

**NAVY TACTICAL MOBILE (TACMOBILE)
SYSTEMS ENGINEERING,
TEST AND INTEGRATION (TSETI)**



STATEMENT OF WORK (SOW)

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1.0 BACKGROUND

The Navy Tactical Mobile (TacMobile) program is an Acquisition Category (ACAT) III Program of Record (POR) that implements an evolutionary acquisition approach to meeting operational requirements through sequential integration of mature Commercial Off-The-Shelf (COTS)/Government Off-The-Shelf (GOTS) capabilities into a functional whole. TacMobile has full life cycle responsibility, from design and development through production, fielding, training, post-fielding maintenance and support, and disposal of obsolete equipment.

TacMobile provides the ground support elements for pre-flight mission planning, in-flight data processing, and post-flight data processing and analysis for P-3C and P-8A aircraft in the performance of anti-submarine warfare and intelligence, surveillance, and reconnaissance missions. TacMobile currently supports two system baselines: Increment 2.0 supporting the legacy P-3C platform and Increment 2.1, which incorporates support functions related to the new P-8A platform while maintaining support to the legacy P-3C mission. The following system types are currently fielded by TacMobile:

- 1) Tactical Operations Centers (TOCs) include the Tactical Support Communications (TSCOMM) capability.
- 2) Mobile Tactical Operations Centers (MTOCs) are mobile versions of the TOC for expeditionary operations at Maritime Patrol and Reconnaissance Forces (MPRF) forward operating locations.
- 3) Joint Mobile Ashore Support Terminals (JMASTs) provide a transportable Command, Control, Communications, Computers and Intelligence (C4I) capability to various operational commanders.

TOCs, MTOCs, and JMASTs are System of Systems (SoS) integrated to meet Fleet requirements. TOCs and MTOCs provide direct operational support to Maritime Patrol and Reconnaissance Aircraft (MPRA), while JMAST provides a transportable C4I capability to various operational commanders as directed. TacMobile capabilities within the SoS are separated into five components:

- 1) Command, Control and Intelligence (C2I)
- 2) Command, Control, Communications, Computers and Intelligence (C4I)
- 3) Enterprise Services
- 4) Facilities/Mobility
- 5) Aircraft Warfighter Interfaces

Multiple subsystems or capabilities exist in each of these categories. Incremental upgrades or inclusion of new capabilities is sequentially made to specific sets of subsystems within these categories to meet emergent operational requirements and to perform technology refreshes of existing systems. Current TacMobile subsystems include:

- 1) Global Command and Control System - Maritime (GCCS-M)
- 2) Combined Enterprise Regional Information Exchange System – Maritime (CENTRIXS-M)
- 3) Acoustic and Non-acoustic Data Processing Systems and Subsystems
- 4) High Frequency (HF)
- 5) Ultra High Frequency (UHF)
- 6) UHF Satellite Communications (SATCOM)
- 7) Super High Frequency (SHF)
- 8) Tactical Common Data Link (TCDL)
- 9) Link-11
- 10) Link-16
- 11) Air Defense Systems Integrator (ADSI)
- 12) Global Broadcast System (GBS)
- 13) Joint Mission Planning System (JMPS) (part of Mission Planning)
- 14) Active System Performance Estimate Computer Tool (ASPECT) (part of Mission Planning)
- 15) Generators
- 16) Power Distribution
- 17) Environmental Control Units (ECUs)

- 18) Host Based Security System (HBSS)
- 19) Network Security Management (NSM)
- 20) C2I
- 21) C4I
- 22) Remotely Operated Video Enhanced Receiver (ROVER)
- 23) P-3C and P-8A Media Interfaces
- 24) Enterprise Storage System (ESS)
- 25) TacMobile Acoustic Support System (TacMASS)
- 26) MT-32
- 27) RMSA-2000
- 28) RF-300M

2.0 SCOPE

This Statement of Work (SOW) includes technical services, equipment procurement, system integration, assembly, testing, studies and analysis, installation, training, maintenance and support, configuration management, quality assurance (QA), material control, program management, and logistics products and services in support of TacMobile life cycle management responsibilities. In addition, certain equipment may be required to be replaced due to high usage or to meet emergent wartime requirements in support of the Overseas Contingency Operations (OCO).

Performance of work under this SOW will primarily occur at contractor and Government sites located in: Charleston, South Carolina; Patuxent River, Maryland; and Jacksonville, Florida. Specific locations in the future may change as a result of operational or training requirements.

3.0 APPLICABLE DOCUMENTS

Table 1 provides a list of reference information that may be applied to the tasks described in this SOW. This list shall not be viewed as all-inclusive. The contractor shall utilize the latest version of the applicable documents.

Table 1: Applicable Reference Documents

American Society of Mechanical Engineers (ASME) Y14.100: Engineering Drawing Practices	http://files.asme.org/Catalog/Codes/PrintBook/35102.pdf
ASME-Y14.24: Types and Applications of Engineering Drawings	http://files.asme.org/Catalog/Codes/PrintBook/34420.pdf
Department of the Navy (DoN) Information Assurance (IA) Publication Module 5239-31: Information Assurance Shipboard Red/Black Installation Publication	http://docs.askives.com/navy-ia-pub-5239-26.html
Department of Defense Directive (DoDD) 8500.1E: Information Assurance	http://www.dtic.mil/whs/directives/corres/pdf/850001p.pdf
Department of Defense Instruction (DoDI) 8510.01: DoD Information Assurance Certification and Accreditation Process (DIACAP)	http://www.dtic.mil/whs/directives/corres/pdf/851001p.pdf
Deputy Assistant Secretary of the Navy (DASN) Acquisition and Logistics Management (A&LM) SECNAVINST 4440.33: Sponsor Owned	http://doni.daps.dla.mil/Directives/04000%20Logistical%20Support%20and%20Services/04-400%20Supply%20and%20Material%20Services/4440.33.pdf

Material, Government Owned Material and Plant and Project Stock Management	
SECNAVINST 5000.02E: Operation of the Defense Acquisition System	http://doni.daps.dla.mil/Directives/05000%20General%20Management%20Security%20and%20Safety%20Services/05-00%20General%20Admin%20and%20Management%20Support/5000.2E.pdf
DoDI 5200.44: Protection of Mission Critical Functions to Achieve Trusted Systems and Networks (TSN)	http://www.dtic.mil/whs/directives/corres/pdf/520044p.pdf
DoDI 8500.2: Information Assurance Implementation	http://www.dtic.mil/whs/directives/corres/pdf/850002p.pdf
Title III of Public Law 107-347: E-Government Act of 2002 , “Federal Information Security Management Act (FISMA) of 2002”	http://www.gpo.gov/fdsys/pkg/PLAW-107publ347/pdf/PLAW-107publ347.pdf
Executive Order 13526: Classified National Security Information	http://www.whitehouse.gov/the-press-office/executive-order-classified-national-security-information
DoDD 8500.01E: Information Assurance	http://www.dtic.mil/whs/directives/corres/pdf/850001p.pdf
DoDD 8570.01: Information Assurance Training, Certification, and Workforce Management	http://www.dtic.mil/whs/directives/corres/pdf/857001p.pdf
Department of Defense (DoD) 8570.01-M: Information Assurance Workforce Improvement Program	http://www.dtic.mil/whs/directives/corres/pdf/857001m.pdf
Secretary of the Navy (SECNAV) Instruction (SECNAVINST) 5239.3B: Department of the Navy Information Assurance Policy	http://doni.daps.dla.mil/Directives/05000%20General%20Management%20Security%20and%20Safety%20Services/05-200%20Management%20Program%20and%20Techniques%20Services/5239.3B.pdf
Office of Management and Budget (OMB) Circular A-130: Management of Federal Information Resources	http://www.whitehouse.gov/omb/circulars_a130_a130trans4/
IEEE/EIA 12207.1: Software Life Cycle Processes-Life Cycle Data	http://www.math.unipd.it/~tullio/IS-1/2009/Approfondimenti/ISO_12207-2008.pdf
IEEE/EIA 12207.2: Software Life Cycle Processes-Implementation Considerations	http://www.math.unipd.it/~tullio/IS-1/2009/Approfondimenti/ISO_12207-2008.pdf
IEEE/IEC 2008: ISO/IEC/IEEE Standard for Systems and Software Engineering Software Life Cycle Processes	http://www.math.unipd.it/~tullio/IS-1/2009/Approfondimenti/ISO_12207-2008.pdf
ISO 9000 (Series): Quality Management and Quality Assurance Standards	http://n5n.org/search/iso-9000-series-pdf
MIL-STD-810G: Environmental Engineering Considerations and Laboratory Tests	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=35978&method=basic
MIL-P-24534A NOT 1: Planned Maintenance System; Development of Maintenance Requirement Cards, Maintenance Index Pages,	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=17395&method=basic

and Associated Documentation	
MIL-M-85337B: Manuals, Technical: Quality Assurance Program	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=34732&method=basic
GEIA-STD-0007: Logistics Products Data	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=276379&method=basic
MIL-PRF-29612B: Training Data Products	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=122906&method=basic
MIL-PRF-29612B: Instructional Systems Development/Systems Approach to Training and Education (Part 2 of 4)	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=207794&method=basic
MIL-DTL-24784 C: Manuals, Technical: General Acquisition and Development Requirements	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=114691&method=basic
MIL-DTL-24784/4C: COTS Equipment Manual Requirements	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=114721&method=basic
MIL-STD-1472G: Human Engineering	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=36903&method=basic
MIL-STD-961E (2) NOT 3: Defense and Program-Unique Specifications Format and Content	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=36063&method=basic
MIL-HDBK-61A: Configuration Management Guidance	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=202239&method=basic
MIL-HDBK-472 (1): Maintainability Prediction	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=54046&method=basic
MIL-HDBK-502: Acquisitions Logistics	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=201462&method=basic
MIL-HDBK-29612-2A: Instructional Systems Development/Systems Approach to Training and Education	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=207794&method=basic
MIL-HDBK-470A NOT 2: Designing and Developing Maintainable Products Systems Vol. 1	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=120647&method=basic
MIL-PRF-32216A: Evaluation of COTS Manuals and Preparation of Supplemental Data	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=275451&method=basic
MIL-HDBK-2036: Preparation of Electronic Equipment Specifications	http://quicksearch.dla.mil/basic_profile.cfm?ident_number=208572&method=basic
Naval Network Warfare Command Instruction (NETWARCOMINST) 12271.1, Policy and Procedures for the FRCB Process	https://usff.portal.navy.mil/sites/cyberfor/searchcenter1/Pages/results.aspx?k=netwarcominst%2012271.1
Naval Sea Systems Command Instruction (NAVSEAINST) 4790.1B: Expanded Ship Work Breakdown Structure (ESWBS) Hierarchical Structure Code (HSC) for Ships, Ship Systems, and Surface Combatant Systems	http://www.navsea.navy.mil/NAVINST/04790-001B.pdf

Navy Staff Office (NAVSO) P-3692: Department of the Navy Guide for Conducting Independent Logistics Assessments	http://acquisition.navy.mil/content/download/9176/42153/version/1/file/2012-11-1+ila+handbook+final.pdf
NATO-STANAG-7023: Specifications And Formats for Interoperability Between Maritime Patrol Aircraft and Maritime Air Operation Centers	http://www.nato.int/structur/AC/224/standard/7023/7023_documents/7023Eed04.pdf
NAVAIRINST 5100.3D: Naval Aviation Systems Safety Program	http://www.navsea.navy.mil/NAVINST/05100-003D.pdf
NAVEDTRA 130A: Task Based Curriculum Development Manual	http://aim.aimereon.com/aimwikidocuments/navedtra/navedtra%20130b%20vol%20i.pdf
NAVEDTRA 131A: Personnel Performance Profile Based Curriculum Development Manual	http://aim.aimereon.com/AIMWikiDocuments/NAVEDTRA/131av3.pdf
NAVEDTRA 134: Navy Instructor Manual	http://aim.aimereon.com/AIMWikiDocuments/NAVEDTRA/NAVEDTRA_134a.pdf
NAVEDTRA 135B: Navy School Management Manual	http://aim.aimereon.com/AIMWikiDocuments/NAVEDTRA/NAVEDTRA_135c.pdf
Office of the Chief of Naval Operations (OPNAV) Instruction (OPNAVINST) 3000.12A: Operational Availability Of Equipment and Weapons Systems	http://doni.daps.dla.mil/directives/03000%20naval%20operations%20and%20readiness/03-00%20general%20operations%20and%20readiness%20support/3000.12a.pdf
OPNAVINST 4790.4E: Ships' Maintenance and Material Management (3-M) System Policy	http://doni.daps.dla.mil/Directives/04000%20Logistical%20Support%20and%20Services/04-700%20General%20Maintenance%20and%20Construction%20Support/4790.4E.pdf
OPNAVINST 5239.1C: Navy Information Assurance Program	http://doni.daps.dla.mil/Directives/05000%20General%20Management%20Security%20and%20Safety%20Services/05-200%20Management%20Program%20and%20Techniques%20Services/5239.1C.pdf
OPNAVINST 1500.76C: Naval Training System Requirements, Acquisition, and Management	http://doni.daps.dla.mil/Directives/01000%20Military%20Personnel%20Support/01-500%20Military%20Training%20and%20Education%20Services/1500.76C.pdf
OPNAVINST 4790 Series: Navy Maintenance	http://doni.daps.dla.mil/allinstructions.aspx?Paged=TRUE&p_FSObjType=0&p_Sponsor0=&p_FileLeafRef=4630.25D.pdf&p_ID=4903&View=%7B1FF912B1-1BC6-444A-8943-B769C77880F2%7D&SortField=Sponsor0&SortDir=Asc&PageFirstRow=501
Principal Deputy Under Secretary of Defense (PDUSD) Acquisition Technology and Logistics (AT&L) Memorandum, "Document Streamlining – Life Cycle Sustainment Plan"	https://dap.dau.mil/policy/Lists/Policy%20Documents/Attachments/3303/USA005157-11_SignedLCSPMemo_14Sep2011.pdf
Program Executive Office (PEO) C4I/295: Policy for Implementation of Life Cycle Configuration Management within the PEO C4I (Life Cycle Configuration Management Implementation	Provided as a reference on NESI

Manual (LCCMIM))	
SECNAVINST 4105.1C: Independent Logistics Assessment and Certification Requirements	http://acquisition.navy.mil/content/download/8974/41469/file/sni%204105.1c.pdf .
Ship Configuration and Logistics Support Information System (SCLISIS) Technical Specification (9090-700D)	Provided as a reference on NESI
Space and Naval Warfare Systems Command (SPAWAR) Instruction (SPAWARINST) 4160.3C: SPAWAR, PEO C4I, PEO Space and PEO EIS Policy, Procedures and Responsibilities for Technical Manual Management Operations and Product/Technical Data Lifecycle Support	Provided as a reference on NESI
SPAWAR Shore Installation Process Handbook (4720.1-M)	Provided as a reference on NESI
SPAWAR Instruction 4000.10: Logistics Planning Guidance and Preferred Formats	Provided as a reference on NESI
SPAWARINST 3090.2A: Policy and Procedures for Fleet Readiness Certification Board (FRCB) Process for Installations of Command, Control, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) and other Electronic Systems	Provided as a reference on NESI
MIL-P-24534 A: Planned Maintenance System; Development of Maintenance Requirement Cards, Maintenance Index Pages, and Associated Documentation	https://acc.dau.mil/CommunityBrowser.aspx?id=151908&lang=en-US
Life Cycle Sustainment Plan (LCSP) for Navy Tactical Mobile (TacMobile) Increment 2.1	Provided as a reference on NESI
Capability Production Document (CPD) for Navy Tactical/Mobile (TacMobile) Systems Increment 2.1	Provided as a reference on NESI
TacMobile Architecture Simplification (TAS) Requirements Addendum to the Combined System Requirements Specification (SyRS) and System Subsystem Specification (SSS) for the Tactical Mobile (TacMobile) Program, Version 2.1 System	Provided as a reference on NESI
Technical Manual Management Plan (TMMP) for Navy Tactical Mobile (TacMobile)	Provided as a reference on NESI

4.0 TECHNICAL REQUIREMENTS

The tasks and types of support required will be applied to the following areas:

- 1) LEGACY/FIELDED SYSTEMS - Legacy/fielded systems represent deployed units in the Fleet.

- 2) TECHNOLOGY REFRESHES - Technology Refreshes occur between major increments and consist of systematic replacement of one or more existing subsystems at all or most TOCs, MTOCs, and JMASTs.
- 3) FUTURE INCREMENTS - During the life of this contract, the contractor will provide Level of Effort support to the Government in the development of future TacMobile increments.

4.1 DEVELOPMENT SUPPORT (RDT&E)

4.1.1 Program Management Development Support

The Contractor shall provide program management services to enable the Government to make sound management and execution decisions for the TacMobile Program in the Research, Development, Test, and Evaluation (RDT&E) phase of the life cycle. These services shall include: the reporting on cost, schedule, and performance plans and projections; conducting technical and project management reviews; and providing QA services on tasking associated with development efforts. The contractor shall provide a principle point of contact to interface with the Government.

- 1) Planning and Control - Provide for planning, direction, coordination, and control of all TacMobile RDT&E activities within the contractor's organization and with all the contractor's team members and subcontractors. Develop a Task Management Plan (CDRL A001) that reflects the contractor's cost, schedule, and performance plans and projections through the period of performance of the task. A "task" is hereby defined as a unique TacMobile project, managed by a single TacMobile Integrated Product Team (IPT) Technical Point of Contact (TPOC), in order to perform efforts specified within this SOW. The Task Management Plan shall also include a risk management strategy that provides the process to assess and mitigate events that could adversely impact the program. The Task Management Plan shall contain the anticipated level of effort, as well as the labor categories for each task, manpower phasing estimates, schedule, milestones, all significant tasks, and recommended metrics. Update the Task Management Plan to incorporate the new tasking and reflect the additional workload. The updated Task Management Plan shall not change the tasking required in any previous Task Management Plan unless specifically directed in writing by the Government. Once the planned performance is coordinated with the Government, it shall remain baselined until further changes are approved by the Government. The contractor shall assist the Government in identifying, assessing, and developing mitigation strategies for TacMobile programmatic and technical risks. Provide a monthly Contractor's Progress, Status and Management Report to communicate the status of progress on assigned tasking, cost information, and to inform the Government of existing or potential risks. (CDRL A002)
- 2) Management and Technical Reviews - Support project management and technical reviews of TacMobile RDT&E activities. Meetings may be conducted as directed by the Government. The contractor may be instructed by the Government to hold meetings at a Government owned facility, at the contractor's facility, or virtually using online collaboration tools. The contractor shall provide the meeting agenda and meeting minutes and shall document any action items. (CDRL A003)
- 3) QA - Implement a quality philosophy for TacMobile research, design, and development in accordance with (IAW) Government direction and applicable specifications and/or procedures. Submit a Contractor's Quality Assurance (QA) Plan (CDRL A009) that describes how the contractor will apply this quality philosophy throughout the contract. Follow those specific elements/sections of the QA Plan that are applicable to the specific work being performed.

CDRL Deliverables:

- A001 - Task Management Plan
- A002 - Contractor's Progress, Status and Management Report
- A003 - Meeting Minutes
- A009 - Contractor's Quality Assurance (QA) Plan

4.1.2 Integrated Logistics Development Support

The Integrated Logistics Support (ILS) IPT is responsible for providing logistics support for activities associated with the development of TOC and MTOC POR subsystems. The contractor shall provide ILS support to include:

- 1) RDT&E Material Procurement Support
 - a) Maintain, track, and update requirements in the Bill of Materials (BOM); provide projections of procurement lead times; and provide status of ongoing procurements.
 - b) Coordinate technical configuration requirements and hardware vendor inputs with the BOM Manager and Engineering personnel.
 - c) Coordinate material receipt with the central warehouse to capture and maintain records of original equipment manufacturer (OEM) serial numbers and Navy Enterprise Resource Planning (N-ERP) assigned serial numbers. (CDRL A008)
 - d) Communicate Government technical configuration requirements to hardware vendors.
 - e) Communicate hardware vendor inputs to BOM Manager and Engineering personnel. (CDRL A008)
 - f) Perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications. (CDRL A008)
- 2) Logistics Management
 - a) Submit a Contractor's Logistics Management Plan (CDRL A010) that describes how the contractor will factor logistics elements into TacMobile design and development.
 - b) Integrate logistics elements to optimize system operability and supportability to reduce life cycle costs and to identify, integrate, and acquire the elements of support. (CDRL A010)
- 3) Logistics Engineering – Provide input to Analysis of Alternatives (AoA) on logistical impacts of proposed system configuration changes. This includes assessing impacts to hardware and software Configuration Items (CIs) and their related documentation (e.g., Allowance Parts Listing (APLs) Maintenance Index Page (MIP)/Maintenance Requirements Card (MRC), Technical Documents), reliability and maintainability data, safety data, any environmental impact and potential obsolescence issues. (CDRL A020)
- 4) Configuration Management
 - a) Submit a Contractor's Configuration Management (CM) Plan IAW the PEO C4I Life Cycle Configuration Management Implementation Manual (LCCMIM) that describes the technical and analytical processes the contractor (to include subcontractors) will implement to ensure quality and timeliness configuration control procedures for engineering and logistics requirements outlined in this SOW and throughout the contract. This includes: hardware, software, media CM, technical documentation, drawing packages, license management, and warranty management. (CDRL A004)
 - b) Identify and document functional and physical characteristics of hardware and software CIs; number and store all software used in builds; track, maintain, inventory, and control all unclassified and classified media, maintain up-to-date Build Lists of all software builds, process software or hardware media for shipment, and support license renewals of RDT&E software. (CDRL A020)

CDRL Deliverables:

- A004 - Contractor's Configuration Management Plan
- A008 - Revisions to Existing Government Documents
- A010 - Contractor's Logistics Plan
- A020 - Technical Report

4.1.3 Design Engineering

The contractor shall perform the technical and engineering functions necessary to convert TacMobile systems' operational or functional needs into system enhancements through design modifications or new design of the systems' hardware and/or software. This includes engineering activities related to the design, development, fabrication, and integration of hardware and software CIs for the TacMobile system with respect to new systems under development or existing systems undergoing modification. Computer aided design and engineering services, as well as computer graphics generation support, shall also be provided.

