

## Los Angeles Air Force Base Media Release



SPACE & MISSILE SYSTEMS CENTER (AFSPC)

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## **SBIRS GEO-1 Fueled for Launch**

**LOS ANGELES AIR FORCE BASE, El Segundo, Calif. --** The Space Based Infrared Systems team passed a major milestone April 11 with the successful completion of the spacecraft fueling for the GEO-1 satellite.

Space vehicle fueling signifies all spacecraft preparations are complete, and the satellite is ready to be mated with the rocket for an early May launch.

The final decision to fuel was given by Lt. Gen. Tom Sheridan, commander of the Space and Missile Systems Center here, after several detailed readiness reviews were conducted in the months prior to beginning fueling operations.

"The joint government/industry team has made tremendous progress and established exceptional commitment in preparing the first SBIRS GEO spacecraft for launch," said Brig. Gen. (s) Roger Teague, director of SMC's Infrared Space Systems Directorate. "The completion of fueling GEO -1 is a strong indication we are moving quickly toward final preparation for launch."

The SBIRS spacecraft propulsion system is a dual-mode design, which operates as a pressure-regulated bipropellant system consisting of fuel and oxidizer and a monopropellant system consisting of hydrazine. Propellants include hydrazine and nitrogen tetroxide.

In the bipropellant mode, the system operates with hypergolic propellants, hydrazine (fuel) and nitrogen tetroxide (oxidizer) for high performance during orbital transfer. Once on station, the system operates in monopropellant mode, using only the hydrazine as fuel for simplicity and reliability.

"Fueling of SBIRS GEO-1 is a major milestone, and I am extremely proud of the entire joint government and industry SBIRS team. We have demonstrated outstanding commitment to the program in preparing this spacecraft for launch," said Jeff Smith, Lockheed Martin's vice president and SBIRS program director.

The next major milestone for GEO-1 is payload fairing encapsulation and transport to the Vertical Integration Facility where it will be mated to the top of the launch vehicle.

SBIRS replaces the legacy Defense Support Program constellation. The state-of-the-art SBIRS sensors will provide significantly enhanced capabilities to support four mission areas: Missile Warning, Missile Defense, Battlespace Awareness and Technical Intelligence.

The SBIRS team is led by SMC/IS. Lockheed Martin Space Systems Company, located in Sunnyvale, Calif., is the prime contractor.

Media representatives can submit questions for response regarding this topic by sending an e-mail to smcpa.media@losangeles.af.mil.

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