

DRAFT

PERFORMANCE WORK STATEMENT

FOR

Alaska Range Combat Training Integrated Communications and Support (ARCTICS)

Date: 30 September 2026

CONTRACT NUMBER:

FA5215-XX-X-XXXX

PREPARED BY:

766 Enterprise Sourcing Squadron (ESS), Joint Base Pearl Harbor-Hickam, Hawaii

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1 SECTION 1 – DESCRIPTION OF SERVICES

1.1 Overview

The 354th Range Squadron (RANS) has a requirement for integrated range operations and maintenance in support of joint air and ground combat training and testing for the United States Air Force's (USAF) Headquarters (HQ) Pacific Air Forces (PACAF) at the Joint Pacific-Alaska Range Complex (JPARC). The JPARC consists of all air, land, and sea training capacity and assets in Alaska. JPARC is composed of military land ranges, maritime training areas, and airspace that provide critical training and testing environment to the Department of Defense (DoD) Service units based in Alaska. PACAF's primary mission is to provide ready air and space power to promote U.S. interests in the Asia-Pacific region during peacetime, through crisis, and in war. The JPARC is the predominant PACAF Area of Responsibility (AOR) training venue supporting mission requirements. It can provide highly realistic training for service, joint, and coalition combat aircrews, aviation ground crews, surface maneuver units, and command staff. RED FLAG-Alaska (RF-A) is a primary USAF combat training exercise and a Joint National Training Capability (JNTC) accredited and certified event that is executed within the JPARC. The JPARC consists of Military Operations Areas (MOAs), Military Training Routes (MTRs), Restricted Airspaces, combat training ranges with both live and inert weapons impact areas, electronic warfare (EW) sites, and all facilities, structures, shelters, systems, and equipment necessary to support live combat training operations. "JPARC South" refers to facilities at Joint Base Elmendorf-Richardson (JBER) and Special Use Airspace (SUA), in accordance with (IAW) 14 CFR Part 73, used/controlled primarily by the 3rd Wing (WG). "JPARC North" refers to all facilities, ranges, and SUA at Eielson Air Force Base (AFB), as well as other facilities, ranges, and SUA not included in JPARC South. Capabilities include providing realistic adversary Electronic Orders of Battle (EOB), Electronic Attack (EA) training, integrated Live, Virtual, and Constructive (LVC) operations, and real-time air-to-air, air-to-ground, ground-to-air monitoring and playback for user feedback and performance self-evaluation.

1.2 Purpose

This Performance Work Statement (PWS) establishes the requirements and responsibilities of the Contractor to provide PACAF specified Operations and Maintenance (O&M) support of Government Furnished Property/Equipment (GFP/GFE), materials, facilities, structures, shelters, and infrastructures. Contractor support requirements are defined throughout the entirety of this PWS.

The target Period of Performance for this requirement is projected to begin in Fiscal Year 2029 (FY29) and will consist of a one (1) year Base Period and four (4) Option Years.

1.3 Background

The Contractor shall provide specified O&M support to provide realistic combat training capabilities in support of daily operations, Large Force Employment (LFE) events, and Major Force Exercise (MFE) activities in the JPARC and at deployed locations.

The Contractor shall be responsible for all management and labor, equipment, tools, and supplies not otherwise specified as GFE, in support of specified JPARC activities. The Contractor shall comply with all applicable laws, regulations, technical data, and standards while providing O&M support.

The Contractor shall provide a workforce that is trained and fully qualified/certified for the tasks assigned.

The Contractor shall schedule, coordinate, and cooperate with government agencies, other contractors, and/or external agencies that are simultaneously supporting JPARC missions with the purpose of all entities working toward the same goal of providing world-class combat training.

Upon commencement of performing contracted tasks, the Contractor shall possess a Facility Security Clearance (FCL) adjudicated to the TOP SECRET (TS) level. Contractor personnel shall possess a minimum Personnel Clearance (PCL) adjudicated to the SECRET level. Contractor personnel required to perform work in facilities accredited to a TS, SENSITIVE COMPARTMENTED INFORMATION (SCI), and/or SPECIAL ACCESS PROGRAM (SAP) shall have the requisite security clearances. A detailed listing of functions requiring TS/SCI and/or SAP clearances is found in PWS 3.2.8.2.

The Contractor will be given access to adequate space at the requisite security level for refurbishment of large, motorized vehicles and radar systems. When required, O&M support shall be conducted in secure Government facilities with requisite security accreditation or within the systems themselves.

The Contractor shall possess an adequate cost accounting system determined acceptable by the Defense Contract Audit Agency (DCAA) or Defense Contract Management Agency (DCMA) as this contract will utilize Cost-Reimbursable contract line items. The Contractor shall provide and maintain a signed copy of Standard Form 1408 [Pre-Award Survey of Prospective Contractor (Accounting System)] or an equivalent DCAA adequacy determination letter.

2 SECTION 2 – GENERAL INFORMATION

In the event of a conflict between documents referenced herein and the contents of this PWS, the contents of the PWS shall be the governing requirement.

2.1 Department of Defense Specifications

2.1.1 Availability of Department of Defense Specifications

Copies are available on the WWW at URL: <https://www.dsp.dla.mil/Specs-Standards/>

2.2 Department of Defense Standards

- MIL-STD-130: Identification Marking of U.S. Military Property
- Property MIL-STD-31000: Technical Data Packages
- MIL-STD-40051-2A: Page-Based Technical Manuals
- GEIA-STD-0007-A: Logistics Product Data

2.2.1 Availability of Department of Defense Standards

Copies are available on the WWW at URL: <https://www.dsp.dla.mil/Specs-Standards/>

2.3 Department of Defense Directives

DOD 8140: Information Assurance (IA) Training, Certification, and Workforce Mgmt

2.3.1 Availability of Department of Defense Directives

Copies are available on the WWW at URL: <https://www.esd.whs.mil/DD/DoD-Issuances/>

2.4 Department of Defense Instructions

Required DOD Instructions (DODI) may include the below, but also may other publications.

- DODI 5000.2: Operation of the Adaptive Acquisition Framework
- DODI 5000.90: Cybersecurity or Acquisition Decision Authorities and Program Managers
- DODI 8500.01: Cybersecurity
- DODI 8510.01: Risk Management Framework (RMF) for DOD Information Technology (IT)
- DODIs available at: <https://www.esd.whs.mil/Directives/issuances/dodi/>

2.4.1 Availability of Department of Instructions

Copies are available on the WWW at URL: <http://www.dtic.mil/whs/directives/>

2.5 Other Government Documents, Drawings, and Publications

- Department of Defense Intelligence Information System (DODIIS): Joint Security Implementation Guide (DJSIG)
- DAG: Defense Acquisition Guidebook
 - <https://dag.dau.mil/Pages/Default.aspx>
- DISR: Department of Defense Information Technology Standards Registry
 - <http://itaonline.disa.mil/VJTA/index.jsp>
- AFMAN 23-110 U.S. Air Force Supply Manual
 - <http://static.e-publishing.af.mil/afman/23-110/VOLTOC.pdf>
- See Appendix 3 for Department of Air Force Instructions (DAFIs), Directives, Technical Orders, Standards, and Commercial Materials

2.6 Required Publications

Required publications consist of: DAFIs, Directives, Technical Orders, Standards, Army Regulations, and Commercial Manuals. It is the Contractor's responsibility to ensure they are familiar with the most up-to-date versions of the Required Publications and to notify the Government if they are unable to access those documents or require further guidance. The Contractor shall reference and comply with stipulations as defined in this PWS and Appendix 3.

3 SECTION 3 – REQUIREMENTS

The Contractor shall provide the technical services and support pursuant to the requirements specified within this PWS.

3.1 Administration

3.1.1 Work Locations

3.1.1.1 Permanent Sites

Base

Eielson AFB, AK

JBER, AK

Associated Wing

354th Fighter Wing (FW)

3rd Wing (WG)

Special Use Airspace (SUA) of the JPARC:

- Restricted Airspace: R-2201, R-2202, R-2205, R-2211, R-2203
- Warning Areas: W-612
- Military Operations Areas (MOA): Birch/Buffalo/Delta/Eielson/Fox/Galena/Naknek, Paxon/Stony/Susitna/Viper/Yukon
- Air Traffic Control Assigned Airspace (ATCAA): Blair/Colorado/Delta/Eielson/Fox/Galena/Hayes/Kantishna/Naknek/Paxon/Sand Point/Sparrevohn/Stony/Susitna/Tok/Utopia/Viper/Yukon

Training Ranges of the JPARC:

- Yukon Training Area (YTA)
- Donnelly Training Area (DTA)
- Blair Lakes Training Range Complex

Training Areas of the JPARC:

- TA-600 (Gerstle River)

A detailed listing of sites/locations is contained in Appendix 6. When additional SUA, Training Ranges, and/or Training Areas are added to the JPARC, the Contractor will be required to perform work to support training operations in the additional locations. The Government will initiate a modification by releasing a Request for Proposal (RFP) and modify Appendix 6 as applicable. Infrastructure and equipment are listed in Attachment 3, GFE/GFP Listing, and Appendices 6, 7, and 8.

3.1.1.2 Deployed Sites

As required and coordinated with the Contracting Officer (CO), based on USAF training support requirements and flying exercise commitments such as, but not limited to: JBER, Road accessible sites within Alaska not identified in Appendix 6, FAA Sites and locations to include but not limited to Middleton Island, Gulkana, and Gulf of Alaska (GOA); sites of the Long-Range Radar System (LRRS) operated by the 611 AOC to include but not limited to Ft. Yukon, Barter Island, etc., the High-frequency Active Auroral Research Program (HAARP) site near Gakona, AK., U.S. Coast Guard Station, Kodiak, training areas/ranges within the contiguous 48 United States and Canada; and throughout the PACAF AOR, to include the Republic of Korea, Thailand, Singapore, Malaysia, Australia, Japan, Indonesia, India, the U.S. Territory of Guam, and the state of Hawaii.

3.1.2 Work Hours

3.1.2.1 Employee Work Hours

The Contractor's employee schedule shall accommodate schedules of the Government (e.g., 353 CTS, 354 RANS, 354 OG, 354 OG Det 1, 354 FW, 3 WG, aircraft units, wing safety, etc.). Contractor's attention is directed to various sections and sub-paragraphs for work schedule requirements in support of flying training operations and must provide flexibility in schedules to maximize training and exercise value.

3.1.2.2 Maintenance Work Schedule

The Contractor shall establish work hours for maintenance. All maintenance shall be performed on a non-interference basis with scheduled operations. No systems will be exempt from operational availability except for the purpose of maintenance to bring the system back on-line. Routine maintenance will be scheduled during non-operation hours.

3.1.2.3 Work Commute

IAW A.S. 785.33 and 785.35, Portal-to-Portal travel prior to, and post work hours are not compensable time. Portal-to-portal is defined as normal travel to/from home to work site, even if work sites vary. The Contractor shall not bill the government for personnel travel to/from work sites.

3.1.2.4 Worktime during Travel

IAW A.S. 785.39, travel away from home community shall be considered work time during normal work hours. Time spent in travel away from home outside of regular working hours as a passenger on an airplane, train, boat, bus, or automobile is not considered work time. Contractor shall not bill the government for personnel time spent in travel outside of defined work time.

3.1.2.5 Overtime Pay

The Government will compensate the Contractor for approved overtime hours expended for performance of task during training support deployments and requested expansion of operation hours. The Contractor shall provide a cost estimate, to include the anticipated overtime required, for each deployment and expansion of operation hours. The Contractor shall make every effort to shift employee work schedules to accommodate expanded flying hour requests to avoid overtime. The Contractor shall not bill more than 40 hours per week per employee unless the additional hours were pre-approved by the CO through the Contracting Officer Representative (COR). Additionally, COR approval is required prior to commencement of overtime workhours. Temporary duty (TDY) travel during non-duty hours, weekends, and holidays shall not be considered compensable overtime; however, transportation and per diem expenses for travel performed during these periods shall be reimbursable.

3.1.2.6 Federal Holidays, Down/Goal Days, and PACAF Family Day Work Schedules

The Contractor shall not be excused from work performance on any days except as defined as legal federal holidays, stipulated in 5 U.S. Code 6103 – Holidays. Down/Goal Day, and/or PACAF Resiliency days shall be workdays unless an alternate work schedule is approved by the CO and COR.

3.1.2.7 Legal Federal Holidays

New Year's Day; Birthday of Martin Luther King, Jr.; Washington's Birthday; Memorial Day; Juneteenth National Independence Day; Independence Day; Labor Day; Columbus Day; Veterans Day; Thanksgiving Day; and Christmas Day.

3.1.2.8 Contingency Situations

During a Crisis Declared by the National Command Authority or Overseas Combatant Commander, the services performed under this contract are not applicable to the requirements as described in DoDI 1100.22 Policy and Procedure for Determining Workforce Mix.

3.1.2.9 Disaster Response

At the direction of the Government and negotiated with the Contractor, the Contractor shall provide, within areas of its expertise, for disaster response work and emergency service for disaster damage repair to JPARC systems and infrastructures.

3.1.3 Contractor Performance Requirements

3.1.3.1 Contractor Responsibilities

The Contractor shall deploy, operate, repair, maintain, fuel, and re-deploy systems as directed by the elements of this PWS. Upon return from mission execution events, the Contractor shall inventory, repair, replenish, and prepare systems and equipment for redeployment for other test events. The Contractor shall assume total performance responsibility for work performed and deliveries under this contract. The Contractor shall ensure proper management of ARCTICS subcontractors through analysis, critique, and assessment of the adequacy, timeliness, and cost effectiveness of work performed. The Contractor shall coordinate management efforts with Government personnel. To aid Government oversight, the Contractor shall submit reports as described in the sections and paragraphs in this contract. When issues are identified, the Contractor shall formulate and provide alternatives for issue resolution.

3.1.3.2 Contractor Manpower Reporting

The Contractor shall report ALL Contractor labor hours (including subcontractor labor hours) required for performance of services under this contract to the managing government contracting office via a secure data collection site. The Contractor is required to completely fill in all required data fields using the following web address: <https://www.sam.gov>. Reporting inputs will be for 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 (NLT) October 31 of each calendar year. Contractors can find User Guides, Frequently Asked Questions and may direct questions to the help desk <https://www.sam.gov>.

The contractor shall:

- (a) Provide a manning plan document of all proposed positions, highlighting any vacancies, and provide a Plan of Action and Milestone (POAM) document to fill any vacancies withing 30 calendar days of contract award.

- (b) Provide a quarterly manning plan document, highlighting any vacancies, and provide a POAM document to fill any current vacancies the day after the last month in a quarter.
- (c) Notify the CO and COR anytime manning drops below 90% of the total proposed positions.

3.1.3.3 Operational Security Plan

The Contractor shall develop and implement an Operational Security (OPSEC) Plan for control of critical program information and sensitive data. The Contractor shall provide an electronic copy to the 354 RANS as well as the after award, and updated copies shall be provided after any change is made. The plan, as updated, shall continue to conform to the requirements of this contract and further instructions contained in AFI 10-701 (Operation Security). The Contractor shall deliver the plan NLT 10 duty days after contract award to the CO and COR as part of the Management Plan. Reference Appendix 5 for more information.

3.1.3.4 Property Management Plan

The Contractor shall develop their Property Management Plan (PMP) (IAW requirements in Section H) for any GFP or Contractor Acquired Property (CAP). This plan shall initiate and maintain the processes, systems, procedures, records, and methodologies necessary for effective and efficient control of GFP. The Contractor shall provide an electronic copy of the PMP to the CO and COR NLT 10 days after contract award as part of the Management Plan. Reference Appendix 5 for more information.

3.1.4 Work Control

All program requirements, contract actions, and data interchange shall be conducted in a digital environment using electronic and web-based applications that are accessible on a standard DoW Non-Secure Internet Protocol Router (NIPR) networked computer. When applicable, such data shall be compatible with the latest version of Microsoft Office family of products. Contractor developed or procured software packages to meet this requirement, if any, that are to reside on computers connected to NIPR, must be on the approved software listing for NIPR and be approved by 354th Communications Squadron.

3.1.5 Meetings and Reviews

3.1.5.1 Range Meetings

The Contractor shall conduct, attend, and participate in range meetings related to events in the JPARC. The meetings are to be scheduled upon request of the responsible CO or COR to discuss and to informally evaluate the Contractor's efforts and accomplishments. During these meetings, the Contractor shall present necessary data to enable a joint review of its various assigned efforts, attendant schedules, and resource expenditures. The Contractor shall present and participate in technical discussions and shall inform, in a timely fashion, the COR of any problems with contract execution and any proposed solutions. The Contractor shall provide meeting minutes and all necessary presentation material. Reference Appendix 5 for more information.

3.1.5.2 Annual Contract Performance Review

The Contractor shall meet with the CO and COR at the end of each 12-month period following contract award for a Contract Performance Review. During this review, the Contractor and

CO/COR will review the Contractor's plans and reports for any updates. Reference Appendix 5 for more information.

3.1.5.3 Kickoff Meeting

The Contractor shall meet with the CO, COR, Requirement Owner, and users NLT 10 days after the start of performance to kick off performance of the contract.

3.1.6 Routine Reports

3.1.6.1 Monthly Progress, Status, and Management Report

The Contractor shall submit a monthly Contractor's Monthly Progress, Status, and Management Report (MPSMR). This report and the financial reports shall convey the status of all base Contract Line Items (CLINs) as well as cumulative contract performance. The Contractor shall notify the Government when 75% of the Cost and CLINs have been expended. This report shall include cost data identifying Labor Category, Material, and Travel on a monthly basis and on a cumulative basis for each month. In addition, all travel and material costs shall be documented on a monthly basis and cumulative monthly. CLINS that have been completed shall be listed as such. Reference Appendix 5 for more information.

The contractor shall provide a burnup chart with an estimated spend plan, by CLIN, for the duration of the PoP, no later than 30 days post contract award. The contractor shall provide a spend plan burnup chart as part of the MPSMR using the initial spend plan as a basis of comparison based on cumulative prior months to gauge financial execution.

3.1.6.2 Material Status Report

The Contractor shall provide a weekly Material Status Report (MSR) listing the equipment that is not mission capable, the reasons for that status, and the action(s) being taken to repair the equipment. The Contractor shall identify any special needs or concerns requiring Government assistance.

The Contractor shall provide an Annual MSR in which the Contractor shall report maintenance, logistics, and operations trends that the government can use to make strategic management corrections to systemic problems made visible during the year. The Contractor shall provide an Annual Maintenance Service and Repair Cost Report that provides the government with data that shows the cost of service and repair parts, hours worked, shipping and postage, Petroleum, Oil, Lubricants (POL), and Other Consumables expended to provide preventive maintenance and repair maintenance to GFE. Demand history shall be used as the basis of future-year expense planning through the Program Objective Memorandum (POM) years. Reference Appendix 5 for more information.

3.1.7 Import/Export, End-User Certificate and ITAR Compliance

The Contractor must be familiar with unique circumstances that require Import/Export, End-User Certificate and International Traffic in Arms Regulations (ITAR) compliance. The Contractor shall comply with all import/export regulation requirements. The Contractor shall comply with all End-user Certificate regulation requirements referencing Defense Federal Acquisition Supplement (DFARS) Clause 225.802-71 to execute the proper signing of these documents. The Contractor shall execute a comprehensive ITAR compliance program that

includes information, policy, and procedures on: Organization Structure, Corporate Commitment and Policy, Identification, Receipt and Tracking of ITAR Controlled Items/Technical Data, Re-Exports/Retransfers, Restricted/Prohibited Exports and Transfers, Recordkeeping, Internal Monitoring, Training, and Violations and Penalties.

3.2 General Requirements

3.2.1 Contract Transition

The transition period is that period during which the incumbent Contractor and the successor Contractor jointly accomplish a transfer of property and responsibility for contract performance. The transition period will be the final 90 days of the incumbent's contract.

3.2.1.1 Incumbent Contractor responsibilities

When the contract reaches 90 days before completion, the Contractor shall continue to provide supervision, control, and work task responsibility for all functions described in their applicable PWS(s) during the transition period. The incumbent Contractor shall support the Government and the successor Contractor to ensure an orderly transition. As a minimum, the incumbent Contractor shall provide the successor access to facilities, structures, shelters, equipment, technical documentation, property accountability, publications, spares etc. on a non-interference, no-cost basis during the transition period.

3.2.1.2 GFP/GFE Audit

The Government, incumbent Contractor, and successor shall perform an audit to include a joint inventory and inspection, and all GFP will be transferred no later than the end of the transition period. The successor Contractor shall inform the CO and COR of any GFP/GFE that is unable to be transferred/audited during the transition period no later than 15 working days prior to the end of the transition period. At the start of the audit, incumbent Contractor shall provide a 100% complete and accurate GFP listing. The incumbent shall be solely responsible for replacement of missing or damaged-beyond-repair GFP/GFE.

3.2.1.3 GFP/GFE Repair

The Contractor is liable for the repair or replacement of all items (e.g., facilities, structures, shelters, major systems, all other GFP/GFE) in the same or better condition than received, discounted for normal wear and tear. During contract transition, the successor Contractor shall accept items "as is" that have open work orders for maintenance or repairs that are reasonable and expected during the lifecycle of the items.

3.2.1.4 GFP Documentation

The incumbent Contractor shall replace any missing, unusable, or outdated documentation NO LATER THAN 30 days before the end of the contract performance period.

3.2.1.5 Data and Documentation Transfer

The incumbent Contractor shall transfer all data, information, reports, records, schedules, software products, point of contacts, information on requisitioned items, etc. that pertain to the equipment, systems or services defined by this contract to the successor Contractor. The Contractor shall not destroy, delete, or remove any data without the explicit approval of the COR or government contracting officer.

3.2.1.6 Successor Contractor Responsibilities – Phase-in Plan

The successor Contractor shall develop and submit a Phase-in Plan to the CO and COR. The Phase-in Plan shall be sent to the CO and COR NLT 5 duty days following contract award. The plan shall contain a listing of phase-in team members and their contact information, projected timelines, and critical phase-in activities/action items. In addition, the plan shall specify when each employee/position transitions on-site and include their duties and responsibilities. During phase-in, the Contractor shall provide daily reports on transition. The successor Contractor shall execute the phase-in plan on the first day of the transition period. Reference Appendix 5 for more information.

3.2.1.7 Phase-Out Plan

The Contractor shall develop and submit to the CO and COR a Phase-out plan within the first 180 days from contract start date. The plan shall be updated annually to ensure accuracy and effectiveness. The plan shall be specific on how the Contractor will smoothly turn over responsibilities assuring full operational capability for the successor on the first day the successor's contract becomes effective (e.g., transition of property accountability, orientation, training). The Contractor shall implement the Phase-Out Plan 90 days prior to the last day of the contract. Reference Appendix 5 for more information.

3.2.2 Program Management

The Contractor shall manage all aspects of contract performance and provide stewardship of Government resources. The Contractor shall provide a responsive and proactive organization whose personnel perform at a proficient skill level and at a minimum meet the performance thresholds identified in Table 5-1.

3.2.2.1 Management Plan

- (a) The Contractor shall submit a Management Plan to the CO and COR NLT 10 duty days after contract award. The plan shall be in Contractor format and conform to the following:
- (b) The plan shall be identified with the preparing office or Contractor's title, the identifying numbers or designators of the contract, the identity of the program, the security classification, and the Government activity issuing the controlling contract.
- (c) The plan may include descriptive material such as graphs, worksheets, tables, etc. as required to clarify or illustrate matters within the text.
- (d) The plan shall be in a current digital format per Appendix 5, A5.1.1.
- (e) The plan shall consist of as a minimum:
 - 1) Contractor's organizational structure and assignment of functions, duties, and responsibilities
 - 2) Contractor's procedures, policies, and the reporting requirements that are established for the initiation, monitoring, control, completion, and reporting of contractual tasks, projects, and programs.
 - 3) Contractor's maintenance plans
 - 4) Contractor's security program and procedures
 - 5) Contractor's Operational Security Plan
 - 6) Contractor's Property Management Plan
 - 7) Contractor's Quality Control Plan
 - 8) Contractor's Environmental Management Plan

- 9) Contractor's Occupational Safety Plan
- 10) Contractor's Command Supported Equipment Management Plan
- 11) Contractor's Configuration Management Plan
- 12) Contractor's Key, Lock, and Lock Combinations Procedures
- 13) Contractor's Integrated Master Plan

3.2.2.2 Program Manager

The Contractor shall provide a Program Manager, located at Eielson AFB, responsible for the overall supervision and control of all JPARC O&M services required by this PWS. Contractor shall provide a point of contact (POC) at JBER to facilitate and coordinate operations.

3.2.2.2.1 Appointment Letters

The name of the Program Manager, JBER POC, and alternates shall be designated in writing to the CO, and COR no later than the transition start date. Updated letters for new/additional personnel shall be provided within 2 business days of appointment. Reference Appendix 5 for more information.

3.2.2.3 Meetings with Government

The Program Manager is required to meet with the CO, contract administrator, COR, Quality Assurance Evaluators (QAE), and other Government personnel when requested. The Contractor may request a meeting with the CO.

3.2.2.4 Program Manager Availability

During operation hours, the Program Manager or alternate shall be available either telephonically or in-person within 30 minutes to discuss contract matters with Government personnel. Outside of operation hours, the Program Manager or designated alternate shall be available within 2 hours.

3.2.2.5 Meeting Minutes

The Contractor shall record the minutes for all meetings at the request of the Government relating to this contract. The Contractor shall coordinate the minutes with the COR prior to finalizing, publishing, and distributing meeting minutes to all attendees within 5 business days. The Contractor shall reference Appendix 5 for specific requirements regarding drafting of meeting minutes.

3.2.3 Financial Management

The Contractor shall include in the MPSMR its financial status, budget, schedule, and control of the resources allocated to meet the requirements of the contract. The Contractor shall be responsible for cost containment and shall assess potential impact of future cost increases (if any) and provide the Government options to offset increases to stay within original contract costs.

3.2.3.1 Unfunded Requirements List

The Contractor shall identify any supplies, equipment, or line-item requirements that cannot be supported within approved funding on a prioritized Unfunded Requirements List (URL). The number one priority shall be the requirement that is the most mission essential. The Contractor shall coordinate with the Government as to the priority of items on the URL. The URL shall be saved to an electronic file system managed by the 354 RANS on NIPR/SIPR to

which the Contractor will be given access. The URL shall be included in the referenced in paragraph 3.2.2.6 and its sub-paragraphs.

3.2.3.2 Document Financial Information

The Contractor shall document and track the status of all appropriated funds associated with the contract to include payments, cancellations, and invoices against each contract line item and sub-line item. The Contractor shall provide status on all purchase orders and coordinate with the 354 RANS RA for all assets purchased via Contractor Acquired Parts (CAP) as an attachment to the MPSMR. The Contractor shall develop the Contractor's Work Breakdown Structure (CWBS) and extend the CWBS to define the lower-level components of what is to be procured and includes all the product elements (hardware, software, data, or services), which are defined by the Contractor and the Contractor's responsibility. The extended CWBS shall serve as the framework for contract planning, budgeting, and reporting of cost and schedule status. The Contractor shall identify major elements of subcontracted work in the extended CWBS. The Contractor may propose changes to the CWBS to enhance its effectiveness in satisfying program objectives. The Contractor shall document financial information in its MPSMR to the CO and COR. The MPSMR shall reflect current and previous fiscal year contract cost data, projected funding requirements, and expenditures. Additional financial information shall include (as applicable):

- (a) A summary listing of all cost reimbursable expenditures by CLIN indicating funding authorized to date.
- (b) Cumulative billings.
- (c) Actual cumulative costs to date.
- (d) Actual costs incurred since last reporting period.
- (e) Projected costs through end of fiscal year.
- (f) Cost variances comparing the estimated cost of completion to amount of funds authorized.
- (g) Percentage of funding obligated and spent.
- (h) Notice to the Government of any potential inability to fulfill financial obligations a minimum of 30 days prior to delinquency, to include proposed solutions URL reviewed for accuracy and completeness.

3.2.4 Information Assurance Contractor Training and Certification

The Contractor shall ensure that personnel accessing information systems have the proper and current information assurance certification to perform information assurance functions in accordance with DoD Directive 8140.01: Cyberspace Workforce Management, and DoD Manual 8140.03: Cyberspace Workforce Qualification and Management Program. This includes an approved DD Form 2875. The Contractor shall meet the applicable information assurance certification requirements, including:

- (a) DoD-approved information assurance workforce certifications appropriate for each category and level as listed in the current version of DoD Manual 8140.03, and AFI 17-1303.
- (b) Appropriate Computing Environment certification for information assurance technical positions as required by DoD Manual 8140.03.
- (c) Upon request by the Government, the Contractor shall provide documentation supporting the information assurance certification status of personnel performing

information assurance functions.

- (d) Contractor personnel who do not have proper and current certifications shall be denied access to DoD information systems for the purpose of performing information assurance functions.
- (e) Contractor personnel with administrator privileges must meet additional requirements, including but not limited to CE certifications.

3.2.5 Contractor Quality Control

The Contractor shall develop and maintain a quality program to ensure support services are performed in accordance with commonly accepted commercial practices, manufacturers' recommendations, this contract, and all federal, state, and local laws and regulations. As a minimum, the Contractor shall develop quality control procedures addressing all major requirements as outlined in this PWS, including the areas identified in the Service Summary. The Contractor shall develop and implement proactive procedures to identify, prevent, correct, and ensure non-recurrence of defective services. Records of all inspections conducted by the Contractor and corrective action taken shall be made available to the Government within one business day upon request.