- 1) The Architecture and Planning (A&P) IPT is responsible for Department of Defense Architecture Framework (DoDAF) architecture definition, CPD and Information Support Plan (ISP) development, Concept of Operations (CONOPs)/Concept of Employment (CONEMP)/use development, stakeholder requirements development and analysis, roadmap reviews, emerging technology prototyping, Fly Away Kit (FAK) development, imagery data and metadata optimization, collaboration with the MPRF Family of Systems on future capabilities planning, and cross-platforms data modeling, in support of major increments and technical refreshes. (CDRLs A003, A008, A020, A024, A025) The contractor shall:
 - a) TOC/MTOC Requirements Analysis and Architecture - Provide direct support to the Program IPT (PIPT) through various architectural, requirements capture, and DoDAF documentation tasks.
 - b) Strategic Integration Planning - Provide direct support to the Government through various analyses, engineering, and Course of Action (COA) development tasks; strategic integration planning; horizontal integration; interoperability with other systems/platforms; speed to capability development efforts; and ensuring external system guidance/directives are adhered to in the TacMobile program.
 - c) Provide A&P support for the development of a cost efficient FAK capability that can be deployed with the P-8A aircraft to support short duration operations. Specifically:
 - i) Support planning for FAK production, integration, assembly, and test of the initial production FAK.
 - ii) Provide management support to include performance, risk, and scheduling oversight.
 - iii) Provide FAK non-recurring engineering support for TacMobile media devices.

CDRL Deliverables:

- A003 - Meeting Minutes
 - A008 - Revisions to Existing Government Documents
 - A020 - Technical Report
 - A024 - Test Documentation
 - A025 - Test Report
- 2) The System Integration Test and Evaluation (SITE) IPT is responsible for overall end-to-end system integration and Test and Evaluation (T&E) of products submitted to the System Architecture and Engineering (SAE) IPT for proposed Fleet Release (FR). The contractor shall provide SITE support to include:
 - a) P-8A Future Increment Support – Specifically:
 - i) Support the execution of P-8A Initial Operational Test and Evaluation (IOT&E)/Follow-on Operational Test & Evaluation (FOT&E) to include the integration and T&E for software and Operational Flight Programs supporting new capabilities as introduced to P-8A, provide documentation changes to support fielding of P-8A, and provide documentation changes to support fielding of P-8A interface components. (CDRLs A008, A013, A020, A024, A025)
 - ii) Support P-8A future increment planning discussions as related to system integration and T&E efforts in TacMobile.
 - iii) Ensure TacMobile requirements meet the T&E criteria for testability and ensure design considerations include TacMobile Key Performance Parameters (KPPs) to include support for Advanced Airborne Sensor (AAS) efforts. (CDRL A008)

- iv) Submit content/comments/reviews for design and architecture documentation. Prepare Draft Test and Evaluation Master Plan (TEMP) reflecting updates in support of future increments or technical refreshes. (CDRLs A013, A017, A020, A023)
- b) TacMobile Incremental and Technical Refresh Support - Provide support for T&E activities leading to an Operational Assessment (OA) or Letter of Observation (LOO) in support of TacMobile Incremental technical refresh activities. (CDRLs A013, A017, A020, A023)
- c) Software Integration for Development Efforts – Integrate software packages as specified for testing of products that may be beneficial or required in future TacMobile systems as well as developmental builds required to conduct tests and verifications of products that are not compatible with the current existing TacMobile system. (CDRLs A013, A020)
- d) Support POR implementation for Link-11, Link-16, and Link-22 as required for support of the MPRF Family of Systems (FoS). (CDRLs A008, A013, A017)
- e) Requirements Management – Support the management of POR requirements, requirements-based engineering changes, and requirements to test traceability and defect management. The effort includes the administration of the Government directed tool suite (i.e., IBM Rational) including server, user, and database administration. (CDRLs A008, A013, A020, A022) Specifically:
 - i) Support ongoing programmatic requirements gathering, analysis, and documentation preparation and review to include: CPD, ISP documents, DoDAF documents, CONOPS documents, CONEMP documents, COA analyses, AoA, Comparative Analyses, and external source requirement-related documentation reviews.
 - ii) Support engineering reviews and discussions (TAS, Mobile Quick Look (MQL), P-8A Increment 2, P-8A future increments, Triton, Higher than Secret (HTS)/Multilayer Security Enclave (MSE), AUS, emergent as directed) to ensure proper capture of requirements for inclusion in the TacMobile RequisitePro (REQPRO) database and presentation of requirements artifacts at prescribed Systems Engineering Technical Review (SETR) events (SRR, Preliminary Design Review (PDR), Critical Design Review (CDR)) for Incremental Technical Refresh and future increments.
 - iii) Prepare TacMobile requirements documentation to include SyRS, System Subsystem Specifications (SSS), Requirements Traceability Matrix (RTM) and provide requirements baseline management.
 - iv) Support the A&P Core, General, Strategic, Architecture Review Tiger Team (ARTT), HTS, PIPT, SITE Local Change Control Board (LCCB), and SAE Configuration Control Board (CCB) meetings including preparing agendas, reports, metrics, and minutes, as required.
 - v) Support IPT defect, Change Requests (CRs), IA Plan of Action and Milestones (POA&M), and requirements creation, adjudication, liaison, and reporting to include large and small scale test planning, test execution, and test reporting support.
 - vi) Support coordination between software developers, integrators, testers and TacMobile IPT Leads to ensure accuracy of the test to requirements traceability within the Rational Quality Manager (RQM) database.
 - vii) Support product licensing for RDT&E equipment software, IA compliance, technical support, and administration of the TacMobile POR IBM Rational Suite of server capabilities, web services, and Microsoft Structured Query Language (SQL).
 - viii) Perform product integration, schema maintenance update, user administration, and oversight for all Rational supported processes and databases including standard operating procedures and support documents.

- ix) Support the development of new innovative ways to manage/communicate requirements and test change/trends across the TacMobile POR.
 - x) Provide administration of Windows Servers – to include security configuration management in compliance with DoD regulations, resource monitoring, space configuration/monitoring, and network monitoring. This effort includes three separate servers that host the web application server: SQL server, database server, and license/file server.
 - xi) Provide administration of Rational Applications – to include the installation of any software, support RDT&E software license renewals, upgrades, setup of new projects, assisting others with setup of application, troubleshooting efforts, and other related Rational Software duties.
 - xii) Provide database support to include Subject Matter Expert (SME) support for Microsoft SQL Server 2005/2008.
 - xiii) Provide separate backups at the operating system level, application configuration level, database level, and file level.
 - xiv) Support product licensing for RDT&E equipment, liaising with IBM to manage license agreements, and ensuring the maximum utilization of available capabilities.
- f) Provide SITE IPT support for the development and revision of TacMobile training documentation (CDRL A027)

CDRL Deliverables:

- A008 - Revisions to Existing Government Documents
 - A013 - Engineering Change Proposal (ECP)
 - A017 - Engineering Drawings
 - A020 - Technical Report
 - A022 - Functional/Physical Requirements Documentation
 - A023 - Test Plan
 - A024 - Test Documentation
 - A025 - Test Report
 - A027 - Training Packages and POA&M
- 3) The Battlespace Awareness (BSA) IPT is responsible for the incorporation of operationally effective C4I, enterprise services, and warfighter interface capabilities. The contractor shall provide BSA support to include:
- a) CR Support
 - i) Perform engineering (e.g., requirements analysis, preliminary design, AoA) required for a Common Workstation Technical Refresh. (CDRLs A005, A007, A008, A022, A024, A025)
 - ii) Implement Public-Key Infrastructure (PKI) authentication on the TacMobile Non-classified Internet Protocol (IP) Router Network (NIPRNet) enclave. This will include requirements analysis, preliminary design, identification of hardware and software, integration, and test to ensure implementation is fully functional and does not degrade overall system performance. (CDRLs A007, A008, A022, A024, A025)
 - iii) Implement Data At Rest (DAR) on the TacMobile NIPRNet and Secret IP Router Network (SIPRNet) enclave. The NIPRNet/SIPRNet DAR solution should address both mobile computing devices and removable media. This will include requirements analysis, preliminary design, identification of hardware and software, integration, and test to ensure implementation is fully functional and does not degrade overall system performance. (CDRLs A007, A008, A022, A024, A025)
 - iv) Support the design and development of MTOC in-garrison connectivity such that MTOC sites are a constant presence on the Global Information Grid (GIG), including when in-garrison. The in-garrison connection (NIPRNet and SIPRNet) for MTOCs shall allow the ADP suite to remain set up and online

- to allow installation of IA patches onto the system during non-operational mission periods. (CDRLs A007, A008, A022, A024, A025)
- v) Support development of necessary engineering and technical documentation for the PMW 160 CENTRIXS-M subsystem. This documentation may include the following documents:
 - (1) BOM Support
 - (2) Cost Analysis Support
 - (3) Power Studies (CDRL A020)
 - (4) Human Systems Integration (HSI) data (CDRL A020)
 - (5) Engineering Drawings (CDRL A017)
 - (6) Engineering Change Request (ECR) (CDRL A013)
 - (7) ECP (CDRL A013)
 - (8) System Administrator Manual (SAM) (CDRL A027)
 - (9) Software User Manual (SUM) (CDRL A027)
 - (10) TacMobile Field Guide (TMFG) (CDRL A027)
 - (11) System Operational Verification and Test (SOVT) (CDRL A016)

 - b) Advanced Airborne Sensor (AAS) Engineering Support – Provide technical support required to maintain the system delivered to the Advanced Sensor Technology (AST) POR IAW the TacMobile Increment 2.1 Authority To Operate (ATO) and design and develop an integrated AAS/TacMobile system that will provide the complete pre- to post-mission support for an AAS-equipped P-8A aircraft. (CDRLs A007, A008, A022, A024, A025) Specifically:
 - i) Support project management, project monitoring and controls, Integrated Master Plan (IMP), Integrated Master Schedule (IMS), financial management, and contract management for the AAS project. Attend weekly and quarterly AAS/TacMobile Integration (ATI) meetings. (CDRL A003)
 - ii) Provide engineering and technical support required to maintain the MTOC 20 system delivered to the AST POR IAW the TacMobile Increment 2.1 ATO; attend weekly and quarterly ATI meetings (CDRL A003); provide Information Assurance Vulnerability Assessment (IAVA) support via routine TacMobile update packages (CDRL A029); and provide Tier 1,2,3 Help Desk and Spares Support via TacMobile Site Support. (CDRL A003)
 - iii) Provide engineering and technical support required for the ATI effort. This effort includes:
 - (1) Attendance at weekly and quarterly ATI meetings. (CDRL A003)
 - (2) Requirements gathering and analysis.
 - (3) Support the design of the TacMobile AAS stack of equipment.
 - (4) Support the development of an integrated AAS P-8A Mission Planning Capability (MPC).
 - (5) Support the development of an integrated AAS P-8A Pre-flight Insertion Data (PID) capability.
 - iv) Provide engineering and technical support required to complete all engineering and technical documentation for AAS. This may be new documentation, updating existing documentation, or both. This includes engineering drawings (system elevation, Installation Requirement Drawing (IRD), Installation Design Plan (IDP)), SOVT, SUM, SAM, applicable TMFG, and applicable TacMobile Quick Reference Guide (QRG). (CDRLs A016, A017, A022, A024, A025)
 - v) Coordinate and perform the IA/security engineering tasks related to the ATI Engineering efforts to support the long-term end product of a fully integrated AAS capability into the baseline TacMobile system. This includes all applicable research, IA scans, and accreditation package preparations or modifications. (CDRLs A020, A029)

 - c) Triton Interface Implementation – Provide engineering and technical support required to design and implement an interface into TacMobile to support the Triton (formerly Broad Area Maritime Surveillance (BAMS)) aircraft platform to include requirements gathering (A022), analysis, design, and development support (A020). Specifically:
 - i) Support project management, project monitoring, and controls to include the IMP and IMS. (CDRL A008)

- ii) Coordinate and perform the software integration of the final Triton design solutions. This includes the integration of all software products used to implement the Triton SIPRNet email aircrew accounts and the Triton file transfer mechanism to a final, secure baseline image for each product. This will also include all associated software documentation to include the Software Version Document (SVD), Software Install Guide, build plan, and applicable licensing info. (CDRL A022)
 - iii) Support IA/security engineering tasks on the final Triton design solutions. This includes all applicable research, IA scans, and accreditation package preparations. (CDRLs A020, A029, A030)
 - iv) Support subsystem functional tests of the Triton design solutions to include associated test documentation. (CDRL A025)
 - v) Provide engineering and technical support required to complete development of all engineering-related documentation for the Triton design solutions. This may be new documentation or updating existing documentation. (CDRL A008) This includes engineering drawings (system elevation, IRD, IDP), SOVT, SUM, SAM, applicable TMFG, and applicable TacMobile QRG. (CDRLs A016, A017)
- d) Multi-level Security Enclave (MSE) Prototype Support – Provide engineering and technical support required for system maintenance and demonstrations of the MSE prototype system to include periodic maintenance and preps prior to system demonstrations and hosting upcoming prototype capabilities prior to being fully implemented within the TacMobile baseline. The system may also require operational support for demonstrations to showcase system prototype capabilities. (CDRLs A007, A008, A022, A024, A025)
- e) Solypsis Map Conversion Tool Support – Provide engineering and technical support required to develop a solution for hosting Solypsis map conversion tools that require LINUX as well as storing all of the Solypsis converted maps in a central repository for retrieval by MOB/PDS TOCs/MTOCs. Specifically:
- i) Perform data gathering and analysis of the Solypsis map conversion requirements. (CDRL A020)
 - ii) Identify COAs to determine the most cost effective hosting site/repository to meet all of the requirements to include possible alternatives such as the SPAWAR Systems Center, Atlantic Navy Data Center, Naval Systems Engineering Resource Center (NSERC), and SPAWAR Acquisition Integrated Logistics Online Repository (SAILOR). (CDRL A020)
 - iii) Provide engineering and technical support required to coordinate the implementation of the Solypsis map conversion tools at the host site/repository and testing the functionality from a lab or live TacMobile site. (CDRL A020)
 - iv) Coordinate and perform the IA/security engineering tasks on the final Solypsis design solution. This includes all applicable research, IA scans, and accreditation package preparations or modifications. (CDRLs A020, A029)
- f) Content Management – Provide engineering and technical support required to design, develop, and implement a Content Management solution in the TacMobile Increment 2.1.1 baseline. (CDRLs A013, A017, A020) Specifically:
- i) Support project management, project monitoring, and controls to include the IMP and IMS.
 - ii) Perform software integration and test to build up the TacMobile Content Management solution. (CDRLs A022, A025)
 - iii) Coordinate support of IA scans and modifications to the TacMobile accreditation package to document the addition of the TacMobile Content Management solution to the TacMobile Increment 2.1.1 baseline. (CDRLs A020, A029)
 - iv) Support subsystem-level test of TacMobile Content Management solution to ensure it properly functions as an integrated subsystem/application within the TacMobile Increment 2.1.1 baseline system. (CDRL A025)
 - v) Provide engineering and technical support required to complete development of all engineering-related documentation for the TacMobile Content Management subsystem. This may be new documentation, updating existing documentation, or both. This includes engineering drawings (system elevation, IRD,

IDP), SOVT, SUM, SAM, applicable TMFG, and applicable TacMobile QRG. (CDRLs A008, A015, A016, A017, A030)

CDRL Deliverables:

- A003 - Meeting Minutes
 - A005 - Program of Record (POR) Site Inventory List
 - A007 - Configuration Audit Report
 - A008 - Revisions to Existing Government Documents
 - A013 - Engineering Change Proposal (ECP)
 - A015 - Inputs to Training System Installation Plan (TSIP)
 - A016 - System Operational Verification and Test (SOVT) Documentation
 - A017 - Engineering Drawings
 - A020 - Technical Report
 - A022 - Functional/Physical Requirements Documentation
 - A024 - Test Documentation
 - A025 - Test Report
 - A029 - Information Assurance Documentation
 - A030 - Installation Drawings
- 4) The Mission Execution Support (MES) IPT is responsible for communication subsystems for both the TOC and MTOC to include RDT&E, testing, builds, and delivery. The contractor shall provide CR Support to include direct support of the CR process to include updating the current CR database for all of the TacMobile TOC and MTOC Communications (COMM) subsystems IAW the TacMobile CR process. This task consists of updating the CRs in ClearQuest; updating the ECR, AoA, and BOM for all hardware and software upgrades; attending weekly meetings supporting the CR process; and providing inputs to all sub IPTs for related CR inputs. (CDRLs A013, A020)

CDRL Deliverables:

- A013 - Engineering Change Proposal (ECP)
 - A020 - Technical Report
- 5) The Mission Planning (MP) IPT is responsible for MPRF mission planning efforts. The contractor shall provide MP support to include:
- a) MPC Design Support – Support MPC software builds, patches, and updates that are required to align the MPRF MPC with the obsolescence driven changes of the on-board P-8A mission system and provide engineering development to align the MPC with future development spirals of the P-8A mission system. Specifically:
 - i) Perform integration and testing of the Electronic Warfare Database System (EWDS).
 - ii) Ensure MPC is in compliance with all IA directives, all discovered defects in MPC builds and patches are documented and corrected, and all CRs are documented in the appropriate databases. (CDRL A029)
 - iii) Develop documentation to include training materials, users manuals, technical reports, test plans and procedures, design and interface documents, and meeting minutes. (CDRLs A003, A008, A013, A020, A027)
 - iv) Ensure delivered software complies with TacMobile CM standards and procedures.
 - v) Test and validate MPC software for functionality. (CDRL A025)
 - vi) Support MPC builds and patches to include all applicable FRs. (CDRL A008)
 - vii) Provide inputs to TacMobile IMS and track progress of tasks against IMS/Plan.

- viii) Provide inputs to ECPs and/or CRs for existing MPC baselines. Review and provide technical input to documentation, including reviewing and updating Field Change Bulletins (FCBs). (CDRLs A013, A017, A022)
- ix) Perform software configuration management activities IAW contractor's software CM plan that address configuration control, establishing development CM environments, incorporating changes into baselines, releasing products, and generating software configuration management reports.
- x) Perform standards compliance activities that address review of engineering activities and audits of designated work products and processes.
- xi) Provide requirements analysis of future MPRF capabilities that will drive future TacMobile development to include the following:
 - (1) Update and recommend changes to the TacMobile Increment 2.1 SyRS and MPC Functional Requirements Document (FRD) via the CR process to support applicable FRs.
 - (2) Coordinate with the P-8A IPT personnel to verify compliance with the updated Interface Control Document (ICD)/Interface Design Documents (IDD) for the MPRF MPC to the P-8A Aircraft Media Management Server (AMMS) Interface, PID, P-8A Tactical Mission Extraction (TME), and the P-8A Pre-flight In-Flight Insertion Data (IFID) as defined in the TOC to P-8A ICD/IDD.
- xii) Maintain an MPC Integrated Project Schedule (IPS) that reflects all associated milestones. (CDRL A008)
- xiii) MPC Software Builds and Patches - Design, develop, test, and deliver MPC software subsystem builds and software patches to correspond with P-8A IDD/ICD revisions, including all corrections and deficiencies identified from previous development builds leading up to FR. Include development and integration results in the monthly status report. (CDRLs A017, A020)
- xiv) Configuration Management - Ensure software changes included in subsystem builds are in compliance with associated revisions of the TOC to P-8A ICD/IDD. Patches shall include mission planning capabilities for items that have been affected by changes to the ICD/IDD and any correction of defects documented during previous test events as directed by the System Integration lead. Verify that the subsystem builds and software patches meet the P-8A program testing requirements and the SPAWAR testing requirements. Deliver MPRF MPC releases that implement updates to the software as defined by the ICD/IDD changes or P-8A or SPAWAR testing requirements. (CDRL A020, A021, A024, A025)
- xv) Hardware and Software Integration and Test - Utilize the TacMobile System Integration Lab (TMSIL) to integrate and test each MPC software build and verify interfaces to other TacMobile subsystems, such as the Enterprise Storage System and P-8A AMMS function IAW defined interfaces. Provide TacMobile software changes/fixes along with verification tests on the TacMobile hardware and software environment. (CDRL A017, A021, A024, A025)
- xvi) Test Engineering - Update MPRF MPC subsystem test plans and acceptance test procedures resulting in development of software builds and patches. Provide technical support for Government testing of software builds IAW the P-8A mission system interface requirements and correct all deficiencies identified as Priority 1 and 2 discrepancies during Government testing of software builds. (CDRL A008)
- xvii) IA Support - Ensure that each new MPC subsystem build implementation complies with IA, the Defense Information Systems Agency (DISA) Security Technical Implementation Guides (STIGs) as identified by the TacMobile IAM, and RETINA scans and that each subsystem functions properly on the TacMobile system secure baseline. All new software development shall be IAW the Application Security and Development (ASD) STIG. (CDRL A029) Specifically:
 - (3) Perform IA analysis in the lockdown of MPC Virtual Machine (VM).
 - (4) Perform ASD implementation and review to ensure compliance with the requirements of the Application and Security Development STIG.
 - (5) Set up and perform all integration in a DISA locked down environment to include compliance with operating systems, database, application server, and web server STIGs.

