



DEPARTMENT OF THE ARMY  
PROGRAM EXECUTIVE OFFICE, AVIATION  
5667 WOOD ROAD  
REDSTONE ARSENAL AL 35898-5000

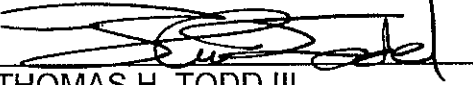
18 JUL 2017


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MEMORANDUM FOR Mr. Craig Spisak, Director, United States Army Acquisition Support Center (USAASC), 9900 Belvoir Road, Building 201, Suite 101, Fort Belvoir, VA, 22060-5567

SUBJECT: 2017 Army Acquisition Executive's (AAE) Excellence in Leadership Award Nomination for Product Management/Product Director Office Team of the Year (O5 Level)

1. I highly recommend the Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) Product Team for the 2017 Army Acquisition Executives' Excellence in Leadership Award for Product Management / Product Director Office Team of the Year (O5 Level).
2. The EMARSS Product Team is most deserving of this award based on its excellence in Army Acquisition, teamwork and innovation during its initial and follow-on modification contracts and the recent completion of its highly successful follow-on Test and Evaluation. The EMARSS Product Team structured multiple innovative contracts to convert twenty Quick Reaction Capability (QRC) systems into the EMARSS Program of Record. This strategy resulted in the savings of over \$240M in procurement costs compared against the life cycle cost estimate while also saving the government nearly \$20 million dollars in technical data rights costs by utilizing the QRC original equipment manufacturers.
3. The point of contact for this award nomination is Mr. Robert 'Derek' Long at COMM (256) 313-4809 or e-mail: robert.d.long.civ@mail.mil.

  
THOMAS H. TODD III  
Brigadier General, USA  
Program Executive Officer, Aviation

  
KIRK F. VOLLMECKE  
Major General, USA  
Program Executive Officer  
Intelligence, Electronic Warfare and Sensors

7-24-17  
(Date)

7-18-17  
(Date)

CF:  
PEO IEW&S

**Assistant Secretary of the Army for Acquisition, Logistics, and Technology**

**2017 Army Acquisition Executives' (AAE) Excellence in Leadership Award**

**PRODUCT MANAGEMENT / PRODUCT DIRECTOR OFFICE  
TEAM OF THE YEAR (O5 LEVEL)**

**Administrative Information**

**Nominating Organizations:**

Fixed Wing Project Office	Project Office – Sensors Aerial Intelligence
Bldg 5681 Wood Road	6006 Combat Drive
Redstone Arsenal, AL 35898	Aberdeen Proving Grounds, MD

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**Team Name: Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) Product Team**

Product Director: Mr. Robert 'Derek' Long (PEO AVIATION)

Product Director E-mail: [robert.d.long.civ@mail.mil](mailto:robert.d.long.civ@mail.mil)

Product Manager: LTC Sean M. Smith (PEO IEW&S)

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## Award Narrative

**Background:** The combined Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) Product Team, consisting of Product Directorate – Special Electronic Mission Aircraft and Product Office – Medium Altitude Reconnaissance and Surveillance System, culminated a 30-month extensive reorganization of the EMARSS Program of Record (POR) with the highly successful Follow-On Test & Evaluation (FOT&E) event in April 2017. Once recognized as one of the Army’s most problematic acquisition programs, the EMARSS Product Team overcame a series of monumental programmatic challenges which resulted in the delivery of the first 12 EMARSS on schedule and within budget constraints. The EMARSS program is an Army Acquisition Category II Program, with an Average Unit Procurement Cost (APUC) of \$21.2 million per system based on the modification of 20 aircraft. Spanning two separate Program Executive Offices (PEO), PEO Aviation and PEO Intelligence, Electronic Warfare and Sensors, the EMARSS Product Team ensured a successful Follow-On Test and facilitated direct coordination with key leaders from the two gaining Aerial Exploitation Battalions (AEB) to ensure a smooth transfer of equipment and successful New Equipment Training (NET) in 4<sup>th</sup> Quarter, Fiscal Year 2017. Furthermore, the EMARSS program was more complex in nature since every system inducted into the program was taken from a disparate fleet of aircraft operationally deployed as a Quick Reaction Capability (QRC) or supporting training and force generation in the Continental United States (CONUS). Despite all of the programmatic and funding challenges, the EMARSS Product Team ensured that these low-density, high-demand multi-intelligence assets will provide critical Aerial Intelligence, Surveillance and Reconnaissance (AISR) support to Combatant Commanders for future decades.

**a. Talent management achievements:** The combined EMARSS Product Team is a small group of dedicated acquisition professionals. Throughout the past year, the program offices have expanded the knowledge base of three field-grade officers to prepare them for future assignments in the acquisition community. Additionally, the program negotiated to bring in a junior systems engineer on a one-year developmental assignment. Program integrators, engineers, and civilian Subject Matter Experts (SMEs) participated with senior leadership to successfully maneuver the EMARSS program through the necessary technical and programmatic reviews. This exceptionally talented product team aggressively tackled tough and unique problems facing this complex POR.

