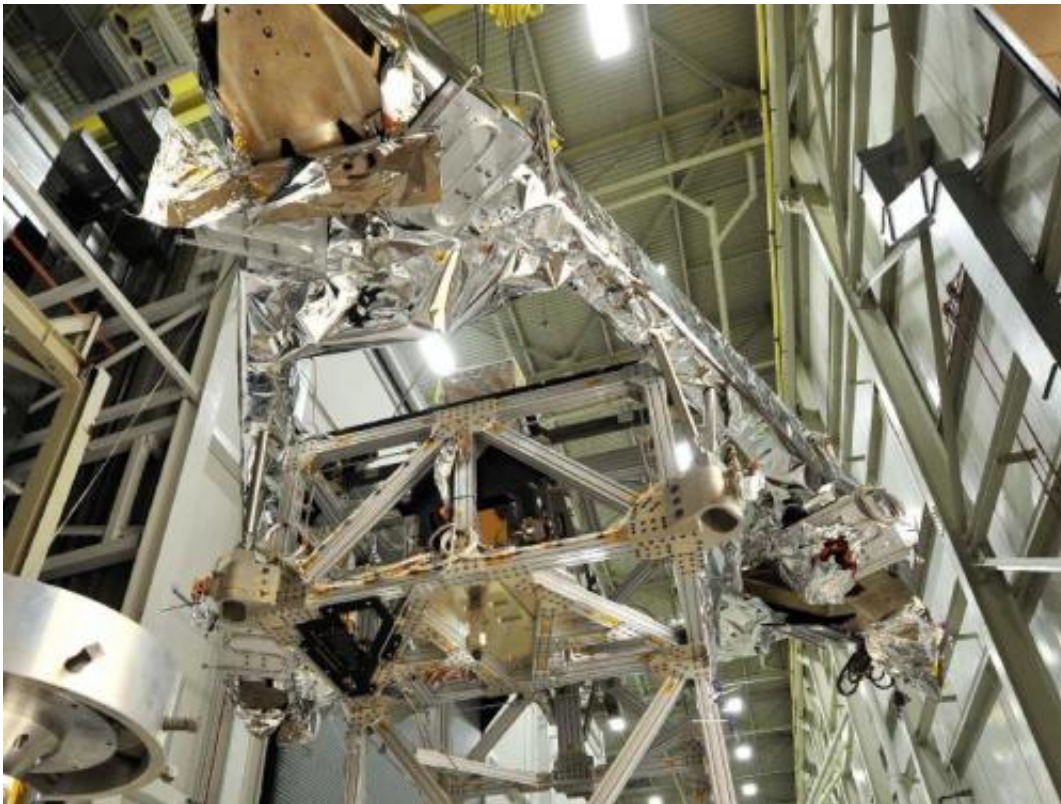


'Giant erector set' supports Webb Telescope test component

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Credit: NASA/Chris Gunn

(Phys.org)—A new photograph taken inside the giant clean room at NASA's Goddard Space Flight Center in Greenbelt, Md., shows what looks like a giant Erector Set supporting a test component of the James Webb Space Telescope.

The "giant Erector Set" is actually ground support equipment that includes the Webb telescope's Optical Telescope Simulator (OSIM). OSIM simulates a beam of light like the optics that will fly on the actual telescope. Because the real flight instruments will be used to test the real flight telescope, their alignment and performance first have to be verified by using the OSIM. Engineers are thoroughly checking out OSIM now in preparation for using it to test the flight science instruments later.

This photo shows the OSIM being loaded back into its stand after a successful test in the large [thermal vacuum chamber](#) called the Space Environment Simulator (SES), at Goddard. The structure that looks like a silver and black cube within the structure is a set of cold panels that surround OSIM's optics.

The OSIM itself will never fly in space, but it is an important part of the testing program to verify that the Webb telescope's [science cameras](#) and spectrographs will function as planned.

The most powerful space telescope ever built, Webb is the successor to NASA's [Hubble Space Telescope](#). Webb's four instruments will reveal how the universe evolved from the Big Bang to the formation of our solar system. Webb is a joint project of NASA, the European Space Agency and the [Canadian Space Agency](#).

More information: For more information about the James Webb Space Telescope visit:

www.jwst.nasa.gov/
www.nasa.gov/webb

Provided by NASA

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