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PERFORMANCE WORK STATEMENT

for

Air Command & Control and Sensor Netting Portfolio Training



December 2020

Prepared For

Program Manager, Air Command & Control and Sensor Netting (PM AC2SN)

Program Executive Officer Land Systems (PEO LS)

2200 Lester St.

Quantico, VA 22134-6050

Record of Changes

Change Number	Date	Reason for Change

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1 SCOPE

This Performance Work Statement (PWS) defines the effort required to analyze, design, develop, implement, evaluate, support, and manage training products and deliver training for the Program Manager, Air Command & Control and Sensor Netting (PM AC2SN) portfolio. It includes associated Subject Matter Expertise (SME) and program management requirements to support this effort.

1.1 Background

The mission of PM AC2SN is to serve as the central agent for the research, development, production, deployment and life cycle management of Aviation Command and Control (AC2) systems for the Marine Corps Fleet Marine Forces (FMF) and Supporting Establishments (SE) in accordance with the Department of Defense (DoD) acquisition process per DODI 5000.02. The PM AC2SN portfolio includes the Common Aviation Command and Control System (CAC2S), Theater Battle Management Core Systems (TBMCS), the Composite Tracking Network (CTN), the interfaces of these programs, and the evolution of these programs and emerging AC2 requirements.

2 APPLICABLE DOCUMENTS

Training Contract Data Requirements List (CDRLs) developed by the Original Equipment Manufacturer (OEM), documentation updated for all Engineering Change Proposals (ECPs), and any other documents that are relevant to training, to include, but not be limited to, the Technical Manuals (TMs), Commercial Off the Shelf (COTS) Manuals, and other relevant documents, will be provided to the Contractor. The Government will provide additional reference documents and updated reference material as needed to complete work or analysis applicable to this PWS.

2.1 Handbooks (Guidance Only)

 MIL-HDBK-29612/2A. Instruction Systems Development/Systems Approach to Training and Education (SAT&E)

2.2 Other Government Documents and Publications

- NAVMC 1553.1A. Marine Corps Instructional Systems Design/Systems Approach to Training and Education Handbook
- MCO 1553.2B. Management of Marine Corps Formal Schools and Training Detachments
- Federal Standard Mandatory Compliance 1, Defense Federal Acquisition Regulation Supplement Clause 252.204-7012 (Safeguarding Unclassified Controlled Technical Information) Version 2.0 August 2015
- Federal Standard Mandatory Compliance 2, NIST Special Publication 800-171,
 Revision 1, Protecting Controlled Unclassified Information in Nonfederal Systems and
 Organizations
- Federal Standard Technical Evaluation Criteria 1, NIST Special Publication 800-171A, Assessing Security Requirements for Controlled Unclassified Information
- NIST Special Publication 800-53

• Federal Information Processing Standards (FIPS) 140-2

2.3 System and Other PMO Documentation

- System documentation will be provided to the Contractor for the AC2SN portfolio including, but not limited to, the items found in Appendix B
- Contractor CUI-SSP Template 20Nov2018-final
- DoD Guidance for Reviewing System Security Plans and the NIST SP 800-171 Security Requirements Not Yet Implemented Exhibit(s)

3 REQUIREMENTS

3.1 General Requirements

The Contractor shall analyze, design, develop, implement, evaluate, support, and manage the PM AC2SN portfolio training products and deliver training in accordance with NAVMC 1553.1A Marine Corps Instructional Systems Design/Systems Approach to Training and Education Handbook; MCO 1553.2B Management of Marine Corps Formal Schools and Training Detachments; Air Command & Control and Sensor Netting (AC2SN) Configuration Management Plan dated March 2018; Marine Corps' College of Distance Education and Training Design and Development Standards (CDET DDS).

The Contractor may be required to deliver the following training products and delivery methods, including, but not limited to:

- New Equipment Training (NET) (paragraph 3.4.4.3)
- Delta Training (paragraph 3.4.4.4)
- On-Site Familiarization Training (paragraph 3.4.4.5)
- Over-the-shoulder Refresher Training (paragraph 3.4.4.6)

Further guidance on requirements of each training product/delivery method are outlined in Appendix C. The Contractor shall provide SME and program management support in accordance with the detailed requirements of paragraphs 3.2 below.

3.2 Detailed Requirements

3.2.1 Data Deliverables

The Contractor shall submit and deliver all data deliverables in accordance with the DD Form 1423 Contract Data Requirements List (CDRL).

3.2.2 Security Requirements

This contract will require the contractor to have a Secret Facility Clearance and will require certain contractors to obtain and maintain classified access eligibility. The contractor shall have a valid Secret Facility Clearance prior to classified performance. The prime contractor and all subcontractors (through the prime contractor) shall adhere to all aspects of DoD Directive 5220.22-M and DoD Manual 5220.22 Volume 2. All personnel identified to perform on this contract shall maintain compliance with DoD, Department of the Navy, and Marine Corps Information and Personnel Security Policy to include completed background investigations (as required) prior to

classified performance. This contract shall include a DoD Contract Security Classification Specification (DD-254) as an attachment.

Facility Security Officers (FSOs) are responsible for notifying the Marine Corps System Command (MCSC) AC/S G-2 Personnel Security Office (PERSEC Office) via encrypted e-mail to MCSC_Security@usmc.mil or 703-432-3374/3952 if any contractor performing on this contract receives an unfavorable adjudication. The FSO must also notify the PERSEC Office within 24 hours of any adverse/derogatory information associated with the 13 Adjudicative Guidelines concerning any contractor performing on this contract, if they have been issued a Common Access Card (CAC), a MCSC Building Badge, and/or granted classified access. The FSO shall notify the Government (written notice) within 24 hours of any contractor personnel added or removed from the contract that have been issued a CAC and/or a MCSC Building badge/access.

3.2.3 Marine Corps Base Quantico (MCQB) Installation Gate Access

Access onto MCBQ requires the use of an active DoD Personally Identifiable Verification (PIV) credential (i.e. CAC, Military Dependent Identification Card, Military Retiree Identification Card, Transportation Worker Identification Credential) that can be scanned at all installation gates prior to being granted access onto the installation. Contractors/vendors who require routine/reoccurring access to MCBQ and are not receiving a CAC in support of this contract effort (or do not already have an acceptable PIV), are eligible for a Defense Biometric Identification (DBID) Card. DBID cards may be obtained at no cost from the MCBQ Provost Marshall's Office after coordination with the Contracting Officer Representative (COR) and the MCSC, AC/S G2, Physical Security Team (PHYSEC Team). To obtain a DBID card, the vendor shall submit a completed Vendor Screening Form (obtained from the COR or the PHYSEC Team) via: encrypted email to mese physicalsecurity@usmc.mil, faxing to 703-432-3481 (attn.: Physical Security), or a hand delivered typed hard copy to the PHYSEC Team at Building 2200. The information on the Vendor Screening Form will be used by MCBQ Provost Marshall's Office to conduct a background check. The vendor will be notified of the results of their vendor screening background check by the PHYSEC Team and/or COR. Vendors who do not meet the eligibility standards will not be cleared for access onto MCBQ or MCSC. Vendors who meet the eligibility standards, and receive a favorable response to the background check, will be required to complete the DBID registration process using a website address/link that will be provided by the PHYSEC Team or COR. Once the Vendor has successfully completed the DBID registration process, a registration code will be provided. The registration code shall be printed, and hand carried by the Vendor to MCBO Provost Marshall's Office, Bldg. 2043, between the hours of 0700 - 1500, in order to be issued the DBID card. DBID cards will be issued for a period of three (3) years regardless of contract expiration. For additional questions regarding submission of the Vendor Screening Form or access requirements, contact the PHYSEC Team at mcsc physicalsecurity@usmc.mil or call 703-432-3964/3909.

