

JSF P5 AIR COMBAT TRAINING SYSTEM

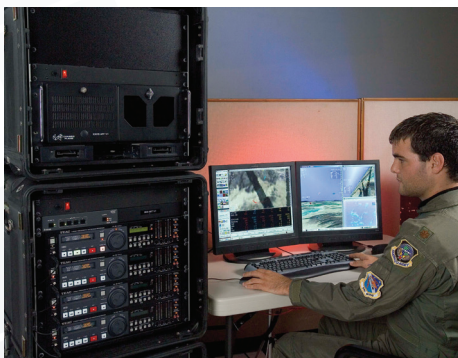
OVERVIEW DESCRIPTION

Fifth generation aircrew require a complex training scenario to prepare them for combat operations in a contested environment. They also need a dedicated training system to capture exercise data and accurately reconstruct the mission. The Joint Strike Fighter (JSF) P5 Air Combat Training System (ACTS) is the training solution for the F-35.

The system includes the JSF P5 Internal Subsystem (IS) and JSF P5 ground software. Unlike previous wing-mounted ACTS pods, the



F-35 ICADS View



ICADS ground station

JSF P5 IS is internal to the aircraft to retain the F-35's low observable characteristics while training. The JSF P5 ground software is embedded in the Offboard Mission Support (OMS), allowing mission planning and debriefing from one workstation in the squadron. The JSF P5 datalink is encrypted to protect the classified F-35 data from being transmitted.

F-35s can train with fourth generation aircraft which carry a wing-mounted pod version of the P5 Combat Training System (CTS)/Tactical Combat Training System (TCTS), the program of record for the U.S. Air Force, Air National Guard, U.S. Navy, U.S. Marine Corps and many international partners.

The JSF P5 IS will seamlessly enter into existing range networks that use the P5CTS/TCTS network and enable combined fourth and fifth generation instrumented training. This system builds upon Cubic's 40 years of experience in air combat training and is the successor system to previous generations of air combat training. The ground system merges flight data into Individual Combat Aircrew Display System (ICADS), the most extensively used debriefing software in the world. ICADS provides multiple viewing options for the air combat training mission debrief.

Together, Cubic and DRS developed and are delivering the JSF P5 ACTS to Lockheed Martin for inclusion with the F-35 aircraft and OMS. Cubic, as the prime contractor, is responsible for the overall P5CTS/TCTS system and system engineering efforts, which includes the JSF P5 ACTS, plus for the development, integration, and installation of the ground instrumentation subsystems and ICADS support. DRS, as the principal subcontractor, is responsible for all areas related to the airborne instrumentation subsystems, which includes the P5IS.

FEATURES

- Supports 100 high-activity aircraft
- Supports air-to-air, air-to-ground and surface-to-air weapon simulations
- Real time weapons simulations with Real-Time Kill Notification (RTKN) to pilots
- No Drop Weapons Scoring (NDWS)
- Electronic combat warfare training capabilities
- Fixed and Transportable ground subsystems
- Integration with other air and ground training systems
- Joint training picture with multiple platforms and ground forces
- NSA Certified Type-1 encryption unit for secure datalink communications



P5 Internal Subsystem