

RQ-11B Raven Small Unmanned Aircraft System (SUAS)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



MISSION

Provides reconnaissance, surveillance, target acquisition (RSTA), and force protection for the battalion commander and below during day/night operations.

DESCRIPTION

The RQ-11B Raven is a Small Unmanned Aircraft System (SUAS). It is a hand-launched, unmanned aircraft system capable of 90 minutes of flight time with an operational range of approximately ten kilometers. The Raven system comprises three air vehicles, a ground control station (GCS), a remote video terminal (identical to GCS), electro-optical (EO) / infrared (IR) payloads, aircraft and GCS batteries, a field repair kit, and a spares package. Normal operational altitude is 500 feet or lower. The system, aircraft, and ground control station are assembled by operators in approximately five minutes. The aircraft has a wingspan of 4.5 feet and weighs 4.2 pounds. Both color EO sensors and IR sensors are fielded for day and night capabilities with each system. A hand controller displays live video and aircraft status. Mission

planning is performed on the hand controller or ruggedized laptop running Portable Flight Planning Software/ Falcon View flight planning software. Aircraft flight modes include fully autonomous navigation, altitude hold, loiter, and return home. In-flight re-tasking and auto-loiter at sensor payload point of interest are also available. Raven incorporates secure Global Positioning System navigation. The digital data link incorporates encryption, improves spectrum management allowing more air vehicles to be flown in an operational area, and provides range extension via data relay between two Raven aircraft.

The Raven is operated by two Soldiers and has a rucksack-portable design. No specific military occupational specialty is required. Operator training is ten days.

SYSTEM INTERDEPENDENCIES

None

PROGRAM STATUS

- **Current:** In production and deployment
- **Current:** Operational in both Operation New Dawn and Operation Enduring Freedom

PROJECTED ACTIVITIES

- **FY11-FY12:** Continue full-rate production and product improvements; integrate and field gimbaled payload (combined EO/IR/ Laser Illuminator)

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

RQ-11B Raven Small Unmanned Aircraft System (SUAS)

FOREIGN MILITARY SALES

Denmark, Estonia, Lebanon, Uganda

CONTRACTORS

Aerovironment, Inc. (Simi Valley, CA)
Indigo System Corp. (Goleta, CA)
All American Racers, Inc. (Santa Ana, CA)
L-3 Communications (San Diego, CA)
Bren-Tronics (Commack, NY)