3.2.4 Marine Corps Systems Command Facility Access

All contractor personnel accessing MCSC facilities/buildings must maintain compliance with access control policy identified within MCSCO 5530.2A - Access Control Order. Access into MCSC facilities requires use of a Command facility access badge issued by the PHYSEC Team. Contractor personnel assigned to sit within MCSC spaces with a dedicated (by name) workspace will be considered "on-site" contractors and may be issued a Green badge with the holder's

photograph. Contractor personnel that frequently visit (three or more times a week) MCSC spaces will be considered "off-site" contractors and may be issued an Orange badge with the holder's photograph. Issuance of a MCSC facility access badge shall be initiated by the COR using the Badge Request process hosted on the MCSC VIPER website. Vendors may be issued a MCSC facility badge prior to issuance of a CAC or DBID card; however, receipt of an unfavorable response will result in deactivation of any currently issued MCSC facility access badge. All other vendors supporting this contract who do not meet the "Green" or "Orange" badge standards shall be required to have their visit to MCSC notified in advance using the MCSC Visitor Notification System hosted on the MCSC VIPER website. Visitor Notifications shall only be submitted by a MCSC sponsor with access to the MCSC VIPER website. Visitors who arrive at MCSC facilities without an approved Visitor Notification on file shall be turned away unless a MCSC escort with a White, Powder Blue, or Green badge can be reasonably coordinated. Vendors possessing an Orange badge are not authorized to escort visitors without an approved Visitor Notification on file. All Green and Orange badges will be programmed with unescorted access into approved MCSC facilities Monday through Friday from 0630-1700. Unescorted access outside of these times to include federal holidays, furloughs, shutdowns, etc. is restricted. For additional questions regarding MCSC facility access requirements, contact the PHYSEC Team at mcsc physicalsecurity@usmc.mil or call 703-432-3964/3909.

3.2.5 MCEN Laptop Computer Requirement

The Contractor shall provide three (3) laptops to be reimaged by the Government in order to connect to the Marine Corps Enterprise Network (MCEN). To accomplish the tasks in the PWS, the Contractor shall acquire laptops authorized to be attached to the MCEN. The list of authorized computers can be obtained from MCSC G-6 upon request. The Contractor shall provide the Government with access to the identified computers for the Government to load the required software that is necessary to accomplish the tasks in this PWS. Any additional software will be provided by the Government if the Government has licenses available. Once the period of performance for the contract is complete, the government will reimage the laptops back to commercially usable equipment.

3.2.6 Travel

In the execution of this effort, the Contractor shall travel to Contiguous United States (CONUS) and Outside Contiguous United States (OCONUS) areas as designated by the AC2SN Program Management Office (PMO). The travel will support both technical and management review meetings, preparation/conduct of training, and other functions as directed by the AC2SN PMO.

3.2.7 Common Access Card (CAC) Requirement

The COR will identify and only approve those contractor employees performing on this contract that require CACs to perform their job function. In accordance with Headquarters Marine Corps issued guidance relative to Homeland Security Presidential Directive – 12 (HSPD-12), all personnel must meet eligibility criteria to be issued a CAC. To meet the eligibility criteria, contractor employees requiring a CAC must obtain and maintain a favorably adjudicated Personnel Security Investigation (PSI). Prior to authorizing a CAC, the employee's Joint Personnel Adjudication System (JPAS) record must indicate a completed and favorably adjudicated PSI or (at a minimum) that a PSI has been submitted and accepted (opened). The minimum acceptable investigation is a T-1 or a National Agency Check with Written Inquiries

(NACI). If a contractor employee's open investigation closes and is not favorably adjudicated, the CAC must be immediately retrieved and revoked. CACs are not issued for convenience.

Facility Security Officers (FSOs) are responsible for notifying the MCSC AC/S G-2 PERSEC Office at 703-432-3490/3952 if any contractor performing on this contract receives an unfavorable adjudication after being issued a CAC. The FSO shall also immediately notify the PERSEC Office of any adverse/derogatory information associated with the 13 Adjudicative Guidelines concerning any contractor issued a CAC, regardless of whether a JPAS Incident Report is submitted.

Each CAC is issued with a "ctr@usmc.mil" e-mail account that the individual contractor is responsible to keep active by logging in on a regular basis (at least twice a month), sending an e-mail and clearing any unneeded e-mails. Contractors issued a CAC are prohibited from "auto-forwarding" e-mail from their .mil e-mail account to their .com e-mail account. If the "ctr@usmc.mil" e-mail account is not kept active, G-6 will deactivate the account and the CAC will lose its functionality. Contractor employees shall solely use their government furnished "ctr@usmc.mil" e-mail accounts for work supporting the USMC, conducted in fulfillment of this contract, and shall not use a contractor supplied or personal e-mail account to conduct For Official Use Only (FOUO) government business. The use of a contractor or personal e-mail account for contractor business or personal use is allowed, but only when using cellular or a commercial internet service provider.

If a contractor loses their eligibility for a CAC due to an adverse adjudicative decision, they have also lost their eligibility to perform on MCSC contracts.

3.2.8 Marine Corps Enterprise Network (MCEN) Computer Access

Contractor personnel accessing MCSC Computer systems shall maintain compliance with United States Marine Corps Enterprise Cybersecurity Manual 007 Resource Access Guide. Contractor personnel shall submit a DD 2875, and completion certificates for the CYBERC course located on MarineNet located at https://www.marinenet.usmc.mil. The CYBERC course consist of the DOD Cyber Awareness Challenge and Department of the Navy Annual Privacy Training. Contractors will have to create a MarineNet account to acquire the required training.

MCEN IT resources, if provided, are designated FOUO and other limited authorized purposes. DoD military, civilian personnel, consultants, and contractor personnel performing duties on MCEN information systems may be assigned to one of three (3) position sensitivity designations.

- 1) ADP-I (IT-1): Favorably adjudicated T-5, T5R, Single Scope Background Investigation (SSBI)/SSBI Periodic Reinvestigation (SBPR)/SSBI Phased Periodic Reinvestigation (PPR)
- 2) ADP-II (IT-2): Favorably adjudicated T-3, T3R, Access National Agency Check and Inquiries (ANACI)/ National Agency Check with Law and Credit (NACLC)/Secret Periodic Review (S-PR)
- 3) ADP-III (IT-3): Completed T-1, National Agency Check with Inquiries (NACI)

All privileged users (IT-1) must undergo an SSBI regardless of the security clearance level required for the position. Privileged users must maintain the baseline Cyberspace Workforce Information Assurance Technical (IAT) or Information Assurance Manager (IAM) relating to the

position being filled. Privileged users are defined as anyone who has privileges over a standard user accounts, as in system administrators, developers, network administrators, code signing specialist, and Service Desk technicians.

All MCEN users must read, understand, and comply with policy and guidance to protect classified information and Controlled Unclassified Information (CUI), and to prevent unauthorized disclosures in accordance with United States Marine Corps Enterprise Cybersecurity Manual 007 Resource Access Guide and CJCSI 6510.01F.

MCEN Official E-mail usage — MCEN IT resources are provided FOUO and other limited authorized purposes. Authorized purposes may include personal use within limitations as defined by the supervisor or the local Command. Auto forwarding of e- mail from MCEN-N to commercial or private domains (e.g., Hotmail, Yahoo, Gmail, etc.) is strictly prohibited. E-mail messages requiring either message integrity or non-repudiation are digitally signed using DoD Public Key Infrastructure (PKI). All e-mail containing an attachment or embedded active content must be digitally signed.

MCEN users will follow specific guidelines to safeguard CUI, including Personally Identifiable Information (PII) and FOUO. Non-official e-mail is not authorized for and will not be used to transmit CUI to include PII and Health Insurance Portability and Accountability Act (HIPAA) information. Non-official e-mail is not authorized for official use unless under specific situations where it is the only mean for communication available to meet operational requirements. This can occur when the official MCEN provided e-mail is not available but must be approved prior to use by the Marine Corps Authorizing Official (AO).

