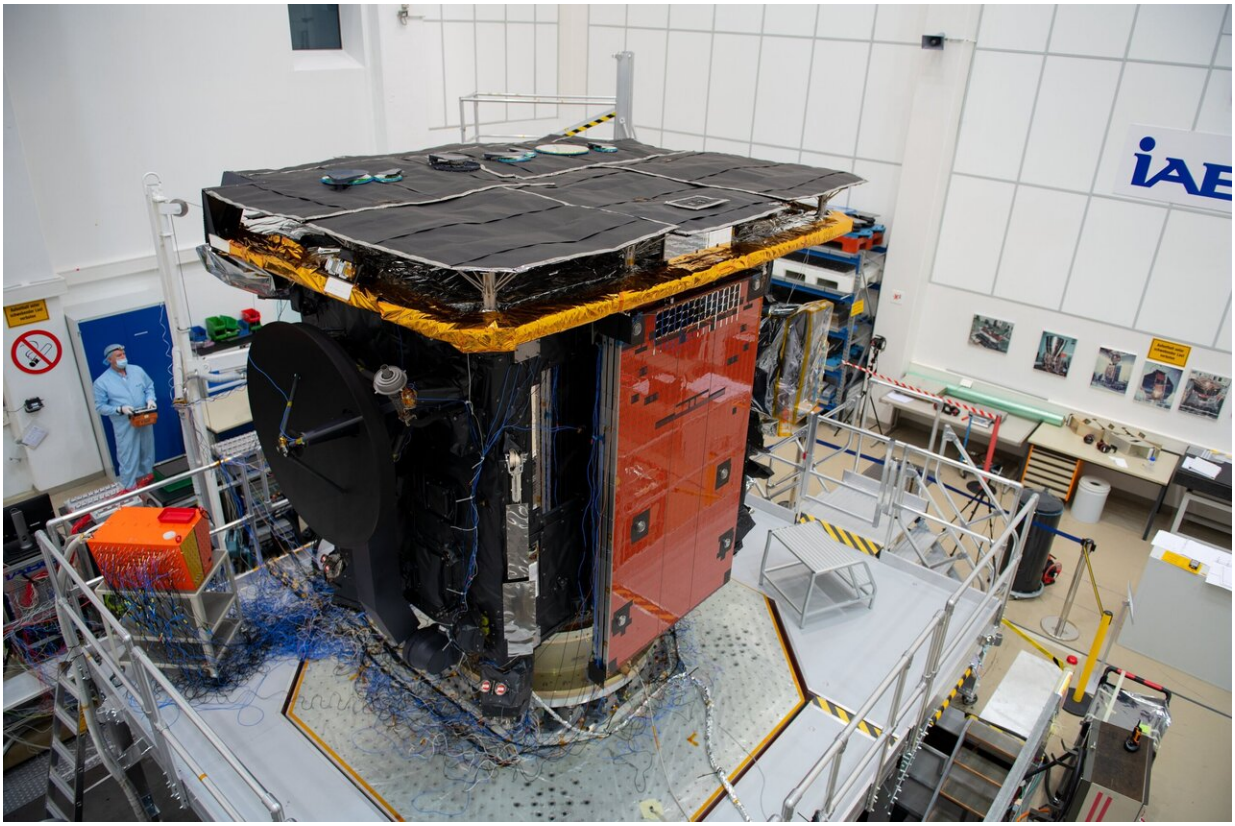
# Image: Connecting to Solar Orbiter

April 4 2019



Credit: ESA - S. Corvaja

In this image, ESA's new Solar Orbiter spacecraft is seen during preparations for a vibration test campaign at the IABG facility in Ottobrunn, Germany, in March 2019.

While the craft is at Ottobrunn, the Solar Orbiter mission control team

located at ESA's ESOC mission control centre in Darmstadt, Germany, is getting ready to establish data links to the satellite.

The live links, dubbed 'system validation tests', will see the flight team connect their mission control system to the spacecraft, as they will in future when the control systems on ground 'talk' to the spacecraft in orbit via radio signals transmitted by a ground station antenna.

"The prime objective of the system validation tests for any spacecraft is to validate that the mission control system can correctly send and receive telecommands to the satellite," says ESA's Jose-Luis Pellon-Bailon.

"The tests also confirm that the spacecraft launch configuration is as expected by the post-launch Flight Control Procedures."

An initial series of system validation tests were run last summer, when Solar Orbiter was still at its manufacturer, Airbus Defence & Space UK, in Stevenage.

"Since then, it has moved to Ottobrunn where we will run the next series of tests in early May and early August, lasting nine days in total and running around the clock," says Jose-Luis.

"Solar Orbiter will then move to the U.S. for launch from Cape Canaveral, where we will run a final series of connection tests at the end of November."

Solar Orbiter will be launched in 2020 to study how the sun creates and controls the heliosphere, the vast bubble of charged particles blown by the solar wind into the interstellar medium.

Provided by European Space Agency