3.2.5.1 Quality Control Plan

The Contractor shall submit its Quality Control (QC) Plan as part of its Management Plan to the CO and COR. As a minimum, the QC Plan shall provide a detailed approach and information on how services will be evaluated and shall identify the frequency, scheduling, and degree of QC inspections that are sufficient to identify deficiencies before they become larger problems and minimizes Government inspection. The Contractor shall reference Appendix 5, paragraph A5.2.6 for QC Plan requirements. The QC Plan shall:

- (a) Detail controls that will be utilized to substantiate those personnel are able to meet PWS requirements.
- (b) Detail analysis processes to be used to identify trends with equipment reliability, Product Quality Deficiency Reports (PQDRs), and repeated deficiencies found during inspections.
- (c) Detail how the Contractor's quality program will ensure accuracy, thoroughness, and timeliness of all reports submitted to the Government.

3.2.5.2 Monthly Report of Inspections

The Contractor shall include summaries of inspections accomplished, results thereof, and projected remedies (if applicable), and next month's inspection schedule in its MPSMR sent NLT 5 duty days at the end of the previous month.

3.2.6 Contract Administrative Management

3.2.6.1 Records – General.

The Contractor shall keep records current and organized. The CO and COR may require copies of documentation or electronic data. The Contractor shall provide requested information within 2 hours for urgent requirements or within 1 working day for routine requirements. Unless otherwise specified in Appendix 5 or by the CO/COR, the Contractor may provide reports and requested information electronically, such as on CD/DVD, or via e-mail. All documentation referred to in this PWS, including all automated electronic data is the

property of the Government and shall remain so upon termination of this contract.

3.2.6.2 Contract Data Management

The Contractor is responsible for all aspects associated with contract Data Management for the JPARC. The Contractor shall develop and maintain all contract-required data.

3.2.6.3 Single Focal Point for Data Management

The Contractor shall:

- (a) Designate a single focal point for management of all contract data requirements.
- (b) Integrate and manage data from all functional areas of the contract.
- (c) Include all records, instructions, plans, permits, and all other documentation created by the Contractor or collected as a result of a PWS requirement in the management of data.

3.2.6.4 Maintaining Master Copies

The Contractor shall:

- (a) Maintain and control master copies of all contract data, including reports, plans, meeting minutes.
- (b) Ensure data created meets all contract and Government requirements.
- (c) Ensure that any data being delivered has incorporated the latest revisions.
- (d) Ensure subcontractors and vendors provide data required by this contract.

3.2.6.4.1 Single Software-Based Data Program

The Contractor shall provide and utilize a single software-based data program that is accessible at NIPR government workstations designated by the COR. This program shall:

- (a) Have a simple, easy-to-use interface.
- (b) Include a file plan, directory, and complete user instructions, and where the user can select and open for display, copy, or print any record, instruction, plan, permit, or any other documentation created by the Contractor during the life of this contract (data not computer generated shall be referenced by the program).

3.2.6.4.2 Retain Master and Working Copies

The Contractor shall retain a master copy and working copy of all data submitted under this contract or transferred from previous contracts, unless stipulated otherwise elsewhere in this PWS. All data forwarded to the data repository shall be retainable, reproducible copies. Any loss of stored data due to a single IT systems failure shall not be excused.

3.2.7 Synchronized Pre-Deployment & Operational Tracker

Synchronized Pre-Deployment Operational Tracker (SPOT) is the central authoritative repository for applicable DoD contracts, Contractor personnel, and contract equipment as defined by the Congressional Acts and DoD regulations listed in the Compliance section below. SPOT delivers a standard, collaborative method for the management, tracking and visibility of Contractor personnel and contracts in support of contingencies, humanitarian assistance, disaster recovery operations, and other military operations or military exercises, when designated by the Combatant Commander. It provides a centralized means to identify the Department's reliance and dependence on contracted capabilities. Additionally, SPOT

offers fidelity and visibility of existing and previously contracted support, so that planners and others may consider current and historical data when developing future total force structure requirements as well as logistics and operational plans across all phases of operations.

3.2.7.1 Regulatory

DoD Instruction 3020.41, dated 20 Dec 11 27 Nov 2024, incorporating change 1 April 11, 2017, Operational Contract Support (OCS): Requires that in applicable contingency operations, Contractor visibility and accountability shall be maintained through a common joint database, i.e., the SPOT or its successor. Additionally, it requires that all mandatory data must be entered into SPOT or its successor before a Contractor employee is permitted to deploy to or enter a military theater of operations. Contracting officers, through the terms of the contracts, shall require Contractors to enter by-name data before an employee's deployment and to maintain and update the information in SPOT or its successor. Additionally, DFARS Clause 252.225-7040. Contractor Personnel Supporting U.S. Armed Forces Deployed outside the United States: Requires Contractor companies to use SPOT to enter all applicable data on contracted personnel before deployment and maintain data for all Contractor personnel that are authorized to accompany U.S. Armed Forces deployed outside the United States. It further requires Contractor personnel to have a SPOT-generated Letter of Authorization (LOA) signed by the Contracting Officer to process through a deployment center or to travel to, from, or within the designated operational area. The LOA identifies authorizations, privileges, or Government support that Contractor personnel are entitled to under the specific contract for which they are deployed.

3.2.7.2 Contractor Requirements

The Contractor shall appoint a Contractor Administrator (CA), that shall interact with the CO and COR and SPOT Government Agent to meet requirements as stipulated in regulatory documents.

3.2.8 Contractor Personnel Management

The Contractor shall establish and maintain all the management entities necessary to fulfill all requirements specified in this PWS. The Contractor shall provide the manpower to perform all operations and maintenance to the performance levels defined within this PWS at no additional cost to the Government.

3.2.8.1 Personnel Training

The Contractor shall be responsible for all training of its personnel at no additional cost to the Government.

3.2.8.1.1 Laws and Regulations

The Contractor shall train its personnel in applicable Federal, State, local, and DAF laws and regulations and requirements.

3.2.8.1.2 Certifications

The Contractor shall ensure personnel performing tasks requiring unique certifications and/or training (e.g. CSL, CST, Cyber Defense Infrastructure Support Specialist (CDISS)/ Information Systems Security Officer (ISSO) qualifications, Information System Security Manager (ISSM), Communications Security (COMSEC) Responsible Officer, HAZMAT certifications, flight line

driver's licenses, commercial driver's licenses (CDL), Load Planners and Certifiers, Helicopter Load Riggers and Certifiers, tower climbing, etc.) are fully qualified and current.

3.2.8.1.3 New Equipment

The Contractor will be afforded access to new equipment during installation/integration to facilitate familiarization and hands-on experience.

3.2.8.1.4 Opportune Training

The Contractor may take advantage of non-obligatory government provided training courses (e.g. Network Administrator, airlift load Rigger/Certifier, HAZMAT Training, etc.) in lieu of civilian courses, where allowed. The Government may assist in scheduling if reasonable to do so. The Contractor shall bear all costs for said training, if fees apply. However, the Government shall not waive the requirement for the Contractor to provide a properly trained workforce, 100% of the time. Awaiting a non-obligatory government provided course shall not be an excuse toward a lack of proper training/certifications.

3.2.8.2 Security Clearances

The Contractor shall hire and maintain a sufficient number of qualified personnel (including possession of security clearances, ranging from SECRET to TOP SECRET, with SCI and SAP access as required), to meet all the requirements of this contract. Task areas requiring personnel with TS, SCI, and/or SAP clearances include:

- (a) Threat system operations of IADS components in SCI and/or SAP accredited facilities.
- (b) Threat system operations performed with advanced IADS components, including other systems that will be procured as a part of the JPARC 2025 modernization program.
- (c) Aircraft merge and debrief processes.
- (d) CDS Systems.
- (e) Program or Operations Managers.
- (f) Computer system or network administrators that manage equipment inside SCI and/or SAP accredited facilities.
- (g) Persons with TS or SAP cleared computer network accounts such as JWICS or CV2.

3.2.8.3 Employee Base Access

The Contractor site manager shall provide the host base Security Force's Pass and ID division, through the CO, a list of personnel who require access to the host base for official business. The Contractor site manager will also identify personnel required to perform work in restricted areas, and ensure they receive and wear Restricted Area Badges (RAB) with the required credentials. All employees must meet all USAF, 354 FW, 3 WG, and deployed or TDY location base access requirements. Employment on this contract, or a subcontractor thereto will not be sufficient in and of itself to grant access to any Government facility. Having an employee(s) lose their base access privileges is not an acceptable reason for lack of performance of the contract. Reference Appendix 5 for more information.

3.2.8.4 Identification and Appearance

Contractor personnel shall present a clean and neat appearance. T-shirts, cut-off shorts, greasy and/or heavily stained outerwear will not be allowed. For contractors in the field, appropriate attire for current environmental and work conditions is acceptable so long as it meets OSHA, EPA, and industry accepted safety standards for the type of work being

accomplished. Contractor personnel shall wear nametags or security badges identifying them as Contractor employees while on duty. Security badges will be provided as GFE.

3.2.8.5 Personal Equipment

The Government will not provide any personal or safety gear for Contractor personnel.

3.2.8.6 Flight line Personnel

Contractor personnel operating on flight lines shall comply with local operating instructions for appropriate clothing attire (e.g., no hats; secured line badges; reflective vests/belts; etc.).

3.2.8.7 Lost, Stolen, or Mutilated Badges

Contractor shall report lost, and/or stolen badges to the RF-A and 354 RANS Security Manager(s) immediately if during the duty day, or if after hours, no later than the next duty day.

3.2.8.8 Scheduled and/or Short Notice Terminated Employees

Contractor shall secure badges from employees at the end of their last duty day if on a scheduled termination (e.g., layoff, retirement, etc.). If employees are terminated on short notice (i.e., fired), Contractor shall secure the employee's badge prior to the end of the termination notice and immediately notify applicable Security Manager(s). Badges will be returned to the Security Manager(s) at the earliest convenience.

3.2.9 Vehicle Requirements in Performance of Contract

The Contractor shall provide all vehicles necessary in the performance of this PWS. See paragraph 3.23.1 and its subsequent paragraphs for amplifying statements of responsibility.

3.2.10 Radio Usage

The Contractor shall comply with all radio procedures as stipulated by the Government while accessing on-base restricted areas and JPARC range lands. Radios will be provided as GFE.

3.2.11 Gate, Key, and Lock Control

The Contractor shall establish and implement procedures that ensure keys, locks, and/or lock combinations issued to the Contractor by the Government are not lost, misplaced, duplicated or used by unauthorized persons. The Key and Lock Control procedures shall be included in the Contractor's PMP. The Contractor shall furnish the CO and COR keys and lock combinations to all entry gates, systems/equipment, and structures and shelters, other than real property.

3.2.11.1 Gate Access Control

The Contractor shall comply at all times with Government directives regarding gate unlocking and locking procedures.

3.2.11.2 Key Use, Loss, and Duplication

The Contractor shall prohibit opening of locked areas by Contractor personnel to permit entrance of persons other than those engaged in performance of work or authorized to be in those areas. The Contractor shall report occurrences of lost or duplicated keys to the CO, and COR. In the event keys, other than master keys are lost or duplicated, the Contractor shall be

required to re-key or replace the affected lock or locks. However, the Government may replace the affected lock or locks or perform re-keying. In the event a master key is lost or duplicated, the Government will replace all locks and keys for that system. When the Government performs replacement of locks or re-keying due to Contractor's loss or unauthorized duplication of keys, the total cost shall be deducted from payment due the Contractor. The Contractor shall prohibit use of keys issued to them by the Government by any persons other than the Contractor's employees.

3.2.11.3 Lock Combinations

The Contractor shall maximize the use of combination locks used on GFE and combinations shall be given to the COR. The Contractor shall establish and implement procedures that ensure lock combinations are not revealed to unauthorized persons. Lock combinations shall be changed at least annually or when an individual who has knowledge of the combination is terminated or transferred, or upon direction from the Government. These procedures shall be included in the Contractor's PMP.

3.2.12 Environmental, Safety, and Health

3.2.12.1 Environmental Management Plan

The Contractor shall develop and implement an Environmental Management Plan (EMP). Reference Appendix 5 for more information. The EMP shall be reviewed annually and updated as required to reflect changes in equipment, regulatory revisions/changes, and/or Contractor's procedures. The plan shall adhere to the most stringent of all federal, state, and local environmental laws and will include but not be limited to:

- (a) Environmental Release Reporting Procedures
- (b) Hazardous Materials Management Plan (HMMP)
- (c) Hazardous Waste Management Plan (HWMP)
- (d) Environmental Permit Management Procedure
- (e) Spill Prevention and Countermeasures Plan

3.2.12.2 Environmental Release

The Contractor shall report, in accordance with the 354 FW Spill Response Plan, fuel or hazardous substance releases immediately upon finding the release. Contractor shall notify the appropriate agencies, as specified in the Spill Response Plan, within 1 hour of a spill of 10 gallons or more. Written report(s) shall be according to the latest guidance issued by federal or state agencies and submitted within 24 hours of spill discovery. Reference Appendix 5 for more information.

The Contractor shall:

- (a) Also submit copies of release (spill) reports to the CO and COR and 354 RANS within 24 hours.
- (b) Comply with all directed actions upon notification from the state, Environmental Protection Agency (EPA), or U.S. Coast Guard regarding follow up reporting.
- (c) Perform all required cleanup of hazardous fuel or hazardous substance release from Contractor owned equipment items or GFP/GFE.

3.2.12.3 Hazardous Materials Management

The Contractor shall develop and implement an HMMP as part of its EMP. Contractor shall comply with AFI 32-7042, Waste Management, and AFI 32-7086, Hazardous Materials Management for guidance in developing the Plan. Reference Appendix 5 for more information. The plan shall include but not be limited to the following items:

- (a) Utilization of Eielson and JBER HAZMAT procedures/ regulations for all hazardous material purchase
- (b) Non-authorization of local purchase of hazardous material acquisition
- (c) Handling hazardous materials
- (d) Requesting third party hazardous material inventory list prior to site arrival
- (e) Briefing and documenting third party personnel on hazardous material and waste responsibilities upon arrival
- (f) Tracking and documenting third party hazardous waste originating on site
- (g) Hazardous material inventory to include:
 - 1) Trade name, chemical name, or common name of each substance
 - 2) Quantity of hazardous material
 - 3) Name and address of manufacturer
 - 4) Manufacturer specific Safety Data Sheet (SDS)
 - 5) Type and condition of container
 - 6) Hazardous material storage

3.2.12.3.1 Operating Procedures for Hazardous Material

The Contractor shall provide to the CO and COR a copy of its Operating Procedures for Hazardous Materials prior to commencement of work on the JPARC.

3.2.12.3.2 Hazardous Waste Management

The Contractor shall develop and implement a HWMP as part of its EMP. The HWMP shall comply with federal, state, and local environmental laws, AFI 32-7042, Waste Management, AFI 32-7086, Hazardous Materials Management. Reference Appendix 5 for more information. The HWMP shall include but not be limited to:

- (a) Hazardous materials and hazardous waste inventories
- (b) Turn-in requirements
- (c) Utilization
- (d) Storage, handling, record keeping, and transportation procedures for hazardous waste by the Contractor
- (e) Hazardous Material Inventory List

3.2.12.3.3 Hazardous Waste Management Plan.

The Contractor shall provide to the CO and COR a copy of its HWMP prior to commencement of work on the JPARC.

3.2.12.3.4 Spill Prevention Contingency and Countermeasures Plans

The Contractor shall develop and implement a Spill Prevention Contingency and Countermeasures Plan as part of its EMP. The Contractor shall reference the 354 FW Spill Response Plan and align its plan to comply with directives so stipulated.

3.2.12.3.5 Provide Spill Prevention and Countermeasures

The Contractor shall provide to the CO and COR a copy of its Spill Prevention and Countermeasures prior to commencement of work on the JPARC.

3.2.12.3.6 Hazardous Substance Release Report (Spill Report)

The Contractor shall provide to the CO and COR a report following any spill of a hazardous substance. This report shall be delivered to the CO and COR within 24 hours of spill discovery. Reference Appendix 5 for more information.

3.2.12.4 Occupational Health and Safety

The Contractor shall comply with occupational safety and health standards IAW Public Law (PL) 91-596 and associated Title 29, Code of Federal Regulations (CFR).

3.2.12.5 Develop Occupational Health and Safety Plan

The Contractor shall develop a comprehensive Occupational Health and Safety Plan (OHSP) to meet these requirements. The plan shall be a part of Contractor's Management Plan and adhere to its distribution and revision requirements. Reference Appendix 5 for more information. The OHSP shall contain, but not be limited to:

- (a) Corporate/company policy statement(s)
- (b) Corporate/company/employees' responsibilities
- (c) Public Law, Federal, State, USAF regulatory references
- (d) Compliance and safe work practices policies and procedures
- (e) Hazard Communication (HAZCOM) procedures
- (f) Corporate/company Safety Programs
- (g) Hazard analysis and corrective action procedures
- (h) Expected Job Safety Hazards
- (i) Accident/incident reporting/investigation procedures
- (j) Employee training programs/policies

3.2.12.6 Eliminate Hazards

The Contractor shall eliminate hazards immediately after discovery or implement interim control measures until final correction can be accomplished.

3.2.12.7 Safety Publications

The Contractor shall comply with the following publications:

- (a) PL 91-596 Occupational Safety and Health Act
- (b) AFI 91-203 Air Force Consolidated Occupational Safety Instruction
- (c) AFI 32-1064, Electrical Safe Practices
- (d) 354FWI 32-2001, Fire Emergency Services Program

3.2.12.8 Safety Inspections

The Contractor shall:

- (a) Perform and document walk-through safety inspections of workplaces no less frequently than monthly.
- (b) Develop a list of high interest areas based on the exposure and potential severity of hazards (e.g., machinery, power tools, industrial work areas, radiation hazard, etc.).
- (c) Perform and document monthly inspections of high interest areas at manned sites and

- quarterly at unmanned sites or as required by supporting government agencies.
- (d) Provide hazard abatement information for hazards not corrected within 30 days.
 - (e) Comply with additional interim control measures and corrective actions as prescribed by the Government.
 - (f) Conduct inspections on organizational fuel tanks as required by the installation and DoW policy
 - (g) Coordinate with Base Environmental Services to ensure completion of radiation hazard surveys.

3.2.12.9 LASER Safety

The Contractor shall ensure all personnel on range carry approved laser eye protection (LEP) that matches the required optical density at the wavelength of the laser system being used. If more than one type of laser is used, LEP should provide full spectrum protection for all wavelengths involved; the highest optical density required for all systems of the same wavelength should be used. When on the range, the contractor shall adhere to all guidance listed in MIL-HDBK-828D or any more recent publication superseding it.

3.2.12.10 Incident Reporting

The Contractor shall notify the CO and COR, and the host base safety office within 24 hours of actual and potential hazards involving Government furnished property, capital equipment, or range operations through the use of AF Form 457, USAF Hazard Report (in AFI 91-202). In the event of an incident, the Contractor shall file an Incident Report IAW local USAF or US Army Safety Office requirements. Reference Appendix 5 for more information.

3.2.13 Customer Support

3.2.13.1 Comprehensive Overviews

Upon Government request, the Contractor shall present a comprehensive overview of the JPARC services and systems the Contractor is responsible to operate. Presentation may include verbal briefings, PowerPoint presentations, and hand-on demonstrations as required.

3.2.13.2 Tours and Demonstrations

The Contractor shall provide tours of on-base JPARC facilities, threat sites and comm sites and provide demonstrations for various visiting groups and individuals. The Contractor shall professionally interface with distinguished visitors, observers, aircrew, and other personnel. The Contractor shall create and provide briefings and demonstrations of the JPARC system as requested by the Government. The Contractor will be notified one week in advance by the COR for coordination, when possible.

3.2.14 Temporary Storage

External open storage or temporary storage of Contractor owned equipment, materials, vehicles, supplies, etc. is not authorized without COR approval. If external open storage or temporary storage is allowed, arrangement shall be neat and orderly and must not pose a safety, security, or environmental hazard. Approved temporary storage items shall be removed by the timeline set by the COR. The COR may direct disposal of trash and/or debris; and may remove temporary storage items at the Contractor's expense if the Contractor fails to comply with the time limit for temporary storage. Storage of personally owned material, equipment, property, vehicles, supplies, etc. on Government owned or managed lands is not

authorized.

3.2.15 Emergency Medical Support

The Government will provide emergency medical care within the capabilities of Government personnel, equipment, facilities, personnel, and medications currently available. "Emergency" is defined as that situation which, if untreated, will result in death, permanent disfigurement, or impairment of faculties, undue pain or suffering, or serious bodily harm, such as permanent loss of the use of a limb, as determined by the reasonable judgment of the attending medical personnel. The Contractor agrees to assume responsibility for providing or enforcing the acquisition of reasonably required follow-on care. The Government will bill the Contractor for all emergency medical services provided to Contractor employees. The Government will keep the Contractor informed of the disposition of any Contractor employee removed from the ranges for emergency medical reasons.

3.2.15.1 Limitations to Liability.

The Contractor shall defend, indemnify, and hold harmless the Government from any judgment or settlement of a claim by any Contractor employee that is based on medical treatment received from Government personnel under this contract.

3.3 Government Support

The Government COR will provide the Contractor access to all available Government furnished information, facilities, materiel, equipment, services, etc. as required. The Contractor shall provide the appropriate documentation (e.g. non-disclosure, non-compete statements) when necessary to gain access to sensitive or "rights guarded" data.

3.4 Travel

The Contractor shall perform all travel required to complete the requirements set forth in this PWS.

For all travel, the Contractor shall comply with the requirements of the Joint Travel Regulations (JTR) and shall only be reimbursed for travel expenses allowable under the JTR for cost type CLINs. For OCONUS travel Requirements, the Government in some cases may be required to submit a country/theatre clearance request for Contractor Personnel accompanying Government personnel to fulfill mission requirements. In such cases, the Contractor shall ensure that they meet all requirements set forth in the applicable sections of the DoD Foreign Clearance Manual (FCM), DoD 4500.54.

Deployed OCONUS locations: As required and coordinated with the CO and COR and based on training requirements and flying exercise commitments such as, but not limited to: Sites and Locations; training areas/ranges within the contiguous 48 United States, Canada, The Republic of Korea (ROK), Australia, Japan, the U.S. Territory of Guam, and the state of Hawaii.

When required, Contractor and subcontractor personnel shall complete Survival, Evasion, Resistance, and Escape (SERE) training (<https://JKODirect.jten.mil>), and Isolated Personnel Report (ISOPREP) (<https://prmsglobal.prms.af.mil/prmsconv>). Further, travel plans shall be entered into Indo-Pacific Command (INDOPACOM) "travel tracker" (<https://iatp.pacom.mil>) and DoD's Aircraft and Personnel Automated Clearance System (apacs.milcloud.mil/apacs/).

3.4.1 SOFA

USFK SOFA Contract Clause – Invited Contractor or Technical Representative Status under U.S. –ROK (see Attachment)

USFK Wartime Clause (Contingency Conditions Clause) – Continuance of performance during any state of Emergency in ROK

3.5 Security

3.5.1 Contractor Security Clearances

At a minimum a SECRET level clearance shall be required for all personnel supporting this effort. Contractor personnel may be required to access, view, possess, process and/or use classified information, information systems and workspaces to successfully complete requirements under this contract. Some Contractors will be required to handle/store Top Secret - Sensitive Compartmented Information (TS/SCI) and/or Special Access Program / Special Access Required (SAP/SAR), and therefore must have the appropriate clearances. Any classified material shall be stored in Government facilities. The Contractor shall provide access to a Security Manager to implement a security program to include documentation control, software control, and Automated Information System control in accordance with the National Industrial Security Program (NISP), if required. The Contractor shall provide a Facilities Security Officer to implement the security program to include personnel security programs, software security and documents controls in accordance with the NISP.

3.5.2 Visiting Government Facilities

Contractor personnel shall be issued identification badges by the Government. The badges shall be clearly visible at all times while Contractor personnel are on Government premises and clearly indicate "Contractor" on them. The Contractor shall furnish all information required to facilitate the use and possession of the badges. The Contractor shall be responsible for ensuring that all badges issued to Contractor employees are returned immediately following completion of the contract, relocation or termination of an employee, and/or upon request of the PCO or the COR.

Contractor will ensure all employees comply with Federal, State, and local health and safety guidance, and Installation Force Protection Condition (FPCON) measures to ensure the safety, health, and welfare of DoD personnel involved in the performance of this effort. This includes Centers for Disease Control pandemic mitigation measures pertaining to screening/testing, wear of personal protective equipment, social distancing and other social prohibitions, quarantine/isolation, vaccine administration, and disinfecting/cleaning.

3.5.3 Common Access Cards

All on-site Contractor personnel shall obtain a DoD issued Common Access Card (CAC) for frequent access to US Government facilities and Information Technology systems. The Contractor shall be responsible for requesting all CACs through the CO or COR.

3.5.4 Anti-Terrorism Level 1 Awareness Training

All Contractor employees, to include subcontractor employees, requiring access to Army Installations, facilities and controlled access areas, shall complete Anti-Terrorism (AT) Level I

awareness training within 30 calendar days after contract start date or effective date of incorporation of this requirement into the contract, whichever is applicable. The Contractor shall submit certificates of completion for each affected Contractor employee and subcontractor employee, to the COR or to the contracting officer. AT level I awareness training is available at the following website: <https://jko.jten.mil/courses/AT-level1/launch.html>.

3.5.4.1 AT Awareness Training for Contractor Personnel Traveling Overseas.

The Contractor employees, to include subcontractor employees, shall receive government provided area of responsibility (AOR) specific AT awareness training as directed by the most recent version of DAFI 10-245. Specific AOR training content is directed by the Combatant Commander with the unit Anti-Terrorism Officer (ATO) being the local point of contact.

3.5.5 Access and General Protection/Security Policy and Procedures.

The Contractor and all associated subcontractor employees shall comply with applicable installation, facility, and Area Commander Installation and/or facility access and local security policies and procedures (provided by government representative). The Contractor shall also provide all information required for background checks to meet Installation access requirements to be accomplished by Installation Provost Marshal Office, Director of Emergency Services, or Security Office. The Contractor workforce must comply with all personal identity verification requirements as directed by DoD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the FPCON at any individual facility or installation change, the Government may require changes in Contractor security matters or processes.

3.5.6 OPSEC Training

Per AR 530-1, Operations Security, new Contractor employees must complete Level I OPSEC training within 30 calendar days of their reporting for duty. All Contractor employees must complete annual OPSEC awareness training.

3.5.7 Information Assurance Awareness Training/Certification

All Contractor employees with access to a government Information System (IS) must successfully complete the DoD Information Assurance Awareness training prior to access to the IS and then annually thereafter. All Contractor employees working IA, Information Technology (IT) functions, or having privileged systems accounts must comply with DoD and Air Force training requirements in DoDD 8140.01, DoD 8140.01-M within six months of employment.

Contractor personnel performing work on Government IT systems including NIPR, local enclaves will have qualifications fulfilling the IT (Cyberspace) workforce element, the Network Operations Specialist, System Administrator, and Technical Support Specialist work roles at a high level of proficiency.

3.5.8 Interaction and/or Disclosure with Foreign Country/Foreign National Personnel

The Contractor shall comply with Foreign Disclosure and Contacts with Foreign Representatives IAW AR 380-10, DoD 5230.11, Disclosure of Classified Military Information to Foreign Governments and International Organizations, DoD 5230.20, Visits, Assignments, and Exchanges of Foreign Nationals.

3.6 Configuration Management

The Contractor shall manage the technical and administrative direction and surveillance actions used to identify and document the functional, physical, and logical characteristics of a Configuration Item (CI), to control changes to a CI and its characteristics, and to record and report change processing and implementation status IAW the Contractor's Configuration Management Plan (CMP). All JPARC systems, equipment, operating sites, structures, shelters, buildings, contractor work areas, and networks will be included in the CMP. Revisions and necessary additions to existing government documents shall be carried out and documented IAW the content and format requirements delineated in the existing government documents. Reference Appendix 5 for more information.

3.6.1 Configuration Management Data

The Contractor shall maintain accurate Configuration data for all JPARC systems listed in Appendices 7 and 8 as applicable. This shall include, but not be limited to, hardware/software (HW/SW) listings, interconnection details, physical layout, materials data, and configuration / set-up / provisioning documentation. The Contractor shall provide to the Government's CM manager complete, detailed, and accurate documentation/updates to equipment HW/SW changes as a result of Contractor initiated actions or on-going upgrades/modifications to JPARC systems. To enable success of JPARC CM program, the Contractor shall:

Ensure documentation submissions do not exceed 30 days from any change, to include System Configurations, Physical/Logical Configurations, and or Software Configuration changes.

Copies / back-ups of all software on JPARC systems will be stored immediately, appropriately and handled in compliance with all provision of sections 3.8.17 (IT) and 3.12.7 (RMF) of this PWS.

- (a) Ensure that a configuration baseline on command supported systems is maintained for all software, firmware, and hardware provided as a part of this contract.
- (b) As applicable, submit updated systems configuration records to include, but not limited to the configuration and location of all electronic combat systems, Air Combat Training System (ACTS) systems, LMOC, networks, Radar Display and Command and Control (C2) systems, LINK-16/SADL systems, Joint Advanced Weapons Scoring Systems (JAWSS) sites, calibration targets, locations, and JAWSS and shelters, towers, and PARC Data Link (PDL) on or around the JPARC ranges.
- (c) Use a currently supported version of, Microsoft "Visio", depending on native drawing format, to produce and modify Configuration Drawings. Contractor shall procure sufficient copies of this software to perform requirements of this PWS.
- (d) Use the existing government-sponsored cataloging system to review, maintain, and categorize configuration information files (or Visio drawings, Word, Excel, PDF documents, photos, etc.). Contractor may propose improvements to existing cataloging system that improves efficiency, accuracy, usability, and security. All configuration data is government owned information and shall be accessible by the Government via DoW NIPR net.
- (e) Perform configuration audits as a minimum, annually. Results of audits, to include discrepancies and their corrective actions shall be provided to the Government via technical report.