All Contractor personnel shall use DoD authorized PKI certificates to encrypt e-mail messages if they contain any of the following:

- 1. Information that is categorized as FOUO or Sensitive but Unclassified (SBU).
- 2. Any contract sensitive information that normally would not be disclosed to anyone other than the intended recipient.
- 3. Any privacy data, PII, or information that is intended for inclusion in an employee's personal file or any information that would fall under the tenets of MSGID: DOC/5 USC 552A. Personal or commercial e-mail accounts are not authorized to transmit unencrypted CUI or PII.
- 4. Any medical or health data, to include medical status or diagnosis concerning another individual.
- 5. Any operational data regarding status, readiness, location, or deployment of forces or equipment.

3.2.9 Contractor assets connectivity to the MCEN

The Contractor shall comply with MCENMSG-Unification 003-14 ENABLING CONTRACTOR ASSET CONNECTIVITY TO THE MCEN. The Contractor will temporarily transfer the Contractor owned laptops to the MCSC G-6, Information Technology Asset Management (ITAM) department to have the MCEN images places on each laptop before it is authorized to connect to the MCEN.

All Contractor owned laptops must meet or exceed the USMC laptop specifications. A list of laptops authorized to be attached to the MCEN can be obtained from MCSC G-6 upon request.

Upon completion of the contract or at such time as the Contractor reclaims the asset from the USMC, non-Government owned internal\external hard drives shall be reimaged by the U.S. Government. Once the hard drives have been reimaged, the laptops\assets will be returned to the Contractor. For additional questions regarding current system specifications contact the MCSC, ITAM lead at (703) 432-4396.

3.2.10 Inventory of Contracted Services

Services Contract Reporting (SCR) requirements apply to this contract. The contractor shall report required SCR data fields using the SCR section of the System for Award Management (SAM) at following web address: https://sam.gov/SAM/. Reporting inputs 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://sam.gov/SAM/.

3.2.11 Trademark Rights

The contractor shall not assert any claim, in any jurisdiction, based on trademark or other name or design-based causes of action that are based on rights the contractor believes it has in the term(s) [contracting officers shall list term(s) (typically the assigned nomenclature, or portions thereof)] (the "Designation(s)"), against the Government or others authorized by the Government to use the Designation(s) (including the word(s), name, symbol, or design) acting within the scope of such authorization (i.e. claims for trademark infringement, dilution, trade dress infringement, unfair competition, false advertising, palming off, passing off, or counterfeiting). Such authorization shall be implied by the award of a Government contract to any party for the manufacture, production, distribution, use, modification, maintenance, sustainment, or packaging of the products and services identified under this contract, and the scope of such implied authorization is defined as the use of the Designation(s) in performance under such contract by the prime contractor and its subcontractors and suppliers at any tier. In all other cases, the scope of the authorization will be defined by the Government in writing.

3.2.12 Protection of Government Systems/Information/Property

The Contractor shall be responsible for safeguarding all Government systems, information, and property provided for Contractor use. The Contractor shall use the reference documents listed in section 2.2 of this PWS.

1. System Security Plan and Plans of Action and Milestones (SSP/POA&M) Reviews

- a) Within thirty (30) days of contract award, the Contractor shall make its System Security Plan(s) (SSP(s)) for its covered contractor information system(s) available for review by the Government at the contractor's facility. The SSP(s) shall implement the security requirements in Defense Federal Acquisition Regulation Supplement (DFARS) clause 252.204-7012, which is included in this contract. The Contractor shall fully cooperate in the Government's review of the SSPs at the Contractor's facility.
- b) If the Government determines that the SSP(s) does not adequately implement the

requirements of DFARS clause 252.204-7012 then the Government shall notify the Contractor of each identified deficiency. The Contractor shall correct any identified deficiencies within thirty (30) days of notification by the Government. The contracting officer may provide for a correction period longer than thirty (30) days and, in such a case, may require the Contractor to submit a Plan of Actions and Milestones (POA&M) for the correction of the identified deficiencies. The Contractor shall immediately notify the contracting officer of any failure or anticipated failure to meet a milestone in such a POA&M.

- c) Upon the conclusion of the correction period, the Government may conduct a followon review of the SSP(s) at the Contractor's facilities. The Government may continue to conduct follow-on reviews until the Government determines that the Contractor has corrected all identified deficiencies in the SSP(s).
- d) The Government may, in its sole discretion, conduct subsequent reviews at the Contractor's site to verify the information in the SSP(s). The Government will conduct such reviews at least every three (3) years (measured from the date of contract award) and may conduct such reviews at any time upon thirty (30) days' notice to the Contractor.

CDRL B007, System Security Plan

2. Compliance to NIST 800-171

- a) The Contractor shall fully implement the CUI Security Requirements (Requirements) and associated Relevant Security Controls (Controls) in NIST Special Publication 800-171 (Rev. 1) (NIST SP 800-171), or establish a SSP(s) and POA&Ms that varies from NIST 800-171 only in accordance with DFARS clause 252.204-7012(b)(2), for all covered contractor information systems affecting this contract.
- b) Notwithstanding the allowance for such variation, the contractor shall identify in any SSP and POA&M their plans to implement the following, at a minimum:
 - (1) Implement Control 3.5.3 (Multi-factor authentication). This means that multi-factor authentication is required for all users, privileged and unprivileged accounts that log into a network. In other words, any system that is not standalone should be required to utilize acceptable multi-factor authentication. For legacy systems and systems that cannot support this requirement, such as CNC equipment, etc., a combination of physical and logical protections acceptable to the Government may be substituted.
 - (2) Implement Control 3.1.5 (least privilege) and associated Controls, and identify practices that the contractor implements to restrict the unnecessary sharing with, or flow of, covered defense information to its subcontractors, suppliers, or vendors based on need-to-know principles.
 - (3) Implement Control 3.1.12 (monitoring and control remote access sessions) Require monitoring and controlling of remote access sessions and include mechanisms to audit the sessions and methods.
 - (4) Audit user privileges on at least an annual basis.

(5) Implement:

- i. Control 3.13.11 (FIPS 140-2 validated cryptology or implementation of NSA or NIST approved algorithms (i.e. FIPS 140-2 Annex A: AES or Triple DES) or compensating controls as documented in a SSP and POA&M); and,
- ii. NIST Cryptographic Algorithm Validation Program (CAVP) (see https://csrc.nist.gov/projects/cryptographic-algorithm-validation-program);
- (6) Implement Control 3.13.16 (Protect the confidentiality of CUI at rest) or provide a POA&M for implementation which shall be evaluated by the Navy for risk acceptance.
- (7) Implement Control 3.1.19 (encrypt CUI on mobile devices) or provide a plan of action for implementation which can be evaluated by the Government Program Manager for risk to the program.

3. Cyber Incident Response:

- a) The Contractor shall, within fifteen (15) days of discovering the cyber incident (inclusive of the 72-hour reporting period), deliver all data used in performance of the contract that the Contractor determines is impacted by the incident and begin assessment of potential warfighter/program impact.
- b) Incident data shall be delivered in accordance with the Department of Defense Cyber Crimes Center (DC3) Instructions for Submitting Media available at http://www.acq.osd.mil/dpap/dars/pgi/docs/Instructions_for_Submitting_Media.docx. In delivery of the incident data, the Contractor shall, to the extent practical, remove contractor-owned information from Government covered defense information.
- c) If the Contractor subsequently identifies any such data not previously delivered to DC3, then the Contractor shall immediately notify the contracting officer in writing and shall deliver the incident data within ten (10) days of identification. In such a case, the Contractor may request a delivery date later than ten (10) days after identification. The contracting officer will approve or disapprove the request after coordination with DC3.

