

U.S. Air Force/Lockheed Martin Team Celebrates Success Of GPS IIR Program As Final Satellite Is Readied For Shipment To Cape Canaveral For June Launch

Satellite Includes Demonstration Payload for New Third Civil Signal

PRNewswire

KING OF PRUSSIA, Pa., April 3

In a ceremony heralding the success of the U.S. Air Force's Global Positioning System Block IIR modernization effort (GPS IIR-M), Lockheed Martin today announced it has completed work on the last satellite in the program constellation, which features a demonstration payload that will transmit the new civil signal, known as L5. Preparations are now underway to ship the satellite to Cape Canaveral Air Force Station, Fla. for a scheduled launch in June 2008.

With over 150 of its employees as well as representatives from ITT Corporation, the Aerospace Corporation and the U.S. Air Force, the Lockheed Martin team today celebrated the success of the GPS IIR program, which is providing enhanced operations and navigation signal performance for military and civilian GPS users around the globe.

Work on the final IIR-M satellite was completed one month ahead of schedule and in less than one year after the Air Force awarded Lockheed Martin a \$6-million contract to develop the demonstration payload that will transmit a third civil signal located on the L5 frequency (1176.45MHz). The signal will comply with international radio frequency spectrum requirements. Future generations of GPS spacecraft will include an operational third civil signal to improve the accuracy and performance capabilities of the system.

"The entire team is proud of this historic milestone and our partnership with the Air Force on what has been a highly successful program with many technical innovations," said Don DeGryse, Lockheed Martin's vice president of Navigation Systems. "As the last in a line of eight modernized IIR spacecraft, this satellite will provide a timely demonstration of the new third civil signal and we look forward to achieving mission success for our customer."

Lockheed Martin Space Systems, Valley Forge, Pa., is the prime contractor for the GPS IIR program. The company designed and built 21 IIR spacecraft for the Global Positioning Systems Wing, Space and Missile Systems Center, Los Angeles Air Force Base, Calif. The final eight spacecraft, designated GPS IIR-M, were modernized to enhance operations and navigation signal performance for military and civilian GPS users around the globe. ITT supplied all 21 navigation payloads for both the IIR and IIR-M spacecraft as well as the L5 demonstration payload components. The operational GPS constellation has been significantly enhanced by the launch and successful initialization of three IIR-M spacecraft within the last six months.

The GPS constellation provides critical situational awareness and precision weapon guidance for the military. The worldwide system also 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 has a legacy of successfully upgrading space programs. In addition to the modernization of the Block IIR program, the company provided progressively advanced upgrades to the Air Forces' Defense Meteorological Satellite Program (DMSP), and military satellite communications programs such as the Milstar and Defense Satellite Communications System (DSCS).

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 second-quarter 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/GPS>

First Call Analyst:

FCMN Contact:

SOURCE: Lockheed Martin

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

<https://news.lockheedmartin.com/2008-04-03-U-S-Air-Force-Lockheed-Martin-Team-Celebrates-Success-of-GPS-IIR-Program-as-Final-Satellite-is-Readied-for-Shipment-to-Cape-Canaveral-for-June-Launch>