- (f) Produce specific configuration materials and data as requested by the government in a timely manner, no longer than 24 hours after any request.
- (g) Participate in Configuration Control Board meetings at the request of the Government.

3.6.1.1 Frequency Management

The Contractor shall support the Government Frequency Management processes designed to obtain required authorizations for new additions (new assignments), deletions, renewals, and/or modifications of frequency assignments for the RF radiating devices assigned to the JPARC. The terms "frequency management" and "spectrum management" are synonymous. The Contractor shall:

- (a) Annually, or within one week as requested by CO/COR, or as required by maintenance procedures measure and document radar RF parametric data, (e.g., frequency, pulse-repetition-interval (PRI)/pulse-repetition-frequency (PRF)) for all Unmanned and Manned Threat Simulators, FSU or International SA/ Ground Control Intercept (GCI), and Replica/real FSU and International Threat radars.
- (b) Annually, or within one week as requested by the CO/COR, produce a summary accounting of all non-threat related RF parametric data (e.g. frequency, RRI/PRF, modulation type, bandwidth, antenna parameters, transmitter power). Associated systems shall include all radiating systems owned by the 354 RANS, such as terrestrial microwave, PDL data links, LINK-16/SADL, and P5CTS.
- (c) The Contractor shall manage frequency authorizations.

3.6.2 Document Management

The Contractor shall ensure that the latest revisions of drawings, specifications, work instructions, inspection/test instructions, software, and other documents satisfying the contract are kept in a Document Repository and used to the maximum extent possible in operation, maintenance, production, inspection, and test. The Contractor shall maintain records of all inspections and tests. Contractor shall make records available to the Government as needed within five business day of request.

3.6.2.1 Document Repository

The Document Repository shall include a master copy of all publications for all Contactor-responsible GFP/CAP provided that is mandatory and pertinent to respective locations and requirements.

- (a) The Contractor shall maintain a Document Repository at a centralized location, providing a library for master copies of all documentation. The Contractor shall establish, maintain, and update a complete index of all publications.
- (b) The Contractor shall establish or obtain working or field copies for all publications required to perform tasks detailed in this PWS. Temporary removal of master documents may occur as needed to ensure mission accomplishment.
- (c) The Contractor shall ensure working or field copies of publications, technical orders, commercial manuals, and any other publications required for specified tasks are maintained for currency and are in usable order. The unavailability or noted inaccuracy of any publication does not constitute a reason for noncompliance within the requirements of this PWS.
- (d) The Contractor shall ensure that copies of documentation received directly for fielded

systems are incorporated into the Document Repository.

- (e) The Contractor shall document noted discrepancies in working or field copies of commercial documents by Contractor format change pages at the front of the affected document. Update Master Document Repository copies.
- (f) The Contractor shall post digitized versions of publications on a common IT data source/drive as designated by the COR.

3.7 Technical Libraries and Publications

3.7.1 Publications Definition

AFIs, AFMANs, DoD regulations, Operating Instructions (O.I.s), Computer Program Identification Numbers (CPIN)s, Military Standards, Government furnished manuals, drawings, Original Equipment Manufacturer (OEM) and/or System Program Office (SPO) supplied operating, maintenance, and parts manuals, drawings, technical notes, checklists in preparation of finalized Technical Orders (T.O.), Information Systems Facility records, all applicable indexes, etc. are collectively referred to as publications hereafter.

3.7.2 Technical Library

This library includes a master copy of all publications for all Contractor-responsible GFP/CFP provided that is mandatory and pertinent to respective locations and requirements.

The Contractor shall maintain a Technical Library at Eielson AFB, providing a repository for master copies of all documentation. The Contractor shall establish Publications Distribution Office (PDO), T.O., and CPIN accounts; designate a primary and alternate representative for these accounts; order and maintain Air Force publications, T.O., and Computer Programs IAW AFI 33-360, and T.O. 00-5-2; establish, maintain, and update, a complete index of all publications in each library.

The Contractor shall:

- (a) Coordinate for/establish/obtain working/field copies for all publications required to perform tasks detailed in this PWS. Temporary removal of master documents is permissible as needed to ensure mission accomplishment.
- (b) Ensure working/field copies of publications, technical orders, commercial manuals, and any other non-AF publications required for specified tasks are maintained for currency and are in usable order. The unavailability or noted inaccuracy of any publication does not constitute a reason for noncompliance within the requirements of this PWS.
 - 1) Ensure that copies of documentation received directly through acquisition/procurement processes are incorporated into the Technical Library.
 - 2) Submit T.O. Change Requests via USAF Form Air Force Technical Order (AFTO) Form 22, Technical Order Publication Improvement Report NO LATER THAN 30 days after the discovery of a T.O. discrepancy to update and/or correct publications.
 - 3) Document noted discrepancies in working/field copies of commercial documents by Contractor format change pages at the front of the affected document. Provide a copy of change page(s) to the librarian in order to update the Master Technical Library copy.
 - 4) Post digitized versions of publications on a common IT data source/drive

- as designated by the COR.
- 5) The Contractor shall take immediate action to correct inaccuracies in data in any ARCTICS required publication.

3.8 Contractor Operations

Contractor operations entail all aspects of support to include planning, scheduling, execution of tasks and operations, performance analysis, and feedback to facilitate PACAF's mission of supporting combat forces training. The Contractor shall perform all specified tasks while ensuring long-term, cost-effective sustainability of JPARC systems.

3.8.1 Overview of Operation & Maintenance Requirements

The following is a summary overview of O&M requirements. This listing is not intended to be comprehensive; the Contractor shall reference this PWS in its entirety, to include appendices, to determine all support requirements. As such, the Contractor shall:

- (a) Ensure its workforce, and all required JPARC systems and capabilities are prepared in time to meet mission requirements.
- (b) Provide a robust and invasive Quality Control program that ensures the best possible services are performed at the lowest possible cost.
- (c) Provide the following subject matter experts (SME) in order to conduct airspace, flying schedule, and Special Use Airspace Information Services (SUAIS) management, and exercise and scenario development, and event execution, analysis, and results reporting.
 - 1) Range Control Electronic Attack - Integrated Air Defense
 - 2) Digital Integrated Air Defense System (DIADS) software SME to develop, test, and make available current, meaningful and accurate DIADS scenarios in the JPARC Networks.
- (d) Provide the ability to develop, test, and make available current, meaningful and accurate DIADS scenarios in the JPARC Networks. Person(s) doing this must be trained and experienced in installing and configuring the software, developing, programming, testing, and operating realistic and relevant scenarios informed by intelligence and mission scenarios.
- (e) Provide O&M to air surveillance, ACTS, and C2 systems, providing live and post-mission merged display of air and surface platform time-space-position-information (TSPI), to include ACTS-derived TSPI, Data Link tracks, radar data in its various forms (e.g., skin track, and transponder targets), and track and target data from passive detection systems.
- (f) Provide O&M to GFE LINK-16, Situational Awareness Data Link (SADL)/Enhance Position Location and Reporting System (EPLRS), and their respective gateways, encryption systems and networks, and C2 management hardware and software systems.
- (g) Provide O&M to LVC networks, computers, and encryption systems, including but not limited to Distributed Mission Operations Network (DMON) and Joint Training and Experimentation Network (JTEN), Defense Research and Experimentation Network (DREN), Secure Defense Research and Experimentation Network (SDREN).. Provide ground-based Adversary Replication (AR) capabilities through O&M of Electronic Attack (EA), cyber-warfare, and target decoy systems. Specifically,

Contractors shall provide O&M of:

- 1) GFE IADS, consisting of simulated, replica, and Former Soviet Union (FSU), and international components, and other advanced threat radar emulators and missile systems.
 - 2) Man-portable Aircraft Survivability Trainer (MAST), and Mallina Man-Portable Air Defense (MANPAD) simulators.
 - 3) Cyber-warfare systems to include communications, and radar jamming, and non-kinetic effects such as electronic and voice deception techniques.
 - 4) Camouflage, Concealment, and Deception (CC&D) to include hard-bodied and inflatable decoy systems, camouflage netting systems.
 - 5) Smokey Surface-to-Air Missile (SAM) missile firing emulators.
- (h) Provide O&M to weapons delivery scoring capabilities, GFE video and data capture systems, to include the JAWSS; and threat system video display and recording capabilities.
- (i) Provide O&M to critical operations networks and systems, ensuring each is fully functional for all scheduled operations on the JPARC. Key networks, systems, and capabilities include, but are not limited to:
- 1) PDL fiber-optic and microwave communications network
 - 2) JPARC-Red (JPARC-R), JPARC-SAP, JPARC-Black (JPARC-B), and JPARC-Releasable (JPARC-REL) networks primarily utilizing Test and Training Enabling Network Architecture (TENA) and LMOC
 - 3) Encryption of range systems and associated JPARC-R/SAP/B/REL data networks
 - 4) Cross-Domain-Solution (CDS) systems including associated systems and software to make rulesets
 - 5) LVC Gateway Portals and protocol conversion systems
 - 6) Voice and radio communications RED and BLACK switches, the range radios and associated encryption and data transport / networking systems
- (j) Provide Information Technology (IT) services with key work roles, to include Network Operations Specialist, System Administrator, and Technical Support Specialist at a high level of proficiency supporting networks and capabilities.
- (k) Comply with all provisions of established Risk Management Framework network and systems authority-to-operate/ authority-to-connect (ATO/ATC) restrictions and allowances. Perform RMF processes required for maintenance of, the development of, and renewal of processes associated with DoD's RMF program for specified networks and computer systems as defined herein.
- (l) Provide O&M support for TDY deployments of FSU IADS radars; and ACTS, LINK-16/SADL, and/or Ground-Air Transmitter/Receiver (GATR) radios.
- (m) Provide operations and infrastructure support for visiting Government units utilizing range resources as part of LFE/MFE training events, and/or small teams conducting short term test/exploitation events.
- (n) Provide complete logistical, supply, and maintenance of JPARC infrastructures as defined in this PWS. To include:
- 1) Supply chain management
 - 2) Shipping and Receiving

- 3) Sourcing and procuring systems and/or OEM parts from non-traditional and/or non-DoD depot sources in order to support non-nomenclature GFE/GFP (e.g. FSU radars, foreign manufactured systems, generator systems, etc.)
- (o) Provide refueling services, to include scheduling, handling, delivery, and transfer as required, for diesel and propane fuels to JPARC operating sites, equipment, buildings, shelters, and structures.
- (p) Provide power production services, performing all manner of O&M of fixed and portable generator systems, and electrical distribution circuits and controls; to include installation, refurbishment, and repair of structure, building, shelter, and equipment power systems.
- (q) Provide maintenance of environmental control systems to include installation, refurbishment, and repair of structure, building, shelter, and equipment environmental control systems.
- (r) Provide routine snow and ice removal from areas predominately used by Contractor personnel (e.g. the sidewalks, entrances, ramps, loading areas, far outlying roads leading up to sites at which the contractor has O&M responsibilities (e.g. Brigadier Road all the way to Hill 3265, spur roads to November (Sheet Hill), Rocky Top, Cam 1 and Cam 2, leading up to site at Donnelly Dome and OP SHACK), Delta Junction sites, Gerstle River, Bridge to Terabithia Tok and various other sites listed in Appendix 6. In addition, clearance of parking areas that support Contractor occupied facilities in accordance with Section 3.12.1.2.8 Snow Removal. Provide complete maintenance support for specified JPARC systems, subsystems, and equipment listed in Attachments 3, GFE/GFP Listing, and Appendices 7, 8, and 9, including hardware, firmware, and software.
- (s) Provide all vehicles and transportation services necessary to meet the requirements of this contract. To include:
 - 1) Vehicles as required (e.g. 4-wheel drive vehicles, forklifts, snowmobiles, etc.) to transport Contractor personnel, systems, equipment, materials, etc. year-round to and from all sites and locations to meet mission requirements.
 - 2) Coordinate helicopter airlift services for maintenance of GFE systems at JPARC fly-to sites with existing airlift Contractor [reference 3.23.2 Air Transport (b)].
 - 3) Planning, coordinating, and completing deployment logistics movements and deployment requirements for airlift, sealift, and surface shipment of required IADS systems.
 - 4) Providing personnel trained and certified to develop load plans, draft hazard declarations, and certify airlift loads and complete necessary documentations.
- (t) Establish a comprehensive security program, develop systems security plans, and employ proper IT and cybersecurity.
- (u) Provide security processes, to include COMSEC Custodian duties, managing cryptographic materials and COMSEC Controlled Items (CCI), and providing O&M to encryption systems and networks.
- (v) Conduct Engineering and Technical services to provide studies and analysis; installation, integration and testing of JPARC networks and systems; systems acceptance testing and general support of O&M functions.

Perform CM, in accordance with the government's CM Plan, maintaining accurate

hardware/software (HW/SW) listings, drawings and configuration documentation to include copies of software and set-up / configuration settings for all JPARC systems listed in appendices. The Contractor shall provide complete, detailed, and accurate documentation updates reflecting equipment HW/SW changes.

3.8.2 Operations Services

The Contractor shall provide all operations support services for all equipment and systems identified in Appendices 7, 8, and 9. Key functional areas/processes required to support the combat training mission includes:

- (a) Operations planning and scheduling
- (b) Mission preparations
- (c) Air and Range Space Management
- (d) Event Control, Analysis, and Reporting
- (e) Air Platform Tracking Management (Does this cover all methods? P5, future P5, etc...?)
- (f) C2 – Data Links
- (g) Live, Virtual and Constructive (L-V-C) Entity Management
- (h) Adversary Replication - Electronic Attack
- (i) Weapons Scoring
- (j) Digital Video Recording and Editing Systems
- (k) Critical Infrastructure Systems and Processes
- (l) IT Systems management
- (m) DoD (RMF processes)
- (n) TDY support to threat systems, and ACTS/LINK-16/radios
- (o) Visiting Unit/Deployed System Support
- (p) Radios/Comm switching system??

3.8.3 Combat Training Mission Priority

Combat training missions shall take priority over all other JPARC activities (unless otherwise coordinated with the CO/COR). Contractor shall complete all pre/post mission data collection and processing necessary to provide effective aircrew feedback and reporting requirements.

3.9 ACTS Operations and Maintenance

3.9.1 Planning Conferences and Daily Mission Planning Support

3.9.1.1 Exercise Planning Conferences

The Contractor shall participate in Exercise Planning Conferences (when requested by the 354 RANS) to provide expertise on, and/or status of all JPARC systems the Contractor is responsible for, and to assist development of and discern plans and priorities for support. Exercise Planning Conferences run for two to five days in length and may occur up to six times per year. Exercise Planning Conferences may require contractor personnel to go TDY.

3.9.1.2 Daily Flying Operation Mission Planning

The Contractor shall support dedicated mission planning and scenario development for local 354 Fighter Wing units providing expertise on and/or status of all JPARC systems for which the Contractor is responsible. They shall coordinate with GODFATHER/SAM-1 to maximize training effectiveness.

3.9.2 Scheduling

The most significant events during the year are MFEs, primarily RF-A and NORTHERN EDGE. Additional exercises and unit-level training, to include DISTANT FRONTIER, add additional demands on JPARC resources. The JPARC hosts three to four exercises each year, each of which lasts approximately 2 weeks with familiarization and post-exercise flights before/after the exercise execution. Daily flying operations for local units at Eielson AFB and JBER continue throughout the year, causing additional demands for JPARC training resources. The flying window shall be 12 hours each day and the threats shall be available at the start of the flying window and support provided for the duration of the window each day.

3.9.2.1 Government Notice for Training Support

The Contractor will notify 354 RANS/RSC/RST if specific mission support requirements cannot be provided as scheduled and why, as soon as such limitation is known. The Government shall identify specific support requirements per the following timelines:

3.9.2.1.1 MFE Support

The Government will provide training requirements no later than 14 days prior to exercise start for each MFE.

3.9.2.1.2 Non-MFE Support

Regardless of whether during an exercise or not, the Government will provide the Contractor with the required Flying Window no later than 1700 on Thursday each week for operations during the following week. The Contractor will publish daily the operational and maintenance status of all threats to inform the Government of the available choices. Threats may be made unavailable for maintenance or repairs. However, the typical number of threats per Paragraph 3.11.1.1.(b) and (c) must be always available for use.

- (a) The contractor shall confirm with the Top-Three, Top-Three designated representative, or the flight lead before cancelling any threats
- (b) The Government will request the following systems and capabilities per the timeline listed below, to facilitate Contractor re-scheduling of work schedules, relocation of resources, and reconfiguration of equipment and operating locations. Systems include:
 - (a) Manned and unmanned threats: NLT 1700L on Thursday the week prior to execution

3.9.2.2 Operations Schedule Changes

The Contractor shall support unexpected changes to operation requirements as it affects its flying training operations support (e.g., extended flying hours, mission/aircraft changes, threat changes, weather delays, etc.) Contractor shall plan work schedules to anticipate potential disruptions/changes to the support required.

3.9.3 Contractor Mission Preparations

The Contractor shall configure the JPARC and all required systems to ensure operational task coverage for all scheduled activities. To support this, the Contractor shall:

- (a) Obtain all required information to support operations by interfacing and coordinating with all applicable agencies such as, but not limited to: 354 RANS, 766 ESS, 354 FW and 3 WG scheduling agencies, Army Range Control, Federal Aviation Administration (FAA), local and visiting flying units, local and visiting ground units, and other

Contractors supporting JPARC missions/installations.

- (b) Perform all necessary preparation/Preventive Maintenance Inspections (PMIs)/tests/checks on required systems/equipment to support scheduled flying/threat training windows.
- (c) Ensure all threat systems and support equipment are properly set up for operation at required locations, and power, fuel, etc. are ready to support required missions.
- (d) Ensure all aircraft-mounted ACTS pods are properly loaded and configured, as required.
- (e) Ensure all PDL, inter/intra-range network connectivity/interfaces identified in Appendix 8 are operational and configured to support operations/security requirements.
- (f) Ensure Air Surveillance networks, ACTS, C2 systems and displays, weapons scoring, and video capabilities are configured and operational as required.
- (g) Ensure all scheduled networks and systems are secured via applicable encryption, and CCI are fully accounted for.
- (h) Ensure all required GATR for the mission are operational, Voice Communications Switching System is programmed and required KY-100M encryption devices are properly keyed and operational. Ensure all PDL network routes to the GATR radios are configured and working to support operational requirements for mission completion.

3.9.4 Government Directed Temporary Duty Training Deployments

3.9.4.1 Contractor Temporary Duty – General

The Contractor shall perform TDY as required by the GPM, and as directed by the CO. Travel and Per Diem costs shall be IAW Joint Travel Regulations (JTR) and FAR Part 31.. All travel directed by the Government will be paid for on a cost reimbursable basis (including Government directed travel between Eielson and JBER). No additional direct labor charges will be provided for TDY support. If requested, the Contractor shall provide a Trip Report for significant trips, visits, etc.

3.9.4.2 ACTS, and Link-16/SADL C2 Deployment Support

Headquarters (HQ) PACAF requires personnel and equipment support to MFE events throughout its AOR. These MFE events are infrequent, and typically scheduled between October and April. TDY periods normally last two to three weeks but may be longer. Operations span pre-mission DRD processing to program ACTS pods for flight, conducting DMD merge processes to form a complete post-mission air picture, and assisting in the mission debriefing process, as required. Additionally, some venues may require the deployment and subsequent operations of Link-16/SADL for use by white force C2 elements. Finally, the Contractor shall:

- (a) Prepare, pre-configure, and pack P5CTS DMDs and deployable laptop computers as stand-alone systems in order to support short term training deployments.
- (b) Prepare, pre-configure, and pack LINK-16/SADL systems as required to support short term training deployments
- (c) Assist the Government with deployment/re-deployment operations.
- (d) Support deployed ACTS pre-mission DRD and/or ground station preparations, live monitor mission execution, and post-mission DMD processes, as required.
- (e) Support deployed C2 LINK-16/SADL operations; serving as a data link focal point and

gateway and providing a surveillance air picture for deployed operations, as required.

- (f) Provide a merged air picture debrief product, and provide debriefing systems such as ICADS, ITAS, PCDS, SIMDIS, or ANGEL assistance during debrief, as requested.
- (g) Provide O&M of applicable equipment as listed in Appendix 8, Tables A8-5, A8-6, A8-8, A8-25, and A8-26.

3.9.4.2.1 Equipment Transport Reimbursements

Transportation of the deployable ACTS and C2 system will be reimbursed.

3.9.4.2.2 Home Station Support

Daily operations support at home station will not be waived unless approved by CO/COR.

3.9.4.2.3 Potential ACTS and/or Data Link Training Deployments

The following table lists the common, and recurring TDY deployments the Contractor shall be expected to support with qualified personnel.

Table 3-1: Potential ACTS/Data Link Deployments

Exercise Title	Location	Duration	Frequency	ACTS DRD Load Merge/ Debrief	ACTS Pods	LINK-16/ SADL C2 Systems
Cope North	Guam	14 Days	Annual	X	X	X
Valiant Shield	Guam	14 Days	Biennial			X
Pitch Black	Australia	14 Days	Biennial	X	X	X
18 FIS	Japan, Korea	30 Days	Annual			
Northern Edge	JBER, AK	14 Days	Biennial	X	X	
Distant Frontier	JBER, AK	14 Days	Annual	X	X	

3.9.5 Visiting Units and Test Teams

3.9.5.1 Visiting Units.

The Contractor shall support integrating US and/or foreign combat/combat training systems (e.g., USMC radars and their C2, Special Forces teams, and foreign MANPAD teams) temporarily emplaced within the JPARC in order to maximize training. The Contractor shall ensure visiting teams are briefed on applicable C2, communications, threat replication, and post mission analysis procedures. Support efforts shall be short-term in nature, typically lasting 4 weeks or less, and focused on support of MFE executions.

3.9.5.2 Test and Evaluation Teams

The Contractor shall support visiting Government and Contractor test teams analyzing tactics

and range systems. Support shall consist of performing dedicated threat engagement scenarios, detailed and focused systems component studies, system performance measurements, and technical order reviews. Contractor shall assist test team in integrating systems into JPARC infrastructure as necessary and approved by the 354 RANS to meet event goals. Test events shall be on an infrequent basis (typically lasting one week) and may occur throughout the year. Test events conducted in conjunction with MFEs shall not impact exercise scenarios nor extend the Contractors scheduled day.

3.9.6 Security

3.9.6.1 Contractor Security Program

The Contractor shall conform to the provisions of DoD 5220.22-M, National Industrial Security Program Operating Manual; DoDM 5205.07 DoD Special Access Program Security Manual (Vol 1: General, Vol 2: Personnel Security, Vol 3: Physical Security, and Vol 4: Marking); DoD 5220.6, Defense Industrial Personnel Security Clearance Review Program; and AFMAN 16-1405_DODM 5200.02 (as supplemented by PACAF/354 FW/3WG), Personnel Security Program Management. Contractor shall provide personnel eligible to meet Director of Central Intelligence Directive (DCID) 6/1, 6/3, and 6/4 (as updated or revised), and Air Force Central Adjudication Facility (AFCAF) adjudication standards. The contractor shall provide personnel that are TOP SECRET/SCI eligible as required by the Government.

3.9.6.1.1 Employee Information

Upon RANS Security Officer request, the Contractor shall provide employee information to include, but not limited to: full name, Social Security Account Number, Passport number, height, weight, color of eyes and hair, date of security clearance, and clearance level.

3.9.6.1.2 Access to Restricted Areas

The Contractor shall control access to its restricted areas and authorize individuals into the area based on clearance. The Contractor shall perform as an escort for un-cleared visitors within the facilities listed in Appendices 7, and 8 as required.

3.9.6.1.3 Access to State of Alaska Facilities

The Contractor may be required to have a background check performed for employees who are required to access State of Alaska Facilities.

3.9.6.2 System Security Plans

The Contractor shall prepare and/or update, maintain and strictly adhere to requirements of the Government-approved System Security Plan (SSP) for JPARC to ensure that all mission related data is afforded the required level of protection IAW AFI 31-101, The Air Force Installation Security Program; AFI 16-1404, Air Force Information Security Program (as supplemented by PACAF/354 FW/3WG); AFI 16-1406, Air Force Industrial Security Program; DoDD 5205.07, DoD Special Access Program Security Manual, Volumes 1-4; and security classification guides as applicable. The Contractor shall:

- (a) Ensure currency of the SSP as the mission requires.
- (b) Follow local SSP requirements for Special Access Program Facilities (SAPFs).
- (c) Perform tasks necessary to establish/maintain an approved SSP and System Accreditation for classified processing.

- (d) Contractor shall update SSP when required due to equipment hardware/software changes/updates and/or procedural/security changes and coordinate all changes or updates through PACAF/A3TW to the AO.

3.9.6.3 Information Systems Security – Personnel Access

The Contractor shall ensure all its personnel with access to JPARC's Information Systems or programs have a valid 'need to know' and meet all applicable Government-directed Information Protection training and/or testing criteria and have a completely signed DD form 2875 on file for the system being used.

3.9.6.4 Intrusion Detection Alarms

The Contractor, at no additional cost to the Government, shall arm and disarm security alarms as required, and respond to alarms in JPARC facilities during and/or after duty hours for intrusion, fire, or Civil Engineer admittance during emergency situations.

3.9.6.5 Security Incidents

The Contractor shall immediately notify Information Protection Office, FD, and the Government security manager of any security incident involving classified material. The contractor shall report/notify OPSEC, CUI, HVSACO, and classified incidents surrounding AF SAPs to the 354 FW/CDN Security staff.

3.9.6.6 Communications Security

The Contractor shall establish, maintain, and administer COMSEC accounts at both JPARC North and South as required. The Contractor shall be directly responsible for COMSEC ordering, handling, storage, loading, and/or destruction, through the local base COMSEC Manager. The Contractor shall manage and protect National Security Agency (NSA) cryptographic material and equipment IAW references listed below, to include Information Protection guidance, as directed by the Air Force monitoring activity, to safeguard COMSEC material and comply with all requirements found in COMSEC Functional Reviews. Applicable directives, instructions, and publications may be found in AFMAN 17-1302-O, COMSEC Operations

3.9.6.6.1 Appoint COMSEC Responsible Officer(s) and Alternate COMSEC Responsible Officer(s)

The Contractor shall appoint COMSEC Responsible Officer(s) and Alternate COMSEC Responsible Officer(s) in writing to the CO, Base COMSEC Manager, and COR.

3.9.6.6.2 COMSEC Manager(s)/Alternate Training

The Contractor shall ensure the COMSEC Responsible Officer(s) and alternate COMSEC Responsible Officer(s), receive training from the Base COMSEC Manager and have an AF Form 4168, COMSEC Responsible Officer and User Training Checklist, on file with the Base COMSEC Manager.

3.9.6.6.3 Completion of AFCOMSEC Form 9, Cryptographic Access Certificate

The Contractor shall ensure the COMSEC Responsible Officer(s) and alternate COMSEC Responsible Officer(s) complete COMSEC Responsible Officer training provided by the Base

COMSEC Manager, and complete an AFCOMSEC Form 9, Cryptographic Access Certificate, prior to assumption of COMSEC Responsible Officer duties (if required).

3.9.6.6.4 Training in Proper Security and Handling Procedures

The Contractor shall ensure personnel with access to systems containing COMSEC materials are trained in proper security and handling procedures.

3.9.6.6.5 COMSEC Monitoring Activity Responsibilities

The Contractor shall report cryptographic, personnel, or physical insecurity IAW AFMAN 17-1302-O to the COMSEC monitoring activity in a secure manner. The COMSEC monitoring activity shall be responsible for processing insecurity information immediately to those agencies listed in applicable AFIs, AFMAN's, and briefing the CO.

3.9.6.6.6 COMSEC Responsible Officer Duties

The Contractor shall maintain trained personnel to perform COMSEC Responsible Officer and Alternate duties. Personnel assigned COMSEC duties shall:

- (a) Perform manual procedures to include inventory, receipt, transfer, issue, destruction and shipment of COMSEC material and controlled items with/through the Base COMSEC Manager.
- (b) Report to the Base COMSEC Manager to transfer (upload) audit trail data and deleting audit trail data per AFMAN 17-1302-O.
- (c) Prepare and process all account closure documents IAW AFMAN 17-1302-O through the Base COMSEC Manager if a COMSEC account closes during the contract period. Conduct all debriefings prior to personnel departures.
- (d) Prepare and submit requests for initial and replacement issues of COMSEC material; prepare and submit requests for disposition of surplus material and ensure all Standard Form (SF) 153s COMSEC Material Report are typed IAW AFMAN 17-1302-O.
- (e) Receive semiannual functional reviews of facilities and procedures for proper security measures IAW AF Form 4160 Information Assurance Assessment and Assistance Program (IAAP) Criteria, from the Base COMSEC Manager.

3.9.6.6.7 Reporting COMSEC INSECURITY

Upon discovering unsecured COMSEC materials, the Contractor shall immediately secure, store, safeguard, and report cryptographic, personnel, or physical insecurity IAW AFMAN 17-1302-O.

3.9.7 Air and Range Space Management

3.9.7.1 Eielson Range Control

Eielson Range Control (ERC) is the central point of contact for all activity within JPARC North air and range spaces and is a critical function of the JPARC. There is potential for future expansion of ERC services within the JPARC. The Contractor shall provide airspace advisory services, performing all range control functions necessary to manage and facilitate exercise and daily flying/threat training schedules. The Contractor shall:

- (a) Have authority to implement requested changes to current-day of schedules as prepared and delivered by the 354 OSS/OSO and/or the 354 RANS. The Contractor shall make

changes IAW AFMAN 13-212 Volume 1, Chapters 2, 4, 5, and Attachment 5; and AFI 13-201, Chapters 3, 4 and 5. These changes will include but are not limited to MTRs, MOAs/Air Traffic Control Assigned Airspace (ATCAA), Air Refueling (AR) Tracks 719 & 720, and Restricted Areas.