CDRL B008, Cyber Incident Reporting

4. Naval Criminal Investigative Service (NCIS) Outreach

The Contractor shall engage with NCIS industry outreach efforts and consider recommendations for hardening of covered contractor information systems affecting DON programs and technologies.

5. NCIS/Industry Monitoring

a) In the event of a cyber incident or at any time the Government has indication of a vulnerability or potential vulnerability, the Contractor shall cooperate with NCIS, which may include cooperation related to: threat indicators; pre-determined incident information derived from the Contractor's infrastructure systems; and the continuous provision of all

- Contractor, subcontractor or vendor logs that show network activity, including any additional logs the contractor, subcontractor or vendor agrees to initiate as a result of the cyber incident or notice of actual or potential vulnerability.
- b) If the Government determines that the collection of all logs does not adequately protect its interests, the Contractor and NCIS will work together to implement additional measures, which may include allowing the installation of an appropriate network device that is owned and maintained by NCIS, on the Contractor's information systems or information technology assets. The specific details (e.g., type of device, type of data gathered, monitoring period) regarding the installation of an NCIS network device shall be the subject of a separate agreement negotiated between NCIS and the Contractor. In the alternative, the Contractor may install network sensor capabilities or a network monitoring service, either of which must be reviewed for acceptability by NCIS. Use of this alternative approach shall also be the subject of a separate agreement negotiated between NCIS and the Contractor.
- c) In all cases, the collection or provision of data and any activities associated with this statement of work shall be in accordance with federal, state, and non-US law.

3.3 Project Management

3.3.1 Program Management

The Contractor shall establish and maintain program management practices throughout the life of this contract. Program management practices shall include, but are not limited to, providing visibility to the Government into the Contractors' organization and techniques used in managing the program, including subcontractor and data management. The Contractor shall plan and monitor the execution of all tasks and shall maintain regular communications to keep the Government apprised of all issues and status. The Contractor shall submit a Monthly Status Report (MSR) to the Government which documents organizational structure, activities planned and completed, and subcontractor activities and data management activities.

CDRL B001, Monthly Status Report (MSR)

3.3.2 Post Award and Training Guidance Conference

The Contractor shall host a Post Award and Training Guidance Conference at the Contractor's facility no later than 14 calendar days after contract award. The purpose of the conference is to review the Contractor's proposed Contract Management Plan and initial Training Program Plan (TPP) and to achieve a clear and mutual understanding of all contract requirements and identify and resolve potential problems. As part of the conference, the Contractor shall introduce key personnel and present program implementation processes to be utilized under this contract.

CDRL B002, Meeting Minutes

CDRL B003, Meeting Agenda

CDRL B004, Briefing Material

CDRL F001, Training Program Plan

3.3.3 Meetings, Formal Reviews, Working Groups, and Technical Reviews

The Contractor shall develop a meeting agenda, briefing material, and meeting minutes associated with the analysis, design, development and delivery of training products and instruction. Action Item documentation, including assignment of responsibilities and due dates, shall be established prior to adjournment of all reviews, and included as part of the review minutes.

CDRL B002, Meeting Minutes

CDRL B003, Meeting Agenda

CDRL B004, Briefing Material

3.3.4 Configuration Control Board (CCB) Support

The Contractor shall participate in the AC2SN CCB and any other programmatic requirements reviews as directed. The Contractor shall receive and assess preliminary ECPs and Change Notices to determine the impact to training materials and the conduct of instruction. The Contractor shall report on the scope of impacts and propose the necessary changes to the design and delivery of training to the Government for approval prior to implementation. The Contractor shall include in the report the required Government Furnished Information (GFI) and resources needed to implement and the expected schedule to complete the changes. The Government will assess the proposed changes and determine if the changes are significant enough to warrant a pilot of the revised materials and instructional delivery. The Contractor shall coordinate with the Government to conduct the pilot as required. Once changes are approved, the Contractor shall revise the training materials to fully incorporated the changes in the training materials.

CDRL B005, Technical Report/Study

3.3.5 Data Management

The Contractor shall support the Government in management of all training Project documentation and source files within the PKI protected, centralized, unclassified Marine Corps Enterprise Information Technology Services (MCEITS) Data Management System (DMS). All data associated with and developed for the AC2SN PMO under this contract belongs to the Government.

3.3.6 Training Integrated Master Schedule (IMS)

The Contractor shall support the AC2SN PMO schedule data management by developing and maintaining an IMS for training, which identifies both project team tasks and activities as outlined in the TPP, training events, as well as Government reviews and dependent activities. The Contractor shall coordinate with the AC2SN PMO for merging of the Contractor IMS with the AC2SN IMS. This is accomplished by working with AC2SN internal and external activities to ensure that FY21 through FY25 training tasks are identified and linked to Program and Contractor IMSs.

CDRL B006, Training Integrated Master Schedule

3.3.7 AC2SN Program Analysis

As tasked, the Contractor shall provide analysis of design changes and upgrades associated with the AC2SN system Portfolio training products to include new efforts and ECPs. The Contractor

shall recommend documentation and schedule strategies to facilitate critical milestones and provide draft inputs to data requirements and deliverables to enable effective program oversight of AC2SN system fielding and training events.

CDRL B005, Technical Report/Study

3.4 Training Products and Services

The Contractor shall provide technical and analytical services, instructional support, and deliver Operator and Maintainer training for the AC2SN portfolio. The Contractor shall review, analyze, and resolve training deficiencies, update program training curriculum and documentation, analyze training delivery strategies, provide inputs to project schedules, resolve issues with AC2SN training material, and deliver onsite training, as described in the following paragraphs. The Contractor shall centrally manage and use MIL-HDBK-29612/2A, Instructional Systems Development/Systems Approach to Training and Education and NAVMC 1553.1, Systems Approach to Training Users Guide as guidance and deliver curriculum products in accordance with MCO 1553.2B Management of Marine Corps Formal Learning Centers (FLC) and Training Detachments.

Operator training should enable the trainee to emplace, displace, operate the system, subsystems, interfacing systems, and equipment controls; execute diagnostic tests and interpret results and perform routine preventive maintenance checks and services.

Maintenance training shall provide students with a knowledge of functional systems theory and should enable the students to emplace, displace, and perform preventive/corrective maintenance tasks required for Crew/Operator, to include System Administration, Field, Fleet, and Sustainment level maintenance to include the following tasks; execute hardware and software diagnostic tests and interpret results, determine if the system/subsystem is malfunctioning or not, isolate and locate malfunctions to the Line Replaceable Unit (LRU), remove defective components and install LRUs and major components and install software updates.

The training shall emphasize hands-on instruction for Operator/Maintainer training and assess student performance.

For full explanation of each training evolution specified for this PWS, see Appendix C.

3.4.1 Training Program Management

3.4.1.1 Training Personnel

3.4.1.1.1 Contractor Training Manager

The Contractor shall appoint a Training Manager who shall be the single Point of Contact (POC) for training, courseware and product development, revisions, updates, and implementation matters. The duties of this Training Manager shall include ensuring the training products are instructionally sound, developed to Instructional Design principles, revised, and updated to support the training outcomes. The Training Manager ensures the training products incorporates curriculum, design and/or procedural changes, ensures instructors are adhering to the training schedule and lesson plans, and coordinates and supervises all training events. The Training Manager shall have a background in the development and presentation of military training programs. In the event the Training Manager is replaced, the replacement must be approved by the Government.

3.4.1.1.2 Curriculum Developer/Instructor Personnel Requirements

NET is often the first time Marines and Sailors are exposed to an acquisition program office and the new system. NET Team instructors represent the PMO and must always look and conduct themselves in a professional manner during training and when in the presence of trainees. At no time shall training team personnel express personal bias towards the Marine Corps, the Navy, the unit, program office, personnel, or the system being trained. The Contractor shall observe these considerations during its personnel selection process and management.

