Lockheed Martin Completes Navigation Payload Milestone For GPS III Prototype

GPS III Remains On Schedule; Within Original Air Force Budget

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DENVER, May 29, 2012 /PRNewswire/ -- The Lockheed Martin (NYSE: LMT) team developing the next generation Global Positioning System III satellites has completed a major integration and test event on the program's satellite pathfinder, known as the GPS III Non-Flight Satellite Testbed (GNST). The milestone is a key indication that the GPS III team is on track to deliver the first satellite for launch availability in 2014.

In Lockheed Martin's new GPS Processing Facility (GPF), engineers successfully powered on the GNST with major elements of its Navigation Payload to include advanced atomic clocks for improved GPS accuracy, and the Mission Data Unit, the heart of the GPS III navigation payload. The test was completed in advance of integrating the full Navigation Payload Element, which is scheduled for delivery to the GPF this fall.

The GPS III program will affordably replace aging GPS satellites while improving capability to meet the evolving demands 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.

"This milestone is yet another example of how the GPS III program is reducing risk early to facilitate affordable, efficient and timely satellite production in the future," said LtCol Don Frew, the U.S. Air Force's GPS III program manager.

Incorporating lessons learned from previous GPS programs, the Air Force initiated a "back-to-basics" acquisition approach for GPS III. The strategy emphasizes early investments in rigorous systems engineering and industry-leading parts standards to significantly reduce risk, improve production predictability, increase mission assurance and lower overall program costs. These investments early in the GPS III program are designed to prevent the types of engineering issues discovered on other programs late in the manufacturing process or even on orbit.

"The GNST is the cornerstone of the Air Force's "back-to-basics" acquisition approach, and this milestone demonstrates that GPS III is on track and the acquisition strategy is working," said Keoki Jackson, vice president of Lockheed Martin's Navigation Systems mission area. "The Air Force's early investment in meticulous parts standards and rigorous systems engineering will significantly reduce per unit production costs and ensure mission success."

As production progresses on the first GPS III satellite, the team has already benefited from lessons learned on the GNST. Early efficiencies identified include:

- 50-80 percent reductions in labor hours and defect rates between similar activities on the GNST and the first space vehicle.
- Identification of tens of millions of dollars in cost savings for the production satellites based on process improvements recognized during GNST integration and test.

"As we continue learning lessons on the GNST and move into full scale satellite production, we expect to continually streamline our processes and reduce per unit costs," Jackson said.

In 2008, Lockheed Martin was awarded the contract for the design, development and production of the GPS III Non-Flight Satellite Testbed (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 123,000 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.

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