- xviii) Training Material Revisions - Provide revisions to the existing government furnished training materials including the SUM, help files, and the NAVEDTRA 130B compliant training materials that are impacted by changes to the TOC to P-8A ICD/IDD. (CDRLs A008, A027)
 - xix) TacMobile P-8A Interface Support - Provide on-site developmental engineering and testing of the TacMobile P-8 Mission System, Mission Planning, Enterprise. and Aircraft Interface components with the P-8A aircraft mission systems components. Identify problem areas and provide coordination for resolution and/or technical progress. Present integration activities, schedules, and problem identification/resolution at Technical Interchange Meetings (TIMs) and include these in the current monthly technical report. (CDRL A003, A020)
 - xx) TMSIL Support - Provide on-site development engineering and testing in the TMSIL located at Naval Air Station (NAS) Patuxent River for P-8A Mission Planning and PID development and verification for TacMobile Fleet test events and post mission data analysis. Identify problem areas and provide coordination for resolution and/or technical progress. Present integration activities, schedules, and problem identification/resolution at TIMs and include these in the current monthly status report. (CDRL A020, A024, A025)
- b) MPRF Support - Support MPRF MPC to include development support of the current TacMobile Increment 2.1, requirements analysis, and design documentation support. Specifically:
- i) Provide SME meeting support to attend various program and technical meetings as directed by the Government.
 - ii) Provide financial management support, administrative support, contract support, security support, and procurement management support.
 - iii) Support the development of project management plans, program status briefs, and statements of work; assist with tracking financial and contractual reports; and support the preparation of procurement packages.
 - iv) Provide contract support for the MPC testing.
 - v) Support the development and updates of instructional curriculum.
 - vi) Develop, review, and update existing technical data packages, operators/users manuals, and applicable hardware documentation. (CDRLs A008, A027)
 - vii) Analyze current systems and applications that may result in ECPs for the current/future systems and applications (CDRL A013) and enter all discovered defects into the error reporting database with a test report.
 - viii) Support the evaluation of new hardware and software for interoperability with existing TacMobile MPRF hardware and software.
- c) Mission Planning High Altitude Anti-Submarine Warfare - Support Mission Planning for P-8A System Design Demonstration, P-8A Increment 2, future increment aircraft, AAS, Automatic Identification System (AIS), High Altitude Antisubmarine Warfare (HAASW), and High Altitude ASW Weapon Capability (HAAWC). Specifically:
- i) Provide research, development, test, and evaluation support for TacMobile MPC support for the P-8A System Design Demonstration aircraft. Test and report on changes to MPC software related to any residual OFP releases resulting from P-8A IOT&E. Support the SAE IPT in development and maintenance of the TacMobile engineering POA&M with respect to new capabilities.
 - ii) Support the TacMobile Increment 2.0 series of upgrades to include ECPs and technical refreshes in support of the U.S. P-8A and its associated capabilities of: Multistatic Active Coherent (MAC), AIS, HAASW, and HAAWC development as well as any relevant weapons testing support. Specifically:
 - (1) Support the design, development, integration, and test of SPAWAR TacMobile MP Systems and/or subsystems supporting the NAVAIR PMA-290 P-8A Poseidon aircraft. (CDRL A030)
 - (2) Collect, collate, develop, and document associated TacMobile Mission Planning requirements and capabilities. (CDRL A025)

- (3) Develop requirements to support all associated and programmed Increment 2 efforts including MAC Program of Record, HAASW and HAAWC programs, and the AIS.
 - (4) Review TOC to P-8A ICD/IDD quarterly revisions, assess impact of changes to the TacMobile MP subsystem, review associated documents and briefings, and recommend changes via ECPs and/or technical refreshes. (CDRL A013)
 - (5) Support TacMobile integration testing by producing PID files IAW the ICD/IDD, transferring to AMMS IAW the AMMS to MP IDD, and evaluating success of PID file interoperability with the P-8A by using TacMobile PID verification test procedures.
 - (6) Provide TacMobile and Mission Planning IPT representation at associated meetings and conferences, document IPT activities, and brief IPT leads on all related topics and events via technical reports and electronic correspondence.
 - (7) Plan and coordinate with test entities, prepare for test periods, conduct test activities, provide SME support, and analyze test data to validate MP for the P-8. (CDRLs A020, A025)
 - (8) Support testers and Fleet personnel, and provide SME support for Fleet Introductory Training (FIT).
 - (9) Provide TacMobile MP P-8A related subsystem-specific updates to operator documentation (User Manual, Maintenance Manual, Field Guide), and updates to P-8A subsystem related curriculum materials in support of FIT. (CDRL A027)
 - (10) Provide MP SME support for all TacMobile Increment 2 Technical Refresh and/or ECPs. (CDRL A013)
 - (11) Provide inputs to TacMobile IMS.
- iii) Support TacMobile future increment upgrades in support of the P-8A program continuance and refinement, multi-security enclaves/higher than Secret (MSC/HTS) level domains, communications upgrades, multi-intelligence, expeditionary upgrades, developed net-enabled ASW weapons program support, Triton Increment 2 capability, and C2 incorporation efforts. Specifically:
- (1) Provide SME services to support the design, development, integration, and test of SPAWAR TacMobile MP Systems and/or subsystems supporting the NAVAIR PMA-290 P-8A Poseidon aircraft in the areas of MAC, Triton interoperability, surface warfare Mission Planning support.
 - (2) Support future increment development through research, documentation, and presentation of relevant technical data.
 - (3) Review TOC to P-8A ICD/IDD revisions, assess impact of changes to TacMobile MP Subsystem, review associated documents and briefings, and recommend changes via ECPs and/or technical refreshes. (CDRL A013)
 - (4) Support TacMobile integration testing by producing PID files IAW the ICD/IDD, transferring to AMMS IAW the AMMS to MP IDD, and evaluating success of PID file interoperability with the P-8A by using TacMobile PID verification test procedures.
 - (5) Provide TacMobile and Mission Planning IPT representation at associated meetings and conferences, document IPT activities, and brief IPT leads on all related topics and events via technical reports and electronic correspondence with primary stakeholders.
 - (6) Plan and coordinate with test entities, prepare for test periods, conduct test activities, provide SME support, and analyze test data to validate MP for the P-8A.
 - (7) Provide TacMobile MP P-8A related subsystem-specific updates to operator documentation (User Manual, Maintenance Manual, Field Guide) and updates to P-8A subsystem related curriculum materials in support of FIT development.
 - (8) Provide MP SME support for all TacMobile future increments, Technical Refresh, and/or ECPs. (CDRL A013)
 - (9) Provide inputs to TacMobile IMS.

CDRL Deliverables:

- A003 - Meeting Minutes
 - A008 - Revisions to Existing Government Documents
 - A013 - Engineering Change Proposal (ECP)
 - A017 - Engineering Drawings
 - A020 - Technical Report
 - A021 - Contractor Source Code
 - A022 - Functional/Physical Requirements Documentation
 - A024 - Test Documentation
 - A025 - Test Report
 - A029 - Information Assurance Documentation
 - A030 - Installation Drawings
- 6) The Post Mission Analysis (PMA) IPT is responsible for the support of the P-3C and P-8A aircraft. The contractor shall provide the following:
- a) P-8A Engineering Support
 - i) Provide software development, research, unit test, subsystem test, designs, requirements validation, and engineering support for P-8A aircraft related to Increment 2 Test Releases (TRs) and FRs. These TRs and FRs are intended for future fielding during a planned TacMobile Technical Refresh and will include functionality related to PMA IPT subsystems supporting the aircraft's capability. (CDRLs A003, A021, A024, A025)
 - ii) Perform integration, assembly, and testing support for PMA IPT subsystem hardware and software of future planned capabilities to include development and fielding for planned subsystem Technical Refreshes and FCBs. (CDRLs A012, A024, A025)
 - iii) Support training material updates and provide inputs to future planned curriculum. (CDRL A008)
 - iv) Support subsystems manual updates to include creating quad charts and AoAs for the CRs submitted to the Rational ClearQuest database.
 - v) Support software development cost estimation, research, test, design, requirements validation, and engineering support for P-8A aircraft related future increment planned FRs.
 - vi) Support initial design documents and AoAs for proposed actions resulting from proposed changes on the aircraft.
 - b) P-3C Engineering Support - Support research, development, integration, test, design, requirements validation, engineering, and subsystem-level improvements in support of P-3C aircraft defined changes for: Acoustic Processor Technical Refresh (APTR), MAC, AIS, TME changes/modifications, reporting, Interface Design Specifications (IDS), and FCBs. Specifically:
 - i) Provide technical SME and software developer support to evaluate hardware and/or software solutions and potential COAs for POR engineering changes as a result of aircraft hardware/software changes. These efforts are intended to support the PMA IPT's ability to meet the overall Key Performance Parameters (KPPs) for data analysis as defined in the current TacMobile CPD.
 - ii) Perform PMA IPT subsystem software development, research, test, designs, requirements validation, and engineering support for P-3C aircraft related to program/software releases that are intended for future fielding as a TacMobile Technical Refresh and will include functionality related to PMA IPT subsystems supporting APTR, MAC, and other future upgrades. Support software development, subsystem testing, and laboratory operations to address correcting documented ClearQuest subsystem CRs and defects. (CDRLs A024, A025)
 - iii) Support integration, assembly, and testing of PMA IPT subsystem hardware/software for future planned subsystem capabilities.
 - iv) Provide user manual and associated documentation support. (CDRLs A008, A024, A025)

CDRL Deliverables:

- A003 - Meeting Minutes
- A008 - Revisions to Existing Government Documents
- A012 - Provisioning Documentation
- A021 - Contractor Source Code
- A024 - Test Documentation
- A025 - Test Report

- 7) The Mission Data (MD) IPT is responsible for the support of TacMobile media and data products with the various components of the P-3C and P-8A aircraft. The contractor shall provide MD support to include:
- a) P-8A System Design Demonstration hardware and software obsolescence support (P-8A FR/TacMobile 2.1) - Support software and hardware validation, verification, and integration efforts in support of P-8A FRs. This task supports P-8A System Design Demonstration phase and TacMobile Increment 2.1 IMS requirements. Tasks include P-8A subsystem software AMMS and hardware changes/improvements, contractor source code validation/verification, changes/updates to TacMobile documentation, test reports, and engineering drawings. (CDRLs A008, A013, A017, A021, A022, A024) Specifically:
- i) Support management of cost, schedule, performance efforts, production schedules, Program Management Office (PMO) inputs, interactions via Working Groups and Technical Interchange meetings, and briefing IPT leads and program leadership.
 - ii) Provide ICD/IDD CR tracking and impact assessment and review.
 - iii) Monitor and report on aircraft OEM document updates, update design documents and specifications, and provide updates to TacMobile P-8A Subsystem documents.
 - iv) Participate in P-8A aircraft change review activities.
 - v) Track progress of other implementations of media and hardware updates as well as NAVAIR plans to address P-8A media and media-related obsolescence.
 - vi) Provide Government Furnished Equipment (GFE) oversight support for P-8A subsystem components provided by other hardware vendors, support of the update of subsystem BOMs, and AoA of components needed to interface with new aircraft media devices. (CDRLs A017, A020)
 - vii) Provide Verification and Validation support of P-8A production aircraft to incorporate ICD/IDD changes and to correct trouble reports, perform analysis, and determine scope of software requirements to plan content of build.
 - viii) Update software, perform unit and subsystem integration testing, and deliver AMMS client and server software builds as required. (CDRL A022)
 - ix) Support Verification and Validation of subsystem components at related Systems Integration Labs (SILs). (CDRLs A017, A020, A021)
- b) P-8A Increment 2 hardware and software development, integration and test support - Support software and hardware integration, test, requirements, and design efforts in support of P-8A test releases and FRs. (CDRL A017) This task supports P-8A Increment 2 and TacMobile Increment 2.1.1 IMS requirements and related deliverables to include P-8A subsystem software deliveries to support P-8A FRs, hardware design/development, contractor source code, changes/updates to TacMobile documentation, test reports, and engineering drawings. Specifically:
- i) Provide technical meeting support as directed by the Government. (CDRL A003)
 - ii) Provide system-level architecture guidance and technical assistance.
 - iii) Participate in P-8A aircraft change review activities and brief IPT leads and program personnel.
 - iv) Provide P-8A related cost, schedule, and performance support.
 - v) Maintain an inventory list of the Government Furnished Property (GFP) at contractor facilities.
 - vi) Prepare for verification and validation periods, conduct test activities (CDRLs A024, A025), and analyze test data to validate changes to subsystem software.

- vii) Provide ICD/IDD CR tracking and impact assessments; review ICD revisions and corrections; deliver updated design/specification change; provide updates to TacMobile related P-8A subsystem documents; deliver hardware and software updates to P-8A subsystem (AMMS, P-8A equipment stack), incorporating ICD/IDD changes; and correct trouble reports as the aircraft transition through test and FRs.
 - viii) Perform analyses to determine the scope of software requirements, plan content of software builds, review aircraft system test problem reports, and track progress subsystem implementations of media and hardware updates.
 - ix) Perform design, development, and test efforts of P-8A hardware, software, and media/media-related changes; and provide required support for P-8A related TacMobile CRs (as required) and additional related future CRs. (CDRLs A013, A017, A020, A021)
 - x) Support integration and verification and validation of subsystem components with P-8A aircraft in the TacMobile System Integration Lab to address P-8A software updates, media support, and aircraft changes that impact TacMobile systems.
 - xi) Support initial TOC/MTOC systems with required updates to P-8A subsystem to include pre-installation subsystem integration and checkout, installation and training efforts, SME input and support, technical support for installation, test support, and updates to internal software development documentation. (CDRLs A008, A013, A017, A020, A021)
- c) P-8A future increment requirements and design efforts in support of P-8A design changes to include:
- i) Support for requirements and design efforts associated with future P-8A design changes to include requirements analysis, subsystem software/hardware design analyses, and technical documentation support.
 - ii) Support requirements analysis and design support to include ICD/IDD CR tracking and impact assessments.
 - iii) Support TacMobile subsystem software/hardware development, integration, testing, and tracking progress of subsystem implementations of media and hardware updates.
 - iv) Support design, development, and test efforts of P-8A hardware, software, and media/media-related changes as related to P-8A future increment/future efforts. (CDRLs A003, A013, A017, A020, A021, A022, A024, A025)

CDRL Deliverables:

- A003 - Meeting Minutes
- A008 - Revisions to Existing Government Documents
- A013 - Engineering Change Proposal (ECP)
- A017 - Engineering Drawings
- A020 - Technical Report
- A021 - Contractor Source Code
- A022 - Functional/Physical Requirements Documentation
- A024 - Test Documentation
- A025 - Test Report

4.1.4 Information Assurance Development Support

The IA IPT is responsible for supporting IA requirements associated with the design, development, and testing for TacMobile Increments 2.0, 2.0.1, 2.1, and 2.1.1; P-8A Increment 2.0; P-8A future increments; and TacMobile Increments 2.1.1 and 3. The contractor shall perform the following IA tasks:

- 1) CR IA Support – Provide IA services in support of the BSA IPT, In Service Engineering Activity (ISEA) CR Support. (CDRL A029)

- 2) AAS IA Support - Provide engineering and technical support required to coordinate and perform the IA/security engineering tasks related to the ATI Engineering efforts to support the long-term end product of a fully integrated AAS capability into the baseline TacMobile system. This includes all applicable research, IA scans, and accreditation package preparations or modifications. (CDRLs A020, A024, A025, A028, A029) Associated deliverables include:
 - a) System Identification Profile (SIP)
 - b) DIACAP Implementation Plan (DIP)
 - c) Validation Plan and Procedures
 - d) Checklists and SRRs
 - e) Plans of Actions and Milestones (POA&Ms)
 - f) System Architecture Diagrams
 - g) Accreditation Boundaries
 - h) External Interfaces/Data Flow
 - i) Hardware/Software Lists
 - j) Ports Protocols & Services
 - k) IA Control Mapping

- 3) Triton IA Support – Provide engineering and technical support required to coordinate and perform the IA/security engineering tasks on the final Triton design solutions. This includes all applicable research, IA scans, and accreditation package preparations. (CDRLs A020, A024, A025, A028, A029) Associated deliverables include:
 - a) SIP
 - b) DIP
 - c) Validation Plan and Procedures
 - d) Checklists and SRRs
 - e) Validation Report
 - f) POA&Ms
 - g) System Architecture Diagrams
 - h) Accreditation Boundaries
 - i) External Interfaces/Data Flow
 - j) Hardware/Software Lists
 - k) Ports Protocols & Services
 - l) IA Control Mapping
 - m) Draft Certification and Accreditation letters for Certifier and Designated Approving Authority signature.

- 4) SOA (Service Oriented Architecture) support – This subtask includes the engineering and technical support required to coordinate and perform the IA/security engineering tasks on the final design solutions. This includes all applicable research, IA scans, and accreditation package preparations. (CDRLs A020, A024, A025, A028, A029) Associated deliverables include:
 - a) SIP
 - b) DIP
 - c) Validation Plan and Procedures
 - d) Checklists and SRRs
 - e) Validation Report
 - f) POA&Ms
 - g) System Architecture Diagrams
 - h) Accreditation Boundaries
 - i) External Interfaces/Data Flow
 - j) Hardware/Software Lists
 - k) Ports Protocols & Services
 - l) IA Control Mapping

m) Draft Certification and Accreditation letters for Certifier and Designated Approving Authority signature.

CDRL Deliverables:

- A020 - Technical Report
- A024 - Test Documentation
- A025 - Test Report
- A028 - DIACAP Information Assurance (IA) Plan
- A029 - Information Assurance Documentation

4.2 PRODUCTION SUPPORT (OPN, APN)

4.2.1 Program Management Production Support

The Contractor shall provide program management services to support hardware procurements, production, integration, and installation activities for the TacMobile program during the Other Procurement, Navy (OPN) phase of the life cycle. The Contractor shall report cost, schedule and performance status on production tasks and conduct technical reviews to enable the Government to make sound management and execution decisions during the production phase of the program. The contractor shall provide a principle point of contact to interface with the Government.