- (b) Assist as required, 354 OSS/OSO, 3 OSS/DOTS, and/or 354 RANS in completing the “next day’s flying schedule inputs”, adding inputs, and/or correcting errors into schedule documents, and then disseminating for publication to electronic web pages. Contractor shall distribute electronic copies of the schedule to agencies and personnel stipulated by the CO/COR. Distribution shall be completed by the close of business each workday.
- (c) Communicate with external agencies, such as but not limited to: Ft Wainwright and Ft. Greely Range Control, Alaska Fire Service, and FAA to perform the Range Control function.
- (d) Maintain awareness of ground party positions and their movements within JPARC North ground spaces.
- (e) Account for positioning of air assets with JPARC North air spaces.
- (f) Advise participants of activities and occupants of JPARC North ground and airspace to ensure safety and mission effectiveness.
- (g) Non-participating aircraft
 - 1) Provide location of all non-participating aircraft within the scheduled airspace to participating aircraft upon check-in.
 - 2) Provide updates to the participating aircraft of any known exit of non-participating aircraft from the scheduled airspace.
 - 3) Provide estimated location call outs for non-participating aircraft when requested by participating aircraft
 - 4) Notify participating aircraft of any entries into the scheduled airspace by non-participating aircraft.
 - 5) Provide these notifications on a non-interference basis.
- (h) Immediately advise 354 OSS/OSO and 354 RANS/RSC of all safety related airspace or range usage issues or incidents.
- (i) ERC will not deny any request made by a participating unit or their representative out of convenience or perceived benefit that does not violate or contradict governing documents such as but not limited to government regulations, LOAs, Memorandums of Understanding, or this PWS.
- (j) Support Radar Monitoring Agencies (RMA) which are the central point of contact for all training activity within the JPARC North air and range spaces crucial for safe Mode 3A/C Off Operations. There is potential for future capabilities and “airborne” RMA services within the JPARC to keep up with United States Air Force operational security practices as the range continues to develop higher classification levels of training.
- (k) Provide a qualified Radar Monitoring Agency (RMA) for Air Force Mode 3A/C Off Operations in Alaskan Special Activity Airspace (SAA) that will operate in accordance with current (and any future iterations) Letter of Agreement (LOA) – ZAN M3 Off Operations dated 01 June 2024, 354 Operations Group local FCIF A25-07, and documents attached therein as well as future iterations if applicable.

3.9.7.2 Airspace Management

The Contractor shall manage military air traffic utilizing the JPARC in a manner that will maximize training opportunities and safety of flight. The Contractor shall:

- (a) Open ranges and airspace 30 minutes prior to first scheduled activity. The Contractor shall monitor radios, phones, surveillance radar and other ERC communications, and fused information sources in use on a continuous basis.
- (b) Communicate with the FAA for aircraft operating in the JPARC when aircraft are unable to communicate directly. The Contractor shall return range airspace to FAA control during extended periods of non-activity as defined in FAA Letters of Procedures, USAF-USA Standard Operating Procedures (SOP), and/or AFMAN 13-212 Volume 1, and NO LATER THAN 30 minutes after last scheduled activity for the day.

Ensure all critical communications, to include all mission-related (GATR, Frequency Modulation (FM) Radio, SUAIS radio, and telephone transmission/receptions, are recorded and archived for a minimum of 30 days unless otherwise directed by the CO/COR.

- (c) Establish and maintain radio contact with aircraft within JPARC North airspaces, per AFI and/or local procedures. Provide the ability to establish and maintain radio contact with personnel in the restricted areas and/or on the ranges when directed by the COR.
- (d) Act as the central POC during emergencies, incidents, and mishaps until the appropriate Government representative assumes control.
- (e) Contact appropriate agencies IAW the Emergency Notification Checklist as derived from AFI 11-418 354FW Supplement 1. The Contractor shall assist the Government in any National Incident Management System (NIMS) incidents, accidents, or occurrences.
- (f) Create and maintain daily event logs describing significant events and conversations (e.g. aircraft incursions into restricted airspaces, lost pilots, extended periods of lost communications, requests from emergency services, etc.). Logs shall be archived for one year.
- (g) Maintain logs pertaining to significant events, such as personnel injury or death while on range and/or aircraft flight mishaps indefinitely, unless otherwise directed by the CO/COR. Additionally, any or all ACTS, Link16, video, and/or audio recordings related to said personal injury, death, and aircraft mishaps shall be labeled and archived permanently or until disposed of by the COR.

3.9.7.3 Range Activity Reports

The Contractor shall maintain a count of airspace usage and weapons expenditure reports on JPARC ranges by military aircraft operating with or in conjunction with USAF units or USAF exercises. The Contractor shall compile data and complete the following reports IAW AFI 13-201, AFMAN 13-212, and USAF-USA SOP:

- (a) Quarterly Restricted Area/Range Utilization Report (AFI 13-201)
- (b) Quarterly MOA Utilization Report (AFI 13-201)
- (c) Quarterly Munitions Expenditure Tracking Report (AFMAN 13-212 V1)

3.9.7.4 Special Use Airspace Information Service

The SUAIS allows pilots to obtain the status and schedules for use of MOAs and Restricted Areas in central Alaska. By using this service, civilian pilots learn when and where military flight operations will occur and how to avoid conflicts with training exercises. This service is

intended to increase safety for civil and military users of special use airspace. As such:

- (a) The Contractor shall provide the SUAIS to aid civilian pilots in effectively utilizing Special Use Airspace in central Alaska.
- (b) The Contractor shall monitor the SUAIS radio frequency and telephone lines during JPARC operation hours and respond to requests for MOA and restricted area information from civil aviators. Prior to closing each day, the Contractor shall update the recorded SUAIS message with the most current projected airspace criteria until opening the next operational day.
- (c) The Contractor shall immediately notify the 354 RANS of outage of a radio or telephone line dedicated to the performance of SUAIS and start trouble shooting and repair actions.

The Contractor shall furnish 354 RANS information concerning SUAIS usage, problems, incidents, opportunities for cost effective improvements, etc. as directed by the CO/COR. Contractor shall attend the Alaska Civil-Military Aviation Council (ACMAC) and one of the semi-annual Fairbanks area General Aviation Association meetings as directed by the CO/COR.

3.9.7.5 Air Force Range Operations Liaison

The Contractor shall provide professional services for the staffing of Air Force Range Operations Liaison support to both Fort Wainwright Range Control (FWA RC) and Donnelly Training Area Range Control (DTA-RC). This support is for five concurrent 8-hour shifts every day through Monday-Friday that covers the hours of 0730L and 1630L based on OPSTEMPO, excluding Federal holidays observed by 354 FW. In addition, two of the five positions will meet the qualifications listed in 3.9.7.6. (RCO).

Task Requirements. The Air Force Range Operations Liaisons shall interface between the 354 RANS, 353 CTS, 354 OSS, 355 FS, 356 FS, 18 FIS, 210 RQS, FWA RC, and DTA-RC on all matters pertaining to the use of Army managed lands and airspace for local routine training as well as exercise events by the Air Force and Air Force sponsored units, e.g., RED FLAG, NORTHERN EDGE, DISTANT FRONTIER, and visiting unit training, etc. Key duties and responsibilities are to:

1. Create and review the daily Drop Plan of US Air Force units and forward to the appropriate Army Range Control for their approval.
2. Identify and expeditiously resolve any conflict situations that arise in planning, scheduling, coordination, control, and execution of air operations.
3. Schedule all Air Force and Air Force sponsored activities occurring on Army-managed lands and airspaces, utilizing the Range Facility Management Support System (RFMSS) software suite and Center Scheduling Enterprise (CSE).
4. Create and distribute all WDLs for exercises and day-to-day flight operations to YTA and DTA-RC. Review the daily weapons employment plan (known as the Drop Plan) as submitted by the 354 RANS and prepare the approval notification for submission by the appropriate Army range control agency.
5. Ensure physical characteristics of ranges are compatible with training and safety requirements, recognize training inadequacies, and provide mitigation measures.
6. Review, catalogue, and update as required, all Weapons Danger Zone (WDLs), Laser Range Safety Danger Zones, and Surface Danger Zones that support Air Forces

weapons employments.

7. Attend required briefings and presentations, to include all Initial, Mid, and Final Planning Conferences for MFE events.
8. Duty location shall be Eielson AFB with travel to Fort Wainwright, Fort Greely, YTA, DTA, and Blair Lakes as required.

3.9.7.5.1 Range Operations Liaison personnel shall meet the following requirements:

Have operational experience with air-to-ground ordnance deliveries and integration with ground-maneuver units.

1. Have comprehensive knowledge of:
 - (a) Department of Army Pamphlet 385-63 Range Safety JP 3-09.3, Joint Fires Manual
 - (b) 11 ABN DIV 350-2 Range Regulation
 - (c) AFMAN13-212v1 Range Planning and Operations and supplements
 - (d) AFI 11-214 Air Operations Rules and Procedures
2. Successfully completed the Interagency Intermediate Range Safety Course, Range Manager Toolkit (RMTK), and WZ training, and use this knowledge in the execution of these tasks.
3. Possess a SECRET security clearance, with the ability to gain a TS/SCI security clearance.
4. Not be required to provide Contractor furnished materials in the performance of this task. All facilities, utilities, vehicles, equipment, parts, supplies and materials shall be provided as GFE.

3.9.7.6 Range Control Officer

The Contractor shall meet the requirements of AFMAN 13-212v1, para. 2.9.7.1, and shall perform Range Control Officer (RCO) functions IAW AFI 13-212v1, Chapters 4, 5, Attachment 5, and any applicable supplements. RCO duties shall be conducted at Blair Lakes Conventional Range within R-2211. This task is important to safety of flight when occurring and shall be manned accordingly.

1. The Contractor shall submit an applicant's qualifications to the Government for review 10 business days prior to performance on the contract.
2. RCO duties are not normally required for daily operations. When an RCO is required at Blair Lakes range, that task will be scheduled at a minimum of 30 days prior. If RCO qualification has lapsed due to non-availability of operational sorties, re-qualification will be provided by the Government.
3. RCO duties may be required during MFE operations.

3.9.8 Air Platform Tracking and C2 Capabilities

3.9.8.1 Air Surveillance

Air Surveillance is a key process for both JPARC training operations (exercise and daily flying training) and air sovereignty operations within Alaska. The Contractor's responsibility is to ensure fully functioning radar systems, provide radar data transport via JPARC networks, and

then display that radar data for operational use. The Contractor shall:

- (a) Provide network systems O&M support to JPARC's surveillance and early warning radars. JPARC's two AN/TPS-77s including on board IFF /SSR systems are to be in operation 24 hours per day, 7 days per week.
 - 1) Report outages to the COR within 15 minutes of knowing radar is down. Maintenance actions should be taken immediately to bring the system back online if during normal Government working hours (0730-1630).
- (b) Ensure the radars and support equipment such as power generation, distribution, fuel, HVAC, and structures are maintained and in proper working order.
- (c) Ensure supported networks, to include adjunct/peripheral/complimentary networks and circuits are operational and fully functioning.
- (d) Configure all communications and networking circuits (e.g., microwave radios systems, multiplexors, routers, switches, encryption devices etc.) to ensure augmenting radars and track sources (e.g. Ft Yukon and Murphy Dome AN/FPS-117 radars) are included and/or compatible within JPARC radar displays.
- (e) Contractor shall establish, configure, and sustain network connectivity to all end-user operator systems. End user systems consist of but are not limited to: Air Combat Training Systems, BC3/TORCC, ANGEL, Radar Acquisition Data Systems (RADS), connections to long haul circuits to JBER, and the Federal Aviation Administration (FAA).

3.9.8.2 Air Combat Training Systems Support

The JPARC's ACTS provides a means to capture and record aircraft TSPI in real-time as well as extract TSPI for post-flight merging into a cohesive replay of aircraft positioning throughout a defined mission period. The key systems forming JPARC ACTS are the P5 Combat Training System (CTS); post mission Data Merge Devices (DMDs), an aircraft TSPI display system, Personal Computer Debriefing System (PCDS), Individual Combat Aircrew Debriefing System (ICADS), ANGEL, SIMDIS, and the various networks, and other systems forming the LMOC, JPARC-Red, JPARC-SAP and JPARC-Black TENA networks and interface gateways. JPARC ACTS real-time Live Monitor and post-mission playback capabilities are the bedrock basis for live airspace control, successful mission scenario executions, and detailed and accurate post-mission after-action analysis. The Contractor shall provide O&M to ACTS, and ACTS-related networks, and all associated ACTS HW/SW systems.

3.9.8.3 P5 Combat Training System

P5 Combat Training System (CTS) components consist of an airborne transponder pod, a network of ground-based transponders known as Remote Range Units (RRU) to intercept airborne pod TSPI messages and relay that TSPI data to a networked HW/SW suite of systems for formulation into aircraft tracking mission data. Additionally, there are CF-34 P5CTS-E encryption/decryption device nested within the P5CTS network used to encrypt/decrypt F-35 Lightning-II's transmitted TSPI from its internal P5 CTS transponder. There are 4 networks of P5 RRUs on JPARC: 1 x externally podded aircraft and 3 x internally podded aircraft (F-35). This intercepted TSPI/mission data is then integrated into JPARC networks and subsequently Debriefing System(s), and other display systems. Furthermore, P5CTS also consists of a Data Recording Device (DRD), inserted into the P5CTS airborne pod to record own-ship TSPI, as well as a Data Merge Device to process DRDs and their data

programming /downloading/ merging processes. P5CTS components are listed in Appendix 8. The contractor shall be responsible for the transition to the next generation replacement capability. The Contractor shall:

- (a) Provide O&M for all P5CTS networked and ground transponder stations (P5CTS Remote Range Unit) systems.
- (b) Provide O&M for AN/ASQ-T50 (V1) and (V2) pods.
- (c) Configure P5TS DRDs and ground system live monitor for operations.
- (d) Initialize P5 CTS DRDs and distribute to aircrew, their agents, and/or load into pods, as required.
- (e) Provide O&M to the CF-34 P5 CTS-E encryption/decryption device, to include all COMSEC procedures.
- (f) Post-mission process and store DRDs.
- (g) Receive, handle, store, and load/merge DRDs provided by visiting TDY units, as required.
- (h) Support System Security Updates and patches as required by System Program Office (SPO).

3.9.8.3.1 Exception

Contractor shall have no Maintenance of F-35 internal P5 CTS transponder.

3.9.8.4 ACTS Pod Support

The JPARC hosts the AN/ASQ-T50, (V1) and (V2) P5 CTS pods. The pods serve as an airborne transponder, providing TSPI of podded aircraft in order to provide real-time monitoring of live-flight operations and a comprehensive air picture for post flight After Action Reviews (AAR).

3.9.8.5 Pod Shipment

The Contractor shall provide all transportation of ACTS equipment necessary to meet mission requirements. The Contractor shall transport pods, adapters, and interface devices between Eielson AFB and JBER as required to support varying mission requirements. It is the Contractor's responsibility to pre-position pods to meet daily training and exercise training events such as RF-A, the biennial NORTHERN EDGE, and annual DISTANT FRONTIER exercises. Contractor shall reference Table 3-1, Recurring ACTS/Data Link.

3.9.8.5.1 The Government shall reimburse the Contractor under Shipping and Receiving, for the following circumstances:

- (a) Movements to JBER specifically directed by the Government.
- (b) Pod movements to locales other than JBER.
- (c) Pod movements for maintenance purposes that are approved and authorized by the government.
- (d) Reimbursement for pod movements is limited to commercial carrier rate.

3.9.8.5.2 Pod Loading

The Contractor shall pod all aircraft as required. Pods shall be properly configured per T.O. for the aircraft being loaded (e.g., ballast weight sets installed for USN/USMC aircraft), and properly loaded with region and date-correct Global Positioning System (GPS) almanacs, and cryptographic keys, as required. Pods shall be loaded at least 1 hour prior to scheduled

takeoff. Last minute schedule changes shall be accomplished as the mission allows.

3.9.8.5.3 Non-indigenous Pods

Participating units may bring P5 CTS pods from home-station to overcome limitations with JPARC's ACTS. The Contractor shall pre-position, load, download, and store TDY/deployed systems as scheduled.

3.9.8.5.4 Pod Operations Security Requirements

ACTS pods are AFI 31-101 defined Protection Level-4 items. The Contractor shall ensure compliance with Protection Level-4 requirements at all times. Emphasis shall be placed on pod operations on Foreign National (FN) aircraft. Contactor shall develop and adhere to its procedures, including the following processes:

- (a) DRD distribution/reception procedures for both U.S. personnel and FN.
- (b) Pod upload/download procedures, and pod-on-aircraft overnight storage restrictions.
- (c) Support System Security Updates and patches as required by System Program Office (SPO).
- (d) Action plan for FN aircraft diverting to alternate landing fields of JBER/Eielson AFB, Anchorage International, and/or Fairbanks International, as applicable. Specifically for FN aircraft the Contractor shall:
 - 1) Load/unload DRD into/from ACTS pods loaded on foreign national aircraft, utilizing appropriately cleared personnel.
 - 2) Provide pod oversight while loaded on foreign national aircraft during the operations flying day (including pre- and post-mission preparation time).
 - 3) Institute their action plan checklist(s) outlining/ACTS technician's procedures/actions in the event of FN aircraft divert.

3.9.8.5.5 ACTS Pod Status Reporting

The Contractor shall track and report daily pod operations supportability (i.e., number of aircraft requesting pods versus number of aircraft actually podded). A monthly summary shall be included in the MPSMR. Contractor is required to utilize daily supportability reports as part of its monthly Operational Effectiveness and Equipment Availability Rate reports as defined in Section 5, Service Summary. Contractor shall provide, Reliability, Availability, and Maintainability for Pods (RAMPOD) and Integrated Systems Program for additional ACTS pods.

3.9.8.5.6 Pod Downloading

The Contractor shall download pods from aircraft for aircraft maintenance actions as directed by unit aircraft maintenance supervision, and/or as requested by the CO/COR.

3.9.8.6 ACTS Mission Preparation

The Contractor shall:

- (a) Ensure all ACTS, and LMOC, JPARC-Rel/R/SAP/B TENA-networks are configured to support live aircraft tracking as required.
- (b) Ensure the JPARC network enclave is inter-connected between JPARC North and JPARC South facilities in order to facilitate Live Monitor viewing at designated locales. These intra-connections are between 353 CTS (Bldg. 1151 and 1141) and 18

FIS (Bldg. 4110), 355 FS, and 356 FS at Eielson AFB, and the 354 OG Det 1 (Bldg. 9549), 90 FS, and 525 FS at JBER.

- (c) Configure the P5 CTS ground system's live monitor Mission Load Unit (MLU) scenario files and the TENA Comm-Card software executable for operations. The Contractor shall initialize P5 CTS DRDs and distribute for loading (e.g., to pilots, aircrew, Duty Desk personnel, etc.). If visiting units bring their own P5 CTS pods, additional DRDs will be provided by the TDY unit. The Contractor shall initialize and distribute the TDY DRDs during the unit's deployment. The Contractor shall ensure the DRDs are returned to the TDY unit prior to the unit's departure.
- (d) Ensure TSPI data/GPS data loggers have their batteries charged, are configured for flight, and distributed as required.

3.9.8.7 ACTS Mission Execution

The Contractor shall:

- (a) Configure Debriefing System(s) [ex. Personal Computer Debriefing System (PCDS), ICADS, SIMDIS], and the ANGEL displays for real-time TSPI tracking. Record each live TSPI tracking mission on Debriefing System(s)
- (b) Ensure live-aircraft GATR audio is present in Debriefing System(s) and recorded. The current audio-to-Debriefing System(s) is a connection from the communication switch, through an audio bridge. Contractor shall have O&M of this audio feed.
- (c) Optimize Debriefing System(s) and TENA applications to ensure Live-Virtual-Constructive entities are processed as high-activity tracks to the maximum extent.

3.9.8.8 ACTS Post-Mission – Debriefing System(s) Support

The Contractor shall Operate Debriefing System(s) as listed in Appendix 8, Table A8-6, to the extent required to support scheduled activities (e.g. MFE/LFEs, daily flying training operations, testing and integration). The Contractor shall provide a complete ACTS replay consisting of all high-activity and low-activity aircraft participating in the event, merging post mission data recorded on the DRDs, F-22 systems, F-35 systems (as required), TSPI data loggers/hand-held GPS devices, aircraft avionics laptops with mission data recorded during the 'live' portion of the mission, and/or TSPI files in compatible formats (e.g. EAG, MSN50, MSNP5 files formats) on the DMD/Debriefing System(s). As part of this requirement, the Contractor shall:

- (a) Store DRDs at the 353 CTS (Bldg. 1151) and 18 FIS (Bldg. 4110) at Eielson AFB, and 354 OG Det 1 (Bldg. 9549) at JBER. Aircrew debriefing locations will be designated based on participants and mission requirements. If post mission aircrew debriefing is to be conducted within Bldg. 1151, Bldg. 1141, and/or Bldg. 9549 (normally during dissimilar aircraft combat training, intra-squadron, or exercise missions), Contractor shall transport DRD derived mission files from the squadron areas to Bldg. 1151 and/or Bldg. 9549.
- (b) For post mission debriefings within the squadron areas (inter-squadron sorties), the Contractor shall transport the 'live' mission data recorded in Bldg. 1151 and/or Bldg. 9549 to the appropriate squadron area. Contractor shall exchange mission data via inter-range circuits to reconstruct aircrew debriefings containing both Eielson and JBER participants. The merged mission file, including both live and DRD derived data, shall be complete and ready for debrief at the appropriate facility within one (1) hour from receipt of last DRD or completion of transfer of mission data between JPARC North and

South.

- (c) Maintain Debriefing System(s) recorded and/or DMD merged mission files for a minimum of 45 days for all daily operations. All MFE/special missions will be kept until disposition is granted by the Government.

3.9.8.8.1 F-22A Merge Support

The Contractor shall provide O&M to the P5 CTS Transportable Ground Subsystem(s) (TGS) and/or P5 CTS Portable Ground System(s) to merge F-22A post-mission data for inclusion into post-mission playback systems. Support shall be provided year-round, for both daily training and exercise periods, to include local training sorties occurring simultaneous with MFE events. Contactor shall:

- (a) Adhere to all applicable security procedures associated with F-22A mission data disseminations.
- (b) Convert F-22A DTC in-flight data to Secret-level position data files.
- (c) Note: All maintenance of Mission Support Systems and Secure Interface System shall be GFE.
- (d) Operate and sustain Debriefing System(s) and/or P5 CTS DMD systems and software to incorporate SIS generated position data files into a useable output for mission debriefs.
- (e) Deliver merged products to the appropriate debrief venue.

3.9.8.8.2 ACTS In-Squadron debriefing systems/ANGEL Debrief Support

The Contractor shall provide in-squadron support for each locally assigned fighter squadron at Eielson and JBER for post mission merge and debriefing operations. Contractor shall setup/prepare debriefing systems for debrief as required by government operators. Contractor shall demonstrate/teach operations of debriefing systems, e.g., replaying of recorded missions, use of operator features, and/or use of analysis tools, as required. Contractor is not required to support the entire debrief session as a routine task.

3.9.8.8.3 System Security Plans

IAW Section 3.8.9.2 System Security Plans (SSP), Contractor shall adhere to all SSPs, to include F-22A SSP.

3.9.8.9 Link-16/Situational Air Data Link Operations

Link-16/SADL are two similar data link networks that provide C2, targeting, and general situational awareness presentations within fighter cockpits and on C2 platform control displays.

3.9.8.9.1 MIDS-JTRS and SADL Transceivers

Multiple Link-16 and SADL transmit/receive radios are used for operations in the JPARC. These radios are located at multiple sites (Eielson AFB, Pole Hill, Paxon, JBER). Each site is connected via PDL pathways and has the capability for remote management of cryptographic keys. These cryptographic keys are loaded remotely using the CI-33 / CI-34 Remote Rekeying system. JPARC's LINK-16/SADL, and remote rekeying equipment is listed in Appendix 8, Table A8-7.

3.9.8.9.2 Link-16 Gateway

Management of Link-16 SADL systems are via a Battlefield Operations Support System (BOSS), virtual BOSS, and a virtual Air Defense Systems Integrator (ADSI). Future capabilities may include JRE, Multi-Tadil Display System (MTDS), Link Monitoring and Management Tool (LMMT), Scalable Portable Integrated Data Router (SPIDR), Tactical Radio Application Extension (TRAX), and ADSI. Maintenance/ troubleshooting hardware/ software suites located in Bldg. 1151. Full capability to manage all J-series messaging is available. As such, the Contractor shall:

- (a) Configure and operate the RF-A Link16/ SADL systems as scheduled.
- (b) Coordinate for and aid in development of applicable Operational Task Data Links (OPTASKLINKs).
- (c) Order, manage, and load applicable Cryptographic keys.
- (d) Maintain and operate the Remote Rekey system in its entirety.
- (e) Connect to Virtual and/or Constructive networks as required.
- (f) Connect JPARC's link to outside surveillance sources as directed by required.
- (g) Provide personnel, and GFE Link16/SADL equipment if required, to support training deployments. See paragraph 1.14.2 and Table 3-1, Recurring ACTS, or Data Link Deployments, for TDY quantity and frequency.

3.9.8.9.3 Joint Interface Control Officer

The Contractor will provide a Joint Interface Control Officer (JICO) qualified person to manage the JPARC's Link-16/SADL datalink networks and infrastructure. The JICO will be fully trained to include completion of Multi-TDL Advanced Joint Interoperability Course and Joint Interface Control (MAJIC) Officer Course, or equivalent training/experience as approved by 354 RANS.

3.9.8.10 Command and Control Systems and Displays

All C2 systems are operated through the LMOC platform. There are four C2 systems currently available on the JPARC. The primary C2 display utilized by Red and Blue Forces' GCI controllers is Battlespace Command and Control Center (BC3). ANGEL is the primary native-TENA integrated display system and may serve as a backup C2 platform. The last system is the Radar Acquisition Data System (RADS). It's a simple, direct radar track quality check for BC3 and ANGEL. All BC3, and ANGEL operator's stations are required to support training and airspace management operations on the JPARC, for both daily and exercise operations. BC3, ANGEL, and RADS equipment is listed in Appendix 8, Tables A8-8, A8-9, A8-10, and A8-11. The Contractor will perform similar work with the new systems to provide the services described in Paragraph 3.14.11 below.

3.9.8.10.1 Battlespace Command and Control Center

The BC3 system employs a server-client network, encompassing its own Track Data Fusion Engine (TDFE) called the Multiple Source Correlator Tracker (MSCT) and connections, via JREAP-C data protocols to the JPARC LINK-16 system. BC3 is the primary C2 system utilized by Red and Blue Forces' Ground Control Intercept (GCI) controllers, Baron and Panther.

MSCT-Lite / Fusion Lite takes feeds from numerous sources (e.g., radar, Identification Friend or Foe (IFF), ACTS, Link-16) and combines them into a single, unique real-time track of aircraft within the JPARC airspace. MSCT-Lite / Fusion- Lite is utilized by both Red and Blues forces and is part of the classified (SECRET) JPARC-RED (LMOC) network.

ANGEL is a distributed display system that allows users to view selectable TSPI of training participants as Test-Training Enabling Architectures TENA objects, and then formulate those objects into real-time aircraft/airspace C2 display. ANGEL is used throughout the RED FLAG-Alaska Operations Building (RFAOB).

3.9.8.10.2 RADS

RADS is an unclassified network consisting of a server and several personal computer (PC)-based clients, displaying surveillance radar tracks. RADS is not configured to effectively merge tracks, nor will it accept other track sources, such as ACTS TSPI. RADS operations are limited at JPARC North as back-up to BC3 and ANGEL and as a track quality check.

3.9.8.11 C2 Display Operations

The Contractor shall:

- (a) Configure ANGEL and BC3 as required to support scheduled operational requirements, ensuring data feed sources and interfaces are operational and providing data to the BC3, and ANGEL servers.
- (b) Ensure debriefing systems, ANGEL, BC3 operator displays for White Forces, Opposing Forces (OPFOR) GCI and Blue Forces GCI are operational and properly functioning prior to start of operations and that the missions are recorded.
- (c) Ensure ANGEL displays are operational to support mission requirements.
- (d) Provide BC3, and ANGEL System Administrator capability as defined by DoD Cyber Workforce Framework work role ID 451, throughout the fly-day as required for daily and exercise operations. Administrators shall possess full O&M capabilities including but not limited to the following skills:
 - 1) Ability to perform start-up/shut-down and troubleshooting and resolution of issues with the servers, run utility applications, and load and run TENA applications, including Cross-Domain-Solution such as SimShield Trusted Bridge.
 - 2) Ability to initialize a client, navigate the map, utilize the column on the Track Table, perform measurement vectors for callouts, scale in/out, and isolate individual tracks. Plus be able to pair targets (ground and air), set up and utilize the LUCI utility, open/close communications channels to radars and TSPI systems, use the TENA Threat Status Utility, and create High-Speed-Anti-Radiation Missile (HARM) shooter and other reports.
 - 3) The Contractor shall provide basic user-level operator training to visiting exercise participants and other Government personnel. Training shall cover how to: initialize a client, set up transmit/receive filters, navigate the map, utilize the column on the Track Table, perform measurement vectors for callouts, scale in/out, isolate individual tracks, utilize the Comm-Card utility, and utilize the High-Speed-Anti-Radiation Missile (HARM) shooter report capability.

