

PERFORMANCE WORK STATEMENT (PWS)

TECHNICAL SUPPORT IN MANUFACTURING SCIENCE AND TECHNOLOGY (MST) OBSOLESCENCE TASKS FOR AMCOM AVIATION AND MISSILE SYSTEMS

1.0 MISSION STATEMENT: The contractor shall implement processes in accordance with joint Government and contractor defined/documentated practices and procedures in order to complete manufacturing technology obsolescence projects for aviation and missile systems and other Army/DOD subsystems and components. Activities include manufacturing technology obsolescence analysis and customer-funded research and development for systems, subsystems and components. The contractor shall provide technical and engineering services to support the advancement of MST obsolescence projects.

2.0 PERFORMANCE REQUIREMENTS:

2.1 The contractor shall provide the labor and travel to accomplish the subtasks listed in the description of work presented in the paragraphs below and line items funded by this Task Order (TO). All paragraphs contained within this PWS are applicable as referenced in the EXPRESS basic statement of work - paragraphs 3.12 Manufacturing Science and Technology (MST), 3-15 Product Assurance, and paragraph 3.8 (IO3-c). All tasks shall be performed using methodology, principles and procedures that are recognized by the Society of Manufacturing Engineers (SME), the Institute of Industrial Engineers (IIE), the Institute of Electrical and Electronics Engineers (IEEE), the American Society for Quality (ASQ) and shall be in accordance with required DOD, DA, AMC, RDECOM, AMCOM and PEO guidance such as DoD Directive 4140.1-R DoD Supply Chain Materiel Management Regulation, SD-22 Diminishing Manufacturing Sources and Material Shortages (DMSMS) Guidebook, Army Regulation 700-90 Army Industrial Base Process, EIA GEB1 DMSMS Management Practices.

2.2 The contractor shall perform manufacturing engineering trades using Government defined/approved methods to evaluate electronics parts availability for aviation and missile systems. The contractor shall evaluate system, subsystem and component level obsolescence to evaluate performance, availability, and supportability. The contractor shall interface with primes, suppliers and other Government agencies to explore manufacturing and acquisition alternatives that minimize obsolescence impacts for systems supported.

2.3 The contractor shall provide technical support for electronics parts obsolescence management activities to assess part life cycle availability, weapon system manufacturing risks, and potential cost impacts. The contractor shall develop, deliver and demonstrate the Government defined/approved obsolescence management tools and processes that

improve technical capabilities and provide better support for our customers. The contractor shall utilize a proven/approved process and procedure to implement, maintain, and monitor a proactive obsolescence management activity in support of the aviation and missile weapon systems and other Army/DOD subsystems and components. The contractor shall adhere to all guidance provided via the DMSMS Army Working Group and the DOD COE as directed by AMRDEC MST obsolescence manager. The contractor shall provide status updates through technical discussions, IAW DI-MGMT-80227 and deliver IAW CDRL A003; funds and man-hour reports IAW DI-FNCL-80331 and deliver IAW CDRL A008, technical reports IAW DI-MISC-80700 and deliver IAW CDRL A016, and presentation materials IAW DI-ADMN-81373 and deliver IAW CDRL A004 as defined by the Government.

2.3.1 The contractor shall evaluate electronics manufacturing trends to assess microcircuit and components obsolescence risks for Army aviation and missile systems and other DOD products. This requires interfacing with part and component manufacturers, vendors and government personnel to monitor manufacturing and supplier trends against military life cycle production needs (including spares and multiple users). The contractor shall verify and validate OEM part numbers, qualified manufacturers, qualified manufacturer part numbers, part number availability, alternate part numbers (and sources) and NSN's for all electronic parts, COTS items, and other components.

2.3.1.1 Analysis shall be presented as obsolescence risk assessments by the contractor with technology roadmaps or alternate formats as directed and identification of alternate sources or replacement approaches that minimize systems costs or downtime. The contractor shall provide a capability to search and identify DOD and commercial microcircuit and component availability using existing databases.

2.3.1.2 The contractor shall participate in the development of obsolescence management plans for all systems supported that provide a guidebook of plans and processes utilized to mitigate obsolescence. The contractor shall participate in the development of contract clauses listing the requirements for an effective obsolescence management program for insertion into statements of work between the weapon system and original equipment manufacturer, tailored to the appropriate life cycle phase of the system.

