Boeing Delta III Rocket Successfully Places Data-Gathering Payload into Orbit

Boeing Delta III Rocket Successfully Places Data-Gathering Payload into Orbit

A data-gathering, simulated payload was successfully placed into orbit today aboard a Boeing Delta III rocket. The launch vehicle lifted off at 7:05 a.m. EDT.

Instruments aboard the 9,480-pound satellite will provide information to further validate Boeing baseline data on launch vehicle performance. Engineers will begin tracking the payload for satellite studies by the U.S. Air Force and the University of Colorado.

"Today, Delta III flew the same flight profile as the mission last year, allowing us to compare data from both flights on an event-by-event basis," said Gale Schluter, vice president-general manager of Boeing Expendable Launch Systems. "This success confirms our confidence in Delta III."

Designated DM-F3 for Delta Mission-Flight 3, the payload was designed to match the mass and frequency characteristics of common commercial communication satellites sized for Delta III. Thus, the interaction during flight between an actual payload and the Delta III was accurately duplicated.

Boeing modified the payload to assist U.S. Air Force engineers in the calibration and testing of electro-optical space imaging systems. Reflective surfaces on the simulated satellite also provide laser cross-section targets at both visible and infrared wavelengths.

In addition, the DM-F3 payload will be used by the Air Force to verify its thermal standards and models for satellites. Verification of models used to predict payload dynamics will be accomplished by viewing the spin rate of the payload. In addition, the University of Colorado Center for Astrodynamics Research plans to analyze data to determine the effect of the orbital environment on the payload.

Delta III was designed to address the growing size of commercial satellites and move Boeing out of its role as a niche player in the launch industry. The Delta III can carry 8,400 pounds (3,800 kg) to geosynchronous transfer orbit, or twice the payload of the Delta II.

A larger fairing to house bigger payloads and a new cryogenically propelled upper stage with a Pratt & Whitneybuilt single engine is used by Delta III. The vehicle uses existing components and infrastructure similar to that used with the Delta II launch.

Delta III engineering, manufacturing, and program management are led by Boeing Expendable Launch Systems based in Huntington Beach, Calif., with final assembly in Pueblo, Colo. The Delta launch team at Cape Canaveral Air Force Station handles launch coordination and operations. Boeing manufactures the Delta III main engine, the RS-27A, in Canoga Park, Calif.

Major Delta III suppliers include: Alliant Techsystems, Inc., Magna, Utah, strap-on solid rocket motors; Pratt & Whitney, West Palm Beach, Fla., RL10B-2 cryogenic upper-stage engine; Mitsubishi Heavy Industries, Nagoya, Japan, 13-foot (4-meter) fuel tanks; and L3 communications, Teterboro, N.J., Redundant Inertial Flight Control Assembly avionics system.

###

20-034

Boeing Delta Web Site

For further information: Beth Hill (714) 372-4736 Walt Rice (800) 946-4646 PIN 149-4784 Keith Takahashi (800) 946-4646 PIN 149-4780 Boeing Delta Launch Hotline (714) 896-4770