

U.S. Air Force Procures Boeing Delta IV Launches for EELV Program

U.S. Air Force Procures Boeing Delta IV Launches for EELV Program

The U.S. Air Force announced today the procurement of 19 Boeing Delta IV launches for the Evolved Expendable Launch Vehicle (EELV) program valued at \$1.38 billion.

This initial launch services contract covers small, medium and heavy payload-class launches from 2002 to 2006. It splits 28 missions in a dual-source procurement designed to encourage greater contractor investment and competition in the U.S. space launch industry, and to decrease the Air Force's overall development cost.

The Air Force also entered into a \$500 million agreement with Boeing, supplementing development of the Delta IV family of launch vehicles for meeting all Air Force EELV requirements.

Acting Secretary of the Air Force F. Whitten Peters made the announcement for the program during a press conference held at the Pentagon earlier today. The EELV program is a multi-year effort aimed at reducing space launch costs by more than 25 percent.

"We are pleased to provide the Air Force with the next generation of space launch vehicles and to help reduce the cost of boosting payloads into orbit," said Jim Albaugh, president of Boeing Space and Communications Group. "The Delta IV program demonstrates the strengths of the new Boeing Company and our commitment to the space transportation business."

Today's announcement follows a development and procurement cycle that began in 1995. During the first phase, four competitors completed a 15-month contract to validate low-cost concepts. In December 1996, two contractors were selected to participate in the second phase, known as the Pre-Engineering, Manufacturing and Development (Pre-EMD) phase, a firm, fixed-price 17-month contract worth \$60 million for each company.

In November 1997, the Air Force announced that it intended to introduce competition across the life span of the EELV program by using a dual-source procurement strategy.

"We believe the Air Force's innovative EELV procurement process will benefit our national security interests as well as the commercial satellite industry," said Gale Schluter, vice president and general manager of Boeing Expendable Launch Systems.

First launch of the Boeing Delta IV is scheduled for 2001 and support projects are well under way. Boeing is building a new 1.5 million-square-foot facility in Decatur, Ala., for low-cost production of the common booster core, a major component of the Delta IV. Start-up production is scheduled for February 1999.

All variants of the Delta IV family will be able to launch from either Cape Canaveral Air Station, Fla., or Vandenberg Air Force Base, Calif. Boeing is building a new launch facility at Space Launch Complex 37 at Cape Canaveral Air Station, Fla. Additionally, the company will modify Space Launch Complex 6 at Vandenberg Air Force Base, Calif., to handle west coast launches.

To increase efficiency, both Cape Canaveral and Vandenberg sites will process rockets horizontally -- away from the launch pad -- to reduce pre-launch on-pad time from 24 days to only six-to-eight days.

The Boeing Delta IV family includes five launch vehicles with payload capabilities ranging from 9,200 to 29,000 pounds: Medium, Heavy and three variants of the Medium vehicle known collectively as the Medium-plus variants.

All vehicles use a common booster core (CBC) powered by the Rocketdyne RS-68 engine. The liquid hydrogen and liquid oxygen-burning, 650,000-pound (2,900-kiloNewton) thrust engine is thirty percent more efficient than conventional liquid oxygen/kerosene engines, and is environmentally friendly, producing only steam as a combustion by-product. Designed for low-cost production, the RS-68 engine has more than 80 percent fewer moving parts than a Space Shuttle main engine.

Modified Boeing Delta upper stages are added to the CBC to complete each vehicle, along with Delta common hardware and software.

The Air Force selected the Delta IV Medium and Heavy vehicles as part of its EELV initial launch services award. The Delta IV Medium, which can lift 9,200 pounds (4,140 kilograms) to geosynchronous transfer orbit, adds a modified Delta III cryogenic second stage and the 13.1-foot (4 meter) diameter composite fairing for payload protection.

The Delta IV Heavy, which can lift up to 29,000 pounds (13,050 kilograms) to GTO links three of the new CBCs together for liftoff, and adds a modified and enlarged Delta III upper stage. The Delta IV Heavy also uses the 16.67-foot (5-meter) diameter metallic fairing that Boeing manufactures for the Titan IV launch vehicle.

Production and assembly of the Delta IV is a team effort for Boeing employees and suppliers throughout the country. The Boeing facility in Huntington Beach, Calif., houses program management, engineering and some manufacturing functions. A new manufacturing facility in Decatur, Ala., will produce common booster cores.

Boeing designs and manufactures the RS-68 engine in Canoga Park, Calif., at its Rocketdyne Propulsion & Power unit.

The company's plant in El Paso, Texas, will build electrical components. Medium fairing segments, fabricated in Huntington Beach, will be shipped to the company's Pueblo, Colo., plant for manufacturing completion. The Pueblo plant also will be responsible for assembly of the medium upper stage.

The Delta IV production team includes major suppliers from throughout the United States: AlliedSignal Aerospace, Teterboro, N.J., Redundant Inertial Flight Control Assembly (RIFCA) for guidance control of all Delta IVs; Alliant Techsystems, Inc., Magna, Utah, and Iuka, Miss., first-stage strap-on solid-propellant rocket motors for the Medium-plus versions and composite CBC structures, respectively; Pratt & Whitney, West Palm Beach, Fla., second-stage engines for the Delta IV Medium and Heavy class vehicles.

###

98-078

For further information:

Media Relations

(714) 896-1301

Boeing Launch Hotline

(714) 896-4770