2.3.1.3 The contractor shall provide and execute a proven process for monitoring and managing alerts from commercially available and all government sources of process change or end of life notices. The contractor shall provide a comparative analysis of the alerts to the various weapon systems data repository managed by the AMRDEC MTO Obsolescence Team. The contractor shall report impact of all alerts to appropriate government personnel immediately upon receipt of alert.

2.3.1.4 The contractor shall track, through vendor polls, etc., the qualified strategic manufacturers/distributors of parts utilized in AMRDEC Aviation and Missile Weapon Systems in order to provide a pro-active obsolescence prediction capability for the supported systems. The contractor shall develop and implement, in conjunction with the

Government, a Government defined/approved standard case file for use with problem devices which warrant formal action, delineating options and firm recommendations by the contractor. The contractor shall provide availability tracking and management of all non-standard parts contained in the customer's information assurance application. This includes all hybrids, application-specific integrated circuits (ASICs), oscillators and custom devices, which are OEM specific and cannot be found in standard part catalogs.

2.3.1.5 The contractor shall support all Obsolescence Working Group (OWG) activities inclusive of taking minutes of the meetings, addressing action items and assisting the government in the preparation of reports and presentation in support of the (OWG).

2.3.2 The contractor shall assess weapon systems life cycles and schedules to evaluate potential electronics obsolescence technical risks. Detailed trades shall be conducted to assess electronic part and component life cycles against specific weapon system life cycles to include support systems such and embedded computers, test equipment and power supplies. Analysis shall be presented as weapon systems affordability/supportability risk assessments with recommendations to alleviate or mitigate impacts.

2.3.2.1 The contractor shall evaluate the impact of the identified obsolescence issues and End of Life Notices. The contractor shall evaluate logistics information to determine health and sustainability of the weapon system at the appropriate level.

2.3.2.2 The contractor shall provide support of AMRDEC MTO in support of reviews of ECPs, waivers, items reduction studies and DLA 339s.

2.3.3 The contractor shall assess obsolescence impacts with emphasis on potential cost impacts. Detailed trades for specific obsolescence problems shall be conducted concurrently with Program Manager/Prime Contractor activities to identify alternate parts, sources and manufacturing technologies with cost and schedule impact analysis for each alternative. The contractor shall develop and implement in conjunction with AMRDEC SEM obsolescence management tools, reports and processes as required per the needs of the weapon system(s).

2.3.4 The contractor shall apply quality and reliability assurance management and technical principles, inspection techniques, and other analytical and empirical tools. The contractor shall develop qualification and acceptance requirements and provide design analyses to assess reliability.

2.3.5 The contractor shall provide technical expertise to assess the continued availability of current manufacturing processes and technologies to ensure continued availability of systems, subsystems, and components and coordinate improvement concepts and tasks that can be implemented to impact the supportability and maintainability. This shall include the investigation of materials and manufacturing processes as they apply to repair and sustainment technologies for weapon systems.

2.3.6 The contractor shall provide testing and evaluation of components as potential replacements for obsolete items. This shall include obtaining small quantities of components for the testing.

3.0 TRAVEL:

3.1 Travel shall be required in performance of this PWS. The contractor must receive approval from the COR prior to performing any travel.

3.2 Travel requirements will be identified in individual TIs.

3.3 Travel requirements shall include trips to aviation and missile prime contractors and suppliers, Government facilities to include depots, industrial base vendors, and related obsolescence and material availability conferences and workshops. Travel requirements will be further detailed in TI's.

4.0 **SECURITY:** The contractor shall provide security to a level necessary to meet the requirements of the tasks requested. Contractor's work effort shall not be above the level of SECRET. Contract personnel shall retain a SECRET level clearance for the duration of the task order.

5.0 **GOVERNMENT FURNISHED PROPERTY:** The contractor shall provide the required services both off-site and on-site. The contractor shall perform off-site tasks using their own facilities and automation resources. For the on-site support, the Government will provide work space, computers, computer network access, peripheral equipment, telephone, office supplies and access to copy and facsimile machines. The Government will provide access to data and information required for the execution of this effort. The Government will also coordinate access to all Government and contractor facilities to be visited as part of this effort.