The Contractor shall appoint a single Lead Operator Curriculum Developer/Instructor and a single Lead Maintainer Curriculum Developer/Instructor. Lead Operator and Maintainer Curriculum Developers/Instructors shall have demonstrated experience as defined below and have completed appropriate formal training in the analysis, design, development, and implementation of military instruction. Appropriate formal training is defined as successful completion of military curriculum developer courses and completion of a Formal School Instructor Course or equivalent industry recognized technical training instructor program. A formal Education or Instructional Design degree is desired but not required.

All Instructors shall have completed a Formal School Instructor Course or equivalent industry recognized technical training instructor program. Operator Instructors shall have demonstrated experience as defined below and be knowledgeable in the technical language and terms associated with the employment and operation of PM AC2SN's portfolio of systems. Maintenance Instructors shall have demonstrated experience as defined below and be familiar with Marine Corps and Navy maintenance practices and preventive and corrective maintenance tasks associated with the AC2SN's portfolio of systems.

The Contractor shall designate a primary and alternate instructor for each period of instruction planned in support of training and ensure the cadre of instructors is adequate to support concurrent, dispersed training events and curriculum management activities as described below. In the event a Curriculum Developer/Instructor is to be replaced, the replacement must be approved by the Government.

3.4.1.1.2.1 Operator Instructor Team Qualifications

In addition to the skills above, the Operator Instructor Team shall meet the following qualifications.

Lead Operator Instructor:

- Previously certified as a Master instructor of military training with the subject of the training in Marine Corps tactical data systems
- Previously certified as a MAWTS-1 C3 Weapons and Tactics Instructor (WTI)
- Experience with the operation of Marine Air Command and Control Systems (MACCS)
 family of systems and units (CTN, CAC2S, TBMCS, Advanced Field Artillery Data
 System(AFATDS))
- Experience with the employment of MACCS agencies
- Experience with leading curriculum development in a formal training environment

The collective capability of the Operator Instructor Team (Primary and Alternate instructors) shall have technical expertise in the following:

- Previously designated Senior Instructor per MAWTS-1 C3 Course Catalog or other Formal School Instructor
- Previously certified as a Joint Interface Control Officer
- Experience and knowledge of operating within a Sensor Netting System
- Experience as a Senior Air Director or Crew Chief
- Previously certified as a MAWTS-1 C3 WTI
- Previously designated as a radar watch supervisor
- Experience as an Approach/Arrival Controller and Final Controller

3.4.1.1.2.2 Maintainer Instructor Team Qualifications

In addition to the skills above in section 3.4.1.1.2, the Maintainer Instructor Team shall meet the following minimum experience qualifications.

Lead Maintainer Instructor:

- Previously certified as a Master instructor of military training with the subject of the training in Marine Corps tactical data systems
- Experience with the maintenance and configuration of MACCS family of systems and units (CTN, CAC2S, TBMCS, AFATDS)
- Experience with leading curriculum development in a formal training environment

The collective capability of the Maintainer Instructor Team (Primary and Alternate instructors) shall have technical expertise in the following:

- Minimum of three (3) years of experience in the maintenance and configuration MACCS family of systems
 - o Experience as a MACCS network administrator
 - o Experience integrating MACCS sensors
 - o Experience configuring and maintaining radios, antennas, and other telecommunication equipment used within the MACCS
- Experience with the Tactical Data Framework (TDF) setup and integration
- Minimum of two years of experience configuring and maintaining tactical data links to include Link 16 and Joint Range Extension Application Protocols A, B, and C
- Experience in Cisco router and switch hardware and Internetwork Operating System, (CISCO certifications are preferred)
- Experience managing operating systems within a virtual environment

 Minimum of four years of experience with Radio Frequency propagation and fundamental characteristics of the electromagnetic spectrum

3.4.2 Training Program Plan (TPP)

The Contractor shall prepare and deliver a TPP which describes the Contractor's approach to completing the revisions and updates of Operator and Maintainer training products and the coordination for and conduct of planned training events. The Government will use the TPP to assess the soundness of the Contractor's approach. Per the CDRL, the plan should address Contractor training organizational structure, organizational interfaces with the Government, training development methodology, key Contractor training personnel, Contractor training development Plan of Action and Milestones (POA&M), Contractor activities, Contractor training deliverable schedule (draft and final), scheduled meetings, In-Process Review (IPR) schedule, level of effort, training related travel, and Contractor requested data for all training deliverables. The TPP shall identify where training related information can be found in the Contractor training IMS provided to the Government. The plan shall be a living document and updated by the Contractor as per the CDRL. The Contractor shall prepare a TPP in accordance with CDRL F001.

CDRL F001, Training Program Plan

3.4.3 Training Materials Development

3.4.3.1 Learning Analysis Report (LAR)

The Contractor shall employ a systematic approach to analyze individual, team, and collective job performance requirements in order to update the job task data necessary to develop new training products or update existing training curriculum and materials. The Contractor shall update and deliver a revised Critical Training Tasks List(s) (CTTL) in accordance with CDRL F002 that identifies the job tasks, sub-tasks, and performance steps necessary to operate, maintain, and support the AC2SN systems.

Subsequently, the Contractor shall use the CTTL to update the LAR which identifies the required knowledge, skills, and attitudes (KSAs) necessary to achieve successful task completion. When new job tasks have been identified or significant changes made to preapproved job tasks, the Contractor shall include and update task selection criteria (difficulty, importance, and frequency) and the conditions and standards from which successful performance is measured. The revised LAR will contain all the critical tasks with associated Operator and Maintainer terminal and enabling learning objectives, establish performance criteria related to tasks/objectives, and sequence objectives for training. Each task and associated terminal and enabling learning objective will have an alpha-numeric numbering scheme to support traceability and curriculum management.

CDRL F002, Critical Training Tasks List

CDRL F003, Learning Analysis Report (LAR)

3.4.3.2 Instructional Media Requirements Document

The Contractor shall develop or update the existing Instructional Media Requirements Document (IMRD) to address changes identified in the revised LAR. The Contractor shall continue to employ AC2SN instructional methods, learning events, training tools/aids, and media previously

used for instructional delivery. However, if changes to current method and media are required to accommodate new or revised training objectives, the Contractor shall describe their methods and media selection methodology, provide all method and media analysis data, and propose primary and alternate methods and media requirements to support instructional delivery of critical training tasks. The Government will review the proposed methods and media approach, and if acceptable to the Government, will provide approval prior to training development. The IMRD shall be delivered in accordance with CDRL F004.

CDRL F004, Instructional Media Requirements Document

3.4.3.2.1 Training Videos

As directed by the COR in accordance with paragraph 3.4.3.2, the Contractor shall develop training videos that will be used to support and/or enhance on the job performance and unit sustainment training (acceptable formats include .mp4, .mov, .flv, .wmv, .avi). The Contractor shall design and develop web-based, professional training videos that will be viewed over the Marine Corps MarineNet Video Services network. The Contractor shall first provide an Instructional Media Design Package to provide the scope, design, and development approach for the video. Upon Government approval, the Contractor shall develop the Instructional Media Package which contains the video products (prototype, final) and all source audio and visual data files required to maintain the videos and provide life cycle support for them. Training videos will be two (2) to seven (7) minutes duration (maximum file size of 500MB and codec .H264), and will ensure the training video points of contact identified therein refer to only the PM AC2SN or Marine Corps Tactical Systems Support Activity (MCTSSA) Help Desk with further issues or concerns.

