Most Advanced GPS Satellite Comes Together: First Lockheed Martin-Built GPS III Ready For System-Level Testing

First GPS III Space Vehicle Prepares for Testing in Simulated Harsh Space Environments

DENVER, May 4, 2015 /PRNewswire/ -- Using a 10-ton crane, Lockheed Martin [NYSE: LMT] engineers and technicians gently lowered the system module of the U.S. Air Force's first next generation GPS III satellite into place over its propulsion core, successfully integrating the two into one space vehicle.

GPS III space vehicle one (SV 01) is the first of a new, advanced GPS satellite design block for the Air Force. GPS III will deliver three times better accuracy, provide up to eight times improved anti-jamming capabilities and extend spacecraft life to 15 years, 25 percent longer than the satellites launching today. GPS III's new L1C civil signal also will make it the first GPS satellite interoperable with other international global navigation satellite systems.

The systems integration event brought together several major fully functional satellite components. The system module includes the navigation payload, which performs the primary positioning, navigation and timing mission. The functional bus contains sophisticated electronics that manage all satellite operations. The propulsion core allows the satellite to maneuver for operations on orbit.

"The final integration of the first GPS III satellite is a major milestone for the GPS III program," said Mark Stewart, vice president of Lockheed Martin's Navigation Systems mission area. "This summer, SV 01 will begin Thermal Vacuum testing, where it will be subjected to simulated harsh space environments. Successful completion of this testing is critical as it will help validate our design and manufacturing processes for all follow-on GPS III satellites."



Lockheed Martin recently fully integrated the U.S. Air Force's first next generation GPS III satellite at the company's Denverarea satellite manufacturing facility.

Lockheed Martin is currently under contract to build eight GPS III satellites at its GPS III Processing Facility near Denver, a factory specifically designed to streamline satellite production.

The GPS III team is led by the <u>Global Positioning Systems Directorate</u> at the U.S. Air Force Space and Missile Systems Center. <u>Air Force Space Command's 2nd Space Operations Squadron</u> (2SOPS), based at Schriever Air Force Base, Colorado, manages and operates the GPS constellation for both civil and military users.

Headquartered in Bethesda, Maryland, Lockheed Martin is a global security and aerospace company that employs approximately 112,000 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 2014 were \$45.6 billion.

Note to Editors:

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

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