

NASA's NPP satellite undergoing flight environmental testing

February 12 2011

The NASA National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) climate/weather satellite is undergoing flight environmental testing at Ball Aerospace & Technologies Corp's production and test facility in Boulder, Colo.

The NPP [satellite](#) began environmental testing in November 2010 and has successfully completed vibration, acoustics and shock environments. In addition, the electromagnetic compatibility/electromagnetic interference testing was completed in January 2011. Currently the satellite is undergoing compatibility testing with the ground system and mission operations team. Later this month, the satellite will be moved into Ball's thermal vacuum chamber where it will be subjected to extreme temperatures to simulate what the satellite will encounter in space.

NPP continues the pioneering monitoring of Earth's climate achieved by NASA's Earth Observing System suite of satellites over the past decade. The mission is also the precursor of the next generation of operational polar-orbiting environmental satellites for the National Oceanic and Atmospheric Administration (NOAA). NPP will continue the operations of NOAA's current generation of polar-orbiting environmental satellites, which have for over 40 years protected lives and property as well as supported U.S. commerce and weather forecasts. The follow-on to NPP is the Joint Polar Satellite System (JPSS), which will be developed by NASA for NOAA.

"I am proud of the NPP team's commitment and dedication; they have kept the satellite on schedule with excellent results," stated Ken Schwer, NPP Project Manager, at NASA's Goddard Space Flight Center, Greenbelt, Md. "We are confident that we will deliver an excellent satellite for our October 25, 2011, launch date."

Throughout the satellite test campaign, NPP has worked closely with the JPSS program to ensure the compatibility and readiness of the JPSS ground and data systems to support the NPP on-orbit mission. In April 2011, the entire ground and data systems will undergo rigorous end-to-end testing to verify requirements and prepare for launch.

NPP just completed a several month review process with a review team that independently checked to ensure all aspects of the mission are on track for launch. The successful results of the review were presented to [NASA](#) Headquarters, Washington, in January 2011 where officials from NASA's Science Mission Directorate approved NPP's plan, budget, schedule, and success criteria for achieving the October 25, 2011, launch and on-orbit mission.

The five-instrument suite includes: the Visible/Infrared Imager Radiometer Suite (VIIRS); the Cross-track Infrared Sounder (CrIS); the Clouds and the Earth Radiant Energy System (CERES); the Advanced Technology Microwave Sounder (ATMS); and the Ozone Mapping and Profiler Suite (OMPS). NPP's advanced ultraviolet, visible, infrared, and microwave imagers and sounders will provide continuity of climate observations and enhance weather forecasting capabilities for the nation's civil and military users of satellite data.

Provided by NASA's Goddard Space Flight Center

Citation: NASA's NPP satellite undergoing flight environmental testing (2011, February 12)

retrieved 25 April 2024 from

<https://phys.org/news/2011-02-nasa-npp-satellite-flight-environmental.html>

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