6.0 DELIVERABLES:

Data provided will be delivered to the AMRDEC MST Obsolescence program manager follows:

6.1 A Contractor's Progress, Status and Management Report will be submitted monthly IAW CDRL A003, Data Item Number DI-MGMT-80227.

6.2 Presentation materials shall be submitted IAW CDRL A004, Data Item Number DI-ADMN-81373.

6.3 Funds and man-hour expenditure reports shall be submitted IAW CDRL A008, Data Item Number DI-FNCL-80331.

6.4 MST obsolescence technical efforts shall be submitted IAW CDRL A016, Data Item Number DI-MISC-80711A.

6.5 The contractor shall deliver a complete and operational government owned Obsolescence Tool along with source code, operations and maintenance manuals IAW CDRLs A040 and A041

7.0 ACCOUNTING FOR CONTRACTOR SUPPORT: The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the contractor will report ALL contractor manpower (including subcontractor manpower) required for performance of this contract. The contractor is required to completely fill in all information in the correct format using the following web address: <https://contractormanpower.army.pentagon.mil>. Required information includes: (1) Contracting Office, Contracting Officer, Contracting Officer's Technical Representative; (2) Contract number, including task and delivery order number; (3) Beginning and ending dates covered by reporting period; (4) Contractor name, address, phone number, e-mail address, identity of contractor employee entering data; (5) Estimated direct labor hours (including subcontractors); (6) Estimated direct labor dollars paid this reporting period (including subcontractors); (7) Total payments (including subcontractors); (8) Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC code for each subcontractor if different); (9) Estimated data collection cost; (10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the contractor with its UIC for the purposes of reporting this information); (11) Locations where contractor and subcontractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on website) (12) Presence of deployment or contingency contractor language; and (13) Number of contractor and subcontractor employees deployed in theater this reporting period (by country). As part of its submission, the contractor will also provide the estimated total cost (if any) incurred to comply with this reporting requirement. Reporting period will be the period of performance not to exceed 12 months ending September 30 of each government fiscal year and must be reported by 31 October of each calendar year. Contractors may use a direct XML data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a contractor's systems to the secure web site without the need for separate data entries for each required data element at the web site. The specific formats for the XML direct transfer may be downloaded from the web site.

8.0 PERFORMANCE OBJECTIVES/METRICS:

8.1 This performance-based service task order incorporates the following performance objectives: (1) Delivery of high quality technical performance; (2) Adherence to TO schedule, milestone, and delivery requirements; and (3) Efficient and effective control of labor resources. It is the contractor's responsibility to employ the necessary resources to ensure accomplishment of these objectives. The Government's assessment of the contractor's performance in achieving these objectives shall utilize the standards, acceptable quality levels, surveillance methods, and performance incentives

described in the Performance Requirements Summary matrix set forth in Appendix A. The performance incentives will be implemented via the Government's past performance assessment conducted in accordance with Part 42 of the Federal Acquisition Regulation (FAR), , and the "Task Order Performance" criteria of the annual award term evaluation, Basic BPA provision 45.

8.2. The performance objectives, standards, acceptable quality levels, and incentives shall be applied on a TO basis with performance incentives to be implemented on an annual basis. The Government will conduct informal interim counseling sessions with the contractor's Program/TO Manager to identify any active TO performance that is not meeting the acceptable quality levels. These sessions will be conducted at least on a quarterly basis in order to provide the contractor a fair opportunity to improve its performance level.

8.3 The Control of Labor Resources criteria will be reflected under the "Cost" category of the annual performance assessment. Although the criteria of Business Relations and Management of Key Personnel are not specifically included in the Performance Requirements Summary Matrix, the overall performance assessment will continue to include these criteria.

8.4 The contractor will be notified, in writing, of the Government's determination of its performance level for each performance objective including all instances where the contractor failed to meet the acceptable quality level.

