Lockheed Martin-Built GPS Satellite Declared Operational For Users Worldwide

Next Block IIR-M Spacecraft Delivered to Support Future Launch

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The newest modernized Global Positioning System Block IIR (GPS IIR-M) satellite, designed and built by Lockheed Martin , has been declared fully operational by the U.S. Air Force following successful on-orbit deployment and checkout of all spacecraft systems.

The satellite, designated GPS IIR-16M, joins two other modernized Block IIR-M spacecraft and 12 original IIR satellites currently on-orbit within the overall 30-spacecraft constellation. The fourth GPS Block IIR-M satellite was recently delivered to Cape Canaveral to support a future 2007 launch, if requested by the Air Force for constellation sustainment.

Launched last month from Cape Canaveral Air Force Station, Fla., GPS IIR- 16M is part of the eightsatellite Block IIR-M series that Lockheed Martin Navigation Systems is developing for its customer, the Global Positioning Systems Wing, Space and Missile Systems Center, Los Angeles Air Force Base, Calif. The series includes new features that enhance operations and navigation signal performance for military and civilian GPS users around the globe.

"Our top priority is delivering mission success for our customer," said Don DeGryse, Lockheed Martin's vice president of Navigation Systems. "The Block IIR series, combined with the improved capabilities of new modernized spacecraft, are providing exceptional navigation service to users worldwide and we look forward to further enhancing the GPS mission with the launch of the remaining IIR-M spacecraft."

Each satellite in the Block IIR-M series includes a modernized antenna panel that provides increased signal power to receivers on the ground, two new military signals for improved accuracy, enhanced encryption and anti-jamming capabilities for the military, and a second civil signal that will provide users with an open access signal on a different frequency.

The Global Positioning System enables properly equipped users to determine precise time and velocity and worldwide latitude, longitude and altitude to within a few meters.

The second GPS IIR-M spacecraft was launched successfully on Sept. 25 and was declared operational on Oct. 12 by Air Force Space Command's 2nd Space Operations Squadron (2 SOPS) at Schriever Air Force Base, Colo., which manages and operates the GPS constellation for both civil and military users.

The modernized navigation payloads are being built by ITT in Clifton, N.J. The satellite upgrades along with final assembly, integration and test is being performed at Lockheed Martin facilities in Valley Forge, Pa.

Lockheed Martin is also leading a team in the competition to build the U.S. Air Force's nextgeneration Global Positioning System, GPS Block III. The program will address the challenging military transformational and civil needs across the globe, including advanced anti-jam capabilities and improved system security, accuracy and reliability.

The team, which includes ITT and General Dynamics, recently completed a System Requirements Review and is now working under a \$49 million contract to execute a System Design Review in March 2007. A multi-billion dollar development contract is scheduled to be awarded by the Global Positioning Systems Wing, Space and Missile Systems Center, Los Angeles Air Force Base, Calif. in 2007.

Headquartered in Bethesda, Md., Lockheed Martin employs about 140,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The corporation reported 2005 sales of \$37.2 billion.

SOURCE: Lockheed Martin

Web site: http://www.lockheedmartin.com/

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