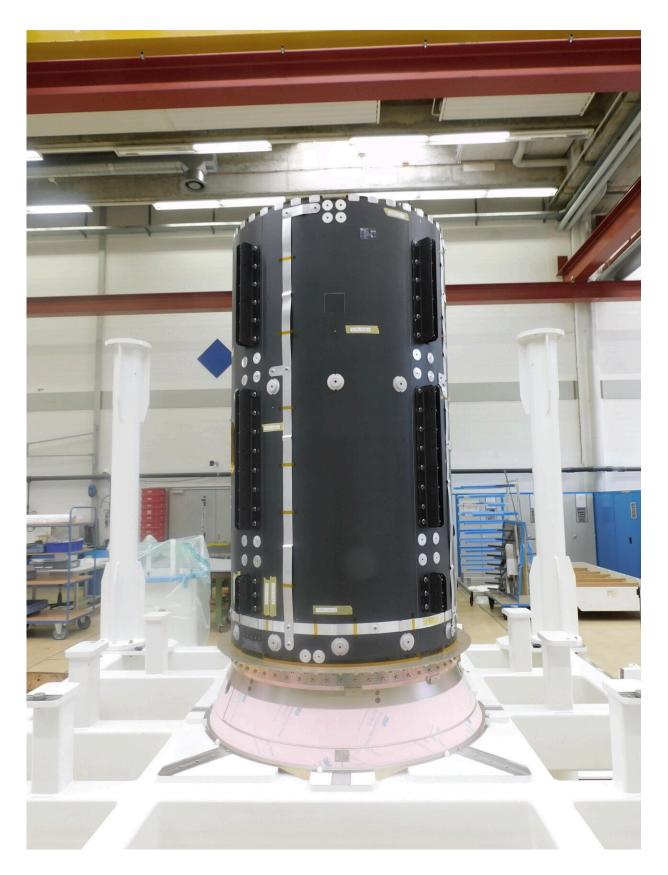


Backbone of Hera asteroid mission for planetary defense

March 10 2022







Credit: RUAG Space

In a Swiss cleanroom, this historic object has been taking shape. Made of carbon fiber reinforced polymer, this is the central core of ESA's Hera asteroid mission for planetary defense.

NASA's DART spacecraft is currently on its way to the Didymos asteroid pair in <u>deep space</u>, to test the kinetic impact technique of asteroid deflection on the smaller of the two bodies on 26 September this year.

Hera will fly to the same asteroid system in the aftermath of the impact to perform a close-up "crime scene investigation," including close-up mapping of DART's crater and assessing the asteroid's make-up and internal structure.

The stiff, strong core serves as a backbone to the spacecraft, built for ESA by a team from RUAG Space in Switzerland and OHB in the Czech Republic. Once current "static load" testing confirms its performance, the core will be shipped to OHB in Germany to assemble the spacecraft's primary structure around it.

It will then be passed on to Avio in Italy to integrate its propulsion module. The bottom aluminum cone includes the Launcher Interface Ring, providing all necessary connections with the launcher.

Hera is scheduled for launch in October 2024, due to reach the Didymos asteroids in December 2026.

Provided by European Space Agency



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