

# Final Modernized Lockheed Martin-Built GPS Satellite Begins Operations For Users Worldwide

PRNewswire  
NEWTOWN, Pa.

The last in a series of eight modernized Global Positioning System IIR (GPS IIR-M) satellites built by Lockheed Martin has been declared operational by the U.S. Air Force for military and civilian navigation users around the globe.

The satellite, known as GPS IIR-21(M), was launched successfully from Cape Canaveral Air Force Station on Aug. 17. Lockheed Martin's operations team assisted the Air Force with the launch and early on-orbit maneuvers.

"The team once again executed a smooth and disciplined on-orbit deployment and checkout of all spacecraft systems and we're extremely pleased to have another high-performance GPS IIR-M satellite in our robust constellation," said Col. Dave Madden, the U.S. Air Force GPS Wing Commander. "I salute the entire government-industry GPS IIR-M team for their talent and determination to provide advanced navigation accuracy and reliability for GPS users worldwide."

Lockheed Martin and its navigation payload provider ITT of Clifton, N.J. designed and built 21 IIR spacecraft and subsequently modernized eight of those spacecraft designated Block IIR-M. 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.

"Reaching this milestone is a critical step in the mission to provide advanced position, timing and navigation capabilities for the warfighter and civil users," said Don DeGryse, Lockheed Martin's vice president of Navigation Systems. "The successful launch and operational turnover is a testament to the capabilities of our entire GPS team. Working together with our Air Force partner is a source of tremendous pride for Lockheed Martin."

GPS provides essential services including situational awareness and precision weapon guidance for the military. It is also an information resource supporting a wide range of civil, scientific and commercial functions -- from air traffic control to the Internet -- with precision location and timing information.

Building upon a legacy of providing progressively advanced spacecraft for the current GPS constellation, Lockheed Martin, along with ITT Corporation and General Dynamics will produce the next generation of global positioning satellites, designated GPS III. This program will improve position, navigation and timing services for the warfighter and civil users.

The team is progressing on-schedule in the Critical Design Review (CDR) phase of the program and is on track to launch the first GPS IIIA satellite in 2014.

Headquartered in Bethesda, Md., Lockheed Martin is a global security company that 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 2008 sales of \$42.7 billion.

Media Contact: Steve Tatum, 408-742-7531; e-mail, [Stephen.o.tatum@lmco.com](mailto:Stephen.o.tatum@lmco.com)

Samantha Un, 408-742-3516; e-mail, [Samantha.Un@lmco.com](mailto:Samantha.Un@lmco.com)

Low- and high-resolution JPEG image files of a GPS IIR-M satellite are available at:

<http://www.lockheedmartin.com/products/GPS/>

First Call Analyst:  
FCMN Contact:

SOURCE: Lockheed Martin

Web Site: <http://www.lockheedmartin.com/>

---

<https://news.lockheedmartin.com/2009-09-03-Final-Modernized-Lockheed-Martin-Built-GPS-Satellite-Begins-Operations-for-Users-Worldwide>