Boeing Demonstrates Joint Strike Fighter Weapon System

Boeing Demonstrates Joint Strike Fighter Weapon System

Boeing has successfully completed the second in a series of four full-mission simulations of its operational aircraft concept for the Joint Strike Fighter (JSF). Boeing is conducting these major simulation demonstrations for the U.S. Department of Defense as part of its program to mature technologies and reduce risk in the development of the JSF.

In an integrated and operational mission environment, Boeing demonstrated the air-to-ground and air-to-air weapons-deployment capabilities of its JSF concept, as well as its sensor management, sensor fusion, radar and pilot-vehicle interface.

"Our goal was to get as close to the design for the Preferred Weapon System Concept as possible," said Stan Kasprzyk, cockpit manager for the Boeing JSF. "We achieved a very successful, high-fidelity evaluation, utilizing advanced simulation technologies to help us demonstrate -- very accurately -- how our JSF weapon system will perform in combat."

The Preferred Weapon System Concept (PWSC) is the design for the operational, production-model JSF.

"While we will continue to refine the simulations, we are primarily focusing on refining the capabilities of the weapon system itself," Kasprzyk said.

Using a piloted-dome environment, pilots representing a number of JSF customers participated in the demonstrations. They flew a total of 40 simulations over a seven-day period. The simulations consisted of four basic scenarios, including a close-air-support mission and an urban-target mission.

"Demonstrations like these early in development are extremely valuable," Kasprzyk said. "The kind of feedback we got led to great success on programs like the 777, and we're applying that kind of thinking very effectively on the JSF program."

Each of the simulations in the series builds upon the preceding model to refine operational capabilities that coincide with design and requirements changes in the Boeing PWSC. The first demonstration, held last November, emphasized less complicated air-to-ground missions. The second demonstration involved more complex, realistic and detailed scenarios.

Boeing also is conducting extensive trade studies and effectiveness evaluations during the simulator operations to reduce risk in later phases of the JSF program, and to ensure that affordability and operational performance requirements are met.

Boeing is competing to build the JSF under a four-year joint U.S. Air Force, Navy and Marine Corps concept demonstration contract, while also defining the characteristics of the operational aircraft (PWSC). The X-32A will demonstrate characteristics of the Air Force's conventional takeoff and landing variant and the Navy's carrier variant. The X-32B will demonstrate the short takeoff/vertical landing variant for the U.S. Marine Corps and the U.K. Royal Navy. A competition winner will be selected in 2001.

###

98-143

For further information: Mike Tull Sept. 15 - Sept. 17 (206) 930-2737 After Sept. 17 (206) 655-1198