APPENDIX A

PERFORMANCE REQUIREMENTS SUMMARY MATRIX

PERFORMANCE OBJECTIVE	PERFORMANCE STANDARD	ACCEPTABLE QUALITY LEVEL (AQL)	METHOD OF SURVEILLANCE	PERFORMANCE INCENTIVE
<p>High Quality Technical Performance</p>	<p>TO technical requirements met with little rework required and with few minor and no significant problems encountered</p> <p><i>Performance meets all technical and functional requirements, and is highly responsive to changes in technical direction and/or the technical support environment</i></p> <p><i>Assessments, evaluations, analyses, recommendations, and related assistance are thorough, reliable, highly relevant to TO requirements, and consist of substantial depth and breadth of subject matter</i></p> <p><i>Deliverable reports contain all required data and meet all applicable CDRL requirements</i></p>	<p>Contractor delivery of products and/or services meets all TO technical requirements. Performance occurs with no required rework at least 80% of time. Problems that are encountered are minor and resolved in a satisfactory manner.</p>	<p>Routine Inspection of Deliverable Products/Services</p>	<p>Assignment of annual Performance Assessment Report (PAR) rating for QUALITY criteria:</p> <p><u>EXCEPTIONAL</u> <i>Performance and deliverables meet all and exceed many TO technical requirements. Performance delivered with no required re-performance/rework at least 95% of time; problems that are encountered are minor and resolved in a highly effective manner.</i></p> <p><u>VERY GOOD</u> <i>Performance and deliverables meet all and exceed some TO technical requirements. Performance delivered with no required re-performance/rework at least 90% of time; problems that are encountered are minor and resolved in an effective manner.</i></p> <p><u>SATISFACTORY</u> <i>Performance and deliverables meet all TO technical requirements. Performance delivered with no re-performance/rework at least 80% of time; problems that are encountered are minor and resolved in a satisfactory manner.</i></p> <p><u>MARGINAL</u> <i>Some TO technical requirements not met and/or performance delivered with no re-performance/rework less than 80% of time. Problems encountered were resolved in a less than satisfactory manner.</i></p> <p><u>UNSATISFACTORY</u> <i>Many TO technical requirements not met. Numerous reworks were required and substantial problems were encountered and no corrective actions employed.</i></p>

<p>Adherence to Schedule</p>	<p>TO milestones, periods of performance, and/or data submission dates are met or exceeded</p>	<p>Contractor meets TO delivery requirements at least 80% of the time (excluding Gov't caused delays)</p>	<p>Routine Inspection of Deliverable Products/Services</p>	<p>Assignment of annual Performance Assessment Report (PAR) rating for SCHEDULE criteria:**</p> <p><u>EXCEPTIONAL</u> TO milestones/ performance dates met or exceeded at least 100% of time (excluding government caused delays)</p> <p><u>VERY GOOD</u> TO milestones/ performance dates met or exceeded at least 90% of time (excluding government caused delays)</p> <p><u>SATISFACTORY</u> TO milestones/ performance dates met or exceeded at least 80% of time (excluding government caused delays)</p> <p><u>MARGINAL</u> TO milestones/ performance dates met less than 70% of time (excluding government caused delays)</p> <p><u>UNSATISFACTORY</u> TO schedule/performance dates met less than 70% of time</p>
<p>Control of Labor Resources</p>	<p>Contract labor mix is controlled in efficient and effective manner</p>	<p>Actual TO labor resource mix is maintained within 20% of originally awarded TO resource mix</p>	<p>Routine Inspection of TO Performance, Performance/Cost Reports, Payment Invoices, Etc.</p>	<p>Assignment of annual Performance Assessment Report (PAR) rating for COST CONTROL criteria:**</p> <p><u>EXCEPTIONAL</u> Actual TO resource mix maintained within 10% of originally awarded TO resource mix (excluding Gov't initiated deviations)</p> <p><u>VERY GOOD</u> Actual TO resource mix maintained within 15% of originally awarded TO resource mix (excluding Gov't initiated deviations)</p> <p><u>SATISFACTORY</u> Actual TO resource mix maintained within 20% of originally awarded TO resource mix (excluding Gov't initiated deviations)</p> <p><u>MARGINAL</u> Actual TO resource mix maintained within 25% of originally awarded TO resource mix (excluding Gov't initiated deviations)</p> <p><u>UNSATISFACTORY</u> Actual TO resource mix exceeds 25% of originally awarded TO resource mix (excluding Gov't initiated deviations)</p>