3.9.9 Live Virtual and Constructive Entity Management

LVC operations is the bridging of the 'real world' live realm with those using simulators and computer-based capabilities. By definition, Live is real people operating real systems such as aircraft, vehicles, ships, etc.; Virtual is real people operating network-connected simulators; and Constructive is computer generated people and aircraft, vehicles, ships, etc. The JPARC

can incorporate and merge all three realms into a cohesive air battle.

Note: The Contractor may see the terms Live – Synthetic – Blended as replacements for LVC. The definition of Live remains the same. Synthetic is any combination of Virtual and/or Constructive. And Blended is a combination of Live and Synthetic; formerly LVC.

3.9.9.1 LVC - Purpose

The primary purpose of LVC operations on the JPARC is to provide augmenting Virtual and Constructive forces and capabilities not currently present in the live realm in order to enhance scenarios and training opportunities for the live participants. A secondary purpose is to use the backdrop of the JPARC's Live range fight to provide realistic forces and capabilities to participants in Virtual network simulators and possibly to other Live ranges.

3.9.9.2 Equipment and Systems

There are three primary realms of concern, JPARC's Live Realm and its Virtual/Constructive realms.

3.9.9.2.1 Live Realm

The Live realm is all the real-world fielded equipment, systems, and networks as noted in Appendices 7, 8, and 9. Contractor shall provide O&M to said system as defined in this PWS.

3.9.9.2.2 Virtual and Constructive Realms (Blended)

JPARC's Virtual and Constructive realms are a system of portals and gateways connecting JPARC's operations networks (LMOC, JPARC-R/JPARC-B, JPARC-Rel) to outside simulator networks such as the Distributed Mission Operations Network (DMON). Similarly, Constructive entities may be injected into the LMOC, JPARC-R/JPARC-B, JPARC-REL operations networks as part of aforementioned Virtual connectivity and/or through resident computer-based training devices such as, Next Generation Threat System (NGTS), Advanced Simulation Combat Operations Trainer (ASCOT), and Modern Air Combat Environment (MACE). These software applications are hosted on the LMOC suite and provided as Virtual Machines. The Contractor has no O&M responsibilities for the DMON itself.

3.9.9.2.2.1 DMON General Description

The DMON is a federated network hosting Virtual simulators representing most USAF Combat Air Forces airframes. These simulators are installed and operated at varying bases throughout the world. Each is connected via the DMON to each other so one simulator can fly with/fight with any combination of simulators on the DMON. Additionally, the DMON is connected to various hub sites that provide inter-connectivity to other Virtual networks as well as connecting to live ranges. Contractor has no O&M responsibility for DMON.

3.9.9.2.2.2 DMON Circuit Connectivity

The DMON connection to the JPARC at Eielson AFB is an encrypted leased Defense Information System Agency (DISA) circuit. The JPARC end of the circuit passes a DMON-owned router called the DMON Stateless Portal, and then terminates at a router within the JPARC-R network boundary, called the Blended Live and Synthetic Training. BLAST serves as TENA-to-Distributed Information Systems (DIS) protocol gateway.

3.9.9.2.3 Additional LVC O&M Responsibilities

In addition to responsibilities defined in paragraph 3.8.1:

- the Contractor shall provide O&M to: the DMON circuit's TACLANE; JPARC-R, LMOC networking and switches; Link-16/SADL and its gateways; and the Live-to-Simulated Communications Interface (LSCI) or its replacement.
- Contractor shall provide a primary and alternate COMSEC Responsible Officer to act as the JPARC site representative for the KG-175 TACLANE connected to the DMON DISA-based circuit that terminates in Bldg. 1151. Contractor shall provide management of cryptographic materials account for the KG-175 TACLANE, conduct the semi-annual inspections, and fill out connect / disconnect forms.
- Contractor shall provide O&M for LVC JPARC-R, LMOC Operations Network, and two of its sub-enclaves, TENA network systems enclave, and the TENA enclave systems connecting to system of the Link-16/SADL network.

3.9.9.3 Other LVC Outside Connections

In addition to DMON, the Joint Training Enabling Network (JTEN) may be utilized to connect JPARC to outside LVC networks.

3.9.9.3.1 Joint Training Enabling Network

Similar to DMON, the JTEN is a federated network of live ranges, Virtual simulators, Constructive enclaves, and LVC hubs such as the Distributed Mission Operations Center (DMOC) and Distributed Training Operation Center (DTOC). The Joint Warfare Center is the manager of the JTEN. Connecting to the JPARC is analogous to DMON connectivity, with the exception of differing DISA circuits, encryption systems and routers. JTEN and DMON cannot be connected to the JPARC simultaneously without proper IA, security, Interconnection security agreements in place. Historically, this has not happened. See Appendix A8-1 for additional details. Contractor shall:

- (a) Provide maintenance of the KG-254A encryption/decryption device; limited to the management and loading of cryptographic materials when directed by JTEN Network Managers.
- (b) Provide maintenance of JTEN routers; limited to conducting basic troubleshooting under the direction of JTEN Network Managers.
- (c) Connect JTEN to JPARC TENA networks when directed by the Government.

3.9.9.3.2 Secret Defense Research Engineering Network

These networks support data transfer between the High-Performance Computing Modernization Program's DoD Supercomputing Resource Centers (DSRC) and users' sites, JPARC will have an instance of each network in support PACAF exercises.

3.9.10 Weapons Scoring

The JAWSS is a collection of three separate sub-systems: Weapons Impact Scoring System (WISS) including scoring surveillance system on the ranges (e.g., IR Cameras and Security Cameras), Improved Remote Strafe Scoring System (IRSSS), and the Laser Spot Video Recording System (LSVRS). JAWSS support is not required daily and will be scheduled IAW the Exercise and/or Daily Flying Training Operations scheduling processes as required.

3.9.10.1 Scoring Requirements - General

The Contractor shall provide real-time scoring of weapons deliveries on one range and record any activity on the other two ranges. Recorded deliveries shall be scored during the first break in activity on either live range. If requested, scores for recorded activity shall be passed to the aircrew immediately after completion of scoring process. R-2211, Blair Lakes Range has priority over other ranges for real-time scoring.

3.9.10.1.1 IRSSS Pre-notice.

There will be a minimum of 30-day notice for scheduling IRSSS.

3.9.10.2 Weapons Impact Scoring System – Overview

WISS is utilized to score free-fall ordnance delivery impacts in relation to surveyed aim points.

3.9.10.2.1 WISS Accuracy Requirements

The Contractor shall maintain WISS scoring accuracy IAW WISS manuals. As such, the Contractor shall:

- (a) Maintain, build, replace, and install calibration markers, Surveyed Aiming Points (SAP), and SAP markers. The Contractor shall update surveyed aiming points, flash targets, and update target information to maintain the accuracy of the WISS system.
- (b) Survey critical points not less than annually and immediately after range build-up efforts to ensure correct system calibration prior to flashing targets.
- (c) Assign target numbers (provided by the 354 RANS) to all targets within field of view of camera pairs and be capable of scoring all such targets.
- (d) Provide inputs to 354 RANS for all target changes.
- (e) Ensure WISS Software is up to date for each range and have an appropriate software medium copy for all programs.
- (f) Ensure configuration management documentation submissions are current and accurate.

3.9.10.2.2 WISS Scoring and Reporting

The Contractor shall:

- (a) Record daily missions on applicable media and keep media and hard copies for 14 days.
- (b) Input the unit/gun/pilot number on hard copy as applicable, prior to sending to squadron(s).
- (c) E-mail/Fax WISS scores to the appropriate unit upon request by the Government within 30 minutes of termination of the mission.

3.9.10.3 Improved Remote Strafe Scoring System

IRSSS utilizes sonic sensors located on the leading edge of strafe targets to record the number of hits that occurred during a strafing attack. Operations will occur only during periods when the RCO is present.

3.9.10.3.1 O&M Demarcations

The Contractor is responsible for the operation and maintenance of the IRSSS scoring equipment: computers, microphones, microphone stands, and the cables. The Government, 354 RANS/RSM Blair Lakes Site Administrator, is responsible to maintain the strafing pits,

berms, and provide and operate a trencher as necessary for Contractor maintenance of the cables between the equipment at the pits and the tower.

3.9.10.3.2 IRSSS Pre-Operations

The Contractor shall perform checks to ensure IRSSS readiness to include: (1) Verify all targets (strafting rags) are in adequate condition; (2) Verify all pits (Low Angle, High Angle, and Moving Strafe Target) are conditioned properly and remove objects as necessary; (3) Ensure berms are adequate to protect IRSSS equipment; (4) Ensure the equipment operates as designed to meet scheduled activity; (5) Notify the Government's 354 RANS/RSM Blair Lakes Site Administrator if the targets require replacement or maintenance is required on the pits, berms, or buried cables.

3.9.10.3.3 IRSSS Operations

The Contractor shall operate the IRSSS, scoring activity on all pits, as scheduled.

- The Contractor shall record and pass scores to aircrew after each attack and retain hard copies of scoring data for 14 days.
- The Contractor shall secure peripherals during times of system inactivity.

3.9.10.4 Moving Strafe Target System

The Contractor shall provide operations support to the moving strafe target system at R-2211's Blair Lakes range. The moving strafe target system will only be used while an RCO is present, and only during spring, summer, and fall periods when tracks are clear of snow and ice. During JPARC modernization, 354 RANS plans to upgrade to a newer moving target system.

3.9.10.5 O&M Demarcations

The Contractor shall be responsible to ensure the strafe scoring system, to include microphones, radios, antennas, computer scoring systems, and circuit paths are fully functional. The Government shall maintain and set up the moving vehicle itself, its propulsion systems, the tracks, all berms, and the strafe rags.

3.9.10.5.1 Operation

The RCO, from the tower, shall remotely operate the moving strafe target when requested by aircrew. RCO shall score strafe events on the moving strafe target per aforementioned criteria.

3.9.10.6 Heated Targets

Within Conex containers at the LANTIRN Village site is a system of electrical load banks and thermal blankets affixed to interior walls that when activated represent window and door silhouettes to infrared sensors. Aircrew utilizes this heating system to enhance their precision ordnance delivery tactics. The Contractor shall:

- (a) Have full maintenance responsibilities.
- (b) When scheduled IAW paragraph 3.10 and subparagraphs, activate/deactivate (turn on/off) the LANTIRN Village Heated Targets via its remote activation switch within Bldg. 1151's JAWSS work center.

3.9.10.7 Laser Spot Video Recording System

The contractor will provide full O&M to the LSVRS on JPARC. The contractor will ensure the system is operational and available for requesting units training on the JPARC. Use of LSVRS will be scheduled as per WISS scheduling requirements.

3.9.11 Video Systems Management

3.9.11.1 Audio-Visual and VTC Systems Support

The Contractor shall provide O&M support to Main Briefing Rooms (MBR), all MPCs in buildings 1151 and 1141 and Det 1 building 9549, small theaters, conference rooms, mission planning areas, RF-A Duty Desk Display System audio-visual (AV), Debrief Display System (DDS) -1 VTC, and intra-site VTC systems and equipment as listed in Appendix 8, Table A8-46. Equipment shall be operated at classification level appropriate to data recorded/briefed/debriefed. JPARC VTC systems are compatible with DISA's Global Video Services (GVS) system, the contractor shall provide fully trained, qualified, and experienced operators.

3.9.11.2 Briefing and Debriefing Requirements

The Contractor shall provide Briefing and Debriefing support and/or capabilities IAW Exercise and/or Daily Flying Training Operations schedules. The Contractor shall provide operations support for Main Briefing Rooms (MBRs) used during the Government's duty day when scheduled IAW 353 CTS Daily Briefing Room schedule. Additionally, the Contractor shall operate all audio, visual, computer, and cryptographic equipment within Bldg. 1141 and Bldg. 1151 and Det 1 9549 when scheduled. The Contractor shall:

- (a) Provide operations set-up for the Mission Planning Cells (MPC), Commander's Conference Rooms (CCR), DDS Room-1 VTC, and all flight brief/debrief audiovisual and VTC systems.
- (b) Provide operations set up for 90 FS and 525 FS government sustained vaulted AFSEVEN (AF7) VTC systems in order to connect to outside VTC's for post-mission debriefs.
- (c) Set up DISA-GVS public room, bridge room, or point to point connections as necessary to connect any / all JPARC's VTCs to other users at the required classification level prior to the start of scheduled VTC events.
- (d) Provide pre-brief system instructions to users when requested.
- (e) Train Government personnel at Eielson and JBER to operate the VTC systems.
- (f) Have a 15-minute response time to provide troubleshooting and setup/repair of VTC systems for unscheduled VTC requests during the Government's duty day.
 - 1) Note: This provision does not apply to government sustained 90 FS and 525 FS vaulted AFSEVEN (AF7) VTC suites.
- (g) Provide manning to operate consoles within the MBRs, and/or the Vaulted VTCs in Bldg. 1141 at Eielson AFB, and Bldg. 9549 at JBER, hanger 4.

3.10 Electronic Attack (EA)

EA training is a key tenet of combat training for all forms of joint and coalition aviation capabilities. On the JPARC, EA is both airborne-based and ground-based. Airborne EA is via the Advanced Capability Pod (ACaP), and/or the Angry Kitten Pod (AKS) utilized by the USAF's Aggressor squadrons. Ground based EA is provided by mix of low-medium simulators to actual FSU SAM/AAA. The Contractor shall have no O&S responsibilities for ground-based EA systems themselves.

3.10.1 Airborne Electronic Attack – Jamming

Indigenous airborne EA encompasses two systems. The first system is the Advanced Capability Pod (ACaP) and the second, ALQ-167v88x, Angry Kitten. Both are aircraft mounted pods used by the 18 Fighter Interceptor Squadron (FIS) to emulate Electronic Counter Measures (ECM) and jamming effects of adversary aircraft. These pods are loaded and used for both daily training and LFE/MFE events.

3.10.1.1 Advance Capability Pod (ACaP). The ACaP system consists of the Advance Capability Pod (8212 and 8222 pods), aircraft instrumentation group-A provision (orange wire) cockpit control panels, aircraft mounting equipment, a back-shop test station.

3.10.1.2 Angry Kitten Pod (AKS). The Angry Kitten system consists of the aircraft mounted pod (ALQ-167 v88x), aircraft instrumentation group-A provision (orange wire) cockpit control panels, aircraft mounting equipment, a back-shop test station.

3.10.1.3 ACaP and AKS Task Requirements. The Contractor shall:

- a) Maintain ACaP and AKS per manufacture specification, perform functional checks of ACaP and AKS before all other missions and do so in accordance with engineering data provided by the ACaP manufacturer, and/or AKS T.Os.
- b) Upload/download the ACaP and/or AKS from storage to/from aircraft and perform ACaP/AKS system functional checks after each ACaP/AKS upload in accordance with manufacturer specifications.
 1. For Daily Flying Training, no more than five (5) of either type of pod shall be loaded, unless otherwise directed by COR/CO.
 2. For MFE and TDY operations, all available pods (both types) shall be loaded, unless otherwise directed by COR/CO.
- c) Conduct cross-loads/transfer of ACaP/AKS pods from one aircraft to the other, on an as-needed basis during aircraft launch.
 1. Cross-loads shall be limited to one per type pod, per go.
- d) Utilize flightline and back-shop test station equipment to perform field-level and intermediate-level maintenance. Troubleshooting down the Line-Replaceable-Unit/System-Replaceable-Unit (LRU/SRU); executing repairs where able.
- e) Document flying hours, sorties, and maintenance effectiveness for each ACaP and AKS on a daily basis. Daily reports shall be summarized into Contractor's MSR. MSRs shall be retained for the life of the contract.
- f) Be responsible for annotating the results of the functional checks in the aircraft forms binder in accordance with AFI 21-101.

Provide operations support services on a temporary duty basis in support of 18 FIS training deployments in addition to the year-round support at Eielson AFB. There are typically two deployments per year, lasting a total of 4 to 6 weeks in

length. Both ACaP and AKS shall be expected to be deployed simultaneously to one locale at a time. Contractor shall maintain a minimum of two ACaP qualified personnel capable of supporting PWS tasking. During deployments, no home station airborne EA jamming operations will be supported.

- g) Ensure ACaP personnel have minimum 2 years' experience maintaining/handling ACaP pods (8222 or 8212). It is highly desired that AKS personnel have a minimum of two years' experience on AN/ALQ-167v88 at the time service begins. However, a lack of experience may be waived if proof of qualification is provided (formal training and/or a 2 years' experience on similar systems, e.g. ACaP, AN/ALQ-188, AN/ALQ-184, etc.

3.11 Threat Operations & Maintenance

JPARC's Opposition Forces are both ground-based and airborne. Ground-based OPFOR consist of simulated, country-specific IADS, Communications Jamming and Deception activities, Cyber non-kinetic effects, and Camouflage-Concealment operations. Contractor shall provide O&M to EA Opposition Forces as specified in Appendix 8.

3.11.1 Integrated Air Defense System

IADS training encompasses the entire realm of scenario development, equipment placement and its use, accurate threat replications via use of air surveillance and command and control (C2) to acquire, track, and engage target(s), accurate and detailed engagement analysis, and the conduct of post-mission analysis. Two essential elements are required for effective IADS presentation: EOB with sufficient fidelity to meet mission requirements and trained personnel to realistically operate the equipment and objectively evaluate the outcomes.

3.11.1.1 IADS

- (a) All JPARC EA systems and IADS assets may be tasked. Required systems for each event will be in accordance with the directives from SAM-1.
- (b) Typical IADS assets required for an MFE/LFE threat training window are:
 - a. Both AN/TPS-77 radars
 - b. 4 Surveillance and Acquisition (SA)/Ground Control Intercept (GCI) Systems, of which will be the P-18, and VERA-NG
 - c. 4 Replica/FSU Shooter-Threat Radars
 - d.
 - e. 3 Manned Threat Simulators 10 Unmanned Threat Emitters (UMTEs)
 - f. 8 NINERs
 - g. 2 MANPAD simulators, each paired with a corresponding Smokey SAM firing unit. Operations may be simultaneously split between R-2205 and R-2202, or both units in one range space only
 - h. 5 Inflatable Decoys
 - i. TEL TMOs positioned at sites designated by the 354FW; 100% deployed

- j. TER TMOs positioned at sites designated by the 354FW; 100% deployed
- k. LAZARUS
- l. 100% ARTS
- m. 3 ELITES
- n. 100% YETIs

(c) Typical IADS assets required for Daily Training consist of:

- a. Both AN/TPS-77 radars
- b. 2 Surveillance and Acquisition (SA)/Ground Control Intercept (GCI) Systems, which will include the P-18, and VERA-NG (after they are installed)
- c. 2 Replica/FSU Shooter-Threat Radars
- d. 2 Manned Threat Simulators
- e. 4 Unmanned Threat Emitters (UMTEs)
- f. 5 NINERS
- g. 1 MANPAD simulator (summer time only)
- h. 75% ARTS
- i. 66% YETIs—this will get us 2 of 3 by CY 23 (per currently funded systems)
- j. TEL TMOs positioned at sites designated by the 354FW; 80% deployed
- k. TER TMOs positioned at sites designated by the 354FW; 80% deployed

3.11.1.2 IADS for Daily Training

The Contractor shall perform all tasks to support a daily training regimen consisting of a 12-hour flying window, 5 consecutive days per week. Daily Operations apply year-round. Threats shall be available during the entirety of the 12-hour flying window. It is important to note that daily training will continue to occur during MFE events and shall be supported. Therefore, IADS support may be required prior to, between, and/or post-MFE Vul periods. The contractor shall demonstrate flexibility as any or all JPARCs IADS assets may be required to support daily training and will be scheduled per paragraph 3.9.3.

3.11.2 IADS Training Equipment

The JPARC's EOB varies from advanced threat emulators, medium-low fidelity threat simulators, to Replica, FSU, and international equipment. The equipment provides for all aspects of IADS generation and simulation; automated IADS functions for scenario replication; Search/Acquisition and GCI equipment to acquire and assign targets; Target Tracking Radar/Target Engagement Radar/Transporter-Erector-Launcher (TTR/TERs/TEL)s, both real and simulated, to engage targets; C2 networks/datalinks to provide both real and simulated C2 functionality; radio frequency and laser jammers to degrade various Blue Force systems, visual cues to simulate launch signatures; and displays for missions monitoring, Real-Time Kill Removal (RTKR), and aircrew debriefing. The Contractor shall integrate and maximize the capabilities of each individual system to ensure realistic IADS scenarios to meet aircrew

mission requirements. The Contractor will provide updated coordinates within 3 meters whenever a threat radar/system/simulator/emulator is moved to a new location. Additionally, the Contractor will provide updated coordinates within 3 meters whenever a Threat Shape Appropriate Radar (TSAR) or decoy is moved. Contractor shall provide a current site configuration of all training assets present at the location with an aerial image showing the location of each asset categorized by site location. The image shall be updated no later than 3-duty days after the movement or placement of a training asset.

3.11.2.1 Former Soviet Union and International Surveillance & Acquisition/Ground Control Intercept

The Contractor shall provide O&M support to the JPARC's FSU SA/GCI systems listed in Appendix 8, Table A8-14, as scheduled. These systems shall be operated both connected to C2 and instrumentation systems within RF-A facilities and/or as stand-alone systems.

Contractor shall ensure all operators of FSU SA/GCI equipment have a minimum of one year of direct experience. Waivers for lack of experience on specific systems will be addressed on case-by-case basis. All waivers will be approved by the CO or COR.

3.11.2.2 Replica, FSU, and International Threat RADAR Simulators

The Contractor shall provide O&M support for all the JPARC's Replica, FSU, and International TTR, TER, TEL systems listed in Appendix 8, Table A8-15 as scheduled. These systems shall be operated either when connected to C2 and instrumentation systems within Bldg. 1151 and the JPARC Range Operation Center (JROC) and/or when they are disconnected and utilized as stand-alone systems. Contractor shall ensure all operators of FSU and International TTR, TER, TEL equipment have a minimum of one-year direct experience. Waivers for lack of experience on specific systems will be addressed on case-by-case basis. All waivers will be approved by the CO or COR.

3.11.2.3 Manned and Unmanned Threat Emitter Simulators

The Contractor shall provide O&M support to the JPARC's manned and Unmanned Threat Emitter (UMTE) systems listed in Appendix 8, Tables A8-16 and A8-17 as scheduled. Contractor shall ensure all required Periodic Maintenance Inspections (PMI) are completed, and fidelity of systems operated for specific events are sufficient quality/capability to meet aircrew training objectives. The Common Electronic Attack Receiver (CEAR) is an integral and vital part of the UMTE's operation and usefulness. The CEAR must be operating properly for the UMTE Remote Emitter Unit (REU) to be considered functional.

3.11.2.4 Man-Portable Aircraft Survivability Trainer (MAST), and Mallina Infrared Stimulators

The MAST and Mallina Infrared (IR) stimulators replicate the signature of various MANPAD missiles during launch and flight, activating aircraft warning systems. The Contractor shall:

- (a) Provide all O&M to MAST and the Mallina IR stimulators. Neither system is operated on a daily basis and will be scheduled IAW the Exercise and Daily Flying Training Operations scheduling processes as required.

3.11.2.5 Digital Integrated Air Defense System Modeling Software

Ground-based EA utilizes DIADS; a software package designed to provide high-fidelity SAM

and Anti-Aircraft Artillery (AAA) engagement modeling. DIADS software is integrated into LMOC, JPARC-R, ACTS, YETI control suite, and C2 systems and can provide an automated process for IADS simulation or be augmented with manual inputs/processes. The Contractor shall provide personnel fully trained on and experienced with DIADS software and adversary IADS. The Contractor is made aware of the 412th Electronic Warfare Group/772nd Test Squadron 2-day DIADS training session at Edwards AFB. The contractor shall provide all O&M to DIADS systems to include but not limited to:

- (a) Performing establishment of settings and configurations/ reconfigurations to meet mission requirements as necessary.
- (b) Based on Government requirements, develop, program, test, store, and catalog complete, detailed, and through IADS scenarios for use in perceived mode.
- (c) Operating and monitoring DIADS performance during missions in order to discern proper functioning of the programmed scenario, making adjustments or inputs as necessary, and determining probabilities of kill in real-time as needed.
- (d) Conducting post-event engagement analysis and providing results products to end users.
- (e) Conducting comparison modeling using Enhanced Surface to Air Missile Simulation (ESAMS), or other loaded modeling software, such as Aggressor View.
- (f) Performing computer troubleshooting and repair of DIADS systems, to include rebooting and reloading software, replacing/reconfiguring hard drives, establishing/re-establishing Internet Protocol addressing, etc.
- (g) Keeping the software and hardware up to date, properly configured, scanned and STIGs are required for RMF / cybersecurity are the Contractor's responsibility.
- (h) As necessary, assist Government and OEM personnel in updates, upgrades, installations of new systems, tests, data recording, and integration.

3.11.2.6 Smokey SAMs

Smokey SAMs are pyrotechnic rocket systems fired from remote launcher assemblies co-located with manned threat emitters or shoulder fired MANPAD teams. Contractor shall:

- (a) Provide Smokey SAMs operations.
- (b) Provide O&M of launcher assemblies.
- (c) Provide hands-on training in the use of Smokey SAM launcher systems and basic pyrotechnic safety procedures to visiting exercise MANPAD team participants.

3.11.2.7 Mobile Decoys and Threat Shape Appropriate Radars

Contractor shall provide O&M support to inflatable SAM decoys, TSARs that maybe be either trailer mounted or non-mobilized. Non mobile TSARs require the use of trucks and or lifting machines to move. Inflatable, fixed metal, and trailer-mounted systems are utilized at key locales within exercise operating air spaces to provide tactical and strategic targeting problems for exercise participants. The Contractor shall:

- (a) Remove from storage and transport decoy systems to specified locales. Contractor shall inflate and/or configure the decoy and TSARs in place.
- (b) Provide support to all systems requiring periodic re-inflation, material repair, and/or heat blanket activation.

- (c) All scheduled systems will be emplaced prior to mission start. A maximum of five inflatable systems (i.e. fully inflated) will be used per vulnerability period (MFE). All TSARs may be used.
- (d) Relocate systems in accordance with specified Exercise and/or Daily Flying Training Operations schedules. Two inflatable systems may be moved between vulnerability periods, and all may be moved overnight. Two days' notice will be provided to move mobilized TSARs.
- (e) Turn on and operate TSARs that are equipped to do so.
- (f) At termination of exercise operations, remove, clean, repair, maintain, and store the inflatable decoy systems at a locale specified by the 354 RANS RST shop.

3.11.2.8 Camouflage-Concealment Operations

Camouflage netting is utilized to conceal targets and/or deceive airborne targeting systems/capabilities. Contractor shall provide O&M to camouflage netting equipment and install as scheduled. The Contractor shall:

- (a) Remove from storage and transport netting to specified locations.
- (b) Cover and stake down netting on selected range systems.
- (c) Relocate netting as directed. Contractor shall have two workdays to relocate all netting systems.

3.11.2.9 Yukon Enhanced Training Initiative radar signal emulators

Future development of the JPARC includes incorporating up to 11 Yukon Enhanced Training Initiatives (YETI) into the JPARC inventory of threat systems. These will be a mix of different bands of the electromagnetic spectrum (e.g., VHF, UHF, L, C, S, X), and will be bed down on the JPARC through FY30. Nine YETI systems are currently at JPARC, C-Band (with CEAPOD, S-Band (with CEAPOD), and an X-Band. Some YETI systems of differing bands will have compatible power/connectivity infrastructure and requirements. Some systems will require much larger primary power sources than others. YETI systems are mobile trailer mounted systems used to replicate advanced, modern adversary capabilities used to train combat aircrews in MFE and daily training missions. As such, YETI systems will change positions and move to different threat sites to present differing training scenarios.

3.11.2.9.1 CEATI Support

The YETI system possesses technology sensitive to the national security of the Commonwealth of Australia and is controlled by the Active Electronically Scanned Array Systems Program Office (AESASPO) of the Australian Department of Defense. Certain aspects of this system may only be maintained by the original equipment manufacturer, or its US subsidiary.

The ARCTICS Contractor shall work cooperatively with CEATI, the US subsidiary of CEA Technologies. The ARCTICS Contractor shall provide communications from the YETI operating site to the YETI control center at Eielson AFB. ARCTICS Contractor shall provide continuous power to maintain safes, communications/networking gear, COMSEC, and any required ancillary equipment to keep communications link up. The ARCTICS contractor shall be responsible for all O&M of the YETI systems that is not required to be performed by CEA/CEATI. The ARCTICS contractor shall coordinate with CEA/CEATI with any repairs or

maintenance on sensitive components or panels to ensure systems are operational for daily training and exercises.

3.11.2.10 VERA-NG

The VERA-NG system is a passive detection system that uses time difference of arrival to gather TSPI data. This system consists of a central processing station and three receiving side stations. System-specific microwave links connect the side stations with the central station. Correct placement and orientation of the antennas is critical to achieving the desired area of observation and accuracy of tracks. The Contractor shall perform all O&M for the VERA-NG. This includes researching and proposing alternate deployment locations when tasked by the CO or COR.

3.11.2.11 Expendable Low-Cost Integrated Training Emitter

Expendable Low-Cost Integrated Training Emitter (ELITE) is an inexpensive emitter used to provide density to threat sites and complicate targeting for pilots and aircrew. The JPARC has 3 x ELITEv3 remotely operated X-band systems with a solar charging kit to provide power at remote sites. ELITEv3 does not track or target specific aircraft or provide radar warning indications. ELITEv3 systems are small and transportable with Pelican cases and will regularly be relocated around the JPARC.