**b. Team’s leadership and knowledge transfer efforts to build competencies of current and future leaders:** The EMARSS program was fortunate to have three field-grade officers cycle through the Assistant Product Manager (APM) position over the last two years. As such, EMARSS APMs were required to brief program statuses and provided routine updates to both PEOs and Assistant Secretary of The Army -Acquisition, Logistics, and Technology (ASA (ALT) leadership. Product leadership also leveraged shared site visits between the EMARSS program and other AISR programs within Fixed Wing and Sensor Aerial Intelligence Project Offices for training events. By allowing other AISR programs, such as Airborne Reconnaissance

Low – Enhanced, within the Product Director’s portfolio to participate in EMARSS technical and testing’s after-action reviews, the programs were given unique insight into program challenges, gained the knowledge of lessons learned from the program, and were advised of issues that needed to be addressed. Additionally, throughout the EMARSS Initial Key Personnel Training (IKPT) and FOT&E at Fort Huachuca, AZ, various programs within PEO Intelligence and Electronic Warfare and Sensors (IEW&S) were invited to witness the setup and configuration of the test environments and to take lessons learned that were applicable to future test events. During EMARSS NET and FOT&E, product team members were rotated in and out of the various events – maximizing exposure to these key program requirements. These team members were also given leadership roles to manage resources, plan flights, coordinate support, report status to leadership at home stations, identify critical issues, and fix problems when they arose. Subsequently preparing individuals for increased responsibility within the acquisition workforce, these leadership roles increased each team member’s knowledge and understanding of the Acquisition process as a whole.

**c. Team’s Effort to Support ASA (ALT) Priorities:** The EMARSS Product Team successfully demonstrated a comprehensive understanding of the ASA (ALT) priorities as they executed and managed three separate and complex system modification contracts which culminated into a successful FOT&E on schedule and within funding constraints.

**1) Effectively Execute Programs:** Over the past twelve months, the EMARSS Product Teams effectively executed four contracts valued at \$335M dollars for the modification of four Initial Variant Modification (IVM) and sixteen Follow-on Variant Modification (FVM) aircraft, building three different model aircraft hosting a broad spectrum of AISR capabilities to include: Full Motion Video, Geospatial Intelligence, Signals Intelligence, Airborne Wide Area Persistence Surveillance System, and Light Detection and Ranging Radar. The systems include an extensive communications suite that include Line of Sight (LOS) and Beyond Line of Sight (BLOS) capabilities. In order to successfully execute a single FOT&E event, the combined Product Offices had to manage three complex integrated master schedules to ensure the initial four systems arrived simultaneously at the test location. This strategy proved to be very demanding and resource intensive; however, it ultimately saved \$4.9M compared to executing three separate operational test events. This approach also minimized the impact to the operational unit that supported the FOT&E. A single unit was able to provide sufficient numbers of Soldiers to execute FOT&E for all three system variants concurrently.

**2) Strive to be Efficient with Limited Resources:** With limited funding to support the complete build of 20 systems, the Product Offices were required to aggressively negotiate Unfixed Contract Actions (UCAs) to support the aircraft and mission equipment package modifications. Taking calculated risk on spares, maximizing the amount Government Furnished Equipment (GFE), and collaborating with other programs to share costly satellite time for testing, are examples of negotiations that ultimately reduced the FVM contract, thereby reducing the overall contract cost by \$20M dollars. The Product Team was also able to capitalize on the sunk cost from the use of QRC systems, effectively reducing the APUC by approximately \$12M

per copy compared to buying all new aircraft and sensors from the Original Equipment Manufacturer (OEM). The Product Team, in close and extensive collaboration with prime contractors, was able to keep cost under control through Integrated Product Teams (IPT) and immense cooperation between the joint government and contractor teams.

Relying heavily on U.S. Government resources whenever possible to support test events, contract costs were minimized, ultimately reducing the overall cost to the program. While this put a strain on the limited government manpower resources Both Product Offices were able to successfully support and coordinate test events from three separate locations. The Product Team also accepted risk in the use of Government resources, relying heavily on the use of Government-owned System Integration Laboratories (SIL) and Government test ranges to support contractor testing. In the event the Government failed to provide a contractually required asset such as a test range or a SIL, the contractor would be able to claim a cost or schedule impact. Leadership gave the Product Team the latitude to execute high-risk / high-reward tradeoffs such as this and they came through in an exceptional manner. This strategy was very effective in reducing the overall cost of the contract, as well as the program.

**3) Internal/External Effective Communication (Risk/Challenges/Issues):** Developing relationships with the User Representatives at both the Aviation and Intelligence Centers of Excellence resulted in extremely effective execution of the operational testing, including the consolidation of multiple test events. This included open communication all the way down to the Battalion-level. The decision to use the unit scheduled to deploy next as the test unit proved to be extremely beneficial when identifying shortcomings of the system under test.

