

Lockheed Martin Delivers GPS III Pathfinder Satellite To Denver On Schedule

New GPS Satellite Factory Opens for Business

DENVER, Dec. 13, 2011 /PRNewswire/ -- The Lockheed Martin (NYSE: LMT) team developing the U.S. Air Force's next generation [Global Positioning System](#) has delivered the program's pathfinder spacecraft to the company's Denver-area facility. The pathfinder, known as the GPS III Non-Flight Satellite Testbed (GNST), will now undergo final assembly, integration and test activities in a new facility designed to maximize efficiencies and reduce costs of satellite production.

The GPS III program will affordably replace aging GPS satellites while improving capability to meet the evolving needs of military, commercial and civilian users worldwide. 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](#).

The GNST is a full-sized, flight equivalent prototype of a GPS III satellite used to identify and solve development issues prior to integration and test of the first space vehicle. The approach significantly reduces risk, improves production predictability, increases mission assurance and lowers overall program costs. Now in Denver, the GNST will be mated with its core structure, navigation payload and antenna elements before completing pathfinding activities and checkout of environmental test facilities. The GNST will then be shipped to Cape Canaveral Air Force Station, Fla., for pathfinding activities at the launch site.

"The on schedule delivery of the GPS III pathfinder is a key indicator that this program is on firm footing and poised to deliver on its commitments," said LtCol Don Frew, the U.S. Air Force's GPS III program manager. "In this challenging budget environment, we are committed to delivering the critical GPS III capabilities to users affordably and on schedule."

GPS III Processing Facility

To reduce the cost of each GPS III satellite, the program invested in an advanced technology facility designed to create a true production line for GPS III. The facility, designated the GPS Processing Facility (GPF) and modernized from the company's former Atlas rocket assembly building, has nearly 40,000 square feet of spacecraft assembly and test area, including a clean room high bay and dedicated thermal vacuum and anechoic test chambers.

The high bay was designed to flow with maximum efficiency by minimizing space vehicle lifts and distances between operations. To do this, the GPS team studied the Corporation's high-volume aircraft production lines and utilized [virtual reality modeling technology](#) to lay out the factory floor. Like in aircraft and automobile production, each GPS III satellite will move through sequential work stations for various assembly and integration operations, culminating with environmental test procedures. Starting with the GNST, the GPF will significantly reduce cycle time and shave cost for each sequential GPS III satellite.

"The new GPS Processing Facility is truly state-of-the-art and its capability will allow our team to execute an extremely efficient GPS III production timeline," said Keoki Jackson, Lockheed Martin's GPS III program director. "The government and industry GPS III team has demonstrated outstanding commitment to this program. Together, we are constantly searching for ways to reduce costs while ensuring we deliver the most reliable, capable GPS satellite ever."

In parallel with the GNST, progress on the first space vehicle is progressing on schedule. Lockheed Martin [received the core structure for the first GPS III satellite](#) in Stennis, Miss., on August 4, and is now integrating the space vehicle's flight propulsion subsystem. The integrated core propulsion module will be shipped to the GPF in the summer of 2012 and will then undergo final assembly, integration and test in order to meet its planned 2014 launch.

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, 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 company that employs about 126,000 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 2010 sales from continuing operations were \$45.8 billion.

Note to Editors:

GPS III video and high-resolution images are available for download at www.lockheedmartin.com/gps

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