3.11.2.12 LAZARUS

LAZARUS is a reconfigurable aircraft tracking system with a modular payload-architecture that accommodates co-aligned configurations of passive EO/IR sensors and active laser devices. It enables safe engagement of aircrew eyes, night vision devices, and aircraft mounted EO/IR sensors during fight for both test and training operations. The LAZARUS system can be divided into two main hardware components to include the pedestal tracking mount, and the trailer.

3.11.3 Threat Training Mission Preparation

For Pre-Operations, the Contractor shall ensure IADS training systems are available & fully functional IAW scheduling criteria as defined in Paragraph 3.9.2 and subparagraphs.

3.11.3.1 Mission Coordination

To facilitate successful training, the Contractor shall:

- (a) Coordinate with applicable government/Contractor agencies to discern threat training windows and systems being utilized.
- (b) Obtain all required information to support operations by interfacing and coordinating with all applicable agencies such as, but not limited to: airspace/range scheduling agencies, Army Range Controls, 354 RANS, local and visiting flying units, local and visiting ground units, and other Contractors supporting JPARC missions/installations.
- (c) Ensure all applicable agencies are notified of the use of lasers in support of the mission and all safety procedures are followed.
- (d) Ensure required connectivity is working such as a situational awareness display like ANGEL, and data transport (TENA, DIS, Protobuff, etc.) are established and tested prior to missions.

3.11.3.2 Emplacement and repositioning of IADS components

Contractor shall correctly locate, deploy, and prepare the specified sites and threat systems at designated locations on the JPARC. IADS components include early warning radars, passive detect systems, GCI radars, UMTE, manned threats, FSU threats, deployed threats, international threats, and TSARs and the power generation, fuel supply, and communications systems associated therewith. Contractor shall move selected IADS components to increase realism during MFEs and at intervals throughout the year for daily flying operations. Whenever IADS components are moved to new locations, the Contractor will provide coordinates of the centroid of the new location with an accuracy of <3 meters within 6 hours be updated in JESTER and information relayed to 354 RANS/RST.

3.11.3.3 IADS Reconfiguration

To facilitate JPARC scenario enhancement and aircrew threat training, the Contractor shall move selected SA/GCI; Replica, FSU, and International Threat Radar simulators; and Manned and Unmanned Threat simulators to increase realism. Movement includes restoring systems to operational status at the new location providing updated system coordinates and ensuring that connectivity to appropriate JPARC instrumentation networks and systems is accomplished. Preparations for movements, movements to initially position systems, transport to/from storage, or for maintenance or Programmed Depot Maintenance (PDM) shall not be counted towards the following maximum limits unless specified in the contract. The Contractor shall:

- (a) Limit threat replication systems to three movements (i.e., one system 3 times, or 3 systems once) per MFE event. Limit threat replication systems supporting daily training to 1 movement per month. The Contractor shall have one day to accomplish moves. The AN/MPS-T1 replica systems are not under this limitation. Movements of the AN/MPS-T1 systems will be planned and scheduled on a case-by-case basis.
- (b) An ARTS-V1 is expected to arrive at JPARC prior to or post-award of this contract. The contractor shall be responsible for O&M of this system. This is a large system that is not expected to be moved after initial placement. If movement is required, it will be coordinated with the contractor at that time. Operations and Maintenance of this system will be negotiated when they arrive at Eielson.
- (c) Government required system moves in excess of these limits will be negotiated on a case-by-case basis. All communication will go through the CO/COR, and 354 RST shop.
- (d) The ARCTICS contractor will be responsible for transportation and movements of the YETI systems to include transport and connection of communication systems between the operating sites and YETI control sites.

3.11.3.4 IADS Equipment and Architecture Preparations

The Contractor shall:

- (a) Perform all necessary preparation/Preventive Maintenance Inspections (PMIs)/tests/checks as required by TO or equipment/Government manuals/documentation on scheduled systems/equipment to support scheduled flying/threat training windows.
 - 1) Contractor shall test and verify IADS systems are operating within T.O. and/or AFTTP 3-1, Volume-II parameters prior to daily operations during Daily Training periods, and prior to each vulnerability period during MFEs.

See also Operator Requirements at paragraph 3.16.4.2 and sub-paragraphs.

- (b) Ensure mobile/portable/system-specific power generation systems for IADS components are fueled, serviced, and ready for operations.
- (c) Ensure IADS components possess the proper level of encryption for the scheduled mission requirements. Unclassified missions require FIPS-140-3 certified encryption.
- (d) Ensure C2 (ARES / ANGEL) gateways and video recording systems are operational.
- (e) Ensure DIADS is properly configured for operational usage, to include network classification security requirements are met.
- (f) Perform DIADS mission file configurations, utilizing JPARC EOB to provide country specific/directed scenarios.
- (g) Configure DIADS for automatic, semi-automatic and manual modes as required to effectively present operations scenarios.
- (h) Contractor shall ensure that all equipment that is operated/maintained complies with TEMPEST requirements IAW AFSSI 7700 Emission Security, AFSSI 7702 Emission Security Countermeasures, and AFSSI 7703 Communications Security.

3.11.4 IADS Training Execution

Threat operators, in conjunction with SAM-1 and/or GODFATHER Command and Control functions shall simulate a wide range of air defense configurations and complexities ranging from autonomously operated threat(s) to a complex and highly integrated air defense system. Air defense configurations may also include and integrate other United States (US) or foreign systems (e.g., mobile man-pad teams, radar warning systems, etc.). The level of IADS applied shall be scheduled as requested by the aircrew, based on the aircrew training objectives, or otherwise determined by the Government IAW paragraph 3.9.2 and its sub-paragraphs. In the highest order IADS, accurate and timely aircraft position data shall be provided to each individual weapon system simulator allowing operators and/or controlling systems to act as skilled threat operators, employing realistic tactics during aircraft engagements.

3.11.4.1 General

The Contractor shall:

- (a) Operate ACTS, C2, DIADS, threat video systems, and utilize software modeling tools (such as E-SAMS, and J-ACE, as required) to formulate threat engagement results.
- (b) Assist SAM-1/ GODFATHER as required in the performance of IADS engagement analysis and mission reporting.

3.11.4.2 GODFATHER Requirements

GODFATHER shall have requisite experience critical to effectively enhance training. Such experience could include 11F/Fighter Pilot, Weapon System Officer, Electronic Warfare Officer, Intelligence, Air Battle Manager, Air Defense experience, or a collection of experience approved by the government. The Contractor shall submit an applicant's qualifications to the Government for review and approval NLT 10 business days prior to performance on the contract.

Contractor GODFATHER shall effectively manage adversary replication through performance of operational Command and Control of JPARC IADS, Cyber Non-Kinetic Effects (CNKE), decoy systems, and missile launch visual aids during both daily training and MFE operations. This task includes all phases of IADS training, to include scheduling training assets, scenario

development and mission planning, event execution management, and post-mission analysis and documentation and reporting.

As such, the Contractor shall:

- (a) Participate and advise in developing various utilizing JPARC IADS, CNKE, MANPADS, and decoy systems to meet aircrew and/or mission training requirements.
- (b) Maintain proficiency in current and relevant adversary IADS engagement tactics. Execute tactics consistent with current adversary TTP as described in AFTTP3-1 Threat Guide.
- (c) Provide/brief aircrews with the current training capabilities and services the JPARC can provide and brief projected future capabilities of the JPARC.
- (d) Provide current site layout/configuration to include TMO, threat systems, or other training aids utilized on the JPARC.
- (e) Be proficient in the operations of all applicable voice and data communications, SA/GCI, and Time-Space-Position-Information (TSPI) display systems to provide C2 to manned threat operators and to affect UMTE engagements.
- (f) Direct threat engagements utilizing C2 systems, providing control for manned threats, MANPADs, and SMOKEY SAMs, as required.
- (g) Conduct training engagements using all available systems as required.
- (h) Perform real-time (if required) and final analysis of engagements to assign a Probability of Kill (PK) rating of zero, low, medium, or high. The Contractor shall utilize all available tools [e.g., ACTS/TSPI displays, DIADS, Joint- Air Combat Evaluation (J-ACE), and ESAMS modeling, video, etc.], in conjunction with considerations of endgame missile fly-out model miss-distance, known simulator limitations, the number of aircraft engaged, phase of flight, engagement range, aircraft flight attitude, electronic counter-measures, expendable counter measures, engagement duration, and threat simulation results.
- (i) Monitor, document, and account for HARM engagements and jamming effects occurring during training scenario execution. During daily training, employ real-time-kill-removal for HARM shots as desired by the training audience. During MFEs, assist HARM shot assessors and/or Jamming Assessment SMEs as required.
- (j) Employ CNKE per scenario requirements.
- (k) Provide post-engagement analysis and results to participants as required.
- (l) In the event a threat becomes inoperable, GODFATHER will provide all unmanned threats to aircrew, even if not scheduled.
- (m) Document mission results, as a minimum, on a mission (shot and/or engagement) summary form. When required, input shot, engagement, and other data into electronic software media (e.g., Excel/Access/PowerPoint) for presentation in debriefs.
 - 1) Perform overall mission analysis and assessment utilizing data such as:
 - i. Sorties lost to threat engagements, anti-radiation missile launches, and jamming effects,
 - ii. Effectiveness of aircrew attacks versus threats, and the attrition of threats,
 - iii. Scoring of weapons delivered by the aircraft against threat targets,
 - iv. Effects those weapons would have had versus real threat targets.
- (n) Debrief participating aircrew on sortie/package/mission effectiveness, incorporating applicable analysis from above, as they relate to SAM/AAA/ MANPAD/Communications

Jamming (CJ)/Imitative Communication Deception (ICD) engagements, and then integrate these mission results into the final mission debriefing.

- (o) Provide all functions necessary to provide effective feedback to users of JPARC systems and facilities (e.g., gather, compile, load, record, and assist in analysis, replay mission recordings/video, and input feedback results into software media such as Excel/Access/PowerPoint).
- (p) Maintain and update existing "Shell" or "Template" electronic software media (e.g., Excel, Access, or PowerPoint) presentation as necessary or requested by the CO/COR.

3.11.4.3 IADS Operator Requirements

Contractor IADS Operators shall:

- (a) Maintain specific knowledge of the types of SAM/AAA weapons systems being simulated, to include capabilities and limitations, and the tactics used by potential adversaries. Source data shall be AFTTP 3-1 as well as Shot Kill Doctrine specific to participating MDS's Threat Guide.
- (b) Ensure threat systems' data and video systems are properly time-stamped and synced to LMOC, JPARC-R/B/SAP network clocks and servers, required data encryption devices are operating properly, and any recording devices are activated.
- (c) Test and verify systems are operating within T.O. parameters prior to daily operations during Daily Training periods, and prior to each vulnerability period during MFEs. Measured results shall be provided to GODFATHER prior to mission start.
- (d) Be proficient at performing simulated threat engagement operations in a training environment, to include the utilization of information from SA/GCI, ACTS/Live Monitor Displays, leading to logical and realistic conclusions.
- (e) Implement IADS scenarios as directed by GODFATHER/SAM-1.
- (f) Perform analysis of engagements in order to assign a PK rating of zero, low, medium, or high, utilizing all tools available (e.g., on-board systems, modeling and Live Monitor displays) known simulator limitations, the number of aircraft engaged, phase of flight, engagement range, aircraft flight attitude, electronic counter-measures effectiveness, use expendable counter measures, and the engagement duration.
- (g) Document mission results, as a minimum, on a mission (shot and/or engagement) summary form.
- (h) Provide post-mission analysis and products to GODFATHER/SAM-1 as required

3.11.4.4 IADS Operator Commentary

Manned system Threat Operators shall provide oral commentary describing the observed countermeasures utilized by aircrew during engagements and the effectiveness of the countermeasures in defeating the threat. Commentary shall also include the threat site designator (e.g., "Kilo site") and threat being simulated (e.g., "SA-3"), tactics utilized by the threat operator, significant events as they occur, and the threat system mode of operation as they change throughout the engagement. The following is a list of standard terms used for commentary and their meanings:

Term	Meaning
Searching	Searching with radar or visually

Locked	Locked onto the target with radar
Broke Lock	Radar has broken lock
Dirt	Specified aircraft detects indications of surface threat in search mode
Mud	Specified aircraft detects indications of surface threat in track mode
Singer	Specified aircraft detects indications of surface threat missile launch
Naked	Specified aircraft does not detect any surface threats in track mode
Jamming (Canyon)	Aircraft jamming radar receiver
Fire	Shooting AAA / simulated AAA
Cease Fire	Termination of AAA firing
Launch	SAM launch or simulated
Impact	Simulated missile reached target
High, Medium, Low PK	Operator assessment of probability of a kill
Miss	Operator or computer assessment of a miss, as he or she sees it
Jinking	Aircrew attempting to taking evasive measures to avoid threat radar lock-on by quickly and repeatedly changing course

Hit	Aircraft was within the weapons blast radius when it detonated. Doesn't mean Aircraft equipment was killed, but there is a possibility.
Splash	Weapon released and targeting a system, but pilots can not verify that the weapon hit intended target and killed it.
Killed	Weapon released and by visual or known knowledge hit the intended target and target system is no longer viable.
Timeout	Shooting long range weapons via Air to Air or HARMS and how long it takes to reach to intended target.
Min Range	Aircraft inside minimum range of weapon being simulated.
Max Range	Aircraft outside maximum range of weapon being simulated
Maximum recommended intercept range (MRIR)	Aircraft inside recommended intercept range of weapon being simulated

3.11.4.5 IADS Threat Video Recording and Editing

The Contractor shall record all threat engagements and SA/GCI scopes via video systems. All recorded activity from threats connected to the PDL shall be at Bldg. 1151 within 30 minutes from the end of a mission. If a threat site is not connected to the PDL, the operator shall record locally, relay to GODFATHER his/her engagement parameters and results, then transport recorded media NO LATER THAN the end of the duty day. The Contractor shall:

- (a) Configure, upgrade, and operate the Digital-Threat Video Recording System, and all software, peripheral networks, computers, hard drives, software, and monitors as required.
- (b) Modify/configure D-TVRS as required for changes in PARC Data Link, encryption systems utilized, and the addition of range systems that provide video feeds.
- (c) Provide usable (debrief-able) video and audio data consisting of significant threat radar events (engagements and missed engagements) from all threat systems requested for a mission. All video and audio data shall be available for scheduled aircrew debriefings within 1 hour after the end of the mission. Recorded video for daily missions shall be retained for 1 week. Recorded video for LFE/MFE missions shall be retained for the period of exercise plus 1 week. Recorded video of significant events such as aircraft accidents, personnel injury, or off-range munitions releases shall be archived and stored indefinitely or until destruction is directed by the CO/COR.
- (d) Create and provide compilations of video and/or audio recordings in the format requested (DVD, digital video imbedded in software) to JPARC clientele upon request. The soonest the video product shall be required to be completed is equal to five times the length of the finished product (e.g., A 30-minute finished product will be available within 2 1/2 duty hours).

3.11.5 Cyber Non-Kinetic Effects

In addition to simulated kinetic means of EA associated with IADS replication, there are capabilities that use electronic means to either disrupt the man-in-the-loop and/or aircraft systems. Communications Jamming and Imitative Communications Deception tactics target man-in-the-loop; primarily pilots and aircrew.

3.11.5.1 Communications Jamming and Imitative Communications Deceptions

The Contractor shall perform CJ/ICD during MFEs and local LFEs, as scheduled. The Contractor shall:

- (a) Operate and maintain all scanning and recording equipment to perform CJ/ICD as identified in Appendix 8.
- (b) Apply ICD as requested, following specific parameters, procedures, and guidance given by the Government's OPFOR commander, SAM-01.
- (c) Comply with AFI 11-214 and SAM-01 direction, whichever is more restrictive.
- (d) Contractor may utilize Compunetix Key Set for scanning and transmission during CJ/ICD.
- (e) Contractor may utilize GFE noise jamming box in conjunction with Compunetix Key Set to generate CJ.
- (f) Contractor is free to develop and utilize Contractor Furnished Equipment (CFE) CJ sound generators.
- (g) Report to SAM-1 and/or aircrew and debrief jamming effectiveness to the appropriate Government personnel and aircrew as required.

3.12 Logistics & Engineering

3.12.1 Logistics

3.12.1.1 General

The goal of logistics support is to facilitate the maintenance of fully functional equipment and systems for maximum training and mission effectiveness. The Contractor shall:

- (a) Manage and perform maintenance tasks and processes in a manner such that it achieves these goals.
- (b) Provide all necessary equipment and materials not specified as GFE and/or GFP to accomplish the tasks in this PWS.
- (c) Work collaboratively with all other Contractors and the Government toward the common goal of a fully operational range and its equipment.
- (d) Provide maintenance support services for all equipment and systems identified in Attachment 3, GFE/GFP Listing, and in Appendices 7, 8, and 9.

3.12.1.2 Logistics Supply

The Contractor shall perform all functions and services required in support of the JPARC and this PWS. The Contractor shall follow Standard Base Supply Customer Procedures IAW AFI 23-101.

3.12.1.3 Material Control

The Contractor shall:

- (a) Identify in writing to the CO and COR, no later than contract performance start, a Material Control Manager (MCM) and alternate to serve as a single point of contact to manage material requirements of this contract.
- (b) Appoint in writing, to the CO and COR no later than contract performance start, primary and alternate custodians for all accounts.
- (c) Establish and manage Equipment, Bench stock, Supply Point, Munitions, Test, Measurement, and Diagnostic Equipment (TMDE), Automated Data Processing Equipment (ADPE), and any other accounts as necessary to meet the requirements of this contract. Contractor shall identify its Asset Account Custodian(s) in writing to the CO and COR.
- (d) Provide copies of transaction documents and other reports (e.g. DO4s, D11s, D18s, M30s, etc.) concerning Contractor managed accounts, as specified in AFI 21-101, when requested by the Government.

3.12.1.3.1 Supply Management

The Contractor shall comply with supply discipline, customer, and Contractor responsibilities IAW applicable directives as outlined in AFI 23-111, Air Force Joint Manual (AFJMAN) 23-210, AFI 21-101, and supplements that pertain to receipt, storage, issue, follow-up, validation, and shipment of assets required to support mission requirements. The Contractor shall requisition, procure, stock, store, issue, recover, turn-in, and account for all items and materials needed to sustain JPARC assets.

3.12.1.3.2 Status Reports

The Contractor shall include in its MSR summaries of:

- (a) Mission Impaired Capability Awaiting Parts (MICAP) Start/Stop Reports.
- (b) Due in from Maintenance (DIFM) Status Reports.

3.12.1.3.3 Open Purchase Justification

The Contractor shall utilize the Enterprise Solution – Supply (ES-S) to support all GFP/GPE repair or maintenance requirements. When the required materials or parts are not available through the ES-S, the Contractor shall use the “Open Purchase” process, upon approval by the designated CO/COR, to preclude operational delays or unacceptable mission impact.

3.12.1.3.3.1 Open Purchase Requests

The Contractor shall submit Open Purchase Requests for supply purchases over \$3,000. The Purchase Request shall include:

- (a) Justification for Open Purchase recommendation and source to include pricing information from three sources or a sole source justification as appropriate.
- (b) Current CAP balance (including all approved purchases not yet deducted).
- (c) CO Approval for purchase with coordination and approval by the CO/COR.
- (d) CO approval for single purchase over \$20K or when the total aggregate amount of all purchase transactions exceeds \$30K in a single month.
- (e) An assigned Purchase Identification (ID). The Purchase ID shall be transcribed to the receipt, invoice, and included in associated reports. The Contractor shall only be

reimbursed cost for purchases that qualify for reimbursement and have Purchase IDs. The Contractor shall maintain sufficient Open Purchase documentation to provide an audit trail.

3.12.1.3.3.2 Open Purchase Summaries

The Contractor shall include summaries of outstanding Open Purchases in its MPSMR.

3.12.1.3.4 Defective Parts

The Contractor shall retain defective accountable parts, supplies, and materials removed from Government equipment as a result of work performed. These items shall be stored until proper accounting and disposition is accomplished. The Contractor shall:

- (a) PQDRs originating point and screening point responsibilities IAW T.O. 00-35D-54. The Contractor shall forward PQDRs IAW TO 00-35D-54 using the on-line system of Joint Deficiency Reporting System (JDRS).
- (b) Include summaries of PQDRs submitted in its MPSMR.

3.12.1.3.5 Excess Materials

The Contractor shall turn in to Logistics Readiness Squadron all excess items and materials not authorized or required IAW AFI 21-101.

3.12.1.3.6 Reusable Container Program

The Contractor shall participate in the Air Force Reusable Container Program IAW AFI 24-602, Volume 2.

3.12.1.3.7 Precious Metals Recovery Program

The Contractor shall participate in the Air Force Precious Metals Recovery Program IAW AFI 21-101 and DoDM 4160.21, Volume 4.

3.12.1.4 Shipping and Receiving

The Contractor shall provide all shipping and receiving services in support of this contract. The Government will provide shipping and receiving services for "Government Supported" property (e.g. system shipments to/from depots; Supply Chain actions; Government-directed ACTS deployments,). The Contractor shall:

- (a) Prepare any equipment designated for shipment IAW applicable T.O. procedures for transportation (e.g. tear down, compliance with any Special Packaging Instructions, set-up, and checkout). Preparation includes, but is not limited to, relocation, required disassembly, cleaning, preparing shipping inventories, addressing, and delivery to point of shipment.
- (b) Make all the arrangements for authorized shipping through the base Traffic Management Office (TMO). Coordinate shipment of all classified materials with the Installation Information Protection Office.
- (c) Complete all required forms and shipping documents (e.g., DD Form 1149, etc.) and requisition all required on-base transportation through the base transportation office. No shipment shall be made without proper supply documentation.
- (d) Transport to shipping location determined by TMO and ship items as directed and

approved by the Government.

- (e) Deliver qualifying items Free-on-Board (FOB) origin via Government Bill of Lading (GBL). Receiving services will be provided by the Government for any materials that are or will become "Government Supported" GFP
- (f) Track all JPARC shipments from start to end, regardless of their origin or destination, and maintain documents for future reference. The Contractor shall maintain a shipping file for all supplies and materials in the transportation system, including turn-ins and receipts. The Contractor shall include summaries of shipping/receiving actions in its MPSMR.

3.12.1.4.1 Non-Availability of Government Transportation

When Government transportation channels are not available, subject to approval by the CO/COR, the Government will reimburse Contractor for commercial transportation/shipping costs, on a case-by-case basis.

3.12.1.5 Refueling

The Contractor shall perform refueling services in support JPARC activities for the sites and systems identified in Appendix 6, 7, and 8. The Contractor shall coordinate with air transport Contractor as necessary for their refueling of remote or fly-to sites.

The Government shall provide or otherwise reimburse the cost of the product for all diesel and motor-gasoline (mogas) fuel for use in GFE systems, and other gases needed such as propane, nitrogen, etc. This does not include refueling of Contractor-owned, Contractor operated vehicles and equipment. In addition, the Contractor shall:

- (a) Ensure no interruption of JPARC activities due to insufficient/contaminated fuels in JPARC equipment or systems.
- (b) Establish a base account for fuels required for GFE.
- (c) Commercially procure fuels required for GFE systems, when fuel from a Government source is not feasible to support mission requirements. The Government shall reimburse the cost of surface transport after the Contractor has shown its choice for commercial delivery provider(s) to be the least expensive bidder, or the Contractor has complied explicitly with Sole-Source requirements as stipulated by the CO.
- (d) The Contractor shall track and report fuel/gasses deliveries (as a minimum) by: date, location, fuel/gasses type, quantity delivered, and quantity remaining in storage tank system(s). Delivery reports shall be monthly and included in Contractor's MPSMR.
- (e) The Contractor shall track and report fuel/gasses consumption. Consumption reports shall be provided monthly, and a summary report provided annually. Monthly reports shall be included in Contractor's MPSMR.

3.12.1.6 Power Production and Environmental Control

The JPARC encompasses sites and equipment, both on the road network, and at remote fly-to locales that requires O&M of power production, power distribution, and environmental control systems. Power production systems consist of fixed and portable diesel and propane generators, Thermo-Electric Generators (TEG)s, Solar panels and wind turbines. Power distribution is all equipment and systems necessary to transfer/convert produced power to usable power for JPARC systems. Environmental Control entails O&M of systems providing Heating-Ventilation-and Air Conditioning

(HVAC) within JPARC radar systems, and within Contractor- maintained structures, and shelters.

3.12.1.7 Power Production and Distribution

The Contractor shall provide O&M of power production systems and their distribution systems, to include controls and pathways in support of JPARC equipment, facilities, shelters, and structures. Power production and distribution shall consist of, but not limited to: generator, solar, and wind systems, battery plants, site uninterrupted power supplies (UPS), AC/DC/frequency/voltage converters, radar power distribution pallets, breaker panels, and system and site wiring.

Contractor shall have no maintenance responsibilities of GFE commercial power lines and transformers. Demarcation of responsibilities shall be at the power drop panel for range sites, and/or the power outlet within government-maintained facilities.

3.12.1.8 Environmental Control

The Contractor shall provide O&M to HVAC systems in order to provide environmental control within JPARC systems, structures, and shelters.

Contractor shall have no maintenance responsibilities of HVAC systems as part of government-maintained facilities.

3.12.1.9 Maintenance Support

The Contractor shall perform as a minimum: troubleshooting, inspecting, repairing, servicing, calibrating, corrosion control, removing and reinstalling, installing Time Compliance Technical Order (TCTO)s, command modifications, upgrading equipment and documentation IAW approved changes, performance of PMIs, and re-establishing systems after movements and deployments.

3.12.1.10 Equipment Availability Rate

The Contractor shall maintain a minimum Equipment Availability Rate (EAR) of 90 percent for all scheduled equipment and systems, unless otherwise stated in Section 5, Service Summary. Appendix 8 lists responsible Equipment and Systems. The Service Summary lists specific EAR reporting requirements. The Contractor shall:

- (a) Use standard industry practices in performing maintenance and troubleshooting.
- (b) Perform maintenance IAW procedures specified in this PWS, and applicable publications identified in Appendix 3.
- (c) Determine the cause of malfunctions prior to installing spares to avoid further damage.
- (d) Maintain clean and orderly maintenance areas.
- (e) Coordinate maintenance activities with associate Contractors and applicable Government agencies (e.g. AT&T Alaska, TMO, Depot, CEATI etc.).
- (f) Coordinate with respective range schedulers and the appropriate on-site manager for maintenance during operations windows.
- (g) Report via readily accessible electronic means (e.g. a web page(s)), viewable on government NIPRNET system, the real-time operational status of all equipment, systems, structures and shelters as listed in Appendices 7, 8, and 9. The Contractor shall:

- a. Ensure maintenance documentation and data are correct, complete, self-explanatory, and reflect actual system status. All system status shall be accurate within 15 minutes and all other maintenance data accurate within 24 hours.
- b. Immediately notify the CO and COR and affected JPARC users of equipment/system status changes and known impact to operations.
- c. Provide a summary report of Equipment and Systems status in its MPSMR.
- d. Notify the CO/COR of maintenance problems or delays that are beyond the Contractor's capability.

3.12.1.11 Maintenance Management

The Contractor shall establish a maintenance management function using AFI 21-101; AFI 21-103; AFI 20-101_63-101, and/or Methods and Procedures Technical Order (MPTO) 00-33A-1001 as guidance. The Contractor shall:

- (a) Submit its Maintenance Management Plan to the government as part of the Management Plan. Contractor shall reference Appendix 5 for any additional stipulations regarding its maintenance Plan.
- (b) Respond immediately to malfunctions during operations that degrade training or mission effectiveness. Actions taken by the Contractor during operations shall not further degrade operations effectiveness.
- (c) The Contractor shall respond as necessary during non-operational periods to ensure future scheduled requirements are fully supported, and equipment is fully operational by the next scheduled event and/or the exercise season.
- (d) Provide all services and any additional equipment (e.g., computers, software) required to effectively manage preventive and corrective maintenance to include planning, scheduling, organizing, directing, controlling, and coordinating maintenance efforts and activities under this contract.
- (e) Establish and adhere to PMI Schedules. The Contractor shall maintain a master PMI schedule and establish a system for scheduling performance and documenting accomplishment or deferment of PMIs.
- (f) Assign job control numbers (JCNs) to all equipment and system maintenance actions. JCN construction shall be IAW T.O. 00-20-2.
- (g) Return equipment and systems to operational status as soon as possible. System restoral shall first be based on mission requirements then by the restoral priorities established by the Government.

3.12.1.12 Command Supported Equipment and Spares Management Plan

The Contractor shall develop and implement a Command Supported Equipment and Spares Management Plan. The implemented plan shall provide the same identification, control, accountability, and historical maintenance data retrieval capabilities as an Equipment Authorization Inventory Data (EAID) account or forward Supply Point Account (SPA) would. Reference Appendix 5 for more information.

Command Supported equipment includes: Compunetix CSS and its remote equipment, specific GATRs and Microwave radios, PDL networks and switches, D-TVRS, all FSU systems, IADS transportable power generation and environmental control systems, fuel tanks, select towers and shelters, JPARC-R/B, networks, non-nomenclatured systems, and nomenclatured systems which Air Force Material

Command (AFMC) has discontinued or does not provide organic support. See Appendix 8, Tables A8-45 and A8-46.

- (a) The Contractor shall ensure that maintenance personnel for FSU and International systems have a minimum of 2 years direct experience on specific systems. Direct experience means that the individual being assigned maintenance responsibility for a specific threat has had training and two years of "hands-on" experience with that specific threat. Waivers for lack of experience on specific Threat systems will be considered based on direct experience with similar Threat systems. Working knowledge of the Cyrillic is an essential skill needed by both operations and maintenance personnel.
- (b) The Contractor shall submit a Command Supported Equipment and Spares Management Plan to the Government IAW Appendix 5. The initial plan shall be due within 60 days after contract start, with updates annually thereafter.
- (c) The Contractor shall notify the CO/COR immediately anytime a critical spare for a system has zero balance and shall provide a repair/replacement plan for such. When such spares/components are for system protection (e.g., surge arrestors, UPS system/components, power filters, and automatic protection components) the affected system shall not be operated without written CO approval and the system shall be shown as RED.