CDRL F005, Instructional Media Design Package

CDRL F006, Instructional Media Package

3.4.3.3 Training Test Package

As directed by the COR, the Contractor shall develop or update the Training Test Package for each Operator and Maintainer course of instruction following NAVMC 1553.1, Systems Approach to Training Users Guide, and MCO 1553.2B, Management of Marine Corps Formal Schools and Training Detachments. The Contractor shall ensure the test package includes written test items and performance test items for the examination of an individual's KSAs, and achievement of terminal and enabling learning objectives based upon the LAR and Lesson Plans (CDRLs F003 and F008). The Contractor shall update or develop the test bank of knowledgebased test items. Each knowledge-based Enabling Learning Objective shall have a minimum of three (3) test items. The correct response will be indicated for each test item. The test bank will provide traceability from each test item to the enabling and terminal learning objectives and the critical task from which it was derived. The Contractor shall develop a minimum of two (2) independent tests and associated answer key each for the Operator and Maintainer courses. The same question will not be repeated on the two versions of the test. The test items shall be written to evaluate the student's comprehension of knowledge-based learning objectives. These written test items shall consist of multiple choice, matching, and fill-in-the-blank questions. No True-False questions shall be included. The Contractor shall update or develop the performance-based test packages to evaluate the student's ability to perform specific Operator and Maintainer task and subtasks. Performance tests shall be in checklist format and have rubrics for grading

performance. The evaluator copy will contain instructions to the evaluator and student. The student copy shall contain only instructions to the student. The Training Test Package shall be delivered in accordance with CDRL F007.

CDRL F007, Training Test Package

3.4.3.4 Operator and Maintainer Training Master Lesson Files (MLF)

The Contractor shall develop and deliver a MLF for each Operator and Maintainer lesson according to the planned Curriculum Outline of Instruction (COI) and based on changes made to the LAR and IMRD. The Contractor shall update existing Operator and Maintainer lesson materials, if available, and incorporate any new lessons, tasks, knowledge, skills and abilities, learning objectives, supporting content, demonstration and practical application activities, transitions, and media. The Contractor shall deliver each product of the MLF adhering to MCO 1553.2 Management of Marine Corps Formal Schools and Training Detachments, and NAVMC 1553.1 Systems Approach to Training User's Guide. All MLF products shall be packaged by lesson and executable in accordance with CDRL F008.

Each MLF shall contain the information referenced below in sub-paragraphs 3.4.3.4.1 through 3.4.3.4.8.

CDRL F008, Master Lesson Files

3.4.3.4.1 Learning Analysis Worksheet (LAW)

The Contractor shall produce and deliver the LAW. The LAW contains the KSAs required to execute each task associated with that lesson.

3.4.3.4.2 Learning Objective Worksheet (LOW)

The Contractor shall produce and deliver the LOW. The LOW contains the Terminal Learning Objective (TLO) and Enabling Learning Objectives (ELO), Test Items supporting each ELO, and the Methods and Media required to support the ELO.

3.4.3.4.3 Concept Card

The Contractor shall produce and deliver the updated Concept Card. One Concept Card is produced for each lesson. The concept card describes the outcome of the lesson, contains the methods, media, academic hours, student to instructor ratio, TLOs, and ELOs.

3.4.3.4.4 Lesson Plan

The Contractor shall deliver updated Operator/Maintainer lesson plan. The lesson plan shall include course and lesson titles and be numbered to reflect its appropriate sequence in the course of instruction. Header information will include the title and address of the AC2SN PMO. The content of the lesson plan will contain the required instructor notes, graphics, media and time cues, and transitions to support effective, consistent delivery of content and enable student mastery of the learning objectives.

3.4.3.4.5 Trainee Guide

The Contractor shall deliver updated Operator/Maintainer Trainee Guides for each lesson once the Government has approved the Lesson Plan. The student guide shall duplicate the lesson plan, except for all instructor notes, media cues, instructor instructions, and time cues.

3.4.3.4.6 Instructional Media (Slides)

The Contractor shall deliver updated media to support and enhance the learning and transfer of knowledge and skills to the students during classroom lectures and activities. The Contractor shall adhere to MCO 1553.2 and NAVMC 1553.1 Systems Approach to Training User Guide for media development.

3.4.3.4.7 Operation Risk Assessment Worksheets (ORAW)

The Contractor shall develop and deliver the ORAW. The ORAW is produced for each lesson that contains practical application, lab/maintenance exercises, and field/Fleet exercises. The purpose of the ORAW is to identify possible hazards to personnel and equipment, implement controls and mitigation, and document cease training criteria.

3.4.3.4.8 Instructor Preparation Guide (IPG)

The Contractor shall develop and deliver the IPG for each lesson. The IPG is created to provide the instructor with information that is critical to the preparation for implementing the lesson. Detailed information is given so that the instructor understands what resources are necessary for the lesson.

CDRL F008, Master Lesson Files

3.4.3.5 Curriculum Outline of Instruction (COI)

For each training material developed, outlined in paragraph 3.4.3, including subparagraphs, the Contractor shall update the COI. The COI shall identify the training schedule of events and include a breakdown of individual topics indicating the purpose, learning objectives, time allotted for each session, academic hours by type of instruction, instructional materials required, facility and instructor requirements, media and training support equipment, reference materials, type of instruction (practical exercise, demonstration, lecture), tools, and Test, Measurement and Diagnostic Equipment (TMDE) required for each period of instruction. Tailoring of the COI for any individual training event to meet unit needs or unique situational requirements will be preapproved by the Government a minimum of 10 days prior to that event. The Government-approved CTTL, LAR, and MLF (CDRLs F002, F003, and F008) shall be used in the development of the curriculum outline information. The Contractor shall deliver all COIs in accordance with CDRL F009.

CDRL F009, Operator and Maintainer Curriculum Outline of Instruction

3.4.3.6 Paper-Based Job Aids

As directed and based on new or updated Instructional Media Requirements Document (CDRL F004), the Contractor shall develop or update Operator and Maintainer Job Aids. The job aids shall address safety requirements and the completion of critical and/or complex tasks, thus enhancing human performance of mental and physical human-system interfaces. Should a new job aid be required, the Contractor shall provide a rationale and draft of the new job aid for Government review and approval prior to the start of training events. Examples of relevant job aids include, but are not limited to, those which provide quick reference or support completion of set-up, operations, critical maintenance, and displacement tasks, and where access to the a computer and/or a network connection is limited. Job aid types include, but are not limited to hard cards, pocket checklists, procedural guides, worksheets, kneeboards, maintenance

requirements cards, and additional supplemental student materials. Job aids shall be legibly printed on subdued colored medium weight and weatherized (example: treaded paper or laminated) card stock paper able to withstand repeated handling and the detrimental effects of the outdoor environment (direct sunlight, water, humidity, etc.). The Contractor shall deliver the job aids in accordance with CDRL F010.

CDRL F010, Operator and Maintainer Job Aids

3.4.4 Conduct of Training Delivery Events

The Contractor shall conduct AC2SN training courses consisting of various instructional methods including lectures, demonstrations, and practical applications. The instructors shall present and deliver the training in accordance with the techniques of military instruction per NAVMC 1553.1, Systems Approach to Training Users Guide and MCO 1553.2B Management of Marine Corps Formal Learning Centers and Training Detachments. The length of training shall be based on course design and strive not to exceed ten (10) training days for the Operator Courses and sixteen (16) training days for the Maintainer Courses consisting of eight (8) hour days, and shall be conducted Monday through Friday per the COI. No less than sixty (60) percent of each course shall be practical application hands-on training. The student to instructor ratio shall not exceed 10:1 (Primary/Alternate) for lectures and shall not exceed 5:1 for hands-on training, practical exercises, and practical application. The Contractor shall ensure the principle end item is utilized to support the ratios and maximum class size. Maximum class size is twenty (20) students. At the conclusion of Operator and Maintainer training, students that have successfully met the academic requirements shall receive a certificate of completion from the Contractor on behalf of PM AC2SN.

