

Image: Getting I-HAB ready for lunar orbit

February 21 2022



Credit: Thales Alenia Space

ESA astronaut Alexander Gerst visited Thales Alenia Space in Turin recently to test out and provide feedback on accommodations for the next human outpost in space, the lunar Gateway.

As the name implies, the Gateway will be located within the moon's orbit and is being built by Thales Alenia Space on behalf of ESA. Among its components is the International Habitation Module or I-Hab.

As crew quarters are designed with humans in mind, Alex both toured the mock-up and stepped into the crew quarter simulator to provide some experienced feedback. After two missions to the International Space Station—Blue Dot (2014) and Horizons (2018)—totalling 362 days in [space](#), Alex is no stranger to living in special conditions.

Using virtual gear, Alex experienced an immersive environment representing the interior of I-Hab, as if he were present on the lunar Gateway in orbit around the moon. What did he think?

Overall, the feedback was positive. Alex provided some recommendations that will help Thales Alenia Space's design team improve the next iterations.

Alex and fellow ESA astronaut Luca Parmitano similarly assisted this process in 2021, but due to COVID-19 restrictions were only able to do so remotely.

Involving astronauts in the module design process allows engineers to capitalize on the astronauts' experience aboard the International Space Station. Their [feedback](#) will guide upcoming design phases, to support a user-centered approach.

"Exciting to see and work on the future of lunar exploration," said Alex. "The Gateway will be different to the International Space Station but an evolution of over two decades of living and working in low-Earth orbit. Next destination: lunar [orbit](#)."

I-Hab is a major part of the Gateway, and together with the

communications and refueling module ESPRIT and ESA's service [module](#) for the lunar spacecraft Orion, Europe is proving to be a vital partner in the Artemis program and humankind's return to the moon.

Provided by European Space Agency

Citation: Image: Getting I-HAB ready for lunar orbit (2022, February 21) retrieved 18 June 2024 from <https://phys.org/news/2022-02-image-i-hab-ready-lunar-orbit.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.