

Modernized GPS Satellite Begins Operations Following Another Record On-Orbit Deployment By Joint U.S. Air Force/Lockheed Martin Team

Next Launch to Include Demonstration Payload for New Third Civil Signal

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A combined U.S. Air Force/Lockheed Martin team has completed a rapid on-orbit deployment of the modernized Global Positioning System Block IIR (GPS IIR-M) satellite launched on March 15 from Cape Canaveral. The spacecraft, which includes new features that enhance operations and navigation signal performance, has been declared operational for military and civilian navigation users worldwide.

Lockheed Martin's operations team assisted Air Force Space Command's 2nd Space Operations Squadron (2 SOPS) and its Reserve associate unit 19 SOPS based at Schriever Air Force Base, Colo., with the launch and early orbit maneuvers. The record on-orbit deployment and checkout of all spacecraft systems and subsequent payload initialization was completed in just over nine days, allowing 2SOPS to set the spacecraft healthy for users around the globe.

The satellite declared operational represents the third successful deployment of a GPS IIR-M satellite in less than six months and is one of the final three Block IIR-M satellites planned for launch in 2008 to sustain and improve the GPS constellation. The next GPS mission will feature a IIR-M spacecraft with a demonstration payload that will temporarily transmit the new third civil signal, known as L5. The launch, designated GPS IIR-20M is scheduled for June 30, from Cape Canaveral.

"The successful launch and operational turnover of this modernized IIR satellite is a profound testament to the close collaboration and partnership between the Lockheed Martin and Air Force team," said Don DeGryse, Lockheed Martin's vice president of Navigation Systems. "We take great pride in providing world class, high-performance GPS spacecraft at rapid cycle times and look forward to achieving mission success on the next modernized spacecraft launch which will feature a demonstration payload for the new civil signal."

The satellite, designated GPS IIR-19M, is the sixth in a line of eight GPS IIR satellites that Lockheed Martin Navigation Systems, Valley Forge, Pa. has modernized for its customer, the Global Positioning Systems Wing, Space and Missile Systems Center, Los Angeles Air Force Base, Calif.

Each IIR-M satellite 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. Air Force Space Command's 2nd Space Operations Squadron (2 SOPS) manages and operates the GPS constellation for both civil and military users.

Lockheed Martin is also leading a team which includes ITT and General Dynamics in the competition to build the U.S. Air Force's next-generation Global Positioning System, GPS Block III. The next-generation program will improve position, navigation, and timing services for the warfighter and civil users worldwide and provide advanced anti-jam capabilities yielding improved system security, accuracy and reliability.

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 early 2008.

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 2007 sales of \$41.9 billion.

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