Conversations with the User in real time positively impacted the tight contract schedules. Another example of effective communication was the requirement to build and deliver four EMARSS-M variant systems to be assigned as training aircraft at the Army's Intelligence Center of Excellence (ICoE) at Fort Huachuca, AZ. When the instructor pilots at Fort Huachuca were afforded the opportunity to participate in preparations for IKPT and FOT&E, they quickly determined that the seating configuration of the EMARSS-M was not conducive to support the Battalion's Program of Instruction (POI), and therefore, the current configuration would not be as effective. This resulted in the need for a unique training configuration that would support the POI. Being able to work with the User in real time afforded the EMARSS product team the ability to deliver a configured aircraft that would maximize student throughput. Working with User, the product team is currently in negotiation with the contractor to reconfigure the seating to better support ICoE's training mission.

**d. Product Management / Product Director Office specific criteria:**

**1) Demonstrated improved efficiency, effectiveness, responsiveness and agility in facilitating the delivery of a best-value capability to the warfighter (i.e., met or exceeded cost, schedule, performance, should-cost or milestone goals):** Due to the EMARSS acquisition strategy using previously deployed QRC systems as a baseline before transitioning

them to POR systems, the Program did not fit into the traditional acquisition definitions for Limited Rate Initial Production (LRIP) and Full Rate Production (FRP). The fundamental use of LRIP and FRP did not fit with the EMARSS acquisition strategy so the program developed an innovative approach to migrate QRC assets into POR systems. IVM and FVM terminology was coined as the program moved through the Milestone C and Post Milestone C requirements.

Another example of responsiveness and agility to deliver the best capability to the Warfighter was the change in requirement from LOS to BLOS. When the Capability Production Document was approved in September 2014, the primary means to operate, communicate, and connect with the Army's Distributed Common Ground System-Army was through the use of LOS datalinks to an Operational Ground Station. Based on the new operational strategy, the Army stood up a Processing Exploitation and Dissemination (PED) Center of Excellence (CoE) at Fort Gordon, GA, which required all intelligence products generated by EMARSS to be transmitted using BLOS. The change of operational architecture caused considerable challenges to the Product Team. Working closely with the User, the team was able to execute a customer demonstration proving out BLOS connectivity with the PED CoE, giving the Gaining Command assurance that the newly tested system would perform the required mission while assigned to remote areas throughout the world.

**2) Overcame significant challenges through effective leadership and innovation in the execution of the mission:** A significant challenge for the Product Team was how to maintain an affordable modification schedule with a low density fleet of 24 aircraft while simultaneously supporting contingency operations in support of Operation Freedom's Sentinel (OFS) with both POR and QRC aircraft, maintaining training student throughput, and preparing for FOT&E. To help reduce the burden of inducting aircraft from the training fleet to a modification line, the U.S. Army transferred four U.S. Air Force Project Liberty aircraft to support aircrew force generation in support of OFS. These aircraft significantly reduced risk to the Army by providing additional training and force generation platforms. These aircraft assisted CONUS training and provided the ability to have uninterrupted EMARSS modification timelines. This strategy allowed the training base to continue with their current POI and maintain student throughput while permitting the product team to bring in aircraft from a low density fleet to keep the modification effort flowing. Without this strategy, the team would have been forced to modify fewer numbers of POR aircraft concurrently which would increase the overall modification schedule thus increasing the cost per aircraft.

**3) Promoted a culture of professional workforce development, mentorship and teamwork:** The EMARSS Product Team displayed a culture of Acquisition professionalism and teamwork that other programs should emulate. Cross coordination between two product offices assigned to two separate PEOs required detailed planning and constant communications. This developed the workforce's ability to synchronize complex activities that ultimately led to the success of the EMARSS program.

## Award Citation

### **Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS)**

The Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) is the Army's premier system for providing critical aerial multi-intelligence to the ground tactical commander. The EMARSS Product Team innovated best practices for the conversion of multiple variants of Quick Reaction Capability systems into the EMARSS Program of Record. This complex transition required multiple contracts valued in excess of \$335M. The Product Team is comprised of two centrally selected Product Manager / Director's spanning two distinct Program Executive Offices (PEO) – PEO Aviation and PEO Intelligence, Electronic Warfare & Sensors. These two product teams consist of 26 core professionals and a host of supporting personnel. The Team's diversity and vast expertise ultimately led to the successful mitigation of difficult problems relating to both Aviation platforms and Intelligence Mission Equipment Packages. The EMARSS product team ensured a highly successful Follow-On Test and Evaluation and facilitated direct coordination with key leaders from the two gaining Aerial Exploitation Battalions to ensure a smooth equipment transfer and preparation for New Equipment Training. The EMARSS Product Team performed flawlessly, ensuring that these low-density / high-demand assets will provide critical Aerial Intelligence, Surveillance, and Reconnaissance support to Combatant Commanders for future decades.