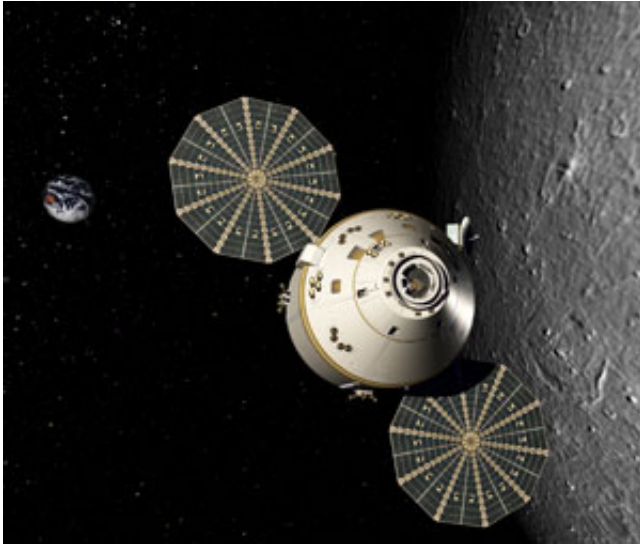


NASA Completes Key Review of Orion Spacecraft

7 March 2007



Orion in lunar orbit. Image credit: Lockheed Martin Corp.

NASA has established a requirements baseline for the Orion crew exploration vehicle, bringing America's next human spacecraft a step closer to construction.

The Orion Project completed its system requirements review in cooperation with its prime contractor, Lockheed Martin, March 1. The review marked the first major milestone in the Orion engineering process and provided the foundation for design, development, construction and safe operation of the spacecraft that will carry explorers to Earth orbit, to the moon, and eventually to Mars. The detailed requirements established in this review will serve as the basis for ongoing design analysis work and systems testing.

"This is a significant step in the development of a space transportation system that will expand our horizons to include other worlds," said Skip Hatfield, Orion Project manager at NASA's Johnson Space Center in Houston.

The Orion review followed an overall review of requirements for the Constellation Program that was completed in November. Similar reviews are planned later this spring for ground and mission operations systems that will support Constellation launch systems and space flight operations ground infrastructure.

"We have now completed program-wide launch vehicle and human spacecraft system requirements reviews," said Constellation Program Manager Jeff Hanley. "These are important pieces of a management and engineering puzzle that will allow us to accomplish the goal of putting humans back on the moon."

The Orion requirements data set was reviewed by agency and contractor scientists and engineers from across the country. More than 1,700 topics covering all aspects of vehicle performance, design and qualification were discussed during the course of the formal review.

Once all project-level reviews are complete, the Constellation Program will hold another full review to update baseline requirements. A lunar architecture systems review of equipment associated with surface exploration and science activities on the moon is expected in the spring of 2009.

Credit: NASA

APA citation: NASA Completes Key Review of Orion Spacecraft (2007, March 7) retrieved 23 January 2021 from <https://phys.org/news/2007-03-nasa-key-orion-spacecraft.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.