The Contractor shall provide the following to support Operator and Maintainer training:

- Any additional computers, media and audio/visual projection equipment required for classroom training not already included with AC2SN systems
- Printed copies of Operator and Maintainer Job Aids (minimum one (1) per system)
- Printed course materials for each student to include course syllabus, student handouts, and any supplemental materials. Student materials shall be printed in color and bound for use.
- Printed Functional Block Diagrams from the Technical Data Package (one (1) per system)
- Printed Master Lesson Files for Instructor, Alternate Instructor, and one (1) guest
- · Printed written and performance examinations with associated test key
- Printed Instructional Rating Forms (IRF) (one per five (5) students)
- Printed End of Course Critiques (EOCC) for each student
- Student Attendance Roster containing the student's full name, rank, and military command. The Contractor shall ensure all students are accounted for every day. The Student Attendance Roster shall have the dates and name of the training course. The Student Attendance Roster shall be submitted with the Course Completion Report to the Government.

The military gaining command shall provide:

- AC2SN Systems and ancillary equipment
- Common General Technician Tool Kits for maintainer training
- Shop Support Equipment for Maintainer Training
- Shop Safety, Personal Protective Equipment (PPE) for Operator and Maintainer Training

3.4.4.1 Course Syllabus

The Contractor shall provide a course syllabus for each student upon the first day of training. Course syllabi shall contain course objectives, the daily training schedule, criteria for successful completion, names of instructors, and instructor contact information in case of emergency.

CDRL F011, Course Syllabus

3.4.4.2 Course Completion Report

The Contractor shall complete and deliver to the government, in accordance with CDRL F012, an After Instruction Report (AIR) five (5) business days after the conclusion of each Operator and Maintainer training event. The Contractor shall report all issues that occurred during the training, identify curriculum shortfalls, and surmise the student's EOCCs and IRFs, using the format prescribed in MCO 1553.2 and NAVMC 1553.1, and include the student attendance roster. The Contractor shall issue IRFs to be completed by at least 10% of all students immediately following each lesson and will be submitted to the Government in conjunction with the Course Completion Report. The Contractor shall administer an EOCC to all students the last day of training for each course. The Contractor shall use the format and data points contained in MCO 1553.2 and NAVMC 1553.1. The Contractor shall maintain all EOCCs and IRFs and deliver to the Government all EOCC in conjunction with the Course Completion Report. Content of the AIR shall be tailored to the specific Operator or Maintainer course. The purpose for this data collection is to provide both the Contractor and Government the information necessary to make informed decisions regarding needed changes to be discussed at the Course Curriculum Reviews (CCR).

The Contractor shall support and participate in one or two-day, Program-Level training CCR Board conducted by the Contractor. The Contractor shall conduct the CCR annually or as directed by the Government. The purpose of the CCR is to assess training effectiveness, identify issues affecting training curriculum, delivery of the training, training support, and any other component that positively or negatively affects the outcome of the training. Components of the CCR are a synopsis of student responses from EOCC, Instructor AIRs, Field Service Representative maintenance actions and any feedback the Contractor has obtained from the gaining commands of AC2SN systems. The purpose of the CCR is to provide the Government data and information needed to make informed decisions regarding additional changes or updates to the training materials or conduct of instruction. The Contractor shall propose logical points within the training schedule to conduct the CCR in the Training Program Plan.

CDRL F012, After Instruction Report (AIR)

3.4.4.3 New Equipment Training (NET)

The Contractor will develop and deliver NET packages as directed by the Government, based upon when there is a new system, or significant system update or added system capability where new KSAs are required by the Operator and/or Maintainer and the initial transfer of knowledge and skills for the operation and maintenance of a new or improved system is required. NET events are associated with fielding of new equipment to the FMF or can be conducted in support of a redistribution of legacy systems to a new user community. NET training shall include the capabilities, functions, and operation of the system; preventive and corrective maintenance procedures; external diagnostics and other tests; performance of system checks and verification procedures and all required CDRLs.

CDRLs F002, F003, F007, F008, F009, F010, F011, F012, F013

3.4.4.4 Delta Training

Delta Training packages shall be developed and provided as directed by the Government, in a similar fashion to NET, however they are conducted in support of major system modifications such as software/hardware/technical refresh events.

- Modification of current baselined system technology
- Training not currently at the FLC
- New KSAs for responsible MOS/NEC (Operator and Maintainer)
- New KSAs for experienced operators and maintainers on the legacy item
- FLC Delta Training package delivery

CDRLs F002, F003, F007, F008, F009, F010, F012, F013, F014

3.4.4.5 On-Site Familiarization Training

The Contractor shall provide instructor lead familiarization training for AC2SN Programs due to a minor modification of current baselined system technology or to present existing curriculum to the FMF (to include embarked MEU and Ship's Force), to fill training gaps identified during unit sustainment training events. Familiarization training may require supplemental training products be used (videos, CBT, ICW, paper-based job aids).

CDRLs F003, F004, F005, F006, F010, F014

3.4.4.6 Over-The-Shoulder Refresher Training

Upon request, the Contractor shall provide instructional support for Marine Corps, Navy, or Joint Service exercises or events with AC2SN Programs. The role of the trainer will be to observe Marines/Sailors during the exercises and provide Over-The-Shoulder Refresher Training, only when need arises, and at the request of the FMF unit. This Over-the-Shoulder Refresher Training will be informal, just-in-time, and re-enforce processes and procedures already taught to the FMF via NET or delta training, and will not be conducted in a manner which interferes with the exercise or deviates from Technical Manual instructions. The Contractor shall deliver an After Action Report at the conclusion of the event or exercise and in accordance with CDRL F014, to document events, tasks, and outcomes of the Contractor provided assistance to inform AC2SN PO decisions on future training requirements.

CDRL F014, After Action Report

3.4.4.7 Course Certificates

The Contractor shall provide each student with a course completion certificate using the Government approved format. The certificate shall contain: Course Title, Training Location, Total Training Hours, Student's Full Name, Rank, and Military Occupational Specialty (MOS)/Navy Enlisted Classification (NEC), and the Training Completion Date. The certificate shall be signed by the lead Contractor instructor or Training Manager at the conclusion of each training class and developed and delivered in accordance with CDRL F013.

CDRL F013, Course Certificates

3.5 Training Material Updates

Upon completion of the CCR (paragraph 3.4.4.2) and upon Government approval of changes, the Contractor shall incorporate directed configuration changes into all the applicable training products. These changes shall be based upon:

- Student responses in the End of Course Critiques
- Course Completion Reports
- Feedback from the FMF
- Curriculum changes to address engineering changes to hardware or software
- Technical Manual changes

The Government shall approve all changes to the training products. The Contractor shall deliver final products within fifteen (15) working days of the decision to implement. The Contractor shall ensure all instructors are educated on the changes and training impacts and given the necessary time to rehearse changes, as needed, prior to delivery at the training event. The Contractor shall maintain version control and configuration management of all training curriculum products until delivery to the Government and dispose of the outdated training products in accordance with Government disposition instructions.

All training curriculum products must be approved and accepted by the Government within thirty (30) calendar days of the end of each contract option year period of performance.

3.6 Training Schedule, Other Direct Charges (ODCs) and Travel Requirements

Laptops, cellular equipment, cellular services, and other items of convenience are not reimbursable as ODCs. Access to Government buildings will be granted for support staff and network accounts established as required. Some aspects of support are likely to require the Contractor to be present at "on-site" Government designated locations for varying durations of time. When this is the case, the Government will provide staff with workspaces and LAN access.

CONUS and OCONUS travel is anticipated. The estimated annual travel is detailed in the following table.

The Government has estimated the average annual training events required for this contract. This list may change based on the availability of the FMF, equipment, and students. The estimated number of travel events are detailed in the following table.

