Boeing F-22 Maintenance 'Schoolhouse' Opens at U.S. Air Force Base

The Boeing Company [NYSE: BA], the U.S. Air Force 82nd Training Wing and industry partners opened a state-of-the-art, Boeing-designed F-22 maintenance training facility at Sheppard Air Force Base, Texas, on Oct. 19, offering a realistic training environment for future Raptor maintainers.

The Boeing Raptor team has the lead on developing F-22 pilot and maintenance training programs in addition to building the fighter's wings and aft fuselage, integrating the avionics and software, and providing a third of the sustainment.

"Activating the training center at Sheppard has been a totally collaborative effort," said Pam Valdez, Boeing director of F-22 Sustainment. "From day one, we've enjoyed a great spirit of teamwork with our Air Force customers, industry partners and suppliers. Working together for more than five years, we've been able to plan, design and integrate training devices, computerized classrooms and courseware into a 120,000-sq. ft. schoolhouse."

The U.S. Air Force's Air Education and Training Command, and Air Combat Command customers; Raptor teammates Lockheed Martin and Pratt & Whitney; and subcontractors: AAI, DME, USM, Sequoyah and AEI; the Army Corps of Engineers; along with the building contractor, ECI Corporation, all teamed with Boeing and the 82nd Training Wing to complete this project.

For instructional purposes, engineers have divided the aircraft into seven full-scale, high-fidelity training devices that replicate flight line maintenance conditions and eliminate the need to train on operational aircraft. The devices provide hands-on practice in inspection, operation, removal and installation, system-testing and fault isolation. They range from simple to highly complex, covering as few as 14 to as many as 240 separate tasks.

The armament trainer, for example, addresses 89 individual functions that technicians must perform in maintaining the F-22's weapons bays, missile launchers, wing pylons, countermeasures dispenser and 20mm cannon. Each component of the trainer mirrors its onboard counterpart as faithfully as possible in dimensions, weight, center of gravity, color and texture.

"It's not enough simply to read about maintaining a Raptor or watch someone else doing it on a video," said Valdez. "There's the kinetic aspect of training -- getting physically attuned to the task. This is critical for timely execution as well as the technician's safety and comfort."

Students also will engage interactively with high-fidelity software lessons in 14 computer-controlled classrooms and gain additional hands-on experience in five labs. A Training System Services Center staffed by contractor personnel will support the entire curriculum.

The F-22 is built by Lockheed Martin in partnership with Boeing and Pratt & Whitney. Parts and subsystems are provided by approximately 1,000 suppliers in 44 U.S. states. F-22 production takes place at Lockheed Martin Aeronautics facilities in Marietta, Ga.; Fort Worth, Texas; Palmdale, Calif.; and Meridian, Miss., as well as at Boeing's Seattle plant. Final assembly and initial flight-testing of the Raptor are performed at Marietta, which recently delivered the 103rd Raptor to the Air Force.

A unit of The Boeing Company, Boeing Integrated Defense Systems is one of the world's largest space and defense businesses specializing in innovative and capabilities-driven customer solutions. Headquartered in St. Louis, Boeing Integrated Defense Systems is a $32.4 billion business with 72,000 employees worldwide.
###

For further information:
Doug Cantwell
The Boeing Company
(206) 662-0949
doug.cantwell@boeing.com