Boeing Beats Schedule on X-32A Forebody

Under cost, under weight and ahead of schedule, the forward fuselage of the Boeing Joint Strike Fighter (JSF) X-32A concept demonstrator aircraft has been completed and is being shipped to Palmdale, Calif., for an early start of final assembly of the aircraft.

The X-32A forward fuselage, or forebody, was rolled out in a ceremony here today by the Boeing Phantom Works, which used a variety of lean design and manufacturing techniques to design and produce the fuselage section in only 14 months -- half the normal development time.

The forebody is being shipped to the Boeing X-vehicle assembly facility in Palmdale, Calif., where final assembly of the X-32A aircraft is scheduled to begin in mid-April. Final assembly refers to the joining of the major components of the aircraft -- the forward, center and aft fuselage sections, along with the wings and tail section.

"The early completion of the forebody will allow us to start final assembly of the X-32A much earlier than expected," said Frank Statkus, Boeing vice president and JSF program manager. "This achievement reflects our commitment to demonstrating that Boeing will meet or exceed all affordability and performance requirements of the JSF program."

JSF is being developed as a next-generation strike aircraft for use by the U.S. Navy, Air Force, Marines, and the U.K. Royal Navy and Air Force. The primary focus of the program is on affordability -- demonstrating ways to dramatically reduce the cost of aircraft development, production and ownership.

As part of the current concept demonstration phase of the JSF competition, Boeing is building two aircraft -- the X-32A and X-32B. The X-32A will demonstrate conventional takeoff and landing capabilities; the X-32B will demonstrate short takeoff/vertical landing capabilities.

"The 100 percent completion of the X-32A forebody in half the traditional amount of time demonstrates that Boeing has broken with traditional techniques and is setting new standards for design and production efficiency," said Jerry Ennis, vice president of Advanced Manufacturing and Prototyping for the Phantom Works.

"This achievement is a tribute not only to the lean design and manufacturing tools we've developed and used on JSF, but also to the teamwork we've developed with our suppliers, union and Boeing teammates across the country," Ennis said.

Among the lean design and manufacturing technologies Boeing is using to dramatically cut cycle times and cost on the JSF program are advanced 3-D modeling and simulation, automated fiber placement, high speed milling machines and simple, low-cost assembly fixtures.

These technologies allow designs to be created and changed very quickly in a single 3-D database used by the Boeing team across the country. This database allows suppliers to start early on parts, and hardware to be machined without first producing expensive try-out parts. It also allows assembly processes to be simulated to avoid costly problems during actual assembly, and is used by shop workers for assembly instructions.

"The use of these advanced tools is helping Boeing cut design cycle times and costs up to 40 percent and production cycle time up to 30 percent," Statkus said. "As a result, we're making equally good progress on the other major sections of the X-32A and B aircraft in St. Louis, Seattle and Palmdale."

According to Statkus, Boeing expects to complete the four-year concept demonstration phase of the JSF competition on schedule. A competition winner is scheduled to be selected in 2001.

###

99-55

For further information:
Dave Phillips
(314) 232-1372
Mike Tull
(206) 655-1198