Expected Travel (CAC2S, CTN, and TBMCS Training)

Reference	Annual # Trips	Duration (days)	Location D	ate
Working Groups	4	3	Quantico, VA	
Program Rev	4	3	NSWC Crane, IN	
Pilot Course/Training Material Verification	1	5	MCTSSA, Oceanside, CA	
Pilot Course/Training Material Verification	1	5	NSWC Crane, IN	
Delta Training	1	5	Cherry Point, NC	
Delta Training	1	5	Yuma, AZ	
Delta Training	1	5	Camp Pendleton, CA	
Delta Training	1	5	29 Palms, CA	
Delta Training	1	5	Okinawa, Japan	
Delta Training	1	5	Virginia Beach, VA	
Delta Training	1	5	Chicopee, MA	
Delta Training	1	5	Great Lakes, IL	
Delta Training	1	5	Yuma, AZ/Miramar, CA	
Delta Training	1	5	Cherry Point, NC/Beaufort, SC	
Delta Training	1	5	Camp Pendleton/Miramar, CA	
Pilot Course/Training Material Verification	4	5	NSWC Crane, IN	
Delta Training	2	5	MCTSSA, Oceanside, CA	
Delta Training	2	5	NSWC Crane, IN	
Over the Shoulder	2	20	Yuma, AZ	

Reference	Annual # Trips	Duration (days)	Location	Date
Over the Shoulder	2	20	29 Palms, CA	
NET	1	20	Cherry Point, NC	
NET	1	20	Yuma, AZ	
NET	1	20	Camp Pendleton, CA	
NET	1	20	Beaufort, SC	
NET	1	20	New River, NC	
NET	1	20	Bogue, NC	
NET	1	20	Iwakuni, Japan	
NET	1	20	Futenma, Japan	
NET	1	20	Fort Worth, TX	
On-Site Familiarization	1	3	Cherry Point, NC	
On-Site Familiarization	1	3	MCTSSA	

Expected Travel - CAC2S Afloat

Reference	# Trips	Duratio n	Location	Date
NET	1	10	USS TRIPOLI, San Diego, CA	2021
NET	1	10	USS ESSEX, San Diego, CA	2022
NET	1	10	USS IWO JIMA, Mayport, FL 2022	
NET	1	10	USS AMERICA, Sasebo, Japan	2022
NET	1	10	USS SAN DIEGO, San Diego, CA	2022
NET	1	10	USS KEARSARGE, Norfolk, VA	2023
NET	1	10	USS BATAAN, Norfolk, VA	2024
NET	1	10	USS MAKIN ISLAND, San Diego, CA	2024

Reference	# Trips	Duratio n	Location	Date
NET	1	10	USS GREEN BAY, Sasebo, Japan	2024
NET	1	10	USS BOXER, San Diego, CA	2025
NET	1	10	USS BOUGAINVILLE, 2025 (homeport unassigned)	
NET	1	10	USS FORT LAUDERDALE 202: (homeport unassigned)	
Delta Training	1	5	USS MAKIN ISLAND, San Diego, CA	
Delta Training	1	5	USS TRIPOLI, San Diego, CA 2023	
On-Site Familiarization	1	3	USS AMERICA, Sasebo, Japan 2023	
On-Site Familiarization	1	3	USS SAN DIEGO, San Diego, CA 202.	
On-Site Familiarization	1	3	USS ESSEX, San Diego, CA	2025
On-Site Familiarization	1	3	USS IWO JIMA, Mayport, FL 2025	
On-Site Familiarization	1	3	USS TRIPOLI, San Diego, CA 2025	
On-Site Familiarization	1	3	USS AMERICA, Sasebo, Japan	2025

APPENDIX A – DATA DELIVERABLES LIST

CDRL Data Item Number	Data Description Title
B001	Monthly Status Report (MSR)
B002	Meeting Minutes
B003	Meeting Agenda
B004	Briefing Material
B005	Technical Report/Study
B006	Training Integrated Master Schedule
B007	System Security Plan
B008	Cyber Incident Reporting
F001	Training Program Plan
F002	Critical Training Tasks List
F003	Learning Analysis Report (LAR)
F004	Instructional Media Requirements Document
F005	Instructional Media Design Package
F006	Instructional Media Package
F007	Training Test Package
F008	Master Lesson Files
F009	Operator and Maintainer Curriculum Outline of Instruction
F010	Operator and Maintainer Job Aids
F011	Course Syllabus
F012	After Instruction Report (AIR)
F013	Course Certificates
F014	After Action Report (AAR)

APPENDIX B – GOVERNMENT SYSTEM DOCUMENTATION LIST

Reference	Document # or Date (if app)	Document Name						
	Common Aviation Command and Control System (CAC2S)							
1	TM 11402B/12506A/12714A- 15/110	Operator and Field Maintenance Manual for Air Command and Control System						
2	TM 11402B/12506A/12714A- 15/111	Software Administrator Manual for Air Command and Control System						
3	TM 11402B/12506A/12714A- 15/112	Software User's Manual for Air Command and Control System						
4	TM 12039A/12041A/12045A- 14/1	Operator and Field Maintenance Manual for the Communication System (AN/MRQ-13 (V)1-3)						
5		Air Command & Control and Sensor Netting Configuration Management Plan						
6		Integrated Master Schedule (IMS) for the Common Aviation Command and Control System (CAC2S)						
7	Current baseline (October 2018)	Common Aviation Command and Control System (CAC2S) Baseline New Equipment Training (NET) Package						
	Theater Battle Manageme	nt Core Systems (TBMCS)						
8	Most current	Integrated Master Schedule (IMS) for the Theater Battle Management Core Systems (TBMCS)						
9	Final copy of TBMCS Technical M completion.	Ianual to be provided to the Contractor upon						
	Composite Tracki	ng Network (CTN)						
10	Most current	Integrated Master Schedule (IMS) for the Composite Tracking Network (CTN)						
11	TM 11406B-OR/1	Operation & Organizational Maintenance Manual for the Command System, Tactical 26 Meter Telescopic Mast						
12	TM 11406B-12&P/2A	Operational and Organizational Maintenance Manual for the Command System, Tactical AN/MSQ-143A(V)1						
13	TM 11406B-20&P/1	Operation and Maintenance Manual for Cooperative Engagement Transmission Processing Set, AN/USG-4B						
14	TM 11406B-QRG	Quick Reference Guide for the Command System, Tactical, Model No. AN/MSQ-143A(V)1						

APPENDIX C – TRAINING EVENT IDENTIFICATION

Training Type	Criteria To Conduct Each Training Type and Associated Assumptions	Required CDRLs for Development/Training Execution		
	• Significant system update/added system capability			
	• Training not currently at the FLC			
New	• New KSAs for responsible MOS/NEC (Operator and Maintainer)	F002, F003, F007, F008,		
Equipment Training (NET)	• Initial transfer of knowledge and skills on the operations and maintenance on a new or improved system at fielding	F009, F010, F011, F012, F013		
	FLC NET package delivery required			
	• Full SAT&E Compliance			
	• Timeline (greater than five T-Days)			
	Modification of current baselined system technology			
	Training not currently at the FLC			
	New KSAs for responsible MOS/NEC (Operator and Maintainer)			
Delta Training	New KSAs for experienced operators and maintainers on the legacy item	F002, F003, F007, F008, F009, F010, F012, F014		
	FLC Delta Training package delivery			
	Full SAT&E Compliance			
	Timeline (less than five T-Days)			
	Minor modification of current baselined system technology or TM update			
On Site	Instructor presence required	F003, F004, F005, F006,		
Familiarization Training	• Supplemental training products may be used (videos, CBT, ICW, paper-based job aids)	F010, F014		
	Compliance with Instructional Media Design			
Electronic- Only Familiarization Only Only Familiarization		F003, F004, F005, F006, F010		
Training	No Instructor presence required			

	 Supplemental training products may be used (videos, CBT, ICW, paper-based job aids) Compliance with Instructional Media Design 	
Over-the- shoulder Refresher Training	 FMF request/identified need On-site training in support of unit exercises or simulation events SME guided 	F014