Missile Defense Research Satellite Launched

Air Force Lt. General Henry “Trey” Obering III, Missile Defense Agency director, announced the successful launch today of the Near Field Infrared Experiment (NFIRE) satellite from the NASA Space Flight Facility, Wallops Island, Virginia. The launch took place at approximately 2:49 am EDT.

The primary mission of the NFIRE satellite is to collect high and low resolution images of a boosting rocket to improve understanding of missile exhaust “plume” observations and plume-to-rocket body discrimination during three plume signature types: targets of opportunity, dedicated missile fly-bys, and ground observations. Targets of opportunity may include aircraft flights, space launches, and missile tests at a viewing distance of 60 to 600 miles. There will be two scheduled fly-bys later this year by missiles launched from Vandenberg Air Force Base, California. Ground observations may include bright burning events such as forest fires, volcanoes, and static (on-ground) tests of rocket engines. The Missile Defense Agency will use this data to validate and update the models and simulations that are fundamental to missile defense technologies. A secondary objective of the experiment is to collect types of infrared and visible light data for assessing early missile launch detection and tracking capability.

The prime integrator for the NFIRE satellite is General Dynamics Advanced Information Systems, a business unit of General Dynamics of Fairfax, Virginia. The satellite is carrying two payloads into low earth orbit aboard an Air Force four-stage Minotaur I space launch vehicle, contracted through Orbital Sciences Corporation’s Launch Systems Group. The primary payload is the Track Sensor Payload (TSP) which will be used to collect the images of the boosting rocket. The TSP was developed by Science Applications International Corporation (SAIC) of San Diego, California under contract to the Air Force Research Laboratory at Kirtland Air Force Base, New Mexico. The secondary payload is a Laser Communications Terminal (LCT) which will be used to evaluate the utility of laser communications for missile defense applications. The LCT was developed by Tesat-Spacecom and is provided by the German government as part of a cooperative agreement between the United States and Germany.

News media point of contact is Rick Lehner, Missile Defense Agency at 703-697-8997 or richard.lehner@mda.mil