- 1) Planning and Control - Provide planning, direction, coordination, and control of all TacMobile Production Support activities within the contractor's organization and with all the contractor's team members and subcontractors. Develop a Task Management Plan (CDRL A001) that reflects the contractor's cost, schedule, and performance plans and projections through the period of performance of the task. The Task Management Plan shall include a risk management strategy that provides the process to assess and mitigate events that could adversely impact the program. The Task Management Plan shall contain the anticipated level of effort, as well as the labor categories for each task, manpower phasing estimates, schedule, milestones, all significant tasks, and recommended metrics. Update the Task Management Plan to incorporate the new tasking and reflect the additional workload. The updated Task Management Plan shall not change the tasking required in any previous Task Management Plan unless specifically directed in writing by the Government. Once the planned performance is coordinated with the Government, it shall remain baselined until further changes are approved by the Government. Report task status. Assist the Government in identifying, assessing, and developing mitigation strategies for TacMobile programmatic and technical risks. Provide a monthly Contractor's Progress, Status and Management Report that indicates the progress of work and the status of the program and of the assigned tasks, report costs, and information of program risks. (CDRL A002)
- 2) Management and Technical Reviews - Conduct project management and technical reviews in support of TacMobile production activities. Meetings may be conducted as directed by the Government. The contractor may be instructed by the Government to hold meetings at a Government owned facility, at the contractor's facility or virtually using online collaboration tools. The contractor shall provide the meeting agenda and meeting minutes and shall document any action items. (CDRL A003)
- 3) QA - Implement a quality philosophy for TacMobile production, integration, and installation activities IAW Government direction and applicable specifications and/or procedures. The contractor shall submit a QA Plan (CDRL A009) that describes how the contractor will apply this quality philosophy throughout the contract. The contractor shall follow those specific elements/sections of the QA Plan that are applicable to the specific work being performed. The contractor shall support the Government's acceptance test team and provide personnel to support Government acceptance testing IAW Government direction and applicable specifications and/or procedures to include:
 - a) Product Approval Reviews
 - b) Production Qualification Test and Evaluation (PQT&E)

- c) Pre-Installation Test and Checkout (PITCO)
- d) Factory Acceptance Tests (FATs)
- e) Government Acceptance Tests
- f) Software Acceptance Tests

CDRL Deliverables:

- A001 - Task Management Plan
- A002 - Contractor's Progress, Status and Management Report
- A003 - Meeting Minutes
- A009 - Contractor's Quality Assurance Plan

4.2.2 Integrated Logistics Production Support

The ILS IPT is responsible for providing logistics support for activities associated with the production, integration, and fielding of TOC and MTOC POR systems. The contractor shall provide ILS support to include:

- 1) Material Procurement Support
 - a) Maintain, track, and update requirements in the BOM, provide projections of procurement lead times, and provide status of ongoing procurements. (CDRL A012)
 - b) Coordinate technical configuration requirements and hardware vendor inputs with the BOM Manager and Engineering personnel.
 - c) Coordinate material receipt with the central warehouse to capture and maintain records of Original Equipment Manufacturer (OEM) serial numbers and N-ERP assigned serial numbers. (CDRL A008)
 - d) Communicate Government technical configuration requirements to hardware vendors. (CDRLs A008, A012)
 - e) Communicate hardware vendor inputs to BOM Manager and Engineering personnel. (CDRLs A008, A012)
 - f) Perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications. (CDRL A008)
- 2) Logistics Management
 - a) Submit a Contractor's Logistics Management Plan that describes how the contractor will factor logistics elements into TacMobile production, integration, and fielding in order to optimize system operability and supportability. (CDRL A010)
 - b) Supply Support: Support the Government in the determination of requirements for initial requisitioning, cataloging, receipt, storage, transfer, issuance, and on-board repairs parts including required for fielding and handover to the site.
 - c) Packaging, Handling, Storage, and Transportation: Utilize available resources, processes, procedures, design considerations, and methods to ensure that systems, equipment, and support items are preserved, packaged, handled, and transported properly.
 - d) Manpower, Personnel, and Initial Training Support: Support the Government in efforts to maximize the use of technology to reduce manpower, personnel, and initial training requirements. Support efforts to streamline processes, procedures, techniques, training devices, and equipment used for initial training of instructor personnel.
 - e) Technical Data: Support the Government in the acquisition and validation of the technical data required in support of TacMobile systems IAW Government specifications and/or procedures.
 - f) Computer Resources: Support the Government in the acquisition of hardware, operating systems, database management, graphics, windowing, and man-machine interface technology to achieve efficient integration of component parts.
 - g) Configuration Management: Support the Government in the systematic coordination, evaluation, implementation, and release of approved changes to established configuration baselines. (CDRL A006)

- h) Reliability, Availability, and Maintainability (RAM) Support: Support the Government in the use of Reliability Centered Maintenance (RCM) principles to perform RAM analysis.
 - i) Provide engineering, technical, and analytical support for ILS elements and disciplines, and programmatic requirements IAW Government direction, applicable specifications, and/or procedures and Navy/SPAWAR requirements to include:
 - i) Support TacMobile Incremental/Technical Refresh phasing plan in Program Support Data (PSD) Automated Reporting and Tracking System (PARTS) in support of yearly Future Years Defense Plan (FYDP) Baseline Assessment Memorandum (BAM-XX) for all end item configurations requiring spare parts support assets required to provide Fleet support during an interim period of operation prior to the Material Support Date (MSD). (CDRLs A008, A020) Specifically:
 - (1) Support program documentation identifying approved end item procurements and installation schedules for budget year plus six out years.
 - (2) Support variant worksheets for each sponsor related incremental upgrade/fielding schedule.
 - (3) Support the development of TacMobile Program Office responses to OPNAV BAM budget drills (e.g., expenditure status, impact on funding cuts).
 - (4) Coordinate, update, and maintain inputs to the spares procurement tracking sheet.
 - (5) Maintain spares procurement data by resource sponsor, appropriation, and subsystem by interim spares and repair parts (on-board-repair-parts), Installation and Check-Out (INCO), and pipeline assets.
 - (6) Coordinate the approval of System-level PSDs with OPNAV and POR.
 - (7) Coordinate efforts with Navy Supply System (NAVSUP).
 - (8) Initiate and/or respond to MSD CRs.
 - ii) Identify and coordinate the transition from system-level to subsystem-level PSDs.
 - iii) Initiate and/or respond to MSD CRs for each PSD.
 - iv) Track, update, maintain, and provide status of each PSD MSD by system and/or subsystem level.
 - v) Track, update, and maintain status by PSD and subsystem-level those individual components that have reached MSD.
 - j) Provide support for Integrated Logistics Assessments (ILA). (CDRL A020)
- 3) Configuration Management: Perform Configuration Management (CM) directly associated with prime mission product including implementation and execution of configuration management and configuration status accounting and audits IAW MIL-HDBK-61A, Configuration Management Guidance, and the PEO C4I LCCMIM. Specifically:
- a) Submit a Contractor's Configuration Management (CM) Plan IAW the PEO C4I LCCMIM that describes the technical and analytical processes the contractor (to include subcontractors) will implement to ensure quality and timeliness configuration control procedures for engineering and logistics requirements outlined in this SOW and throughout the contract. This includes: hardware, software, media CM, technical documentation, drawing packages, license management, and warranty management. (CDRL A004)
 - b) Maintain unique identification records of Hardware CIs (HWCIs) and Computer Software CIs (CSCIs). Develop, review, and maintain Configuration Baselines (i.e., Functional, Allocated, and Product). Maintain selected configuration documentation used to define baselines. (CDRL A008)
 - c) Record, update, and track the status of all changes (e.g., CRs, ECRs, and FCBs). Perform configuration status accounting and configuration change control utilizing Government-approved CM tools, such as CMPro and ClearQuest. (CDRL A013)
 - d) Support the development, processing, update, and maintenance of subsystem nomenclatures. (CDRL A008)
 - e) Establish Equipment Identification Codes (EIC) for new equipment identified for implementation into the TacMobile baseline. (CDRL A008)
 - f) Support development, updates, and maintenance of Program of Record Site Inventory (PORSI) lists, and identify shortages for each site. (CDRL A005)

- g) Create, update, and maintain site specific configuration records in Configuration Data Manager Database-Open Architecture (CDMD-OA) prior to and post system installation, and in support of FRCB data requirements. (CDRL A006)
- h) Perform audits (Functional Configuration Audits (FCAs), Physical Configuration Audits (PCAs)). Perform audits to validate that hardware configuration baselines align with subsystem drawings and technical documentation. Manage audits of software builds to verify system load to build plan. (CDRLs A006, A007) Specifically:
 - i) Perform PCAs to validate that hardware configuration baselines align with subsystem drawings and technical documentation.
 - ii) Perform FCAs on software builds to verify system load to build plan. (CDRL A020)
 - iii) Support the identification of required licenses for fielding incremental systems IAW the Software Build Plan Matrix. (CDRL A011)
 - iv) Process software or hardware media for shipment, reproduce FCBs for shipment to sites, prepare shipping documentation, and coordinate for pickup. (CDRL A020)
 - v) Support GOTS Software Monitoring/Retrieval to include monitoring Software Configuration Management (SCM) tools databases (e.g., DOL, SDOL, DADS, DII COE) for version changes to segments included in current baselines and provide version descriptions when new versions are identified. Download segments in a build plan on media to support system requirements. (CDRL A020)
 - vi) Maintain Configuration Status Accounting via SPAWAR Systems Center, Atlantic Material Management System (e.g., CMPro). (CDRL A020)
 - vii) Provide support for SPAWAR Systems Center, Atlantic transition from System Asset Based Availability and Reliability Database (SABAR) to N-ERP. (CDRL A020).
 - viii) Provide warehouse support for receipt, storage, inventory, and shipment of hardware IAW existing Government regulations. (CDRL A011)
 - ix) Receive, inspect, and inventory all incoming material for TacMobile development and production.
 - x) Conduct inventory utilizing Government approved software programs.
 - xi) Support document preparation for equipment procurement, turn-in, and shipment of TacMobile hardware, parts, spares, and inventory. (CDRL A008)
 - xii) Monitor inventory data to identify pending problem areas and provide solutions to preclude delinquent supply items.
 - xiii) Platform/Site Activation/Installation – Provide services to support the fielding and delivery of TacMobile system builds and turnover to sites. (CDRL A020) Specifically:
 - (1) Support preparation of and track work orders for material transfers.
 - (2) Validate and document equipment configuration prior to shipment.
 - (3) Support preparation of document equipment, and technical and engineering documentation for shipment. (i.e., Material Safety Data Sheet (MSDS), warranty, and software license information)
 - (4) Coordinate shipment delivery requirements with warehouse and transportation office.
 - (5) Provide transport to Government shipping facility.
 - (6) Receive, inventory, and inspect packaged systems at the TacMobile sites.
 - (7) Verify Site POR Inventory with Fleet personnel.
 - (8) Report delivery progress and results.
 - xiv) Assist in identifying and resolving any logistics discrepancies while on-site.
 - xv) Track and resolve any logistics SOVT discrepancies until the issue is closed.
- 4) Technical Data Support - Support TacMobile documentation for the fielding of TacMobile Increments 2.0, 2.0.1, 2.1, and 2.1.1. Specifically:
 - a) Provide Technical Manual support to include:
 - i) Support TacMobile documentation IAW the Shore Installation Process Handbook, SPEG, and TacMobile Technical Manual Management Plan in Extensible Markup Language (XML) formats using prescribed Document Type Definitions (DTDs) or schemas. (CDRLs A008, A021)

- ii) Support TacMobile documentation to include System Setup Guide (SSGs), SAMs, System Administrator Supplements, Reference Guides, Field Guides, Grounding Guides, Operation and Maintenance Manuals (O&Ms), System Operator's Manuals (SOMs), and QRGs. (CDRLs A008, A021)
 - iii) Support FCBs as required to distribute manuals to Fleet customers (CDRLs A014, A021)
- b) SOVT Support - Develop SOVTs for TacMobile efforts in the form of System Level, Platform Level and Integrated Intermediate-Level (I-Level) standardized SPAWAR formats. Individual systems/subsystems will be developed IAW SPAWAR SPEG standard. Installation will also require I-Level SOVTs that provide the necessary test procedures for complete Mission Thread/End-to-End testing for a complete TacMobile platform. Revise/Change approved SOVTs as directed. (CDRLs A008, A016, A021)
- c) Provide Engineering Drawing support to include:
- i) Develop, create, revise, and update TacMobile engineering drawings to include case assemblies, fabrication drawings, altered items, cable assemblies, technical master drawing list, technical data summary, master parts lists, system elevations/floor plans, cable block diagrams, cable running sheets, and any other required drawings such as labeling details, strap settings, and patch panel layout as applicable to each subsystem. Develop graphics for technical manuals. (CDRLs A008, A021)
 - ii) Develop IRD/IDPs IAW latest revision of the SPAWAR IRD and Shore Installation Handbook Standards. (CDRLs A008, A021)
 - iii) When directed, reproduce hardcopy deliverables to Fleet customer to include: printing, binding, creating title cover pages, producing reference CDs, and providing QA. (CDRLs A008, A021)
 - iv) Develop As-Built Engineering Drawings. (CDRLs A008, A021)
 - v) Support installation of specific systems/subsystems and develop As-Built Installation Design Plans (IDPs) IAW the latest revisions of the SPAWAR Shore Installation Handbook Standards. (CDRLs A008, A021)
- 5) Provide Initial Training Support to include:
- a) Initial Training Development Support – Support the establishment of training services, devices, accessories, aids, equipment, and parts used to establish and facilitate initial instruction of personnel to operate the TacMobile SoS to include initial training equipment and initial training services. (CDRLs A008, A026, A027)
 - b) Initial Training Equipment – Support the Government IPT in the acquisition of the initial set of training equipment required to meet specific training objectives directly associated with the TacMobile SoS. (CDRL A008)
 - c) Initial Training Services – Provide support to establish and facilitate initial instruction of personnel to operate and maintain the system to include the development of courses for formal training at the Center for Naval Aviation Technical Training Unit Jacksonville, FL (i.e., schoolhouse), initial/contractor training services, and FIT for the installation of TacMobile systems. (CDRLs A008, A026, A027)
 - d) Support the Human Performance Requirements Review and Navy Training System Plan (NTSP) IAW OPNAV INST 1500.76, and conduct necessary changes to the NTSP via Human Analysis & Requirements Planning System (HARPS). (CDRL A026)
- 6) Provide logistics support necessary for troubleshooting and/or repair of the equipment to be integrated into a TacMobile system prior to formal fielding and turnover to the site.

CDRL Deliverables:

- A004 - Contractor's Configuration Management (CM) Plan
- A005 - Program of Record (POR) Site Inventory List
- A006 - Configuration Status Accounting Information
- A007 - Configuration Audit Report
- A008 - Revisions to Existing Government Documents
- A010 - Contractor's Logistics Plan
- A011 - Inventory Report
- A012 - Provisioning Documentation
- A013 - Engineering Change Proposal (ECP)
- A014 - Notice of Revision (NOR)
- A016 - System Operational Verification and Test (SOVT) Documentation
- A020 - Technical Report
- A021 - Contractor Source Code
- A026 - Draft Navy Training System Plan (NTSP)
- A027 - Training Packages and POA&M

4.2.3 Engineering Production and Installation Support

- 1) The SAE IPT is responsible for the production and fielding of Incremental and Technical Refresh subsystems to the Fleet to include hardware/software integration, facilities planning and installation. Specifically, the contractor shall:
 - a) Increment 2.1 Production – Support the production of subsystems (C4I, ESS, P-8A –Class/Unclass and Network Security Management), integration of the End-to-End MTOC, Increment 2.0.1 Technical Refresh, and Increment 2.1 subsystems. (CDRLs A003, A008, A011, A017, A020, A025)
 - b) Increment 2.1 and Increment 2.1.1 Installation - Support the installation of the Technical Refresh and Increment 2.1 subsystems to the Fleet. (CDRLs A003, A011, A013, A014, A017, A020, A025, A030)
 - c) Facilities Engineering – Support planning and design of facilities to include building modifications and/or additions in support of the arrival of the P-8A aircraft to the TacMobile sites to include:
 - i) Installation Planning – Support planning activities related to Increment 2.1 and Increment 2.1.1 installations, advanced planning and tasks required to ensure the site is prepared to receive the Increment 2.1 or Increment 2.1.1 subsystems, and support for surveys and studies. (CDRLs A003, A017, A020)
 - ii) Technical Refresh Production and Installation - Provide TacMobile Technical Refresh production and installation support to include (CDRLs A013, A014, A017, A020, A025, A030):
 - (1) Support NIPRNet Server and Client Technical Refresh Production.
 - (2) Support CENTRIXS Technical Refresh Production.
 - (3) NIPRNet Technical Refresh - Support installation of the NIPRNet Technical Refresh effort to include subsystem hardware and software necessary to maintain compliance with the Navy Expeditionary Combat Command (NECC) 3.0 NIPRNet Authority to Operate (ATO).
 - (4) Data Storage Architecture Upgrade (DSAU) – Support production and installation of the DSAU Technical Refresh in order to maintain compatibility between all TacMobile units and all fielded P-8A aircraft. The contractor may be required to support multiple discrete production efforts concurrently within fixed schedule requirements tied to P-8A aircraft deployment schedules.

CDRL Deliverables:

- A003 - Meeting Minutes
- A008 - Revisions to Existing Government Documents
- A011 - Inventory Report
- A013 - Engineering Change Proposal (ECP)
- A014 - Notice of Revision (NOR)
- A017 - Engineering Drawings
- A020 - Technical Report
- A025 - Test Report
- A030 - Installation Documentation

- 2) The SITE IPT is responsible for overall end-to-end system integration and acceptance testing of products submitted to the SAE IPT for proposed FR. The contractor shall provide SITE support to include:
- a) P-8A Low Rate Initial Production (LRIP) Aircraft Support - Support the following SITE efforts:
- i) P-8A LRIP Support T&E - Conduct Government acceptance testing to include independent verification and validation (IV&V) of products as required upon receipt of software deliverables to support LRIP capabilities. Prepare FCBs for delivery of implementation materials (software, documentation, hardware) to Fleet users. This task includes all efforts required to implement FRs for world-wide TOCs and MTOCs in support of LRIP P-8A aircraft to include (CDRLs A008, A024, A025):
 - (1) Develop FCBs for delivery.
 - (2) Support production of Installation Instructions.
 - (3) Support production of Test Plans.
 - (4) Provide updates of all related Test Procedures.
 - (5) Support production of Test Report.
 - ii) P-8A LRIP FR Documentation Support - Review current system test procedures and SOVT documentation for possible impacts upon receipt of software deliverable to support P-8A LRIP capabilities. (CDRLs A008, A016, A024, A025)
 - iii) Increment 2.0/2.1 Support for IA Management - Provide support for Increment 2.1 and 2.0 systems to include all C4I and network interfaces, near-real-time IAVA process and T&E for integrated products slated for fielding via FCB and products submitted to SAE for FR, support for multiple System Integration Test (SIT) events/year, and execution of the TacMobile Information Assurance Vulnerability Management (IAVM) Plan. (CDRLs A008, A020, A024, A025)
 - iv) IAV Management Process Support – Participate in the IAVA assessment process by reviewing and submitting the engineering technical risk associated with U.S. Navy released IAVAs. Per the TacMobile IAVM Plan, implement the process dictated therein by preparing Fleet Advisory Messages (FAMs), verifying installation instructions, and recommending real-time or integrated release based on assessed risk. Subtasks of this effort are:
 - (1) Supply sufficient manpower to manage and execute the process defined by the TacMobile IAVM Plan.
 - (2) Prepare risk assessments and recommendations for implementation via FAMs as IAVs are released to DoD using the IAVM Plan in collaboration with the software integration team and the IAV Manager.
 - (3) Prepare FAMs to support delivery and implementation of IAV patches.
 - (4) Maintain metrics on number of IAVs issued vs. number implemented via FAM, mean time for implementation (by FAM), and man-hours needed to manage/execute the process.
 - v) IA Support for Execution of the TacMobile IAVM Plan
 - (1) Provide management and oversight of both near-real-time and all other IAVs.
 - (2) Provide reporting to the SAE IPT and PIPT of vulnerabilities that impact either 2.0 or 2.1 IA posture

- (3) Provide reporting to the SAE IPT and PIPT of issues presented by field sites as a result of FAM releases
 - (4) Prepare a weekly report for inclusion in the PIPT. Report metrics that reflect status and overall impact of the near-real-time IAV implementation process.
 - (5) Ensure all IAVs along with risk/complexity assessment are appropriately reported in the POR POA&M as required by ATO.
 - (6) Ensure Software Integration is made aware of all IAVs for which an integrated product is required.
 - (7) Manage IA Resources to ensure appropriate IA tests are conducted on every delivered product that is slated for FR.
 - (8) Establish a virtual environment for IA assessments to enable parallel efforts between IA and functional testing.
- vi) LRIP Acceptance T&E for IA Related Integrated Products – In support of TacMobile system fielding, support IV&V and Government acceptance testing for TacMobile integrated products, prepare and submit defects as noted during test, and prepare FCBs required for delivery of integrated products to Fleet (assume two integrated products annually for each baseline to include NIPR and CENTRIXS Technical Refresh). Acceptance T&E will be conducted as a SIT event where all newly delivered products will be formally assessed. Specifically:
- (1) Prepare draft acceptance test plans for each SIT.
 - (2) Prepare draft acceptance test reports for each SIT event.
 - (3) Prepare and present a Test Readiness Review (TRR) brief (internal) prior to each SIT.
 - (4) Update POR acceptance test procedures as required.
 - (5) Perform submission and re-verification to support the Defect process.
 - (6) Review all SVDs and Software Design Documents (SDD) as delivered by either TacMobile software developers or software integrators.
 - (7) Provide assessment of ‘readiness for issue’ at test conclusion.
 - (8) Participate in the Local Configuration Control Board as directed.
 - (9) Prepare Draft required fielding documentation (FCB, user documentation updates, drawing packages).
- vii) IA Support for Integrated Product Assessments – For each product delivered by the Software Integration team, conduct IA assessment as required to ensure product is aligned with the TacMobile accreditation and that targeted findings are correctly implemented. Specifically:
- (1) Conduct security scans to ensure findings targeted by the deliverable are corrected, and report same via the IA POA&M.
 - (2) Coordinate with the Software Integration team to ensure findings are being appropriately addressed; supply technical and engineering advice as appropriate.
 - (3) Prepare updates to the existing security accreditation packages as required.
 - (4) Conduct source code reviews on all TacMobile developed software products.
- viii) P-3C Operation Flight Program (OFP) T&E – Provide T&E, documentation changes, test procedure updates, FCB verification, and release for updated P-3C Tactical Mission Software (TMS), Airborne Operational Program (AOP), and SAM products. Assume one release for each for the period of performance.
- b) Increment 2.0/2.1 Software Integration Support - Support all software integration efforts necessary to sustain the TacMobile ATO for both Increment 2.0 and 2.1 to include system engineering, software integration, and technical support during all phases of life cycle support for TOC, MTOC, and JMAST POR systems and to assist in the certification and accreditation (C&A) process. This task includes all software integration efforts necessary to sustain the TacMobile ATO for Increments 2.0 and 2.1. For planning purposes, Software Integration will prepare two releases for each baseline and five out of cycle releases. (CDRLs A020, A025) Specifically:
- i) Provide system engineering and software integration support for TOC, MTOC, and JMAST POR systems. This includes the following systems/subsystems: Video Teleconference (VTC), SHF, GBS,

