Handing over European service module for Artemis II

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Yesterday, ESA formally gave possession of the second European Service Module to NASA for the Artemis II mission that will see four astronauts circle our moon and return to Earth.

In the presence of one of the four Artemis astronauts that will rely on the European Service Module-2 for water, air, electricity, propulsion and temperature control on their two-week voyage around our moon, ESA's European Service Module production manager Anthony Thirkettle and NASA's Orion program manager Howard Hu signed the papers for the handover of the hardware at NASA's Kennedy Space Center in Florida, U.S.

The European Service Module-2 will power the Orion spacecraft on the Artemis II mission that will see NASA astronauts commander Reid Wiseman, pilot Victor Glover, and mission specialists Christina Koch with Canadian Space Agency astronaut Jeremy Hansen complete flyby of the moon and return to Earth.

The crew will fly Orion to 8889 km beyond the moon before completing a lunar flyby and returning to Earth. The mission will take a minimum of eight days and will collect valuable flight test data, in the first time for over 50 years that humans have voyaged to our natural satellite.

The European Service Module has 33 thrusters, 11 km of electrical wiring, four propellant and two pressure tanks that all work together to supply propulsion and everything needed to keep the astronauts alive far from Earth—there is no room for error.
Orion is NASA’s next spacecraft to send humans into space and part of the Artemis programme. It is designed to send astronauts farther into space than ever before, beyond the Moon and to the lunar Gateway. Credit: European Space Agency

"The handover is a formality, but it is an important milestone for the program. It could not have been achieved without the tremendous effort of all the teams involved," said Anthony, "ESA will continue to work closely with our NASA and industry colleagues on getting the Orion spacecraft ready for launch and throughout the Artemis II mission."

The European Service Module-2 will go through further tests before being connected to the Orion crew capsule later this year. The full spacecraft will then be put on track for the launchpad with fueling and integration with NASA's mega moon rocket SLS for a launch next year.