3.12.1.13 Air Force Supported Equipment Level of Repair

The Contractor shall perform repairs on all Air Force supported equipment and systems as specified in Section 3, and Appendices 8 and 9, to the level authorized by the appropriate Source Maintenance Recoverability (SMR) codes and/or approved depot level repair requests (for Budget Code 8 and XD coded items). The Contractor shall:

- (a) Perform all depot levels of repair on equipment not otherwise SMR coded.
- (b) Request authorization to perform depot level repair from the appropriate depot if the Contractor possesses adequate skills, tools, etc. The Government reserves the right to provide the Contractor with special tools and/or technical data. Such repairs shall be at no additional man-hour costs to the Government.

3.12.1.14 Command Supported Equipment

The Contractor shall perform all levels of maintenance on equipment and system not currently supported by the Air Force. When the Air Force no longer supports a system, any proposed solution/action will be discussed/negotiated at that time. The Government will either provide GFE and/or fund on a cost-reimbursable basis for materials and parts.

3.12.1.15 System Overhaul Forecast – Depot Supported

The Contractor shall forecast all system overhaul requirements for a minimum of 5 years. The forecast shall be developed to minimize operations impact. This report shall be accurate within 30 days of changes to original forecast. The schedule shall include the last overhaul date. The Contractor shall:

- (a) Coordinate the Air Logistics Center (ALC) depot maintenance schedule with 354 RANS.
- (b) Adhere to the approved ALC depot maintenance schedule and ship and receive IAW paragraph 3.22.4, "Shipping and Receiving."
- (c) Include the updated System Overhaul Forecast in its MPSMR.

3.12.1.16 System Overhaul – Command Supported

The Contractor shall perform complete Command Support Overhaul of equipment, systems, and shelters as scheduled and coordinated with the Government. Overhaul work shall sustain or improve the life and/or operating performance characteristics of the system, subsystem or component. The Contractor shall:

- (a) Maintain a 5-year overhaul forecast to include estimated costs to facilitate budget forecasting. Forecast shall be updated monthly and be included in MPSMR.
- (b) Submit complete equipment, system, and shelter overhaul plans including timelines, parts, materials, itemized costs, etc. for Command Supported Overhaul. Any additional Contractor payment for overhaul support shall be negotiated prior to start of work. All parts and materials will on cost-reimbursable basis and/or provided GFE. Labor shall be excluded from cost basis.
- (c) Ensure Contractor's repairs or alterations meet the most recent design and technical specifications without changing the basic function.
- (d) Provide an end-product in "like-new" condition in appearance as well as in operation and performance.
- (e) Perform and meet all technical documentation requirements and manufacturers and technical manual performance standards and specifications, unless the CO/COR approves deviations.
- (f) Demonstrate that the end-product successfully meets all performance criteria specified by the generating documents.
- (g) Provide a monthly status of systems being overhauled in the MPSMR.

3.12.1.17 Preventative Maintenance

The Contractor shall adhere to an organized and systematic approach that ensures marginal components, parts, and assemblies are discovered or their failure predicted to allow corrective actions to begin and prevent failures that could be anticipated as well as prevent degradation in the equipment and subsystems covered in this contract. This concept follows a preventive maintenance plan that allows corrections to be made before part, subsystem, or equipment failure. As such:

- (a) All PMIs shall be performed on a non-interference basis with scheduled training operations. PMIs may be performed on scheduled systems between missions if the PMI can be performed without interruption to scheduled operations.
- (b) The Contractor shall report the cause, Estimated Completion Date (ECD), and action taken to prevent reoccurrence when PMIs with a frequency of 14 days or more are deferred more than once. The Contractor shall place such equipment in RED status when this occurs and the equipment will not be operated until the PMI(s) are completed.
- (c) The Contractor shall assess remote site weather conditions to ensure scheduled/deferred PMIs are completed before equipment reaches Red Status. Waivers for Red status will not be granted if weather conditions were sufficient for access at least 72 hours prior and the Contractor made no attempt to schedule required airlift.
- (d) The Contractor shall include summaries of missed PMIs, the status of applicable system(s), and projected get-well dates in its MPSMR.

3.12.1.18 Corrosion Control

The Contractor shall establish a corrosion prevention and control program. The Contractor shall schedule and perform corrosion control of equipment, systems, electronic equipment, and support equipment identified for Contractor maintenance in Appendices 7, 8, and 9, as applicable.

3.12.1.19 Structure/Shelter/Tower Repairs

The Contractor shall provide maintenance to structures/shelters/towers not designated as real property. Real property will be maintained by the Government with the exception of the occupant requirements as per AFI 32-1001 and the 354FW Facility Managers Guide. As such, the Contractor shall:

- (a) Ensure adequate power generation, battery plant functionality, grounding, heating, cooling and the required structural integrity to support equipment usage in support of this PWS' operations requirements.
- (b) Be responsible for the emplacement/installation into structures/shelters of responsible electronic systems as defined in Appendices 7, 8, and 9. Examples of systems are, but not limited to: Manned and unmanned threat systems and equipment, WISS cameras, weather/security video cameras, video encoders, multiplexors, ACTS master/remote transponders, PDL hardware, GATRs, etc.
- (c) Install onto or remove from associated towers the system-associated antennas waveguides, RF cabling, to include their associated mounting and/or suspension equipment. Mounting equipment includes, but is not limited to: Tower clamps, antenna mounting arms, waveguide/RF Cable isolation brackets, and waveguide/RF cable grounding pig tails.
- (d) Inspect installed equipment for mounting integrity, serviceability, and corrosion and/or weather-related damages at least annually.

3.12.1.20 Damage Repair

The Contractor shall assume responsibility for damage due to own negligence. Repair shall be accomplished at no additional cost to the Government. Maximum repair times shall be negotiated, established, and met by the Contractor barring any unforeseen circumstances.

3.12.1.21 Repairable Assets

The Contractor shall be responsible for the repair and return to serviceability all repairable parts, components, assemblies, and subassemblies for the equipment and systems specified in Appendices 8 and 9. Repair of defective DIFM assets, Command Supported Equipment and Spares to a serviceable condition shall not exceed 14 days total Awaiting Maintenance (AWM) days. The Contractor shall include the status of AWM equipment in its MPSMR.

3.12.1.22 Time Compliance Technical Orders / Command Modifications

The Contractor shall identify, obtain, perform, coordinate installation, order components, schedule system downtime and document TCTOs and command directed modifications, Engineering Change Proposals (ECPs) and Engineering Change Notices (ECNs).

The Contractor shall comply with and perform actions associated with all TCTOs and Government-approved ECPs and ECNs.

Contractor shall document all TCTO, ECN, and ECP actions accomplished IAW T.O. 00-5-15, T.O. 00-20-2, T.O. 00-20-4, T.O. 00-33A-1001, and the PWS.

3.12.1.23 Cannibalization

The Contractor shall control, report, and document cannibalization actions IAW T.O. 00-20-2 and AFI 21-101. Cannibalization shall not to be used as a troubleshooting procedure.

Cannibalization of equipment shall be performed only as a last resort to return a critical asset for operations, and only with CO/COR approval. Status reporting of system receiving cannibalized parts shall not be upgraded to higher status (i.e. Red-Yellow, Red-Green, or Yellow-Green) until the original failure is repaired, whether on the original system or cannibalized system. Cannibalized system status shall be reported based on its operational condition as a result of the cannibalization.

3.12.1.24 Maintenance Documentation

Once created, all documents, data, and the alternate means used, become Government property and will remain in place at the end of the contract period. The Contractor shall:

- (a) Document maintenance actions and deferrals for Maintenance Data Collection (MDC) reportable equipment and systems IAW T.O. 00-20-1, T.O. 00-20-2, T.O. 00-20-3, T.O. 00-20-4 and provide MDC information to all Government collection agencies in the proper data format.
- (b) Utilize the Integrated Maintenance Data System (IMDS) to report maintenance status on depot supported equipment.
- (c) Establish and maintain historical files for all applicable Contractor-maintained shelters and structures listed in Appendix 7, and equipment and systems listed in Appendix 8.
- (d) Maintain historical records on all JPARC Equipment Status Reportable (ESR) electronics equipment IAW T.O. 00-20-1, T.O. 00-20-4, and T.O. 00-20-8.

3.12.1.25 Reliability, Availability, and Maintainability for Pods and Integrated Systems Program

RAMPOD is a government sustained and mandated database. Systems requiring data input to RAMPOD are P5 CTS. The Contractor shall:

- (a) Input an accurate daily accounting of the location, by tail number and pod number, of each aircraft that has a pod installed. Local accounting logs may be destroyed at the discretion of the Contractor once data is input to the USAF's RAMPOD database.
- (b) Input and update pod maintenance actions (current location, inventory, coffin, job actions, etc.) into the RAMPOD database.
- (c) Comply with input actions for follow on software suites if RAMPOD is superseded.

3.12.1.26 Test, Maintenance, and Diagnostic Equipment

The Government will provide TMDE calibration and repair services at Eielson AFB and JBER for Government provided TMDE. The Contractor shall:

- (a) Only use TMDE with current calibration certification and ensure TMDE is calibrated on schedule IAW T.O. 33K-1-100-WA-1.
- (b) Comply with TMDE user-owner responsibilities as outlined in T.O. 00-20-14 and T.O. 00-20-2.

- (c) Provide all other TMDE beyond what is provided as GFE as necessary to meet task performance of the PWS.
- (d) Ensure Contractor provided TMDE is calibrated by an agency that is a member of the National Institute of Standards and Technology (NIST) and/or American National Standards Institute (ANS/ISO/IEC 17025.2005 for Part 1 and ANSI Z540.0-2006 for Part 2).

3.12.1.27 Range Maintenance Support Services

3.12.1.27.1 Scope of Work

The Contractor shall provide range maintenance support services to assist with site development, target/threat staging, vertical construction/carpentry, and heavy equipment/mechanic operations at Eielson AFB Range complexes. The Contractor shall manage and direct its own workforce to meet the operational availability metrics and taskings scheduled by the Government. The Government will provide heavy equipment, tools, and material to support qualified operators. Estimated hours and breakdown of duty description and credentials are listed in Exhibit 1.

3.12.1.27.2 Operational Conditions & Scheduling

Range maintenance activities are subject to highly unpredictable mission training tempos, military exercises, and extreme Alaskan weather conditions. The Government will provide the Contractor with a weekly baseline schedule of range operations.

The Contractor shall maintain a flexible staffing posture to accommodate schedule shifts. Short-notice changes to scheduled maintenance windows (defined as less than 24 hours' notice) shall be coordinated through the Contracting Officer's Representative (COR) and the Contractor's Range Maintenance Foreman.

Non-Personal Services Boundary. Government personnel will not supervise, direct, or control Contractor employee work tasks. The Contractor's Range Maintenance Foreman shall act as the single point of contact to receive Government taskings from the COR and is solely responsible for assigning tasks, supervising contractor personnel, and ensuring compliance

3.12.1.28 Snow Removal

The Contractor shall:

- (a) Clear or remove snow and ice as necessary to ensure access, safety, operability, and maintainability of systems and equipment, facilities, structures, and all threat operating sites as directed as outlined in Appendix 6 and 7.
- (b) Perform snow and ice removal as necessary from areas predominately used by Contractor personnel (e.g., the sidewalks, entrances, ramps, loading areas, and parking areas that support Contractor occupied facilities to include building 1141 rollup door on the east side of the building. Snow and ice removal of sidewalks are limited to within 50 feet of buildings occupied by the Contractor. The Contractor shall keep roads clear of snow leading up to sites that they are responsible for. Range maps will be made available to the Contractor by 354 RANS. The Contractor shall be responsible for

replacing any damaged equipment from conducting snow removal.

- 1) Note: Contractor is not responsible for snow and ice removal for Bldg's 1151 and 1141 at Eielson AFB, and Bldg 9549 and Hanger 4 at JBER.

3.12.1.29 Site Vegetation Control

The Contractor shall perform vegetation as required control to:

- (a) Allow access to all facilities, structures, and shelters occupied by the Contractor as well as applicable sites and locations listed in Appendix 6, Table A6-13.
- (b) Provide fire abatement for all facilities, structures, shelters, systems, and equipment occupied by the Contractor as well as applicable sites and locations listed in Appendix 6, Table A6-13 to include helicopter landing zones.
 - 1) Brush clearance for fire abatement shall be IAW National Fire Protection Association guidelines of a minimum of 30 feet clearance free of brush and trees.
- (c) Provide clear and accurate line-of-site to score able JAWSS targets, SAP markers, calibration points, and to enable clear views from observation cameras.
- (d) Eliminate obstructions from microwave pathways.
- (e) Keep all operating locations clear of brush and vegetation and ready for use whether currently populated with systems, equipment, or threats or not.

3.12.1.29.1 Exception

Contractor vegetation control does not apply to Bldg 9549 or Hanger 4 on JBER, and buildings 1151, 1135, 1137, 1138, 1141, 1341, 2351, and 3425 on Eielson AFB.

3.12.1.29.2 Site Preparation

The Contractor shall prepare established or newly selected sites for equipment deployment and installation. Site preparation may include the clearing of brush and debris, snow and ice removal, surveying, grading or leveling of soil, shelter installation, fuel storage installation, installation of electrical grounding systems, cable conduit installation, and fire vulnerability mitigation, and/or tasks associated with annual post-winter site re-establishment are not reimbursable.

3.12.1.29.3 Ongoing Status

The Contractor shall include statuses of any Site Preparations currently ongoing in its MPSMR.

3.12.1.30 Site Portable Toilets

The Government shall furnish any toilets (fixed or portable) as GFE. Servicing fees for all portable toilets shall be at the Contractor's expense.

3.12.1.31 Permanent Enhancements

Site Preparations that result in permanent systems/capabilities enhancements may result in modifications to this PWS. The Contractor shall provide or recommend PWS modifications to support these permanent systems/capabilities enhancements.

3.12.1.32 Reimbursement

Contractor-performed site preparations requiring heavy equipment in order to clear trees, brush, and/or snow, or to excavate/backfill will be reimbursed.

3.12.1.33 Temporary Storage

External open storage or temporary storage of equipment, materials, vehicles, supplies, etc. is not authorized without CO approval. If external open storage or temporary storage is allowed, arrangement shall be neat and orderly and must not pose a safety, security, or environmental hazard. Approved temporary storage items shall be removed by the timeline set by the CO. The CO may direct disposal of trash and/or debris; and may remove temporary storage items at the Contractor's expense if the Contractor fails to comply with the time limit for temporary storage.

3.12.1.34 Key and Lock Control

The Contractor shall establish and implement procedures that ensure keys, locks, and/or lock combinations issued to the Contractor by the Government are not lost, misplaced, duplicated, or used by unauthorized persons. The Key and Lock Control procedures shall be included in the Contractor's Management Plan. The Contractor shall furnish the COR keys and lock combinations to all entry gates and facilities other than real property.

3.12.1.35 Gate Locking

The Contractor shall comply 100 percent of the time with Government directives regarding gate unlocking and locking procedures.

3.12.1.35.1 Key Use, Loss, and Duplication

The Contractor shall prohibit opening of locked areas by Contractor's employees to permit entrance of persons other than those engaged in performance of work or authorized to be in those areas. The Contractor shall report occurrences of lost or duplicated keys to the PD, CO, and COR. In the event keys, other than master keys are lost or duplicated, the Contractor shall be required to re-key or replace the affected lock or locks. However, the Government may replace the affected lock or locks or perform re-keying. In the event a master key is lost or duplicated, the Government will replace all locks and keys for that system. When the Government performs replacement of locks or re-keying, the total cost shall be deducted from payment due the Contractor. The Contractor shall prohibit use of Government issued keys by any persons other than the Contractor's employees.

3.12.1.35.2 Lock Combinations

The Contractor shall maximize the use of combination locks used on GFE and combinations shall be given to the PD and COR. The Contractor shall establish and implement procedures that ensure lock combinations are not revealed to unauthorized persons. Lock combinations shall be changed at least annually or when an individual who has knowledge of the combination is terminated or transferred, or upon direction from the Government. These procedures shall be included in the Contractor's PMP.

3.12.2 Transportation

3.12.2.1 Surface Transport

The Contractor shall provide all vehicles and transportation necessary to meet the requirements of this contract. The Contractor shall:

- (a) Provide transportation support for sites and locations listed in Appendix 6 and other established sites and locations not listed in Appendix 6 within 150 nm radius of Eielson AFB.
- (b) Provide vehicles / equipment as required (e.g., 4-wheel drive vehicles, skid steer, tractor, forklift, snowmobiles, all-terrain vehicle (ATV), SnowCat, trailers, etc.) and any ancillary items (e.g., tire chains, tow straps, trailer hitches, tiedown straps, etc.) to meet the contract requirements. Road maintenance does not always occur on a regular basis for most of the JPARC access roads. This shall not preclude the Contractor from performing and meeting the requirements of this PWS.
- (c) Transport Contractor personnel, systems, equipment, materials, etc. year-round to and from all sites and locations to meet mission requirements.
- (d) Ensure all Contractor vehicles comply with AFMAN 31-116, Air Force Motor Vehicle Traffic Supervision requirements, and meet all National, State, and local requirements for maintenance, safety, insurance, and registration.
- (e) Ensure all employees operating vehicles in support of this contract are properly trained and licensed.
- (f) Maintain sufficient number of flightline qualified drivers and maintain flightline-certified vehicles to support the requirements of this contract.
- (g) Recover Contractor-use vehicles as required.
- (h) Coordinate, for personnel and vehicle ground movement on R2202 and R2205 with necessary agencies IAW U.S. Army Region Alaska (USARAK) Range Regulation Reg. 350-2 Chapters 1, 2, 3, 4, 5, 6, 7, and 12.
- (i) Submit USARAK Form 279, Range or Training Area Request, if required, to 354 OSS/OSO Scheduling Office or via Eielson Range Control, as appropriate for personnel manning range systems within R-2202 or R-2205.
- (j) Report all vehicle related accidents/incidents IAW Federal and State requirements. The Contractor shall provide a written incident report to the CO/COR upon request.
- (k) Ensure contract employees needing to operate Government Motor Vehicles (GMV) comply with AFI 24-301, Section 11E.

3.12.2.2 Air Transport

Contractor shall coordinate air transport to meet the requirements of this PWS. Contractor personnel shall fly aboard helicopters to access remote and fly-to sites utilizing the air lift Contractor service provided under a separate contract. The Contractor shall be responsible to ensure personnel being transported have all applicable personal survival gear in their possession when utilizing air transport. Contractor shall:

- (a) Coordinate air transport to meet the requirements of this contract.
- (b) Contractor shall provide weekly updates, if any, to the Government and/or primary helicopter Contractor Not Later Than (NLT) 1200L, the Thursday prior to applicable

change period.

- (c) Schedule required range airspace for Contractor operations, maintenance, and support functions when utilizing contracted air transport.
- (d) The Contractor shall schedule required range airspace for Contractor required operations. The Contractor shall comply with USARAK Reg. 350-2, submitting USARAK Form 279 and/or the memorandum of cancellation to 354 OSS/OSO Scheduling Office or via Eielson Range Control, as appropriate for helicopter operation within R-2202, R-2205, or R-2211.
- (e) Secure all FAA waivers and comply with all FAA regulations and local Air Force directives when utilizing air transport services that land/departs for Air Force bases.
- (f) Maintain personnel to meet all Government requirements for rigging external loads for Government helicopters (sling qualified Riggers and Certifiers).
- (g) Ensure any documentation transport of hazardous materials/equipment is accounted for prior to airlift departure time.
- (h) Develop certifiable load plans, as required.
- (i) Rig external helicopter loads (standard and non-standard) for safe external transport of JPARC equipment and systems.
- (j) Participate in joint inspection of loads, as required.
- (k) Monitor remote site access conditions to ensure on-time completion of PMI and required/scheduled maintenance actions are completed during non-inclement weather.
- (l) Ensure the Contractor's air transport (fixed wing and/or helicopter) is certified to carry military and Government civilian personnel.
 - 1) The Contractor shall allow Government personnel to accompany Contractor on scheduled trips, at no cost to the Government, if space and/or weight is available.
 - 2) When directed by the Government, and space is not available, the Contractor shall obtain transportation for military and/or government civilians on a cost-reimbursable basis.

3.12.3 Critical Infrastructures

Critical infrastructure is the combination of networks and systems necessary for the execution of daily and exercise training operations. Critical infrastructure is the inter-, and intra-connectivity between individual capabilities (e.g. ACTS, radar, C2, IADS components, weapons scoring, voice communications, etc.) that provides a coherent entity picture and enables the operation of training systems, and an accurate post mission feedback capability. Critical infrastructures also include the power generation, back-up, distribution, and fuel systems that allow the other systems to operate. Critical capabilities are:

- (a) PDL fiber-optic and microwave communications network, including leased circuits.
- (b) Data and Video Networks and Encryption.
- (c) Operations Networks: JPARC-R/SAP/B/REL/ LMOC - TENA networks.
- (d) CDS systems.
- (e) Voice Networks and Systems: The Compunetix voice and radio communications switch and its operator-interface Mission Instruments; debriefing systems such as ICADS and ANGEL Audio Record; and GATR radios on JPARC.

- (f) Supervisory Control and Data Acquisition (SCADA) systems.
- (g) IT Networks and Systems.
- (h) Power generation and distribution systems.

3.12.3.1 PARC Data Link

The PARC Data Link is a system of communications and networking equipment used to transport all necessary types of data and information in support of training missions throughout the entirety of the JPARC. The equipment comprising the PDL is owned by the 354 RANS. However, there are interfaces to lines owned by the 354th Communications Squadron, and lines leased by DISA, and/or private and public providers. The PDL is composed of carrier class terrestrial microwave and fiber optic transport systems, multiplexers, routers, switches, firewalls, video encoders/decoders, Voice over Internet Protocol (VoIP) call managers, encryption devices, RF links, and base band extensions, both broadcast and cabled. Data transport is accomplished using a core Multiprotocol Packet Label Switching (MPLS) architecture. Types of data moved includes analog audio, Plain Old Telephone Service (POTS), 4-wire E&M, synchronous and asynchronous serial, and IP over Ethernet. All the surveillance, instrumentation, training, scoring, threat and site camera video, etc., utilized on the JPARC have their data and video streams transported over the PDL. As such, the Contractor shall:

- (a) Provide O&M to systems noted in Appendices 7, and 9.
- (b) Monitor performance status of components and links of the PDL and analyze data to determine health of the system.
- (c) Configure, upgrade, integrate, and test updates and improvements to PDL components and software.
- (d) Perform IA / Cybersecurity tasks, maintenance, updates, data collection, to attain and maintain Authority to Operate (ATO) and Authority to Connect (ATC).
- (e) Not have direct repair actions to 354th Communications Squadron or DISA leased lines but shall be required to conduct diagnostics to determine the leased line as being faulty, and then initiating notifications to the agency providing the leased circuit and working with the line's owner to repair.

3.12.3.2 Data And Video Network Encryption

Key data and video streams carried over the PDL include but are not limited to JPARC's air surveillance data, aircraft TSPI, threat simulator engagement data and video, Link-16/SADL, and voice communications. Each of these network paths require encryption. The level of encryption is defined in Table A8-29. Point of encryption/decryption will be the threat system, surveillance radar system, remote communication switches, and the applicable termination locale with RF-A facilities, either Bldg. 1151 and/or Bldg. 1141, or the host computer system. Equipment is listed in Appendix 8, Table A8-29 and used in conjunction with scheduled IADS systems and operated accordingly. The Contractor shall:

- (a) Establish COMSEC account(s) as necessary to manage encryption devices and keys therefore.
- (b) Transport/install/remove/secure all encryption/decryption as scheduled.

- (c) Ensure all encryption/decryption equipment and datalink are fully operational to support scheduled missions.
- (d) Ensure data and video transfer rates meet demand and resolve performance problems.
- (e) Ensure all encryption/decryption, datalinks, termination and recording equipment and all data products are labeled, accounted for, transferred, transported, handled, stored, and used appropriately for the classification of the data generated.

3.12.3.3 Weather/Security Cameras

There are weather/security cameras emplaced at key remote sites throughout the JPARC. Their primary purpose is to provide a view of prevailing weather conditions; a key decision calculus in determining whether to fly to these sites. Two camera systems are installed at range road gates that lead into the R-2205 Impact Areas. These cameras are emplaced to monitor trespassers during critical bombing operations. The Contractor shall provide O&M to remote site video systems, to include cameras, encoders/decoders, and transport systems. For all current and future YETI sites, physical placement of camera systems will be provided by CEATI. The ARCTICS Contractor shall provide the camera equipment, video server, ensure continuous video feed and recording, and provide CEATI with unassisted access to video feeds and recordings at YETI control station.

3.12.3.4 Automated Surface Observation System Or Fmq-23 Fixed Based Weather System

Accurate weather observations and forecasting is crucial to air combat training on the JPARC. There are two Automated Surface Observation Systems (ASOS) / Fixed Based Weather System (FBWS) systems within JPARC's purview. They are located at Camera Site-II, and at R-2211 Blair Lakes. Contractor shall provide maintenance services to the ASOS / FBWS.

3.12.3.5 Supervisory Control and Data Acquisition Systems

SCADA is used to monitor on range systems. JPARC has SCADA systems installed at road accessible and remote sites as note in Table A8-42. These sites also include client workstations on Eielson AFB, providing 354 RANS and the O&M Contractor to see live and/or historical information regarding the condition of range systems. The Contractor shall:

- (a) Provide O&M to the SCADA systems in its entirety including IA cybersecurity tasks, and proposed modifications, upgrades, engineering changes need to keep the system sustainable, useful, and relevant.
 - (b) Program, configure, and administer the server and clients.
 - (c) Program remote terminal units (RTUs) at remote locations.
 - (d) Sustain, calibrate, modify, and add as necessary sensors, actuators, and RTUs.
 - (e) Analyze adequacy, reliability, sustainability, of the system or component parts and recommend improvements, changes, updates, upgrades, or replacements.
- Recommendations will include the analysis, estimated costs and installation plans.

3.12.3.6 Data Networks

In order to execute training on the JPARC, operations systems such as ACTS, surveillance, C2, threat training, weapons scoring, etc., require network inter-connectivity between these individual systems. Those resulting networks in turn requires inter-, and intra-connectivity to other networks, both internal to JPARC, and those associated with other outside ranges and/or virtual and constructive realms. All these networks, internal or external, vary in classification and data transfer protocols. To ensure seamless data transfer between systems of differing native protocols, JPARC uses software programs as gateways to translate data into the common protocol language, Test and Training Enabling Network Architecture (TENA). Also, to bridge the JPARC's internal networks' consisting of varying classification realms, the JPARC uses a CDS system known as SimShield Trusted Bridge. Additionally, to intra-connect JPARC networks with outside live-virtual-constructive networks, the JPARC hosts portal systems, the Distributed Mission Operations Network (DMON), the Joint Training Enabling Network (JTEN), the Defense Research and Engineering Network (DREN), and the Secure Defense Research and Engineering Network (SDREN). Personnel performing these duties shall have Privileged Access and therefore must be certified in accordance with DoD Directives 8140.01, 8140.02, 8140.3, AFMAN 17-1303, and associated references.

3.12.3.6.1 LMOC, JPARC-B and JPARC-R Networks and Protocols

Intra-range data collaboration for JPARC operations networks is the combination of two primary networks, JPARC-B and JPARC-R which together are an instance of LMOC. JPARC-B consists of the network of unclassified operations systems (e.g. ACTS, radar surveillance and UMTEs, etc.), and JPARC-R is the companion network of classified systems (e.g. debriefing systems, LINK-16, DMON/JTEN LVC networks). Both JPARC-B and JPARC-R host systems whose native data protocols may be TENA or another protocol (e.g. Distributed Information Systems (DIS)). Where a systems' native protocol is other than TENA, a gateway is used to enable TENA compatibility. Collectively, JPARC-B, SimShield, and JPARC-R maybe referred to as LMOC. JPARC-REL is a new network that will allow participants from FVEY countries to perform the duties of "Panther" Air Battle Management. It will primarily use data from TORCC / BC3 and Link-16. JPARC-SAP is a new network that will be used in Bldg. 1141 until moved to the JPARC Range Operations Center (JROC) upon its completion for operations at higher security classification levels. It will function similarly to JPARC-R, but at higher levels as a part of JPARC 2025 modernization program. As such, the Contractor shall:

- (a) Provide O&M of all LMOC, JPARC-R/SAP/B/REL networks, to include all aspects of hardware: computers, monitors, servers, switches, routers, cabling, TENA/DIS gateways, Google Protobuf, and connected Contractor-responsible operations systems.
- (b) Manage all aspects of software maintenance, to include troubleshooting execution problems, and finding solutions, updating systems, loading/re-loading software, applications, computing environment, and testing new or revised versions.
- (c) Comply with security and Risk Management Framework requirements as stipulated in paragraph 3.19.7 and sub-paragraphs.
- (d) LMOC is a program run by the Aerospace Dominance Directorate of the Air Force Life Cycle Management Center (AFLCMC/HBZPL) who have responsibility for the development and fielding of the LMOC systems to the Air Force. However, they or their

contractors have no O&M responsibilities for the LMOC, JPARC-B, JPARC-R, JPARC-REL, or JPARC-SAP at Eielson. It is the contractor's responsibility to provide qualified administrators, operators, maintainers, and cybersecurity personnel to perform all O&M functions of these systems and networks.