- ROVER, CENTRIXS, High Frequency IP (HFIP), TCDL, ADSI, RMSA2000, IASCAN, NETWORKMGMT, Enterprise Storage, P-8A, P-3C, C4I, TAS, and the TacMobile Acoustic Support System (TacMASS).
- ii) Support two integrated product deliveries for each supported baseline per year. Each of those will include: IAVs not previously issued under the near-real-time process and software updates not previously issued.
 - iii) Provide new baseline recovery media as requested by the Government.
 - iv) Ensure that the following is included in all delivered products:
 - (1) SVD
 - (2) Build Plan (fully articulated per the Software Integration lead's direction). Build plan will include Department of the Navy (DoN) Application and Database Management System (DADMS) verification for each Computer Software CI (CSCI) included on the plan.
 - (3) Installation Guide sufficiently detailed to allow installation by an 'advanced' user (or System Administrator).
 - v) Provide support for the TacMobile Near-Real-Time IAV Management Process. Assess operational risk and technical complexity of IAV patches.
 - vi) Integrate, build, and troubleshoot provided software for TacMobile Increment 2.0 and 2.1 systems and prepare the system software for Government acceptance testing.
 - vii) Ensure all databases that use Database Management Systems (DBMS) designed, implemented, and/or hosted on servers and/or mainframes supporting Navy applications and systems are registered in DADMS and are FAM approved.
 - viii) Provide software security support to include the assessment of IAVA security bulletins and their applicability to TacMobile systems and subsystems in production, and the resolution of IAVA security bulletins as required in the form of FCB, software security updates, or system service packs.
 - ix) Provide software updates to satisfy directives from agencies with authority over DoD computer assets.
 - x) Support security/IA requirements by identifying controls to be put in place for the identified systems and networks. The contractor will recommend, and adopt if necessary, processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security engineering.
 - xi) Assist in the C&A process as necessary and ensure that software and security updates and patches are documented IAW DODI 8510.1.
 - xii) Manage all TacMobile integrated applications in the DADMS and submit updates to the DADMS portfolio management system as required in order to maintain currency for ALL COTS and GOTS applications not uniquely developed for TacMobile. Submit CRs as required by the DADMS portfolio manager.
 - xiii) Perform scientific, technical, and engineering support necessary to add system operation and/or functionality required for security accreditation or security enhancement through modification of system design, hardware, and/or software.
 - xiv) Support the introduction of new TacMobile system administration tools.
 - xv) Review and provide inputs to TacMobile System level documentation. Perform red-line inputs to Setup Guide, System Administrator Manuals, System Operator Manuals, and Field Guides.
 - xvi) Perform vulnerability assessment in the form of technical and non-technical assessments, automated C&A scanning, IA testing, manual reviews, inspections, and interviews.
- c) Increment 2.0.1 Technical Refresh and 2.1.1 Engineering Support - Provide system engineering, software integration, and technical support to provide TacMobile Technical Refresh 2.0.1, Increment 2.1, and TacMobile C2/C4I production. Task includes: assessment and integration of newly introduced changes/defect corrections and IA compliance items as integrated into new products to include solutions for items such as SIPR PKI implementation and Active Directory re-configuration. (CDRLs A008, A020)

- d) SIPR/PKI Support - Provide engineering and technical support required to implement PKI Authentication on the TacMobile SIPRNet enclave. This task will provide implementation of the PKI solution for GCCS-M, as well as the PKI solution for the TacMobile-specific equipment. (CDRLs A008, A016, A020, A024, A025) Specifically:
- i) Support project management, project monitoring and controls, IMP, IMS, financial management, and contract management for the SIPR PKI project.
 - ii) Provide engineering and technical support required to coordinate and perform the hardware integration of the final SIPR PKI design solutions. This includes build up, integration, and acceptance test of the hardware components. This will also include all associated hardware documentation to include PITCO, SOVT, and configuration procedures.
 - iii) Provide engineering and technical support required to coordinate and perform the software integration of the final SIPR PKI design solutions.

CDRL Deliverables:

- A008 - Revisions to Existing Government Documents
 - A013 - Engineering Change Proposal (ECP)
 - A016 - System Operational Verification and Test (SOVT) Documentation
 - A020 - Technical Report
 - A024 - Test Documentation
 - A025 - Test Report
- 3) The Battlespace Awareness IPT is responsible for the incorporation of operationally effective C4I, enterprise services, and warfighter interface capabilities. The contractor shall provide BSA support to include:
- a) Messaging Subsystem Update - Provide engineering and technical support for the integration, assembly, and acceptance testing of the Command and Control Official Information Exchange (C2OIX) product from PMW 790. (CDRLs A003, A008, A016, A020, A022) Specifically:
 - i) Provide support for project management, project monitoring and controls, IMP, IMS, financial management, and contract management for the C2OIX project.
 - ii) Coordinate with the TacMobile IA team to perform any necessary IA scans and modifications to the TacMobile accreditation package to document the addition of the C2OIX subsystem to the TacMobile Increment 2.1.1 baseline.
 - iii) Perform subsystem-level test of C2OIX to ensure it properly functions as an integrated subsystem within the TacMobile Increment 2.1.1 baseline system.
 - iv) Provide engineering and technical support of all engineering-related documentation for the C2OIX solution to include engineering drawings (system elevation, IRD, IDP), SOVT, PITCO, SUM, SAM, applicable TMFG, and applicable TacMobile QRG.
 - b) Correlation Application - Provide engineering and technical support for the integration, assembly, and acceptance testing of the Correlation Application into the TacMobile Increment 2.1.1 baseline. (CDRLs A003, A008, A020, A022) Specifically:
 - i) Provide support for project management, project monitoring and controls, IMP, IMS, financial management, and contract management for the TacMobile Correlation Application project.
 - ii) Support the preparation of ECPs/ECRs and associated forms IAW existing ECP/ECR processes. (CDRL A013) This subtask may also include various technical and programmatic meetings and discussions related to the SETR process to include SRR, PDR, CDR, TRR, and PRR.
 - iii) Perform hardware/software integration, assembly, and acceptance testing.
 - iv) Coordinate with the TacMobile IA team to perform any necessary IA scans and modifications to the TacMobile accreditation package to document the addition of the TacMobile Correlation Application to the TacMobile Increment 2.1.1 baseline.

- v) Perform subsystem-level acceptance test of TacMobile Correlation Application to ensure it properly functions as an integrated subsystem/application within the TacMobile Increment 2.1.1 baseline system.

CDRL Deliverables:

- A003 - Meeting Minutes
 - A008 - Revisions to Existing Government Documents
 - A013 - Engineering Change Proposal (ECP)
 - A016 - System Operational Verification and Test (SOVT) Documentation
 - A020 - Technical Report
 - A022 - Functional/Physical Requirements Documentation
- 4) The Mission Execution Support (MES) IPT is responsible for communication subsystems for both the TOC and MTOC to include production testing, builds, and delivery. The contractor shall support the following MES efforts:
 - a) Increment 2.1 Procurement and Integration – Support procurement and integration (including SME inputs to documentation), testing by the Government, and PITCO for all subsystems prior to delivery. Revise and update IDPs, FIT training materials, and FRCB package requirements. Test subsystems prior to delivery to ensure they have been delivered without damage, are assembled properly and are functioning correctly. Provide program management oversight support; attend program and technical meetings to include PIPT, A&P IPT, PMA IPT, and PMW 750/PMA-290 meetings (CDRL A003); provide project planning support of PIPT objectives; provide inputs to TacMobile IMS; maintain schedule and track progress of tasks against the IMS/IMP; and monitor progress of tasking and assess risk, ensuring that project management plans, schedule, and risk mitigation steps remain within budget and schedule.
 - b) Increment 2.1 Delivery and Installation – Support Technical Refresh 2.0.1; support 2.1 installs, including SME inputs to documentation; support FIT for TacMobile subsystems and on-site fielding plans; support all COMM subsystems while delivery is in progress and SOVT; and revise and update IDPs and Fleet Readiness Certification Board (FRCB) package requirements. Test subsystems to make sure they have been delivered without damage, were assembled properly, and are functioning correctly. Provide program management oversight support; attend program and technical meetings, as directed by the Government, to include PIPT, A&P IPT, PMA IPT, and PMW 750/PMA-290 meetings (CDRL A003); provide project planning support of PIPT objectives; provide inputs to TacMobile IMS; maintain schedule and track progress of tasks against IMS/IMP; monitor progress of tasking; and assess risk, ensuring that project management plans, schedule, and risk mitigation steps remain within budget and schedule. (CDRLs A008, A016, A019, A024)
 - c) CR Support - Provide CR support to include updating the current CR database for all TacMobile TOC and MTOC COMM subsystems. All new subsystems will be developed and integrated IAW the TacMobile CR process. This task consists of updating all COMM CRs in ClearQuest, developing the ECRs, supporting development of Government BOMs, and updating and providing all draft documentation and a draft IRD drawing package for each subsystem COMM CR. The Government estimates a requirement to support eight CRs annually. (CDRLs A008, A013)
 - d) P-3C/P-8A COMM Support - Update the current CR database for all of the TacMobile TOC and MTOC COMM subsystems. All new subsystems will be developed and integrated IAW the TacMobile process. This tasking will include the COMM support with a P-3C and P-8A aircraft from Jacksonville, Florida and Patuxent River, Maryland using the TacMobile COMM lab. This annual support will cover both audio and digital radio circuits supporting both ground and flight requirements. Circuits supported include: HFIP,

Link-11, Link-16, UHF voice, SAT voice, HF, voice, Image Communications Equipment (ICE) Imagery, TCDL, ROVER, and HF Data circuits. The Government estimates a requirement to support five test events annually. (CDRLs A008, A013, A020, A024) Specifically, provide P-3 TSCOMM communication follow on support to include:

- i) Perform HFIP integration.
- ii) Perform Link-11 integration with the aircraft to include any console any station (ACAS) setup and configuration.
- iii) Perform ICE Imagery integration with the P-3C to include coordination with the Jacksonville Demand Assigned Multiple Access (DAMA) network.
- iv) Perform secure and unsecure voice integration to include DAMA, UHF, and HF voice circuits.

CDRL Deliverables:

- A003 - Meeting Minutes
 - A008 - Revisions to Existing Government Documents
 - A013 - Engineering Change Proposal (ECP)
 - A016 - System Operational Verification and Test (SOVT) Documentation
 - A019 - Trip Report
 - A020 - Technical Report
 - A024 - Test Documentation
- 5) The PMA IPT is responsible for PMA efforts in support of the P-3C and P-8A aircraft. The contractor shall support the production, integration, installation, and acceptance testing of hardware and software products associated with TacMobile technical refresh increments. (CDRLs A008, A012, A013, A020, A024, A025, A031) Specifically:
- a) Increment 2.1 Subsystem upgrade, integration, installation, and test support to include:
 - i) Provide PITCO support for Increment 2.1 systems planned deliveries identified in the current IMS. Provide SME support to integrate, configure, and test PMA IPT equipment in support of Increment 2.1 planned systems deliveries.
 - ii) Attend program and technical meetings as directed by the Government, e.g., PIPT, PMA IPT, and other PMW 750 meetings (CDRL A003). Provide project planning support of PIPT objectives. Support the development of program management plans and cost estimates. Provide inputs to TacMobile IMS; maintain schedule and track progress of tasks against IMS/IMP; and monitor progress of tasking and assess risk, ensuring that project management plans, schedule, and risk mitigation steps remain within budget and schedule requirements.
 - b) TacMASS Technical Refresh support to include:
 - i) Support procurement of required materials to support the building, integrating, and testing required to convert the current TacMASS Single workstation into a smaller unit to address Size, Weight and Power (SWaP). Support will require documentation support for an updated drawing package for a new configuration and setup guide.
 - ii) Support procurement of required materials to support building, integrating, and testing required to swap out the current network switches to an IA approved Layer TWO switches on each TacMASS unit. Provide expected schedule required to support fielding of the new switches.
 - iii) Attend program and technical meetings as directed by the Government, e.g., PIPT, PMA IPT, and other PMW 750 meetings (CDRL A003). Provide project planning support of PIPT objectives. Develop program management plans and cost estimates. Provide inputs to TacMobile IMS; maintain schedule and track progress of tasks against IMS/IMP; and monitor progress of tasking and assess risk, ensuring that project management plans, schedule, and risk mitigation steps remain within budget and schedule requirements.

- c) TacMASS LITE – Provide engineering and technical support for a TacMASS LITE Technical Refresh to reduce the current TacMASS SWaP to include removal/reconfiguration of existing TacMass hardware, installation of new hardware, and updates to applicable documentation.

CDRL Deliverables:

- A003 - Meeting Minutes
- A008 - Revisions to Existing Government Documents
- A012 - Provisioning Documentation
- A013 - Engineering Change Proposal (ECP)
- A020 - Technical Report
- A024 - Test Documentation
- A025 - Test Report
- A031 - As-Built Drawings

- 6) The MD IPT is responsible for the support of TacMobile media products to the various components of the P-3C and P-8A aircraft. The contractor shall support the following MD efforts:

- a) P-3C Software Operating System Support – Support the implementation of Windows 7 Operating System and Solaris 11 software onto the Aircraft Interface System to include software development required to modify the current applications for Windows 7 and Solaris 11 migration. This support shall include the software modification, IA, test, documentation (TMFG/FCB), CM support and delivery to TOC/MTOC sites. (CDRLs A003, 008, A020, A024, A025, A027)
- b) P-3C Software Upgrade Support – Provide software development support for TacMobile to support the PMA-290 P-3C aircraft operations. Software development support will include TMS 5.6, AOP 4.2, SAM 4.0, and SAM 5.0. Software development required to provide software upgrades to the existing aircraft interface system that will provide support to the P-3C aircraft. This support shall include the software modification, IA, test, documentation (TMFG/FCB), CM support, and delivery to TOC/MTOC sites. (CDRLs A008, A020, A021, A024, A025, A027)

CDRL Deliverables:

- A003 - Meeting Minutes
- A008 - Revisions to Existing Government Documents
- A020 - Technical Report
- A021 - Contractor Source Code
- A024 - Test Documentation
- A025 - Test Report
- A027 - Training Packages and POA&M

4.2.4 Information Assurance Production Support

The IA IPT is responsible for supporting IA requirements associated with the production, integration (both hardware and software), acceptance testing, and system engineering support for TacMobile Increment 2.0.1 (Technical Refresh), TacMobile Increments 2.1, 2.1.1, P-3C, P-8A TRs and FRs, P-8A production aircraft support, and P-8A obsolescence work in preparation for FRs. The contractor shall perform the following IA tasks:

- 1) Increment 2.0/2.1 Test and Evaluation Support - Provide IA services in support of the SITE IPT. (CDRLs A020, A024, A025, A029) Specifically:

- a) Provide management and oversight of the IA process to include both near-real-time and all other IAVs.
 - b) Provide reporting to the SAE IPT and PIPT of vulnerabilities that impact either 2.0 or 2.1 IA posture.
 - c) Provide reporting to the SAE IPT and PIPT of issues presented by field sites as a result of FAM releases.
 - d) Prepare weekly a report for inclusion in the PIPT Report metrics that reflect status and overall impact of the near-real-time IAV implementation process.
 - e) Ensure all IAVs along with risk/complexity assessment are appropriately reported in the POR POA&M as required by ATO.
 - f) Ensure Software Integration is made aware of all IAVs for which an integrated product is required.
 - g) Manage IA Resources to ensure appropriate IA tests are conducted on every delivered product scheduled for FR.
 - h) Establish a virtual environment for IA assessments to enable parallel efforts between IA and functional testing.
 - i) Conduct an IA assessment for each product delivered by the Software Integration team to ensure alignment with TacMobile accreditation and correctly implement targeted findings. (CDRL A029) Specifically:
 - i) Conduct security scans to ensure findings targeted by the deliverable are corrected.
 - ii) Communicate IA status via the IA POA&M.
 - iii) Coordinate with the software integration team to address findings and provide technical and engineering support as required.
 - iv) Prepare updates to the existing security accreditation packages.
 - v) Conduct source code reviews on all TacMobile developed software products.
 - j) Associated deliverables include:
 - i) IA POA&M (CDRL A029)
 - ii) Source Code Review Findings (CDRL A029)
 - iii) Scan results for each software product (CDRL A029)
- 2) CR Support - Provide IA services in support of the BSA IPT ISEA CR Support. (CDRL A029)
- 3) Messaging Subsystem Update Support - Perform IA scans and modifications to the TacMobile accreditation package to document the addition of the C2OIX subsystem to the TacMobile Increment 2.1.1 baseline. (CDRLs A020, A024, A025, A028, A029) Associated deliverables include:
 - a) System Architecture Diagrams
 - b) Accreditation Boundaries
 - c) External Interfaces/Data Flow
 - d) Hardware/Software Lists
 - e) Ports Protocols & Services
 - f) Draft Certification and Accreditation letters for Certifier and Designated Approving Authority signature.
- 4) Correlation Application Support - Perform IA scans and modifications to the TacMobile accreditation package to document the addition of the TacMobile Correlation Application to the TacMobile Increment 2.1.1 baseline. (CDRLs A020, A024, A025, A028, A029) Associated deliverables include:
 - a) External Interfaces/Data Flow
 - b) Hardware/Software Lists
 - c) Ports Protocols & Services
 - d) Draft Certification and Accreditation letters for Certifier and Designated Approving Authority signature.

CDRL Deliverables:

- A020 - Technical Report
- A024 - Test Documentation
- A025 - Test Report
- A028 - DIACAP Information Assurance (IA) Plan
- A029 - Information Assurance Documentation

4.3 SUSTAINMENT SUPPORT (OM&N)**4.3.1 Program Management Sustainment Support**

The Contractor shall provide program management services to support fielded TacMobile systems. The Contractor shall report cost, schedule, and performance status on sustainment tasks and conduct technical reviews on sustainment activities to enable the Government to make sound management decisions with regard to fielded systems. The contractor shall provide a principle point of contact to interface with the Government.

- 1) **Planning and Control** - Provide for planning, direction, coordination, and control of all TacMobile Sustainment Support activities within the contractor's organization and with all the contractor's team members and subcontractors. Develop a Task Management Plan (CDRL A001) that reflects the contractor's cost, schedule, and performance plans and projections through the period of performance of the task. The Task Management Plan shall include a risk management strategy that provides the process to assess and mitigate events that could adversely impact the program. The Task Management Plan shall contain the anticipated level of effort, as well as the labor categories for each task, manpower phasing estimates, schedule, milestones, all significant tasks, and recommended metrics. Update the Task Management Plan to incorporate the new tasking and reflect the additional workload. The updated Task Management Plan shall not change the tasking required in any previous Task Management Plan unless specifically directed in writing by the Government. Once the planned performance is coordinated with the Government, it shall remain baselined until further changes are approved by the Government. Report task status. Assist the Government in identifying, assessing, and developing mitigation strategies for TacMobile programmatic and technical risks. Provide a monthly Contractor's Progress, Status and Management Report that indicates the progress of work and the status of the program and of the assigned tasks, report costs, and information of program risks. (CDRL A002)
- 2) **Management and Technical Reviews** - Conduct project management and technical reviews in support of TacMobile Sustainment activities. Meetings may be conducted as directed by the Government. The contractor may be instructed by Government to hold meetings at a Government owned facility, at the contractor's facility or virtually using online collaboration tools. The contractor shall provide the meeting agenda and meeting minutes and shall document any action items. (CDRL A003)
- 3) **QA** - Implement a quality philosophy for TacMobile sustainment activities IAW Government direction and applicable specifications and/or procedures. Submit a QA Plan (CDRL A009) that describes how the contractor will apply this quality philosophy throughout the contract. Follow those specific elements/sections of the QA Plan that are applicable to the specific work being performed.

