

James Webb Space telescope passes a mission milestone

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Artist's impression of the James Webb Space Telescope. Credit: Northrop Grumman

(Phys.org) —NASA's James Webb Space Telescope has passed its first significant mission milestone for 2014—a Spacecraft Critical Design Review (SCDR) that examined the telescope's power, communications and pointing control systems.



"This is the last major element-level critical design review of the program," said Richard Lynch, NASA Spacecraft Bus Manager for the James Webb Space Telescope at NASA's Goddard Space Flight Center in Greenbelt, Md. "What that means is all of the designs are complete for the Webb and there are no major designs left to do."

During the SCDR, the details, designs, construction and testing plans, and the <u>spacecraft</u>'s operating procedures were subjected to rigorous review by an independent panel of experts. The week-long review involved extensive discussions on all aspects of the spacecraft to ensure the plans to finish construction would result in a vehicle that enables the powerful telescope and science instruments to deliver their unique and invaluable views of the universe.

"While the spacecraft that carries the science payload for Webb may not be as glamorous as the telescope, it's the heart that enables the whole mission," said Eric Smith, acting program director and program scientist for the Webb Telescope at NASA Headquarters in Washington. "By providing many services including telescope pointing and communication with Earth, the spacecraft is our high tech infrastructure empowering scientific discovery."

Goddard Space Flight Center manages the mission. Northrop Grumman in Redondo Beach, Calif., leads the design and development effort.

"Our Northrop Grumman team has worked exceptionally hard to meet this critical milestone on an accelerated schedule, following the replan," said Scott Willoughby, Northrop Grumman vice president and James Webb Space Telescope program manager in Redondo Beach, Calif. "This is a huge step forward in our progress toward completion of the Webb Telescope."

The James Webb Space Telescope, successor to NASA's Hubble Space



Telescope, will be the most powerful <u>space telescope</u> ever built. It will observe the most distant objects in the universe, provide images of the first galaxies formed and see unexplored planets around distant stars. The Webb telescope is a joint project of NASA, the European Space Agency and the Canadian Space Agency.

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