Aerial Common Sensor (ACS)

Provides commanders at every echelon tailored multi-sensor intelligence via a single, manned, airborne intelligence, surveillance, and reconnaissance system.

DESCRIPTION AND SPECIFICATIONS

Aerial Common Sensor (ACS) delivers the intelligence, surveillance, and reconnaissance (ISR) data required for dominant maneuver, precision engagement, and decision superiority by merging and enhancing the sensor capabilities of current ISR platforms, Airborne Reconnaissance Low (ARL) and Guardrail/Common Sensor (GR/CS). ACS provides a larger area of coverage, supporting Future Force operational geometries and the greater lethality ranges of new weapons systems.

ACS transforms Army airborne ISR from a strategic-lift-intensive, maximum-deployment-time asset to a minimum-lift, minimal-deployment-time, global asset capable of operation immediately upon arrival into theater. Mission tailorable and scalable, this Army-led, joint Future Force airborne ISR system provides distributed, wide area, persistent surveillance and multi-intelligence precision targeting. ACS provides critical intelligence and combat information to and from the unit of employment/unit of action and the component commander via the Distributed Common Ground System (DCGS)-Army (the ground station component).

Using robust sensor-to-shooter and reachback links, ACS provides multi-sensor intelligence throughout a non-linear framework and non-contiguous battlespace providing real-time sensor-to-shooter information "in the crew seat." On-board battle command and communications relay packages ensure uninterrupted, joint integrated command, control, communications, and intelligence (C3I), fully interoperable with joint and national collectors, ground processing facilities and dissemination systems, meeting transformational, joint net-centric situational awareness requirements, as well as Army and Navy requirements for a worldwide, self-deployable single ISR system.

The ACS acquisition strategy leverages commercial and government off-the-shelf technologies into an open systems architecture, ensuring paced technology growth with Future Combat Systems (FCS) and against emerging threat capabilities while reducing total ownership cost.

ACS provides a multi-intelligence system to support warfighter requirements across the full spectrum of operations, from early/denied entry through crisis resolution, including:

- Critical precision signal intelligence (SIGINT) linkage into the Joint ISR Network
- Imagery intelligence (IMINT)
- Measurement/measuring and signature intelligence (MASINT)

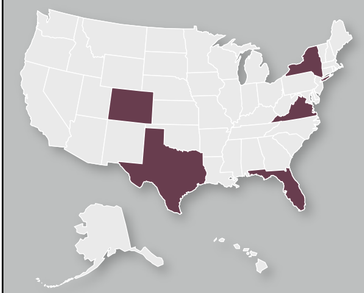
ACS will replace all five of the Army's Aerial Exploitation Battalions beginning in FY10. The Navy will replace the current EP-3 fleet with ACS beginning in 2012.

PROGRAM STATUS

- **3QFY04** Source selection
- **4QFY04** Milestone B and award of system development and demonstration (SDD) contract
- **2QFY05** Preliminary design review

PROJECTED ACTIVITIES

- **4QFY05** Critical design review



CONTRACTORS
Lockheed Martin (Denver, CO);
L3 Communications (Greenville, TX);
Harris (Palm Bay, FL) Argon (Fairfax, VA);
BAE Systems (Green Lawn, NY)

INVESTMENT COMPONENT
Modernization

ACQUISITION PHASE
- System Development and Demonstration