CDRL Deliverables:

- A001 - Task Management Plan
- A002 - Contractor's Progress, Status and Management Report
- A003 - Meeting Minutes
- A009 - Contractor's Quality Assurance Plan

4.3.2 Integrated Logistics Sustainment Support

The ILS IPT is responsible for providing logistics support for activities associated with the sustainment of fielded TOC, MTOC, and JMAST POR systems. The contractor shall provide ILS support to include:

- 1) Material Procurement Support
 - a) Maintain, track, and update requirements in the BOM; provide projections of procurement lead times; and provide status of ongoing procurements. (CDRLs A011, A012)
 - b) Coordinate technical configuration requirements and hardware vendor inputs with the BOM Manager and Engineering personnel.
 - c) Coordinate material receipt with central warehouse to capture and maintain records of original equipment manufacturer (OEM) serial numbers and N-ERP assigned serial numbers. (CDRL A008)
 - d) Communicate Government technical configuration requirements to hardware vendors.
 - e) Communicate hardware vendor inputs to BOM Manager and Engineering personnel. (CDRLs A008, A012)
 - f) Perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications. (CDRL A008)
- 2) Logistics Management support to include:
 - a) Submit a Contractor's Logistics Management Plan that describes how the contractor will factor logistics elements into all TacMobile sustainment efforts. (CDRL A010)
 - b) Supply Support: Support the Government in the determination of requirements, requisitioning, cataloging, receipt, storage, transfer, issuance, and disposal of consumables. (CDRL A008)
 - c) Packaging, Handling, Storage, and Transportation: Utilize available resources, processes, procedures, design considerations, and methods to ensure that systems, equipment, and support items are preserved, packaged, handled, and transported properly.
 - d) Manpower, Personnel, and Training: Support the Government in efforts to maximize the use of technology to reduce manpower, personnel, and training requirements. Review and propose improvements to current processes, procedures, techniques, training devices, and equipment used to train civilian, active duty, and reserve military personnel to operate and support TacMobile. (CDRL A008)
 - e) Technical Data: Support the Government in the acquisition, development, and validation of the technical data required in support of TacMobile systems IAW Government specifications and/or procedures.
 - f) Support and Test Equipment: Support the Government in the selection of General Purpose Electronic Test Equipment (GPETE). (CDRL A008)
 - g) Computer Resources: Support the Government in the utilization of state-of-the-art advances in hardware, operating systems, database management, graphics, windowing, and man-machine interface technology to achieve efficient integration of component parts. (CDRL A008)
 - h) Design Interface/Health/Safety: Support the Government in the development of logistics-related design parameters for readiness and support resource requirements. (CDRL A008)
 - i) Configuration Management: Support the Government in the systematic coordination, evaluation, implementation, and release of approved changes to established configuration baselines. (CDRLs A006, A007, A008)
 - j) RAM: Support the Government in the use of RCM principles to perform RAM analysis. (CDRL A008)
 - k) Review, provide inputs, update, and maintain Government logistics documentation such as the LCSP, CATEX, IUID Plan, Maintenance Plan, PESHE, SSPP, TMMP, Configuration Management Plan (CMP), and ULSS. (CDRL A008)
 - l) Assess and provide written notification of any deficiencies in the logistics support program that require immediate attention and corrective action. Evaluate risk, impact on life cycle cost, and supportability as well as potential impact to system performance. (CDRL A020)
 - m) Provide support for Integrated Logistics Assessments. (CDRL A020)
- 3) Logistics Engineering support to include:

- a) Provide SME input on the logistical impacts of proposed system configuration changes. This includes assessing impacts to hardware and software CIs and their related documentation (e.g., APLs MIP/MRC, Technical Documents), reliability and maintainability data, safety data, any environmental impact, and potential obsolescence issues. Identify logistics related implementation costs for life cycle support, technical documentation modification, preventative maintenance, supply chain management support, and spares. (CDRLs A008, A020)
 - b) Assess potential obsolescence issues for critical parts to identify any items that have reached End-of-Life (EOL) or where the OEM will no longer manufacture equipment or provide maintenance support. Provide obsolescence management and insight into critical hardware and software that have reached EOL or where the OEM will no longer produce or provide maintenance support for both hardware and software. Provide proposed alternate components (same form/fit/function) and assess risk and impact to system support. (CDRL A020)
- 4) Configuration Management: Perform CM directly associated with the sustainment of fielded systems including implementation and execution of configuration management and configuration status accounting and audits IAW MIL-HDBK-61A, Configuration Management Guidance, and the PEO C4I LCCMIM. Specifically:
- a) Submit a Contractor's Configuration Management (CM) Plan IAW the PEO C4I LCCMIM that describes the technical and analytical processes the contractor (to include subcontractors) will implement to ensure quality and timeliness configuration control procedures for engineering and logistics requirements outlined in this SOW and throughout the contract. This includes: hardware, software, media CM, technical documentation, drawing packages, license management, and warranty management. (CDRL A004)
 - b) Maintain unique identification records of HWCIs and CSCIs, configuration baselines (i.e., Functional, Allocated, and Product) and configuration documentation used to define baselines. (CDRLs A006, A007, A008)
 - c) Record, update, and track the status of all changes (e.g., CRs, ECRs, and FCBs). Perform configuration status accounting and configuration change control utilizing Government-approved CM tools, such as CMPro and ClearQuest. (CDRL A006, A007, A008, A013)
 - d) Support the processing, update, and maintenance of subsystem nomenclatures. (CDRL A008)
 - e) Establish Equipment Identification Codes (EIC) for new equipment identified for implementation into the TacMobile baseline. (CDRL A008)
 - f) Support development, updating, and maintenance of PORSI lists and identify shortages for each site. (CDRL A005)
 - g) Create, update, and maintain site specific configuration records in CDMD-OA prior to and post system installation, and in support of FRCB data requirements. (CDRL A006)
 - h) Perform audits (FCAs, PCAs) to validate that hardware configuration baselines align with subsystem drawings and technical documentation. Manage audits of software builds to verify system load to build plan. (CDRLs A006, A007, A008)
 - i) Perform PCAs to validate that hardware configuration baselines align with subsystem drawings and technical documentation.
 - ii) Perform FCAs on software builds to verify system load to build plan. (CDRL A020)
 - i) Track all software license and registration record for software licenses procured for distribution to sites and labs. Maintain records of software licenses distributed to the sites and labs and identify required licenses for fielding incremental systems IAW the Software Build Plan Matrix. Track hardware and software registration and license agreements for each site and lab; notify the Government 90 days prior to any registration or license expirations. (CDRL A011)
 - i) Software Control Support: Provide management support for licenses of software; coordinate duplication and distribution of software. (CDRL A020)
 - ii) Software Reproduction and Distribution Support: Duplicate, package, and track software and documentation for release and/or distribution to support project requirements. Prepare and maintain a master list of currently active versions of each CSCI until superseded by a new version. Retain

- superseded versions of the master for the life of the program or as otherwise directed by the Government. (CDRL A020)
- j) Process software or hardware media for shipment, reproduce FCBs for shipment to sites, prepare shipping documentation and coordinate for pickup. (CDRL A020)
 - k) Support GOTS Software Monitoring/Retrieval: Monitor Software Configuration Management (SCM) tools databases for version changes to segments included in current baselines; provide version descriptions when new versions are identified. Download segments in a build plan on media to support system requirements. (CDRL A020)
 - l) Maintain Configuration Status Accounting via SPAWAR Systems Center, Atlantic Material Management System (e.g., CMPro). (CDRL A020)
 - m) Provide support for SPAWAR Systems Center, Atlantic transition from SABAR to ERP. This will include tasks such as: validating current inventory, reviewing and validating inventory data, identifying and updating records with any additional data required for application records, and making corrective action to corrupt data as a result of the transition. (CDRL A020). Provide warehouse support for material receipt, packaging and handling, storage, inventory, and shipment for hardware, parts, and spares required for Fleet and program support IAW existing Government regulations. (CDRL A011)
 - n) Receive, inspect, and inventory all incoming material for TacMobile development and production.
 - o) Conduct inventory utilizing Government approved software programs.
 - p) Support document preparation for equipment procurement, turn-in, and shipment of TacMobile hardware, parts, spares, and inventory. (CDRL A008)
 - q) Monitor inventory data to identify pending problem areas and provide solutions to preclude delinquent supply items.
- 5) Technical Data Support - Documentation support of TacMobile Increment 2.0, 2.0.1, 2.1, and 2.1.1. Specifically:
- a) Provide Technical Manual support to include:
 - i) Support documentation IAW the Shore Installation Process Handbook, SOVT Preparation and Execution Guide (SPEG), and TacMobile Technical Manual Management Plan. Technical manuals will be developed in XML formats using prescribed DTDs or schemas. (CDRLs A008, A016, A021)
 - ii) Support documentation revision/updates as directed by the Government.
 - iii) Support revision/updates of TacMobile System/Subsystem Level User Technical Manuals in the form of SSGs, SAMs, System Administrator Supplements, Reference Guides, Field Guides, Grounding Guides, O&M manuals, SOMs, and QRGs. (CDRLs A008, A021)
 - iv) Produce reference CDs containing user technical manual, contractor documentation, and reference materials when directed. CD shall have a printed label containing the disk title, classification, and tracking number. The information contained on the CD will be organized in such a way that navigation of the CD will closely resemble navigation of the current TacMobile Website. Images of each reference CD will be stored such that each reference CD may be duplicated in the future as required. (CDRLs A008, A021) Maintain technical manuals and contractor documentation on SAILOR Website.
 - v) Reproduce hard copy deliverables to Fleet customers to include: printing, binding, creating title cover pages, producing reference CDs, and providing QA. (CDRLs A008, A021)
 - vi) Create FCBs as required to distribute new, updated, and/or revised manuals to Fleet customers (CDRLs A014, A021)
 - b) SOVT Support - Develop SOVTs for TacMobile Efforts in the form of System Level, Platform Level, and Integrated I-Level standardized SPAWAR formats. Individual systems/subsystems will be developed IAW the SPAWAR SPEG standard. Installation will also require I-Level SOVTs that provide the necessary test procedures for complete Mission Thread/End-to-End testing for a complete TacMobile platform. Revise and change approved SOVTs as directed. CDRL deliverables shall be delivered once TA, APM, and SOVT developer approve. (CDRLs A008, A016, A021)

- c) Engineering Drawing Support to include:
 - i) Revision and update of TacMobile engineering drawings to include case assemblies, fabrication drawings, altered items, cable assemblies, technical master drawing list, technical data summary, master parts lists, system elevations/floor plans, cable block diagrams, cable running sheets, and any other required drawings such as labeling details, strap settings, and patch panel layout as applicable to each subsystem. Develop graphics for technical manuals. (CDRLs A008, A021)
 - ii) Revision and update of IRD/IDPs IAW the latest revision of the SPAWAR IRD and Shore Installation Handbook Standards. (CDRLs A008, A017, A021)
 - iii) Reproduce hardcopy deliverables to Fleet customer when directed, to include printing, binding, creating title cover pages, producing reference CDs, and providing QA. (CDRLs A008, A017, A021)
 - iv) Create As-Built Engineering Drawings in support of fielded TacMobile systems IAW the latest revisions of the SPAWAR Shore Installation Handbook Standards. (CDRLs A008, A017, A021, A031)

- 6) Training Support to include:
 - a) Training Support – Support the establishment of training services, devices, accessories, aids, equipment, and parts used to establish and facilitate instruction of personnel to operate and maintain the TacMobile SoS. Subparts include Training Equipment, Training Services, and Training Facilities. (CDRLs A008, A015, A026, A027)
 - b) Training Equipment – Support the Government IPT in the acquisition of training equipment required to meet specific training objectives directly associated with the TacMobile System of Systems (SoS).
 - c) Training Services – Support the training services used to establish and facilitate instruction of personnel to operate and maintain the system with maximum efficiency to include the development of training courses for installation, formal schoolhouse training, and sustainment training services. (CDRLs A008, A026, A027)
 - d) Training facilities – Support the acquisition of special facilities necessary to accomplish TacMobile SoS training objectives.
 - e) Support the Human Performance Requirements Review and Navy Training System Plan (NTSP) IAW OPNAV INST 1500.76, and conduct necessary changes to the NTSP via Human Analysis & Requirements Planning System (HARPS). (CDRL A026)

- 7) ISEA - Support ISEA functions by manning the TacMobile Help Desk at SPAWAR Systems Center, Atlantic, Charleston facility from 0700 to 1700 (EST) during normal workdays, responding to initial site calls within two hours, and maintaining a log of all problem reports and Help Desk communications and actions in the Government Remedy system. In addition, maintain a 24 hour 7 day a week phone watch for support after normal work hours. Monitor SIPRNet message traffic on Government provided terminal for TacMobile Casualty Reports (CASREPs) and take appropriate action. Support ISEA tasks to include efforts required to establish and monitor processes for the administration of in-service and life cycle support operations and functions, project management, program performance reporting, and integrated logistics support (CDRLs A008, A011, A013, A016, A020). Specific support activities include:
 - a) Enter and track CASREP in the CASREP Action Response Tracking System (CARTS).
 - b) Perform CASREP tracking, data collection, expediting, trend analysis, and preparation of periodic CASREP briefs and reports.
 - c) Provide Help Desk support, software support requests, CASREP status, trouble ticket metrics, and trend data.
 - d) Identify trends, corrective action, and metrics by reviewing CASREPs, Distance Support actions, Technical Feedback Reports, Help Desk Trouble Tickets, and ECPs.
 - e) Collect, analyze, and report technical and performance data on equipment associated with proposed baseline configuration changes and equipment being integrated as part of the integration system build through the completion of system installation.
 - f) Provide the personnel and support necessary to troubleshoot and/or repair equipment being integrated as part of a system build prior to fielding and turnover of equipment to a TacMobile site.

- g) Record all Engineering provided failure or maintenance data on production/system build related equipment in the Government Remedy system.
- h) Analyze technical and performance data, and review and submit recommended modifications to the initial provisioning baseline, spares levels, and operator and maintenance procedures.
- i) Review ECRs, FCBs, and Fleet input for potential impact on documentation such as Provisioning Technical Documentation, system/equipment O&M manuals, MIPs, MRCs, maintenance instructions, and SOVT documents.
- j) Provide engineering support for fielded TacMobile systems to include:
 - i) Identify all required modifications necessary to address issues, problems, and system failures as identified by Fleet users or the Government.
 - ii) Provide support for the identification of obsolete equipment.
 - iii) Provide recommendations for alternative parts or components and identify impacts to the schedule for integration and testing.
 - iv) Provide logistics support for the development and maintenance of engineering and design solutions in the appropriate form.
 - v) Review and provide inputs to applicable Government documentation.
 - vi) Support Government efforts to continuously collect RAM data and perform analyses to assist the Government in determining whether modifications to fielded equipment are necessary.
- k) Provide ILS IPT support for NORs, SOVTs, Field Kit Delivery Plans, Functional/Physical Requirements Documentation, and Installation Documentation. (CDRLs A014, A016, A018, A022, A020)

CDRL Deliverables:

- A004 - Contractor's Configuration Management (CM) Plan
- A005 - Program of Record (POR) Site Inventory List
- A006 - Configuration Status Accounting Information
- A007 - Configuration Audit Report
- A008 - Revisions to Existing Government Documents
- A010 - Contractor's Logistics Plan
- A011 - Inventory Report
- A012 - Provisioning Documentation
- A013 - Engineering Change Proposal (ECP)
- A014 - Notice of Revision (NOR)
- A015 - Inputs to Training System Installation Plan (TSIP)
- A016 - System Operational Verification and Test (SOVT) Documentation
- A017 - Engineering Drawings
- A018 - Field Kit Delivery Plan
- A019 - Trip Report
- A020 - Technical Report
- A021 - Contractor Source Code
- A022 - Functional/Physical Requirements Documentation
- A026 - Draft Navy Training System Plan (NTSP)
- A027 - Training Packages and POA&M
- A030 - Installation Documentation
- A031 - As-Built Drawings

4.3.3 Engineering Sustainment Support

- 1) The SAE IPT is responsible for facilities planning and sustainment support for currently fielded equipment. The contractor shall support ECPs, determine solutions, test, prepare for FCBs as warranted by software and hardware changes, evaluate system safety concerns and issues and provide Tier 3 In-Service Engineering

Activity support for TacMobile POR sites. (CDRLs A003, A008, A013, A014, A017, A018, A020)

Specifically:

- a) Provide C4I support to include troubleshooting and/or distance support in the following areas: IA, SIPRNet/NIPRNet network, servers, workstations, printers, power distribution, safety assessments, system administration for fielded systems, training requirements, maintenance of the lab systems, and crypto management.
- b) Provide Aircraft support to include troubleshooting and/or distance support regarding the P-3C Aircraft Interface and P-8A Aircraft Interface for fielded systems.

CDRL Deliverables:

- A003 - Meeting Minutes
 - A008 - Revisions to Existing Government Documents
 - A013 - Engineering Change Proposal (ECP)
 - A014 - Notice of Revision (NOR)
 - A017 - Engineering Drawings
 - A018 - Field Kit Delivery Plan
 - A020 - Technical Report
- 2) The SITE IPT is responsible for overall end-to-end system integration and T&E of products submitted to the SAE IPT for proposed FR. The contractor shall provide TacMobile laboratory sustainment support to include support for sustainment and regulatory compliance for TacMobile operated labs located at SPAWAR Systems Center, Atlantic facilities in Charleston, SC and Patuxent River, Maryland. Specific tasking includes:
 - a) Perform installation and sustainment of systems IAW FCB releases as directed therein.
 - b) Conduct daily, weekly, and monthly backups and security scans as directed in baseline the System Administration Manual.
 - c) Ensure proper tracking, receipt, and handling of all classified material, equipment, and other GFE.
 - d) Conduct monthly self-assessments for security awareness to ensure compliance with applicable directives. (CDRL A020)
 - e) Conduct weekly security self-assessments. (CDRL A020)
 - f) Conduct monthly security scans and submission of same to the POR. (CDRL A029)
 - g) Provide user account maintenance for the lab systems assigned.
 - h) Provide user assistance and appropriate reporting for issues noted in the lab environment.

