

# Modernized GPS Satellite Built By Lockheed Martin Successfully Launched From Cape Canaveral

PRNewswire

CAPE CANAVERAL AIR FORCE STATION, Fla.

A U.S. Air Force modernized Global Positioning System Block IIR (GPS IIR-M) satellite, built by Lockheed Martin, was successfully launched today from Cape Canaveral Air Force Station aboard a United Launch Alliance (ULA) Delta II launch vehicle.

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.

Today's mission represented the third successful launch of a GPS IIR-M satellite in under five months and is one of the final three Block IIR-M satellites planned for launch in 2008 to sustain and improve the GPS constellation.

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.

"All of us at Lockheed Martin are proud of our long-standing partnership with the Air Force and the Block IIR-M's impressive record of performance," said Don DeGryse, Lockheed Martin's vice president of Navigation Systems. "We look forward to conducting another timely and efficient on-orbit checkout so that the warfighter and civil users around the globe can benefit from this satellite's advanced navigational capabilities as quickly as possible."

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 to Cape Canaveral next month in preparation for launch in June.

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.

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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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:

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