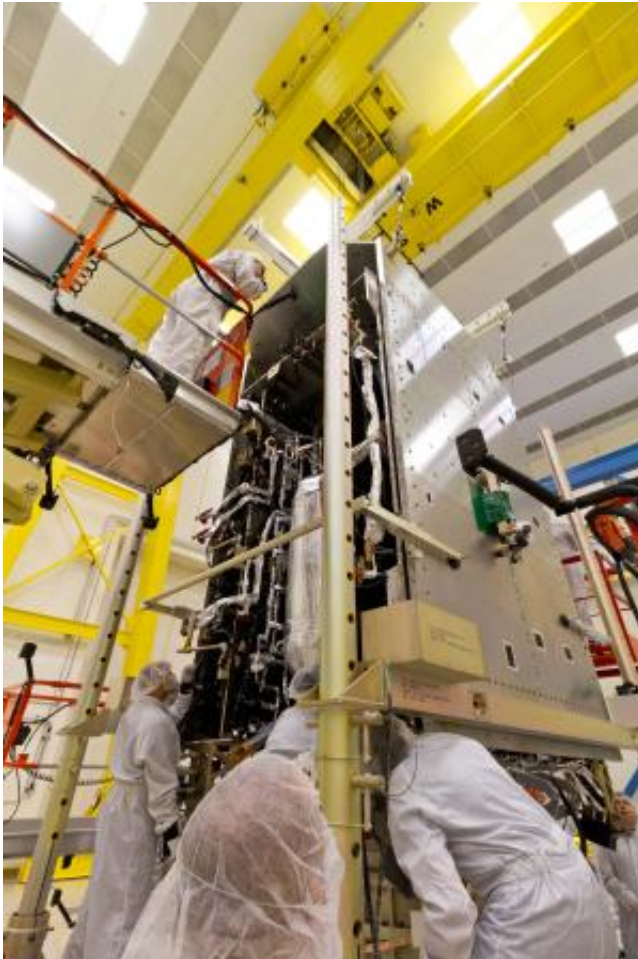


Lockheed Martin successfully mates NOAA GOES-R satellite modules

September 19 2014



Lockheed Martin successfully mated together the large system and propulsion modules of the first GOES-R series weather satellite at the company's Space Systems facilities near Denver, Colorado.

A team of technicians and engineers at Lockheed Martin has successfully mated together the large system and propulsion modules of the first GOES-R series weather satellite at the company's Space Systems facilities near Denver, Colorado. The Geostationary Operational Environmental Satellite-R series (GOES-R) is NOAA's next-generation geostationary weather satellites.

The system module of the A2100-based satellite houses more than 70 electronics boxes that comprise the three major electrical subsystems; command and data handling, communication, and electrical power. The propulsion core contains the integrated propulsion system and serves as the structural backbone of the satellite. The propulsion subsystem is essential for maneuvering the GOES-R satellite during transfer orbit to its final location, as well as conducting on-orbit repositioning maneuvers throughout its mission life.

"Positioning these large modules together in such a precise manor is a challenging task," said Tim Gasparrini, vice president and program manager for GOES-R at Lockheed Martin Space Systems. "Our team spent many hours modeling and analyzing the procedure in our virtual reality lab called the CHIL before tackling the mate in the cleanroom. This was a critical step in the integration of GOES-R and the team did an outstanding job."

With the core spacecraft completed, the team will begin installing the six weather and solar-monitoring instruments onto the satellite. Functional testing and environmental testing phases of the program will follow this fall. GOES-R is scheduled to be launched in early 2016.

Data from NOAA's GOES satellites provides accurate real-time weather forecasts and early warning products to NOAA's National Weather Service and other public and private sectors. The advanced spacecraft and instrument technology on the GOES-R series will vastly improve

forecasting quality and timeliness, generating significant benefits to the U.S. and Western Hemisphere in the areas of public safety, severe weather monitoring, [space weather prediction](#), ecosystems management, commerce and transportation.

Provided by Lockheed Martin

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