CDRL Deliverables:

- A020 - Technical Report
 - A029 - Information Assurance Documentation
- 3) The BSA IPT is responsible for the incorporation of operationally effective C4I, enterprise services, and warfighter interface capabilities. The contractor shall provide BSA support to include:
 - a) CR Support - Provide ISEA support for fielded subsystems under BSA cognizance. This will include requirements analysis, preliminary design, identification of hardware and software, integration, and test to ensure implementation is fully functional and does not degrade overall system performance. As a part of the ISEA support, the BSA IPT will provide engineering and technical support to continue work on existing CR as well as new CRs related to fielded BSA subsystems. The Government estimates a requirement to support up to ten CRs annually. (CDRLs A003, A008, A013, A016, A020) Documentation may include the following:
 - i) BOM
 - ii) Cost Analysis
 - iii) Power Studies
 - iv) Human Systems Integration (HIS) data

- v) Engineering Drawings
 - vi) ECR
 - vii) ECP
 - viii) SAM
 - ix) SUM
 - x) TMFG
- b) Enterprise Storage System (ESS) Engineering – Provide engineering and technical support for the ESS. Specifically:
- i) Provide IA/Security engineering to scan and identify IA vulnerabilities. (CDRLs A024, A025, A029)
 - ii) Provide tracking and assistance with mitigations and/or remediation to production ESS IA vulnerabilities.
 - iii) Provide engineering and technical support associated with completing the documentation of the 3-node MTOC ESS. This will include updates to nomenclature, drawings, and other associated documentation. (CDRL A016)
 - iv) Support updates to the ESS IDD to reflect deltas between the IDD and current Fleet implementation.
 - v) Provide project management, project monitoring and controls, IMP, IMS, financial management, and contract management for the ESS project.
 - vi) Provide engineering and technical support required for maintaining changes to the current ESS configuration, as baselined in TacMobile Increment 2.1. This may include preparation of ECPs/ECRs and associated forms IAW the existing ECP/ECR processes. (CDRLs A014, A017)
 - vii) Implement enhanced network accessible mass storage capability to ensure adequate storage for additional MPRF platforms.
 - viii) Provide engineering and technical support to include updates to drawings and other associated documentation. (CDRLs A008, A016)
 - ix) Coordinate and perform the subsystem functional tests to verify and validate the applicable ESS CRs. This also includes all associated test documentation to include test plans and test reports.
 - x) Provide engineering and technical support required for maintaining ESS IA compliance. This will include IA/security engineering to scan and identify IA vulnerabilities applicable to ESS based on new or existing IA requirements, and tracking and assisting with mitigations and/or remediation to production ESS IA vulnerabilities. (CDRLs A024, A025, A029)
 - xi) Provide engineering and technical support required to complete all engineering and technical documentation for the ESS to include engineering drawings (system elevation, IRD, IDP), SUM, SAM, applicable TMFG, and applicable TacMobile QRG. (CDRLs A008, A016)
- c) NIPR Enclave Upgrade - Provide engineering and technical support required to upgrade the TacMobile NIPRNet enclave IAW the PMW 790 NECC accredited solution. Specifically:
- i) Provide project management, project monitoring and controls, IMP, IMS, financial management, and contract management for the NIPR Upgrade project.
 - ii) Provide engineering and technical support required to complete development of all engineering-related documentation for the NIPR Upgrade solution to include engineering drawings (system elevation, IRD, IDP), SUM, SAM, applicable TMFG, and applicable TacMobile QRG. (CDRLs A008, A016)
 - iii) Provide engineering and technical support required to coordinate and perform the IA/security engineering tasks to include all applicable research, IA scans, and accreditation package preparation or modifications. (CDRLs A024, A025, A029)

CDRL Deliverables:

- A003 - Meeting Minutes
- A008 - Revisions to Existing Government Documents
- A013 - Engineering Change Proposal (ECP)

- A014 - Notice of Revision (NOR)
 - A016 - System Operational Verification and Test (SOVT) Documentation
 - A017 - Engineering Drawings
 - A020 - Technical Report
 - A024 - Test Documentation
 - A025 - Test Report
 - A029 - Information Assurance Documentation
- 4) The MES IPT is responsible for sustainment support of communication subsystems for both the TOC and MTOC. The contractor shall support all of TacMobile TSCOMM and MTOC COMM life cycle support, integrated C4ISR, Information Technology (IT), and Space capabilities in support of COMM subsystems at SPAWAR Systems Center Atlantic, Patuxent River, Maryland. This tasking supports the Patuxent River Lab daily operations such as EKMS, inspections, inventories, standard operating procedure creation/updates, mandatory training, and EKMS equipment maintenance and updates. This effort will support the Fleet at both the MTOC and TSCOMM. The contractor is responsible for monitoring the progress of all Remedy and CASREP tickets and communicating status to MES IPT stakeholders. (CDRLs A008, A024, A025)

CDRL Deliverables:

- A008 - Revisions to Existing Government Documents
 - A024 - Test Documentation
 - A025 - Test Report
- 5) The PMA IPT is responsible for sustainment tasks in support of the P-3C and P-8A aircraft. Specifically, the contractor shall support the ISEA for current and future planned 2.0 and 2.1 PMA IPT related subsystems to include addressing software defect corrections, updates to subsystem user manuals, technical meetings (CDRL A003), IA compliance integration and testing, subsystem-level testing, FCBs, laboratory operations support, and SME support for Fleet operators and technicians. In addition, the contractor shall:
- a) Support software corrections to identified system defects and CRs for PMA related subsystems. (CDRLs A021, A024, A025)
 - b) Support updating Post Mission Analysis related subsystems manuals that result from software changes and or defect corrections. (CDRL A008)
 - c) Support trainer evolutions, security, IA tasking, subsystem hardware/software updates and fielding of FCBs.
 - d) Support aircraft data extract, validation, copy, and entry of data files into the SPAWAR CM Library.
 - e) Support validation of aircraft media for functionality in support of Remedy tickets generated by the Fleet units. (CDRLs A024, A025)
 - f) Support CRs for existing Increment 2.0 and 2.1 baselines.
 - g) Support providing updated systems documentation, including reviewing and updating FCBs.
 - h) Provide system engineering, software engineering, and technical support during all phases of life cycle support for subsystem deliveries.
 - i) Support the following: LCCB Meetings, PIPT Meetings, PMA IPT Meetings, Project Planning Meetings, and other PMA IPT meetings. (CDRL A003)
 - j) Support PMA IPT subsystems migration from the XP Operating System to a Windows 7 Operating System.

CDRL Deliverables:

- A003 - Meeting Minutes
- A008 - Revisions to Existing Government Documents
- A021 - Contractor Source Code
- A024 - Test Documentation

- A025 - Test Report
- 6) The MD IPT is responsible for the support of TacMobile media and data products with the various components of the P-3C and P-8A aircraft. The contractor shall provide support of TacMobile media products to the various components of the P-3C such as LSRS, BMUP+, AIP, C4 for ASW and baseline P-3C aircraft. These media items are the DASD (SATA/78B SCSI), Magneto Optical (MO), Optical (IP/ODS), Mini Oasis (SATA/SCSI), SAM and APTR, and software/hardware sustainment support of Fleet operational assets as well as NAVAIR entities at PMA-290, PMA-264, VX-1, and VX-20. The contractor shall provide software maintenance support as required to support Fleet readiness on current hardware and software architecture encompassing the P-3C aircraft interface subsystem. This support shall include the software modification, test, documentation (IRD/TMFG/FCB), CM support, and delivery to TOC/MTOC sites. (CDRLs A008, A013, A014, A020, A024, A025)

CDRL Deliverables:

- A008 - Revisions to Existing Government Documents
- A013 - Engineering Change Proposal (ECP)
- A014 - Notice of Revision (NOR)
- A020 - Technical Report
- A024 - Test Documentation
- A025 - Test Report

4.3.4 Information Assurance Sustainment Support

The IA IPT is responsible for supporting IA requirements associated with system engineering support for TacMobile Increment 2.0.1 (Technical Refresh), TacMobile Increment 2.1, TacMobile Increment 2.1.1, P-3C, P-8A FRs and TRs, P-8A production aircraft support, and P-8A obsolescence work in preparation for FR 20. The contractor shall perform the following IA tasks:

- 1) TacMobile Lab Sustainment Support - Maintain TacMobile laboratory facilities located at SPAWAR Systems Center, Atlantic in Charleston, South Carolina and SPAWAR Systems Center, Atlantic in Patuxent River, Maryland in order to ensure continuous IA regulatory compliance. (CDRL A029)
- 2) CR Support - Provide IA services in support of the BSA IPT ISEA CR Support. (CDRL A029)
- 3) ESS Engineering Support – Provide engineering and technical support required for maintaining ESS IA compliance. This will include IA/security engineering to scan and identify IA vulnerabilities applicable to ESS based on new or existing IA requirements, and tracking and assisting with mitigations and/or remediation to production ESS IA vulnerabilities. (CDRLs A020, A024, A025, A028, A029) Associated deliverables include:
 - a) Validation Plan and Procedures
 - b) Checklists and SRRs
 - c) Validation Report
 - d) POA&Ms
 - e) System Architecture Diagrams
 - f) Accreditation Boundaries
 - g) External Interfaces/Data Flow
 - h) Hardware/Software Lists
 - i) IA Control Mapping
- 4) NIPR Enclave Upgrade Support - Provide engineering and technical support required to coordinate and perform the IA/security engineering tasks on the final Solypsis design solution. This includes all applicable research, IA

scans, and accreditation package preparations or modifications. (CDRLs A020, A024, A025, A028, A029)

Associated deliverables include:

- a) System Architecture Diagrams
- b) Accreditation Boundaries
- c) External Interfaces/Data Flow
- d) Hardware/Software Lists
- e) Ports Protocols & Services
- f) IA Control Mapping

CDRL Deliverables:

- A020 - Technical Report
- A024 - Test Documentation
- A025 - Test Report
- A028 - DIACAP Information Assurance (IA) Plan
- A029 - Information Assurance Documentation

4.4 AUSTRALIAN COOPERATIVE PROGRAM SUPPORT

Support services listed under SOW Section 4.4 will be funded by the Australian Government. The contractor shall provide engineering services, integrated logistics services, security related services, and management services in support of PMW 750 TacMobile Program efforts associated with the Australian TOC and MTOC Cooperative Program. The contractor shall:

- 1) Provide PDR support. (CDRL A003)
- 2) Provide CDR support. (CDRL A003)
- 3) Provide support to establish the Allocated Baseline for the Royal Australian Air Force (RAAF) TOC and MTOC.
- 4) Support the development and integration of the Defence Information Environment (DIE)/Single Information Environment (SIE) Interface Test System (ITS).
- 5) Support refinement of requirements in support of Australian logistics facilities and training in relation to integration of the TOC and MTOC into the RAAF. (CDRL A022)
- 6) Provide engineering and technical integration support.
- 7) Provide logistics and training support.
- 8) Provide foreign disclosure and security support.
- 9) Provide acquisition security support.
- 10) Specifically, support the following subtasks:
 - a) Program Management and Technical Oversight to include:
 - i) Provide direct support to the TacMobile APM in the execution of PMW 750/Air-7000 tasking; develop and execute short- and long-term task execution plans; develop and execute the Australian Project IMS and system/capability delivery IAW the Program IMP; support the Government in the development of

- PMA-290 annual budget and POM submits; and manage cost, schedule, and performance risks for SPAWAR Australian IPTs and sub IPT personnel and resources.
- ii) Assist PO in reviewing and maintaining the TacMobile Notional Roadmap, the TacMobile Notional Roadmap AUS version, and the TacMobile slide of the FoS Roadmaps. Develop and update an EOL tracking sheet for TacMobile subsystems and component parts to minimize risk to the Australian project and aid in maintaining the overall TacMobile Technology roadmap.
 - iii) Assist the Government is designing methods to implement IAVA updates, Computer Tasking Orders (CTO), Mandatory Security Updates (MSU), FAMs, DoN CIO directives, and ECPs. Assist in integrating other security and software related updates into the shared baseline as necessary for the secure operation of the Australian TacMobile Systems. (CDRL A029)
 - iv) Attend program and technical meetings: PIPT, A&P IPT, TacMobile Architecture Simplification (TAS), and other TacMobile, PMW 750, and PMA-290 meetings as directed by the Government. (CDRL A003) Provide project planning support of project objectives to the TacMobile program. Develop recommended program management plans and cost estimates. Provide inputs to TacMobile IMP and IMS; maintain schedule and track progress of tasks against IMS/IMP; and monitor progress of tasking and assess risk, ensuring that project management plans, schedule, and risk mitigation steps remain within budget and schedule while providing technical/engineering support as required. Report cost, schedule, and performance metrics to TacMobile PIPT during weekly meetings.
- b) Engineering support to include:
- i) Identify data requirements, file types, file formats, and metadata standards for the PID build process (as well as In-Flight and Post-Flight data) to facilitate the use of Australian supplied data for PID building. Identify PID files that are manipulated and/or generated by TOC. Identify design and system testing issues that may arise from use of the Australian SIE and the need for Australian TOC configurations to operate with Australian Defence Force Information and Communication Systems. (CDRL A022)
 - ii) Provide software integration support, software integration evaluation, software integration technical advice, and software engineering support to SPAWAR Systems Center, Atlantic AUS Chief Engineer for all issues relating to software implementation and development. Provide engineering support to activities related in planning fabrication, integration, and testing of hardware and software items necessary to integrate the Australian TOC/MTOC into the TacMobile Program of Record (POR). (CDRLs A013, A014, A017)
 - iii) Support requirements and design efforts in support of Australian TacMobile project. Attend program and technical meetings: A&P IPT, TAS IPT, and other TacMobile, PMW 750, and PMA-290 meetings as directed by the Government. (CDRL A003) Efforts include requirements analysis of Australian operational needs and their impacts to TacMobile subsystem software and hardware design, and TacMobile documentation caused by Australian requirements. Dependencies on other IPTs include MP (PID/mission package impacts/changes), BSA (mass storage impacts/changes), and TAS efforts. External dependencies include proper engineering and interface design specifications as defined in the TOC OEM to P-8A ICD/IDD document. (CDRL A022)
 - iv) Provide engineering support to activities related to Common Access Card (CAC)/PKI requirements. Provide engineering support as the project coordinates with U.S. DoD NIPRNet site owners to ensure they can accept External Certification Authority (ECA) digital certificates that will allow Australian personnel to access U.S. DoD NIPRNet sites. (CDRLs A017, A022)

- v) Update the Australian Cooperative Project Engineering Plan (PEP), identifying the full project phasing and deliverables due to Australia during each phase.
 - vi) Provide engineering and logistics support to develop and maintain a TacMobile Obsolescence Survey that will identify items that make up the current 2.1 configuration that are approaching EOL and End-of-Support (EOS) dates. This work will assist the PO in prioritizing TacMobile engineering activities needed to support removal and replacement of these items in order to meet Australian TOC/MTOC delivery dates.
- c) Logistics support to include:
- i) Material Procurement Support
 - (1) Maintain, track, and update requirements in the BOM; provide projections of procurement lead times; and provide status of ongoing procurements. (CDRLs A011, A012)
 - (2) Coordinate technical configuration requirements and hardware vendor inputs with the BOM Manager and Engineering personnel.
 - (3) Coordinate material receipt with the central warehouse to capture and maintain records of OEM serial numbers and N-ERP assigned serial numbers. (CDRL A008)
 - (4) Communicate Government technical configuration requirements to hardware vendors.
 - (5) Communicate hardware vendor inputs to BOM Manager and Engineering personnel. (CDRL A008)
 - (6) Perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications. (CDRL A008)
 - ii) Logistics Management – Submit a Contractor’s Logistics Management Plan (CDRL A010) that describes how the contractor will factor logistics elements into all aspects of the contract, from design and development through system delivery, maintenance, and sustainment support as well as how the contractor will integrate the logistics elements to optimize system operability and supportability to reduce life cycle costs and to identify, integrate, and acquire the elements of support. Subtasks include:
 - (1) Review, provide inputs, update, and maintain Government logistics documentation such as the LCSP, CATEX, IUID Plan, Maintenance Plan, PESHE, SSPP, TMMP, CMP, and ULSS. (CDRL A008).
 - (2) Assess and provide written notification of any deficiencies in the logistics support program that require immediate attention and corrective action. Evaluate risk, impact on life cycle cost, and supportability as well as potential impact to system performance. (CDRL A020)
 - (3) Provide support for Integrated Logistics Assessments. (CDRL A020)
 - iii) Logistics Engineering
 - (1) Provide input to AoA on logistical impacts of proposed system configuration change. This includes assessing impacts to hardware and software and their related documentation (e.g., APL, MIP, MRC, Technical Documents), reliability and maintainability data, safety data, any environmental impact, and potential obsolescence issues. Identify logistics related costs for implementation and life cycle support (e.g., technical documentation (modification or development), preventative maintenance, supply chain management support, and spares). (CDRL A020)
 - (2) Assess potential obsolescence issues for critical parts to identify any items that have reached EOL or where the OEM will no longer manufacture or provide maintenance support. The contractor shall provide obsolescence management and insight into critical hardware and software that have reached EOL or where the OEM will no longer produce or provide maintenance support for both hardware and software. Provide proposed alternate components (same form/fit/function) and assess risk and impact to system support. (CDRL A020)

- iv) Configuration Management: Perform CM directly associated with prime mission product including implementation and execution of configuration management and configuration status accounting and audits IAW MIL-HDBK-61A, Configuration Management Guidance, and the PEO C4I LCCMIM. Specifically:
- (1) Maintain unique identification records of HWICs and CSCIs. Develop, review, and maintain configuration baselines (i.e., functional, allocated, and product). Maintain selected configuration documentation used to define baselines. (CDRL A008)
 - (2) Record, update, and track the status of all changes (e.g., CRs, ECRs, and FCBs). Perform configuration status accounting and configuration change control utilizing Government-approved CM tools, such as CMPro and ClearQuest. (CDRL A013)
 - (3) Support the development, processing, update, and maintenance of subsystem nomenclatures. (CDRL A008)
 - (4) Establish EICs for new equipment identified for implementation into the TacMobile baseline. (CDRL A008)
 - (5) Support development of, update, and maintain PORSI lists and identify shortages for each site. (CDRL A005)
 - (6) Create, update, and maintain site specific configuration records in CDMD-OA prior to and post system installation, and in support of FRCB data requirements. (CDRL A006)
 - (7) Perform audits (FCAs, PCAs) to validate that hardware configuration baselines align with subsystem drawings and technical documentation. Manage audits of software builds to verify systems load to build plan. (CDRL A007)
 - (8) Track all software license and registration records for software licenses procured for distribution to sites and labs. Maintain record of software licenses distributed to sites and labs as well as identify required licenses for fielding incremental systems IAW the Software Build Plan Matrix. Track hardware and software registration and license agreements for each site and lab and notify the Government 90 days prior to any registration or license expirations. (CDRL A011)
 - (9) Software Control Support: Provide management support for licenses of software; coordinate duplication and distribution of software. (CDRL A020)
 - (10) Software Reproduction and Distribution Support: Duplicate, package, and track software and documentation for release and/or distribution to support project requirements, prepare and maintain a master list of currently active versions of each CSCI until superseded by a new version, and retain superseded versions of the master for the life of the program or as otherwise directed by the Government. (CDRL A020)
- v) Process software or hardware media for shipment; reproduce FCBs for shipment to sites; prepare shipping documentation and coordinate for pickup. (CDRL A020)
- (1) Support GOTS Software Monitoring/Retrieval: Monitor SCM tools databases for version changes to segments included in current baselines and provide version descriptions when new versions are identified. Download segments in a build plan on media to support system requirements. (CDRL A020)
 - (2) Maintain Configuration Status Accounting via SPAWAR Systems Center, Atlantic Material Management System (e.g., CMPro). (CDRL A020)
 - (3) Provide support for SPAWAR Systems Center, Atlantic transition from SABAR to ERP. This will include tasks such as: validating current inventory, reviewing and validating inventory data, identifying and updating records with any additional data required for application records, and making corrective action to corrupt data as a result of the transition. (CDRL A020). Provide warehouse support for material receipt, packaging and handling, storage, inventory, and shipment for hardware, parts, and spares required for Fleet and program support IAW existing Government regulations.(CDRL A011)
 - (4) Receive, inspect, and inventory all incoming material for TacMobile development and production.
 - (5) Conduct inventory utilizing Government approved software programs.

