

# Sixth Modernized GPS Satellite Built By Lockheed Martin Ready For Launch From Cape Canaveral

A U.S. Air Force modernized Global Positioning System Block IIR (GPS IIR-M) satellite built by Lockheed Martin is ready for launch aboard a Delta II rocket on March 15 from Cape Canaveral Air Force Station, Fla. The Block IIR-M spacecraft series is designed to provide enhanced navigation capabilities for military and civilian GPS users around the globe.

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.

"We are extremely proud of the increased capabilities these advanced spacecraft are providing to our warfighters as well as civil users worldwide," said Don DeGryse, Lockheed Martin's vice president of Navigation Systems. "The success of this program is based on extensive experience in evolving GPS capabilities and a dedication to teamwork between Lockheed Martin and the Air Force and we look forward to achieving mission success for our customer."

The GPS constellation provides critical situational awareness and precision weapon guidance for the military and supports a wide range of civil, scientific and commercial functions -- from air traffic control to the Internet -- with precision location and timing information.

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 for the Air Force. The final satellite, which includes a new demonstration payload that will provide a temporary on-orbit demonstration for the new civil signal, known as L5, has just completed final integration testing and is on track for shipment Cape Canaveral in early April.

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

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

First Call Analyst:

FCMN Contact:

SOURCE: Lockheed Martin

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