

Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Provides a persistent multi-intelligence capability to detect, locate, classify/identify, and track surface targets in day/night, near-all-weather conditions with a high degree of timeliness and accuracy.

DESCRIPTION

The Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) contributes to filling critical gaps in the Airborne Intelligence, Surveillance and Reconnaissance (AISR) coverage Brigade Combat Teams (BCTs) require to be successful across the Range of Military Operations and especially in Irregular Warfare (IW) operations. The capabilities include an electro-optical/infrared high definition full motion video sensor, communications intelligence (COMINT) sensor, and an

aerial precision geo-location (APG) sensor, all supported by line-of-sight and beyond line-of-sight (LOS/BLOS) communications and hosted on a manned, medium-altitude derivative of the commercial Hawker-Beechcraft King Air 350ER aircraft.

EMARSS contains a tailored set of Distributed Common Ground System–A (DCGS-A) enabled software and ISR processing software functionalities to process, exploit, and rapidly disseminate the intelligence derived from the imagery sensor. The imagery and APG operators release time-sensitive information directly to the supported BCT and subordinate units, and to the DCGS-A, enabling tactical ground forces to operate at their highest potential. EMARSS complies with the DoD Information Technology Standards Registry and the Defense Information Systems Network (DISN). This architecture permits interoperability with any multi-service or Joint system that complies with DoD-standard formats for data transfer and dissemination.

EMARSS is an improvement over the existing MARSS in that it hosts an on board DCGS-A capability, improved satellite communications, improved aircraft performance, and life cycle logistics sustainment capability.

SYSTEM INTERDEPENDENCIES

In this Publication

Distributed Common Ground System–Army (DCGS-A)

Other Major Interdependencies

DCGS-A is the EMARSS ground station supporting pre-mission, mission, and post-mission operations. DCGS-A software is on-board the EMARSS work stations and will be updated as DCGS-A provides incremental software builds.

PROGRAM STATUS

- **1QFY12:** Completed System Design Review
- **1QFY12:** Conducted Integrated Baseline Review
- **2QFY12:** Took Receipt of “Green” Aircraft

- **3QFY12:** Completed Engineering Risk Reduction Prototype (ERRP) Aircraft

PROJECTED ACTIVITIES

- **2QFY13:** Contractor Testing and Developmental Testing (CT/DT)
- **3QFY13:** Joint Requirements Oversight Council consideration of the CPD
- **3QFY13:** DD250 of EMARSS EMD Systems to Government
- **4QFY13:** Limited User Testing (LUT) and Logistics Demo
- **4QFY13:** Milestone C

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS)

FOREIGN MILITARY SALES

None

CONTRACTORS

Prime:

The Boeing Co. (Ridley Park, PA)

Airframe:

Hawker-Beechcraft (Wichita, KA)

SATCOM:

L-3 Communications West (Salt Lake City, UT)

COMINT Hardware/Software:

BAE Systems (Nashua, NH)

Training and Operational Testing:

Avenge (Dulles, VA)

Cockpit Avionics:

Rockwell Collins (Cedar Rapids, IA)

SETA Support:

CACI (Tinton Falls, NJ)

Booz Allen Hamilton (Eatontown, NJ)

Engineering/Program Management:

MITRE (Eatontown, NJ)

Aircraft Engineering:

CAS, Inc. (Huntsville, AL)

Science Applications International Corp. (SAIC)
(Huntsville, AL)

Information Assurance:

Sensor Technologies (Red Bank, NJ)

Program Support:

CACI (Arlington, VA)

Software Engineering Support:

Lockheed Martin (Tinton Falls, NJ)

