Lockheed Martin Delivers Propulsion Core For The First GPS III Satellite

Spacecraft on Schedule for 2014 Launch Availability

PR Newswire
DENVER

DENVER, Sept. 24, 2012 /PRNewswire/ -- The Lockheed Martin [NYSE: LMT] team developing the U.S. Air Force's next generation Global Positioning System III satellites has delivered the first spacecraft's propulsion core module to the company's Denver-area GPS Processing Facility (GPF). The milestone represents the program's first major hardware delivery for GPS III Space Vehicle 1 and highlights the satellite's initial Assembly, Integration and Test activities in the GPF.

The propulsion core contains the integrated propulsion system and serves as the structural backbone of the satellite. Developed and tested at Lockheed Martin's Mississippi Space & Technology Center, the propulsion subsystem is essential for maneuvering the GPS III satellite during transfer orbit to its final location as well as conducting on-orbit repositioning maneuvers throughout its mission life.

"The delivery of the propulsion core demonstrates that this program is on firm footing and poised to deliver on its commitments," said Lt Col Todd Caldwell, the U.S. Air Force's GPS III program manager. "In this challenging budget environment, we are focused on efficient program execution to deliver critical new capabilities to GPS users worldwide."

The propulsion system benefits from a Lockheed Martin initiative to improve the manufacturability of GPS III. The activity simplified plumbing routing and reduced welds by 25 percent compared to similar spacecraft, which results in significantly reduced cycle time and cost for all GPS III production satellites.

To reduce risk and overall program costs for the government, the team is first fielding a full-sized satellite prototype, known as the GPS III Non-Flight Satellite Testbed (GNST). The approach is used to identify and solve development issues prior to integration and test of the first GPS III satellite.

"Building on the lessons learned from our GNST pathfinder, we expect to execute a very smooth and efficient assembly, integration and test phase for the first GPS III satellite," said Keoki Jackson, vice president of Lockheed Martin's Navigation Systems mission area. "We are on track to deliver the first satellite for launch availability in 2014, and as we complete production pathfinding on the GNST and move into full scale satellite production, we expect to streamline our processes further, reduce risk, lower per unit costs and ensure mission success."

The GPS III program will affordably replace aging GPS satellites while improving capability to meet the evolving demands of military, commercial and civilian users. GPS III satellites will deliver better accuracy and improved anti-jamming power while enhancing the spacecraft's design life and adding a new civil signal designed to be interoperable with international global navigation satellite systems.

In 2008, Lockheed Martin was awarded the contract for the design, development and production of the GNST and the first two GPS III satellites, with priced options for up to 10 additional satellites. In early 2012, the Air Force exercised a $238 million option for production of the next two satellites, GPS III space vehicles three and four. The Air Force plans to purchase up to 32 GPS III satellites.

The GPS III team is led by the Global Positioning Systems Directorate at the U.S. Air Force Space and Missile Systems Center. Lockheed Martin is the GPS III prime contractor with teammates ITT Exelis, General Dynamics, Infinity Systems Engineering, Honeywell, ATK and other subcontractors. Air Force Space Command's 2nd Space Operations Squadron (2SOPS), based at Schriever Air Force Base, Colo., manages and operates the GPS constellation for both civil and military users.

Headquartered in Bethesda, Md., Lockheed Martin is a global security and aerospace company that employs about 120,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The corporation's net sales for 2011 were $46.5 billion.

Media Contact:
Michael Friedman
303-971-7255

michael.1.friedman@lmco.com

Dani Hauf
303-564-3151
danielle.m.hauf@lmco.com

SOURCE Lockheed Martin

---

https://news.lockheedmartin.com/2012-09-24-Lockheed-Martin-Delivers-Propulsion-Core-For-The-First-GPS-III-Satellite