- (6) Support document preparation for equipment procurement, turn-in, and shipment of TacMobile hardware, parts, spares, and inventory.
 - (7) Monitor inventory data to identify pending problem areas and provide solutions to preclude delinquent supply items.
- vi) Platform/Site Activation/Installation – Provide services to support the fielding and delivery of TacMobile system builds and turnover to sites. Specifically: (CDRLs A019, A020)
- (1) Support preparation of and track work orders for material transfers.
 - (2) Validate and document equipment configuration prior to shipment.
 - (3) Support preparation of document equipment and technical and engineering documentation for shipment to include MSDS, warranty, and software license information.
 - (4) Coordinate shipment delivery requirements with warehouse and transportation office.
 - (5) Provide transport to Government shipping facility.
 - (6) Receive, inventory, and inspect packaged systems at the TacMobile sites.
 - (7) Verify site POR inventory with Fleet personnel.
 - (8) Assist in identifying and resolving any logistics discrepancies while on-site.
 - (9) Track and resolve any logistics SOVT discrepancies until the issue is closed.
- vii) Technical Data Support – Develop documentation to support the fielding of TacMobile Increment 2.0, 2.0.1, 2.1, and 2.1.1. Specifically:
- (1) Develop documentation IAW the Shore Installation Process Handbook, SPEG, and TacMobile Technical Manual Management Plan. Technical manuals will be developed in XML formats using prescribed DTDs or schemas. (CDRLs A008, A021, A027)
 - (2) Receive data for documentation development, revision, or updates from Government or Contractor Engineering or Logistics SMEs.
 - (3) Develop TacMobile System/Subsystem Level User Technical Manuals (CDRLs A008, A021)
 - (4) Develop, create, revise, and update TacMobile System/Subsystem Level User Technical Manuals in the form of SSGs, SAMs, System Administrator Supplements, Reference Guides, Field Guides, Grounding Guides, O&Ms, SOMs, QRGs. (CDRLs A008, A021)
 - (5) Produce reference CDs containing user technical manual, contractor documentation, and reference materials when directed. CD shall have a printed label containing the disk title, classification, and tracking number. The information contained on the CD will be organized in such a way that navigation of the CD will closely resemble navigation of the current TacMobile Website. Images of each reference CD will be stored such that each reference CD may be duplicated in the future as required. (CDRLs A008, A021)
 - (6) Maintain technical manuals and contractor documentation on SAILOR Website.
 - (7) When directed, reproduce hardcopy deliverables to Fleet customer to include: printing, binding, creating title cover pages, producing reference CDs, and providing QA. (CDRLs A008, A021)
 - (8) Create FCBs as required to distribute new, updated, and/or revised manuals to Fleet customers (CDRLs A014, A021)
- viii) SOVT Support – Develop SOVTs for TacMobile efforts in System Level, Platform Level, and Integrated I-Level standardized SPAWAR formats. Individual systems/subsystems will be developed IAW the SPAWAR SPEG standard. Installation will also require I-Level SOVTs that provide the necessary test procedures for complete Mission Thread/End-to-End testing for a complete TacMobile platform. Revise/change approved SOVTs as directed. CDRL deliverables shall be delivered once APM and SOVT developer approve. (CDRLs A008, A016, A017, A019, A024, A025)
- ix) Engineering Drawing Support to include:
- (1) Develop, create, revise, and update TacMobile engineering drawings to include case assemblies, fabrication drawings, altered items, cable assemblies, technical master drawing list, technical data summary, master parts lists, system elevations/floor plans, cable block diagrams, cable running

- sheets, and any other required drawings such as labeling details, strap settings, and patch panel layout as applicable to each subsystem. Develop graphics for technical manuals. (CDRLs A008, A017)
- (2) Develop IRD/IDPs IAW the latest revision of the SPAWAR IRD and Shore Installation Handbook Standards. (CDRL A008)
 - (3) When directed, reproduce hardcopy deliverables to Fleet customer to include: printing, binding, creating title cover pages, producing reference CDs, and providing QA. (CDRLs A008, A021)
 - (4) Develop As-Built Engineering Drawings. (CDRLs A008)
 - (5) Support installation of specific systems/subsystems, develop As-Built IDPs IAW the latest revisions of the SPAWAR Shore Installation Handbook Standards. (CDRLs A008, A031)
- x) Training Support to include the following subtasks:
- (1) Training Development Support – Support the establishment of training services, devices, accessories, aids, equipment, and parts used to establish and facilitate initial instruction of personnel to operate and maintain the TacMobile SoS. Subparts include Initial Training Equipment, Initial Training Services, and Training Facilities. (CDRLs A008, A026, A027)
 - (2) Training Equipment – Support the Government IPT in the acquisition of training equipment required to meet specific training objectives directly associated with the TacMobile SoS.
 - (3) Initial Training Services – Support the initial training services used to establish and facilitate initial instruction of personnel to operate and maintain the system with maximum efficiency to include the development of training courses for installation, formal schoolhouse training, and initial/contractor training services. (CDRLs A008, A026, A027)
 - (4) Training Services – Support the training services used to establish and facilitate instruction of personnel to operate and maintain the system with maximum efficiency to include the development of training courses for installation, formal schoolhouse training, and sustainment training services. (CDRLs A008, A026, A027)
 - (5) Training Facilities – Support the acquisition of special facilities necessary to accomplish TacMobile SoS training objectives.
 - (6) Support the Human Performance Requirements Review and Navy Training System Plan (NTSP) IAW OPNAV INST 1500.76, and conduct necessary changes to the NTSP via Human Analysis & Requirements Planning System (HARPS). (CDRL A026)
- xi) ISEA - Support ISEA functions by manning the TacMobile Help Desk at SPAWAR Systems Center, Atlantic, Charleston facility and maintain a log of all problem reports and Help Desk communications and actions in the Remedy system. In addition, maintain a phone watch for continuous support after normal Charleston facility working hours. Monitor SIPRNet message traffic on Government provided terminal for TacMobile CASREP reports and take appropriate action. Support ISEA tasks to include efforts required to establish and monitor processes for the administration of in-service and life cycle support operations and functions, project management, program performance reporting, and integrated logistics support. (CDRLs A008, A020) Specific support activities include:
- (1) Enter and track CASREPs in CARTS.
 - (2) Support CASREP tracking, data collection, expediting, trend analysis, and preparation of periodic CASREP briefs and reports.
 - (3) Provide Help Desk support, software support requests, CASREP status, trouble ticket metrics, and trend data.
 - (4) Identify trends, corrective action, and metrics by reviewing CASREPs, Distance Support actions, Technical Feedback Reports, Help Desk Trouble Tickets, and ECPs.
 - (5) Collect, analyze, and report technical and performance data on equipment associated with proposed baseline configuration changes and equipment being integrated as part of the integration system build through the completion of system installation.

- (6) Provide the personnel and support necessary to troubleshooting and/or repair equipment being integrated as part of a system build prior to fielding and turnover of equipment to TacMobile site.
- (7) Record in Remedy all failure and/or maintenance data related to production/system build equipment.
- (8) Analyze technical and performance data. Review and submit recommended modifications to the initial provisioning baseline, spares levels, and operator and maintenance procedures.
- (9) Review ECRs, FCBs, and Fleet input for potential impact on documentation such as Provisioning Technical Documentation, system/equipment O&M manuals, MIPs, MRCs, maintenance instructions, and SOVT documents.
- (10) Provide engineering support for fielded TacMobile systems to include:
 - a. Identify all required modifications necessary to address issues, problems, and system failures as identified by Fleet users or the Government.
 - b. Provide support for the identification of obsolete equipment.
 - c. Provide recommendations for alternative parts or components and identify impacts to the schedule for integration and testing.
 - d. Provide logistics support for the development and maintenance of engineering and design solutions in the appropriate form.
- (11) Review and provide inputs to applicable Government documentation.
- (12) Support Government efforts to continuously collect RAM data and perform analyses to assist the Government in determining whether modifications to fielded equipment are necessary.
- (13) Support program acquisition documentation and project logistics related programmatic documentation.
- (14) Monitor and assist with management of any logistics or training issues that could impact cost or delivery schedule, impede system supportability, and/or potentially impact system performance.
- (15) Assist the project manager in defining required IPT tasks as written labor requirements and required CDRL deliverables; coordinate/recommend contract modifications in support of the Australian project.
- (16) Identify operations, maintenance, and support publications that require updates in order to support joint U.S./AUS TOC/MTOC long-term sustainment and operations. Provide inputs to existing TacMobile Program documentation required by Australian participation as a POR cooperative partnership. Specifically, assist SPAWAR Systems Center, Atlantic with the update of the Australian TOC/MTOC Life Cycle Logistics Sustainment Plan. The Australian LCSP shall be a supplement to the TacMobile Increment 2.1 LCSP. Additionally, develop recommendations for a TacMobile Joint Life Cycle Sustainment Plan (JLCSP) to incorporate both documents. (CDRL A008)
- (17) Assist the project engineering team in the identification of software procurement and software licensing issues that may arise; identify license renewal requirements and procurement cost to the project manager in order to budget for procurements.
- (18) Provide input to the Australian CMP to provide detailed plans, policies, procedures, and controls used to show a repeatable CM and planning process for hardware and software CIs, configuration control, configuration status and accounting, configuration verification and audit, and data and documentation management. Develop, update, and maintain the Australian CMP that shall be a supplement to the TacMobile Increment 2.1 CMP. Additionally, develop recommendations for a TacMobile Joint CMP to incorporate both documents. (CDRL A008)
- (19) Respond to data calls and inquiries associated with requirements, costing, inventory control, and logistics support procedures. Provide input to project lead and financial

personnel with changes to the Government BOM that may impact allocated procurement funds or build schedules. (CDRL A011)

CDRL Deliverables:

- A003 - Meeting Minutes
- A005 - Program of Record (POR) Site Inventory List
- A006 - Configuration Status Accounting Information
- A007 - Configuration Audit Report
- A008 - Revisions to Existing Government Documentation
- A010 - Contractor's Logistics Plan
- A011 - Inventory Report
- A012 - Provisioning Documentation
- A013 - Engineering Change Proposal (ECP)
- A014 - Notice of Revision (NOR)
- A016 - System Operational Verification and Test (SOVT) Documentation
- A017 - Engineering Drawings
- A019 - Trip Report
- A020 - Technical Report
- A021 - Contractor Source Code
- A022 - Functional/Physical Requirements Documentation
- A024 - Test Documentation
- A025 - Test Report
- A026 - Draft Navy Training System Plan (NTSP)
- A027 - Training Packages and POA&M
- A029 - Information Assurance Documentation
- A031 - As-Built Drawings

5.0 OTHER DIRECT COSTS AND TRAVEL

The contractor shall procure consumable material, hardware, and software IAW the Government-furnished BOM. The contractor shall procure all additional materials required to complete the integration of TacMobile systems not otherwise furnished as GFE following receipt of written direction/authorization from the applicable Government TPOC.

Work under this SOW may require travel to operational, lab and training locations such as the following Government and military sites: Edinburgh and Darwin, Australia; Sigonella, Italy; Kaneohe Bay and Wahiawa, Hawaii; Manama and Isa, Bahrain; Whidbey Island, Washington; Kadena and Misawa, Japan; North Island, California. Specific locations in the future may change as a result of operational or training requirements.

6.0 PROCUREMENT ORDERING

The contractor shall procure hardware for future increments, technical refreshes, field change kits, spares, and modifications to systems following receipt of written authorization from the Procurement Contracting Officer.

7.0 SECURITY

The nature of this task requires access up to Top Secret (TS)/Sensitive Compartmented Information (SCI). The work performed by the contractor will include access up to TS/SCI data, information, and spaces. The contractor will be required to attend meetings, as directed by the Government, classified up to the SCI level.

All outgoing Country/Theater clearance message requests shall be submitted to the SPAWAR Systems Center, Atlantic, SC 29419-9022, Attn: Security Office, for action. A Request for Foreign Travel form shall be submitted for each traveler, in advance of the travel to initiate the release of a clearance message at least 30 days in advance of departure. Each traveler shall also submit a Personal Protection Plan and have a Level 1 Antiterrorism/Force Protection briefing within 90 days of departure.

All work shall be performed IAW DoD and Navy Operations Security (OPSEC) requirements and IAW the OPSEC attachment to the DD 254.

8.0 ENTERPRISE CONTRACTOR MANPOWER REPORTING APPLICATION (ECMRA)

- 1) The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the Space and Naval Warfare Systems Command (SPAWAR) via a secure data collection site. The contractor is required to completely fill in all required data fields using the following web address: <https://doncmra.nmci.navy.mil>.
- 2) Reporting inputs (from contractors) will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at <https://doncmra.nmci.navy.mil>.

9.0 ACRONYM LIST

A&LM	Acquisition and Logistics Management
A&P	Architecture and Planning
AAS	Advanced Airborne Sensor
ACAS	Any Console Any Station
ACAT	Acquisition Category
ADNS	Advanced Digital Network System
ADSI	Air Defense Systems Integrator
AIS	Automatic Identification System
AMMS	Aircraft Media Management Server
AoA	Analysis of Alternatives
AOP	Airborne Operational Program
APL	Allowance Parts Listing
APM	Assistant Program Manager
APM-L	APM - Logistics
APTR	Acoustic Processor Technical Refresh
ARTT	Architecture Review Tiger Team
ASD	Application Security and Development
ASME	American Society of Mechanical Engineers
ASPECT	Active System Performance Estimate Computer Tool
AST	Advanced Sensor Technology
ASW	Antisubmarine Warfare
AT&L	Acquisition Technology and Logistics
ATI	AAS/TacMobile Integration
ATO	Authority to Operate
AW	Aviation Warfare
BAM	Baseline Assessment Memorandum
BAMS	Broad Area Maritime Surveillance
BOM	Bill of Materials
BSA	Battlespace Awareness
CATEX	Categorical Exclusion
C&A	Certification and Accreditation
C2I	Command, Control and Intelligence
C2OIX	Command and Control Official Information Exchange
C4I	Command, Control, Communications, Computers and Intelligence
C4ISR	Command, Control, Communications, Computers and Intelligence Surveillance and Reconnaissance
CAC	Common Access Card
CARTS	CASREP Action Response Tracking System
CASREP	Casualty Report
CCB	Configuration Control Board
CD	Compact Disk
CDMD-OA	Configuration Data Manager Database-Open Architecture
CDR	Critical Design Review
CDRL	Contract Data Requirements List
CENTRIXS	Combined Enterprise Regional Information Exchange System
CI	Configuration Item
CM	Configuration Management

CMMI	Capability Maturity Model Integration
CMP	Configuration Management Plan
COA	Course of Action
COMM	Communications
CONEMP	Concept of Employment
CONOPS	Concept of Operations
COTS	Commercial Off-The-Shelf
CPD	Capabilities Production Document
CR	Change Request
CSCI	Computer Software Configuration Item
CTO	Computer Tasking Orders
DADMS	DON Application and Database Management System
DAMA	Demand Assigned Multiple Access
DAR	Data At Rest
DASN	Deputy Assistant Secretary of the Navy
DBMS	Database Management System
DIACAP	DoD Information Assurance Certification and Accreditation Process
DIE	Defence Information Environment
DISA	Defense Information Systems Agency
DoD	Department of Defense
DoDAF	Department of Defense Architecture Framework
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DoN	Department of the Navy
DSAU	Data Storage Architecture Upgrade
DTD	Document Type Definition
ECA	External Certification Authority
ECP	Engineering Change Proposal
ECR	Engineering Change Request
ECU	Environmental Control Unit
EIA	Electronics and Information Technology Association
EIC	Equipment Identification Code
EOL	End-of-Life
EOS	End-of-Support
ESS	Enterprise Storage System
ESWBS	Expanded Ship Work Breakdown Structure
ET	Electronic Technician
EWDS	Electronic Warfare Database System
FAK	Fly Away Kit
FAM	Fleet Advisory Message
FAT	Factory Acceptance Test
FCA	Functional Configuration Audit
FCB	Field Change Bulletin
FISMA	Federal Information Security Management Act
FIT	Fleet Introductory Training
FoS	Family of Systems
FOT&E	Follow-On Operational Test and Evaluation
FR	Fleet Release
FRCB	Fleet Readiness Certification Board

FRD	Functional Requirements Document
FRT	Fleet Refresher Training
FY	Fiscal Year
FYDP	Future Years Defense Plan
GBS	Global Broadcast System
GCCS-M	Global Command and Control System - Maritime
GEIA	Government EIA
GFE	Government Furnished Equipment
GIG	Global Information Grid
GOTS	Government Off-The-Shelf
GPETE	General Purpose Electronic Test Equipment
HAASW	High Altitude ASW
HAAWC	High Altitude ASW Weapon Capability
HARPS	Human Analysis & Requirements Planning System
HBSS	Host Based Security System
HF	High Frequency
HFIP	High Frequency IP
HSC	Hierarchical Structure Code
HSI	Human Systems Integration
HTS	Higher Than Secret
HWCI	Hardware Configuration Item
IA	Information Assurance
IAV	Information Assurance Vulnerability
IAVA	IAV Assessment
IAVM	IAV Management
IAW	In Accordance With
ICD	Interface Control Document
IDD	Interface Design Document
IDP	Installation Design Plan
IDS	Interface Design Specification
ICE	Image Communication Equipment
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers
IFID	In-Flight Insertion Data
ILA	Integrated Logistics Assessment
I-Level	Intermediate Level
ILS	Integrated Logistics Support
ILSP	Integrated Logistics Support Plan
IMP	Integrated Master Plan
IMS	Integrated Master Schedule
INCO	Installation and Check-Out
IOT&E	Initial Operational Test and Evaluation
IP	Internet Protocol
IPS	Integrated Project Schedule
IPT	Integrated Product Team
IRD	Installation Requirement Drawing
IS	Information Specialist
ISEA	In Service Engineering Activity
ISO	International Standards Organization

ISP	Information Support Plan
IT	Information Technician
ITS	Interface Test System
IUID	Item Unique Identification
IV&V	Independent Verification and Validation
JLCSP	Joint Life Cycle Sustainment Plan
JMAST	Joint Mobile Ashore Support Terminal
JMPS	Joint Mission Planning System
KPP	Key Performance Parameter
LCCB	Local Change Control Board
LCCMIM	Life Cycle Configuration Management Implementation Manual
LCSP	Life Cycle Sustainment Plan
LOO	Letter of Observation
LRIP	Low Rate Initial Production
MAC	Multistatic Active Coherent
MD	Mission Data
MES	Mission Execution Support
MIL-HDBK	Military Handbook
MIL-P	Military Specification for Planned Maintenance
MIL-PRF	Military Performance Specification
MIL-STD	Military Standard
MIP	Maintenance Index Page
MP	Mission Planning
MPC	Mission Planning Capability
MPRA	Maritime Patrol and Reconnaissance Aircraft
MPRF	Maritime Patrol and Reconnaissance Forces
MQL	Mobile Quick Look
MRC	Maintenance Requirements Card
MSD	Material Support Date
MSDS	Material Safety Data Sheet
MSE	Multilayer Security Enclave
MSU	Mandatory Security Update
MTOC	Mobile Tactical Operation Center
NAS	Naval Air Station
NATO	North Atlantic Treaty Organization
NAVEDTRA	Naval Education and Training
NAVOCEANO	Naval Oceanographic Office
NAVSEA	Naval Sea Systems Command
NAVSEAINST	Naval Sea Systems Command Instruction
NAVSO	Navy Staff Office
NECC	Navy Expeditionary Combat Command
N-ERP	Navy Enterprise Resource Planning
NETWARCOMIN ST	NETWARCOM Instruction
NIPRNet	Non-classified IP Router Network
NSERC	Naval Systems Engineering Resource Center
NSM	Network Security Management
NSWC	Naval Surface Warfare Center
NTSP	Navy Training System Plan

O&M	Operation and Maintenance
OA	Operational Assessment
OCO	Overseas Contingency Operation
OEM	Original Equipment Manufacturer
OFP	Operational Flight Program
O-Level	Organizational Level
OLSS	Operational Logistics Support Summary
OM	Operator and Maintenance
OM&N	Operations & Maintenance, Navy
OMB	Office of Management and Budget
ONI	Office of Naval Intelligence
OPN	Other Procurement, Navy
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	OPNAV Instruction
OPSEC	Operations Security
OS	Operation Specialist
PARTS	PSD Automated Reporting and Tracking System
PAXIL	Patuxent River System Integration Lab
PCA	Physical Configuration Audit
PDR	Preliminary Design Review
PDUSD	Principal Deputy Under Secretary of Defense
PEO	Program Executive Office
PEO-IWS	PEO Integrated Warfare Systems
PEP	Project Engineering Plan
PESHE	Programmatic Environmental, Safety, and Occupational Health Evaluation
PID	Pre-flight Insertion Data
PIPT	Program IPT
PITCO	Pre-Installation Test and Checkout
PKI	Public-Key Infrastructure
PMA	Program Manager, Air
PMA IPT	Post Mission Analysis IPT
PMW	Program Manager Warfare
PO	Program Office
POA&M	Plan of Action and Milestones
POR	Program of Record
PORSI	POR Site Inventory
PQT&E	Product Qualification Test and Evaluation
PRR	Production Readiness Review
PSD	Program Support Data
QA	Quality Assurance
QRG	Quick Reference Guide
RAAF	Royal Australian Air Force
RAM	Reliability, Availability, and Maintainability
RCM	Reliability Centered Maintenance
RDT&E	Research, Development, Test, and Evaluation
REQPRO	RequisitePro
ROVER	Remotely Operated Video Enhanced Receiver
RQM	Rational Quality Manager
RTM	Requirements Traceability Matrix

SABAR	System Asset Based Availability and Reliability Database
SAE	System Architecture Engineering
SAILOR	SPAWAR Acquisition Integrated Logistics Online Repository
SAM	System Administrator Manual
SAT	Satellite
SATCOM	Satellite Communications
SCI	Sensitive Compartmented Information
SCLISIS	Ship Configuration and Logistics Support Information System
SCM	Software Configuration Management
SDD	Software Design Document
SECNAV	Secretary of the Navy
SECNAVINST	Secretary of the Navy Instruction
SETR	Systems Engineering Technical Review
SHF	Super High Frequency
SIE	Single Information Environment
SIP	System Identification Profile
SIPRNet	Secret IP Router Network
SIT	System Integration Test
SITE	System Integration Test and Evaluation
SITREP	Situation Report
SME	Subject Matter Expert
SOM	System Operator's Manual
SoS	System of Systems
SOVT	System Operational Verification and Test
SOW	Statement of Work
SPAWAR	Space and Naval Warfare Systems Command
SPAWARINST	SPAWAR Instruction
SPEG	SOVT Preparation and Execution Guide
SQL	Structured Query Language
SRR	System Requirements Review
SSC	SPAWAR Systems Center
SSG	System Setup Guide
SSPP	Systems Safety Program Plan
SSS	System Subsystem Specifications
STANAG	Standardization Agreement
STIG	Security Technical Implementation Guide
SUM	Software User Manual
SVD	Software Version Document
SWaP	Size, Weight and Power
SyRS	Systems Requirement Specification
T&E	Test and Evaluation
TacMASS	TacMobile Acoustic Support System
TacMobile	Navy Tactical Mobile
TAS	TacMobile Architecture Simplification
TCDL	Tactical Common Data Links
TEMP	Test and Evaluation Master Plan
TIM	Technical Interchange Meeting
TME	Tactical Mission Extraction
TMFG	TacMobile Field Guide

TMMP	Technical Manual Management Plan
TMS	Tactical Mission Software
TMSIL	TacMobile System Integration Lab
TOC	Tactical Operations Center
TPOC	Technical Point Of Contact
TRR	Test Readiness Review
TS	Top Secret
TSCOMM	Tactical Support Communications
TSIP	Training System Installation Plan
TSN	Trusted Systems and Networks
UHF	Ultra High Frequency
ULSS	User's Logistics Support Summary
VM	Virtual Machine
VTC	Video Teleconference
XML	Extensible Markup Language