3.12.3.6.2 Cross-Domain-Solution and SimShield Trusted Bridge

The JPARC requirements for CDS operations are to bridge the unclassified JPARC-B, and the classified JPARC-R data network realms. The JPARC uses the SimShield Trusted Bridge system to bridge these closed networks. SimShield is a TENA-based server, utilizing software-based rulesets to ensure non-authorized data packets are prevented from passing from one realm to the other. Among the data processed by the SimShield are virtual radio traffic that allow virtual participants on the DMON (JPARC-R classified network) to connect to the Communications Switching System, and GATR on range (JPARC-B, unclassified network). Eielson currently utilizes one primary server, and one back-up spare rack mounted and ready for immediate usage. There is licensure for four SimShield systems: two at JPARC-North as primary and backup servers; and one for an off-site at a software laboratory. Licenses can be transferred between computer servers on a temporary basis to short term mission requirements. There is a requirement to add SimShield CDSs to the JPARC-R forming new networks. Notably segmenting the Link-16 / SADL and BC3/TORCC systems from JPARC-R to continue data exchange but make a new enclave at a different security classification such as SECRET / Releasable, known as JPARC-REL. As such, the Contractor shall:

- (a) Provide operations and maintenance of SimShield Trusted Bridge Cross Domain Systems, and associated networks.
- (b) Follow and enforce all physical and cybersecurity policies and procedures for the SimShield to include, but not limited to logging inspections of tamper tape, and reviewing and clearing error and audit logs.
- (c) Ensure SimShield is configured and operational for combat training events IAW the Daily and Exercise Flying schedule.
- (d) Load/re-load and configure computing environment, applications, and software as necessary.
- (e) Load/re-load Rule Sets at the direction of the government.
- (f) Conduct data-logging and error trend analysis at the direction of the CO/COR.
- (g) Provide support to government-sponsored upgrades and enhancement efforts, to include supporting all TENA integration, testing, and modifications to the systems listed in Appendix 8.
- (h) Provide IA / Cybersecurity support in order to maintain valid Cross Domain Solution Authorization (CDSA) for all CDS.

3.12.4 Voice Communications Networks and System

3.12.4.1 Communications Switching System

JPARC uses a Communications Switching System (CSS) utilizing two Mission Voice Platforms from Compunetix. These compose a classified and an unclassified CSS. These systems consist of a Voice-over-IP based central switches, remote radio and telephone

switches/multiplexors, local and remote operator consoles, interconnected by Ethernet-based networks. There are two Platform Manager servers which are used to configure the MVPs, Mission Instruments, radio and telephone devices, and set-up the “missions” that assign the radios and telephones to each MI or group of MIs. There are two legal recording systems, one for each MVP. Classified operations will be supported by a dedicated MVP, 11 IP to 4-wire converts Compunetix calls “4-Star” units 42 KY-100M (or equivalent) encryption devices, and KYoIP devices at the main switch and at each remote location, and NSA approved user interface devices known as Mission Instruments (MI), also referred to as Key Sets. The systems will be utilized for all critical GATR, Land Mobile Radio (LMR), and telephone communications. The Contractor shall:

- (a) Provide O&M for all CSS components to support scheduled operational requirements. Contractor shall support CSS components where resident (e.g. The MVPs in building 1151, radio interfaces at remote communications sites, and Platform Managers (PM) and operator Mission Instrument (MI) panels in RED FLAG-Alaska facilities at Eielson AFB, building 9549, 90 FS, 525 FS at JBER, 355 FS, 356 FS, and others).
- (b) Ensure MIs are operational and properly functioning prior to start of operations. Contractor shall move/re-position MIs, to include required cabling, to support operational requirements. Contractor shall monitor and configure systems to include the development of new and/or changing of existing MI “maps” or “missions”, as required for optimum use during scheduled operations windows.
- (c) Provide MI basic operator skill training to Government, Contractor, and visiting exercise participants personnel. Contractor shall produce and provide paper copies of a simple checklist outlining basic “how-to” operations (e.g. How to turn on, select/change a radio channel, push-to-talk, adjust volumes, and MI reset functions, etc.). Contractor shall provide a short hands-on tutorial, when requested.
- (d) Configure/program CSS and local/remote GATRs for HAVE-QUICK-II radios and/or Secure-Voice operations.
- (e) Configure and key KY-100M devices for operation and ensure KY over IP (KYoIP) devices are working configured and passing KY data correctly and are routed correctly over the PDL.
- (f) Ensure the legal-record audio recording systems are operational and configured for use. Make recordings available as directed by the Government. In the case of an incident on range such as an aircraft mishap, the Contractor shall archive the legal recordings immediately.
- (g) Contractor shall keep software of all CSS components up to date, patched and follow all cybersecurity process. Further, contractor shall provide evidence and artifacts to associated agencies and contractors.

3.12.4.2 GATR

Contractor shall provide all O&M to JPARC GATR systems as noted in Appendices 7 and 9.

3.12.4.2.1 Debriefing Systems – GATR Audio Recording.

Contractor shall provide all O&M to the debriefing systems (ICADS, ANGEL), Trilogy Audio

Server, and respective network systems to ensure live aircraft, and C2 communications are recorded in designated debriefing systems stations, and then available for time-synchronized replay during post mission analysis.

3.12.5 Engineering Services

3.12.5.1 Engineering and Technical Services - General

As a result of advances in technology, potential for increased capability, system obsolescence, and/or reaching the end of a systems lifespan, GFE/GFP systems, and range communications and power generation/transfer architecture systems, may require modification and/or replacement in order to ensure relevant JPARC training capabilities. The Contractor shall work closely with 354 RANS/RSE to:

- (a) Provide on-site engineering system-specific expertise to Government agencies and/or visiting Contractors on JPARC systems capabilities. Focus areas include but are not limited to: radars, passive detection systems, radio frequency circuits, systems, and antennas, electronics, communications, data network and computer engineering, SCADA systems, systems failure analysis, environmental control systems, electrical power production and distribution systems, microwave and fiber optic networks and backbone systems, integrated communication switches, GATR, telephony, mechanics and structural engineering.
- (b) Attend planning, design, and project progress meetings.
- (c) Propose detailed modifications, retrofits, and new systems, installations, and integrations for JPARC systems and infrastructures to include estimated costs and schedules.
- (d) Assist in determining follow-on O&M requirements for modifications or additions to JPARC systems or capabilities.

3.12.5.2 Engineering Studies and Analysis

The Contractor shall conduct technical studies and analyses of possible replacement, upgrades, modifications, and enhancements to JPARC systems, equipment, and infrastructures, providing engineering analysis in areas such as but not limited to: radars, electronics, communications, systems and network engineering, systems failure analysis, environmental control systems, and electrical power production and distribution systems, microwave and fiber optic networks and backbone systems. The Contractor shall:

- (a) Provide concepts studies and analysis, and design recommendations, documenting the purpose, assumptions, rationale, alternatives, estimated timeline, estimated resource requirements, recommendations, and relevant issues for each study effort.
- (b) Produce comprehensive technical reports for all Government directed analyses.

3.12.5.3 Maintenance Support

The Contractor shall conduct design and analysis supporting maintenance, repair, upgrade or replacement of JPARC systems, equipment, and infrastructure. Contractor shall evaluate JPARC systems and infrastructures for maintenance difficulties and End-of-Life notices from equipment manufacturers. Contractor shall research ways to mitigate these issues and

present to the Government a plan to prevent loss of service, or increased costs due to obsolescence. Plans will include market research, design alternatives and choice, estimated costs and schedules.

3.12.5.4 Failure Analysis

The Contractor shall perform analysis of equipment and system failures to identify root causes and develop corrective action alternatives supporting Quality Control efforts.

3.12.5.5 Integrations, Testing, and Evaluation

The Contractor shall perform system analysis, integration, test, and evaluation of current and future JPARC hardware, firmware, and software systems. This includes but is not limited to: analog and digital communications systems; Ethernet and SCADA networks; radar; microwave and other radio frequency systems; EA threat simulator and Former Soviet Union (FSU) and international radar/Command and Control (C2) systems; audio and visual ordnance scoring systems; power generation; fuel storage and transfer system, and environmental control systems. Identify sources of problems, errors, limitations, and performance shortfalls in current versions, and determine necessary corrective actions. Analyze, design, specify, procure, build, and test proposed system modifications and upgrades prior to incorporation as new operational baselines.

3.12.5.6 System Acceptance

The Contractor shall plan, develop, and coordinate procedures; perform, and document acceptance testing of equipment received from depot, vendors, or other sources. Efforts shall include installation, integration, and acceptance testing of scheduled modifications, upgrades, additions to, relocation, reconfiguration, and/or replacements of JPARC hardware, software, and firmware systems and equipment. The Contractor shall assist and be an active participant during acceptance testing for JPARC equipment.

3.13 Information Technology Networks and Systems Management

The Contractor shall provide Network Operations Specialists, and Cyber Network Administrators (CNA) support to JPARC IT systems, and GFE hardware and software systems: Non-Secure Internet Protocol Router Network (NIPRNET) operations at both Eielson AFB and JBER for those systems used by 354 RANS and the contractor, Non-Secure International Operations Network (ION) at both Eielson AFB and JBER until the end of 2025 exercise season and selected workstations inside the operating spaces at each location. Personnel performing CST and CNA duties shall have Privileged Access and as such shall be certified in accordance with DoD Directive 8140 series and AFMAN 17-1303.

3.13.1 Administration – NIPRNET

Contractor shall perform duties of Computer Support Liaison (CSL) and Computer Support Technician (CST) not under administrative control of the respective base's Network Control Center (NCC). The CSL/CSTs shall follow established security procedures and report

security vulnerabilities, breaches, incidents, and problems to the Network Operations Specialist, Information Systems Security Manager (ISSM), Base Network Control Center (BNCC), and/or Installation Information Protection Office (IPPO). As such, The Contractor shall:

- (a) Perform network management services for NIPRNET up to the level allowed per host base communications squadron. Contractor shall coordinate with and report network transport and administrative problems with the host base communications squadrons.
- (b) Perform Server Management Services, provide global naming services and maintenance and management of all JPARC IT systems resources, including users, groups, printers, volumes, and servers, and installation of new hardware, software patches and security fixes. Contractor shall ensure all service points, servers, switches, clients, printers, and Local Area Network (LAN) drops are certified and documented.

3.13.2 Data Integrity

Ensure data integrity of all user data and comply with all applicable Department of Defense (DoD) and USAF Directives, Instructions, Manuals, and Pamphlets, including, but not limited to:

- (a) AFGM2018-17-02 (supersedes: AFI 33-115, and AFMAN 17-100)
- (b) AFI 17-130/ AFI33-200 AFGM2018_01
- (c) Joint Special Access Program (SAP) Implementation Guide (JSIG) (formerly JAFAN 6/3)

3.13.3 User Support

Contractor shall serve as the first line of customer service to resolve JPARC network problems. The Contractor shall review the Government's computer resources, coordinate with the host base communications squadron, and recommend corrections for service problems. Contractor will meet or exceed the requirements of DoD Cyber Workforce Framework work role ID 411: Technical Support Specialist, with a high degree of proficiency.

3.13.4 Hardware Support

Contractor shall reconfigure, repair, format, partition, transport and restore system hardware; build, install, and/or repair cabling; configure and troubleshoot printers and scanners, and perform server and workstation/client backup and recovery for all NIPRNET workstations where allowed by local communications squadron.

3.13.5 Software Support

Contractor shall coordinate with host base communication squadron and applicable agencies to ensure 354 RANS user access to Centralized Scheduling Enterprise (CSE), Falcon View and Talon View modules within the Portable Flight Planning Software (PFPS), FedLog, Weapons Danger Zone (WDZ), Patriot Excalibur (PEX) flight scheduling, and all other required applications and software, providing CST and SW upgrade as necessary. The Contractor shall:

- (a) Ensure all client workstations are configured with applications and software according to user requirements.
- (b) Ensure all applications and software are updated with latest mapping databases, software, and configuration files.
- (c) Confirm any software installed on USAF system is on the Approved Software List as managed by the 354 FW and/or 3 WG Wing Cybersecurity Office(s).
- (d) Provide maintenance and maintenance support for existing Microsoft Access / SQL databases.

3.13.6 Cyber Defense Infrastructure Support Specialist / Information Systems Security Officer

The Contractor shall perform and fulfill functions/responsibilities as ISSO IAW 32 CFR part 117 National Industrial Security Program Operation Manual (NISPOM) and DoDD 8140 CDISS requirements. These functions shall be provided at each operating location on a continuous basis to preclude security and operational impacts during any periods of absence due to temporary duty, sickness, and leave of Contractor's personnel.

3.13.6.1 Responsibilities

The Contractor shall:

- (a) Provide personnel to perform CDISS / ISSO responsibilities, maintaining fully trained and certified alternate appointed at all times. Certification shall be IAW DoD Directive 8140.01-M, and AFMAN 17-1303.
- (b) Manage the Computer Security (COMPUSEC) program for the JPARC IT systems, providing day-to-day security administration, monitoring activities at the facility, and ensuring compliance with higher-level security regulations and guidance (e.g. Joint SAP Implementation Guide (JSIG)), as well as local procedures. The Contractor shall implement all COMPUSEC directives as tasked.
- (c) Manage the Information Systems and provide day-to-day security administration for the JPARC classified and unclassified networks and maintain certifications of workstations and networking components. This includes the sub-systems of JPARC-B, JPARC-R, LMOC, debriefing systems, JAWSS, shared drives, threat systems and range video, SCADA, and PDL networks and NIPRNET not under the administration of the BNCC.
- (d) Implement all computer security directives as tasked by written governing directives, the Air Force's Approving Official (AO), the Wing Cybersecurity Office and/or the local government ISSM.
- (e) Monitor activities at the facility and ensure compliance with higher-level security regulations and guidance as well as local procedures.
- (f) Perform initial evaluations of security problems, conduct security training, and coordinate any network architecture or configuration changes with the local government ISSM relating to impact on the AO-approved security posture, and document and report security vulnerabilities and incidents.
- (g) Perform the security software administration functions.
- (h) Act as Local Area Network (LAN) Administrator and review system audit trail for

systems under Contractor control.

3.13.7 Risk Management Framework

RMF processes are mandatory for networked systems on the JPARC. As such, the Contractor shall comply with all regulatory policies and provisions of RMF (formerly Defense Information Assurance Compliance Accreditation Program - DIACAP) consistent with DoDD 8140 series; DoDI 8510.01, AFI 17-101, and the Federal Information Security Management Act (FISMA) security requirements.

3.13.7.1 Baseline Requirements.

The Contractor shall ensure IT personnel meet the training and certification requirements as stipulated in the most current versions of the references DODD 8140 series, and AFMAN 17-1303. The contractor shall ensure that:

- (a) New and existing computers and network equipment will be configured in accordance with applicable Security Technical Information Guidelines (STIGs) under a cognizant ISSM, CDISS, and Security Control Assessor (SCA).
- (b) Baseline Hardware Inventory of all computers and network hardware on the JPARC is kept current to include manufacturer, type, serial number, physical location and network topology.
- (c) JPARC computer systems comply with all requirements of marking and labeling the classification of the data processed or stored on the system IAW Department of Defense Manual (DoDM) 5200.01, Volumes 2 and 3.
- (d) Network configuration drawing/diagrams are kept current and accurately depict the JPARC network.
- (e) Baseline Software Inventory of all computer and network hardware on the JPARC is kept current to include manufacturer, type, version number, required licenses, keys, registrations, date installed and by whom.
- (f) Proper procedure is followed to insure the appropriate physical and technical protection of the JPARC hardware and software and for its restoration in the event of failures; keeping records of usernames and passwords for all non-NIPRNET to include date of changes. Records shall be kept in the fire safe.
- (g) A backup copy of all installed software on the JPARC or a ghost image of the software is kept on site, and in a fire safe.
- (h) A log of all passwords, logins, access procedures, for each computer, server, Virtual Machine (VM), software application, network device will be kept updated and retained in the firesafe. All changes to login /log on passwords for each device, software application, VM will be annotated in the log when made, dated and signed by the authorized personnel making the change. The log will be maintained throughout the period of performance unless otherwise directed by the CO/COR.
- (i) Permission settings of Audit Trails on JPARC systems are assigned in accordance with DoD policies and be limited to the administrator and other designated privileged users only.
- (j) Disaster recovery plans for the JPARC networks are reviewed, updated, and tested IAW

DoD time criteria.

3.13.7.2 RMF – NIPRNET

Contractor shall assist the local Cyber Security office as required. Contractor shall, if tasked, provide products such as inventory listings, network mapping, server information, software licensure, and aid in security testing of networked machines, etc.

3.13.7.3 RMF – JPARC Classified and Unclassified Networks

The Contractor shall participate in the recurring JPARC RMF processes for responsible systems, to include JPARC Operations classified and unclassified networks and connected systems (e.g. JPARC-B/SAP/R/REL, PDL, DTVRS, CSS, and SCADA) As such, the Contractor shall:

- (a) Submit a Change Request for hardware and software changes to the Change Control Board prior to effecting said change. See Configuration Management, paragraphs 3.6.1 and subparagraphs.
- (b) Submit new or modified RMF documentation on any network component (server, switching, or general architectural changes) that has been added to the system or has been modified to such an extent that the certification document no longer reflects the system as certified by the Approving Official (AO).
- (c) Collect data for the system authorization agreement work/system accreditation with the network security manager and the host base communications squadron, to implementing such network security policies and procedures as outlined in the system security authorization agreement, as approved by the AO.
- (d) Provide completed and accurate RMF products to the Government for inclusion into a comprehensive RMF package for the entire JPARC infrastructures.
- (e) Configure computing environment software to meet user needs consistent with governing directives and host base guidance. The Contractor shall install, test, and accept new systems according to terms of current purchase contracts and instructions and as approved by AO.
- (f) Implement ownership of applications and monitor control over permissions to read, write, and execute such applications.
- (g) Perform updates and patches to firmware/software for all components of the networks on a regular basis in accordance with RMF policy directives, regulations, and instructions.
- (h) Perform scans of required type and frequency to include Assured Compliance Assessment Solution (ACAS) scans every 60 days. Make required changes based on results thereof and rescan until the networks pass requirements. Archive results and make copy available to the Government or designated third party.

4 SECTION 4 - GOVERNMENT FURNISHED MATERIALS, EQUIPMENT, PROPERTY AND SERVICES

4.1 Government Furnished Materials

4.1.1 General Supplies

The Government will reimburse the Contractor for all supplies and materials needed to directly support operations and maintenance of GFE. This does not include general-purpose office supplies or personal equipment (e.g. cold weather gear, safety items, etc.).

4.2 Government Furnished Equipment/Property

The Government shall provide the Contractor equipment listed in Appendices 7, 8, and 9.

4.2.1 Equipment/Property Inventory

Contractor shall:

- (a) Maintain current equipment inventory data in all systems (e.g., ADPE, Equipment Authorization Inventory Data (EAID), etc.).
- (b) Maintain traceable records on all inventories of spares, issues, turn-ins, reorders, and costs including open purchase contract files.

4.2.2 Equipment Action Requests

The Contractor shall prepare and deliver AF Form 601, Equipment Action Requests, to the Equipment Accountability Office for authorization and/or Table of Allowance changes or equipment replacements IAW procedures outlined in AFI 21-101 and Supplements. The Contractor should not acquire additional Government Furnished Test, Measurement, and Diagnostics Equipment (TMDE) for systems covered by this contract that are not identified by DoD/USAF systems' Table(s) of Allowance.

4.2.2.1 Damaged equipment

The Contractor shall report damaged equipment to the CO/COR immediately upon detection and investigate and report facts regarding the damage within 30 days. Note, depending on circumstances, the Contractor may be held to the provisions of paragraph 3.15.7.12, Repairable Assets.

4.2.2.2 Lost and/or Stolen Equipment

The Contractor shall report lost and stolen equipment to the Property Administrator within 2 workdays, IAW Federal Acquisition Regulation (FAR) Part 45, Defense Federal Acquisition Regulation Part 245, and DoDI 4161.02.

4.2.3 GFE/GFP Accountability

The Contractor shall provide a database compatible with current Government standards (Microsoft Office products). The Contractor shall provide the CO and COR an accurate copy of the Government Furnished Property Database on a CD/DVD.

4.2.3.1 Database Information

As a minimum, the Contractor shall include in the GFE/GFP database all items that make up the systems listed in Appendices 7, 8 and 9 and any additions made to these lists. The database shall include all information that applies below:

- (a) Name
- (b) Description
- (c) National Stock Number (NSN)
- (d) Cage Code
- (e) Part Number
- (f) Model
- (g) Serial Number
- (h) Quantity on hand at last inventory, and Unit of Measure
- (i) Last Inventory Date
- (j) Cost (Price at Delivery)
- (k) Delivery Date
- (l) Owning Workcenter
- (m) Owning System and System Affiliation as listed in Appendix 8. Identify the owning for items that are required for the system to function as designed, modified, or enhanced and are not defined as part of the system in the appropriate technical publications. Do not identify an owning system for CFE and GFE, which assist the Contractor or reduce the Contractor's cost of operating and/or maintaining each system (e.g., Do not include test equipment, tools, materials, etc.)
- (n) Identification of disposition documents and disposition date
- (o) Disposition Date
- (p) Source of Supply
- (q) Bar Code Identifier # - (Contractor generated)

4.2.3.2 GFE/GFP Audits and Reporting

The Contractor shall inventory a minimum of 25 percent of GFE/GFP annually. Contractor shall complete a 100% inventory during contract phase-out IAW paragraph 1.13.1.2.

4.2.3.2.1 Directed Audits

The Contractor shall conduct inventory audits with the Government when directed by the CO and coordinated with the COR.

4.2.3.2.2 Annual Audit Report

The Contractor shall submit an Annual Report of Government Property by 25 October each year.

4.2.3.3 Government Use of JPARC GFE/GFP Systems and Capabilities

The Contractor shall facilitate Government use of all JPARC equipment and capabilities. Support shall include hands-on training and indoctrination in proper use of all JPARC equipment and capabilities to local units, visiting forces, and government-directed Contractors. This training and indoctrination shall be as required, and cover the Major Systems listed in Appendix 8, as well as software systems:

- (a) ACTS, C2, Link-16/SADL
- (b) UMTE Control
- (c) DIADS, Joint Anti-Air Combat Effectiveness (J-ACE) /Joint Anti-Air Model (JAAM)

- (d) Simshield, Gateways
- (e) SCADA

4.2.3.4 Training to Level of Understanding

The Contractor shall provide trainees with an understanding of equipment and facilities capabilities and limitations, key functions and processes, and operational usage. Training shall be on the major operational settings and variables, equipment configuration, and major equipment and facility performance and status indications used to determine equipment and facility operational or maintenance performance.

4.3 Tenant Radio Locations and Equipment

There are four ground-to-air radios that are maintained by the FAA within the Hill 3265 and Taylor Mountain shelters, and three ground-to-air radios owned by USAF and maintained by the FAA within their (FAA) facility at the Gulkana Airport. The Contractor shall:

- (a) Provide maintenance of the Hill 3265 and Taylor Mountain shelters themselves per this PWS. Contractor shall provide suitable space, power, and PDL circuit paths for the FAA radios emplaced.
- (b) Operate the FAA radios at the Gulkana Airport per mission requirements. Maintenance of the radios is IAW FAA/USAF Letter of Agreement, DTF A04-00-Z-43147 (i.e. Contractor is required to report radio outages and FAA will repair).

The State of Alaska has Land Mobile Radio and /or terrestrial microwave equipment in the shelters at Pole Hill, Hill 3265, Taylor Mountain, and Donnelly Dome. The USAF owns terrestrial microwave and GATR equipment in State of Alaska owned facilities at Tok and Porcupine Ridge. The Contractor shall:

- (a) Provide maintenance of the Hill 3265, Pole Hill, and Taylor Mountain shelters themselves per this PWS. Contractor shall provide suitable space, power, and PDL circuit paths for the State of Alaska radios emplaced.
- (b) Provide O&M of USAF owned equipment and systems at the State of Alaska's facilities in Tok and Porcupine Ridge. Contractor has no maintenance tasks for the State of Alaska's facilities or systems.

4.4 Government Furnished Facilities

The Government shall provide the facilities, equipment, materials, and services listed here and/or in Appendix 7.

4.4.1 Definition - Facilities, Structures, and Shelters

Facilities are defined as Government maintained buildings. Structures are fixed, Contractor maintained buildings, towers, radomes, etc. Shelters are moveable, Contractor maintained units such as S-250, S-280, and NavAir shelters.

4.4.1.1 Government Furnished Facilities

The Government will furnish or make available permanent and temporary (vans, trailers, and

modular) facilities described here and/or in Appendix 7. Compliance with the Occupational Safety and Health Administration (OSHA) Standards and other applicable laws and regulations for the protection of employees is exclusively the obligation of the Contractor. Further, the Government will assume no liability or responsibility for the Contractor's compliance or noncompliance with such requirements, with the exception of the requirement to make corrections according to approved plans of abatement subject to base-wide priorities. Before any modifications of the facilities performed by the Contractor at his or her expense, the Contractor must furnish the CO documentation describing, in detail, the modification requested. No alterations to the facilities shall be made without specific written permission from the CO. The Contractor shall return the facilities to the Government in the same condition as received, fair wear and tear and approved modifications excepted. These facilities shall be used only in the performance of this contract.

4.4.1.2 Facility Management

The Contractor shall manage Government furnished facilities (Real Property) IAW AFI 32-1001, the 354FW Facility Managers Guide, and this contract. The Contractor shall designate a facility manager and implement a Facility Manager's Program for all real property facilities assigned. Per AFI 32-1001, Facility Manager(s) shall be designated in writing prior to taking possession of/ or occupying government furnished facilities. The Contractor shall provide a current list of facility managers to the Government when directed or whenever changes occur, whichever comes first. The Contractor shall perform routine inspections in accordance with local host base building custodial procedures.

4.4.1.3 Facility Maintenance

The Government shall furnish and/or make available facilities described in this section. These facilities shall be used for performance of this contract only. The Contractor shall be responsible for occupant maintenance only and property security. The Government will provide all maintenance, other than occupant maintenance, of Government furnished facilities listed in Appendix 7.

4.5 Government-Furnished Services

4.5.1 Telephone Services

The Government shall provide local and Defense Switch Network (DSN) telephone services through the base operator switch. This service is for official use only in support of the JPARC contract. All commercial long distance telephone services shall be the responsibility of the Contractor. Government provided telephone circuits shall not be used to support equipment or systems for which the Contractor is responsible for connectivity under this contract.

4.5.2 Internet and NIPRNET/SIPRNET Connectivity

The Government shall provide access to the Internet through the Base Network Control Center (BNCC). Internet access is for official use only in support of the JPARC contract. Contractor shall be provided NIPRNET/SIPRNET access as required to meet mission requirements. As a minimum, the PM shall have both NIPRNET and SIPRNET accounts. Contractor shall use

NIPRNET/SIPRNET, respective of security classification, as the primary means for official electronic correspondence with the government.

4.5.2.1 Government e-mail accounts

The Government will provide a NIPR e-mail address to contractor employees. The contractor will use these as their primary means of electronic communications with the Government.

4.5.2.2 Utilities

Utilities currently supporting facilities listed here and in Appendix 7 will be provided at no cost to the Contractor (e.g., electricity, water, sewage, and heat).

4.5.2.2.1 Conservation of Utilities

The Contractor shall be responsible for operating under conditions that preclude the waste of utilities.

4.5.2.3 Security Police and Fire Protection

The Government will provide Security Police and Fire protection for Government furnished facilities located on Eielson and JBER. The Contractor shall:

- (a) Ensure equipment, structures, and shelters are secure at all times.
- (b) Respond to notification from the Bureau of Land Management of potential danger to JPARC equipment. The Contractor shall provide mitigation of fire/flooding hazards.

4.5.2.4 Postal Services and Installation Distribution

The Government will provide the Contractor access to Base Information Transfer System (BITS) distribution for military correspondence at Bldg 1151 on Eielson AFB and Bldg 9549 on JBER. US mail and commercial delivery services are payable by the Contractor.

4.5.2.5 Refuse Collection

The Government will provide dumpsters for ordinary refuse collection and recyclable materials as well as collection points for hazardous waste. The Contractor shall collect and properly dispose of all refuse generated in support of this contract.

4.5.2.6 Custodial Service/Housekeeping

The Government will provide custodial services limited only to joint use, unrestricted areas within Bldg. 1151 and Bldg. 1141 at Eielson AFB, and Bldg. 9549 and Hangar 4 at JBER. All other housekeeping and custodial requirements or services for the facilities provided are the Contractor's responsibility.

4.5.2.7 Long Haul Circuits

The Government shall provide all long-haul communications circuits through the Defense Information Systems Agency (DISA). These circuits are leased from commercial vendors and consist of copper wire, fiber optic cable, microwave, and satellite transmissions.

4.5.2.8 Helicopter Service

The Government will provide a set amount of Helicopter hours for the Contractor to perform maintenance, refueling efforts, etc. to fly to sites. The Contract shall propose the number of hours needed and will be evaluated by the Government.

5 SECTION 5 - SERVICE SUMMARY

5.1 General

The Service Summary (SS) identifies the performance objectives for this contract. The Government reserves the right to monitor all services called for in the contract to determine whether or not the performance objectives and goals were met. The performance threshold briefly describes the minimum acceptable levels of service required for each requirement. These thresholds are critical to mission success. See Table 5-1.

The absence of any contract requirements from the Service Summary shall not detract from its enforceability nor limit the rights or remedies of the Government under any other provision of the contract.

5.1.1 Service Provider's Metrics

Metrics will be utilized as the primary method of surveillance for this contract. The dominant metrics the government will use to assess performance are Operational Effectiveness (OE) rates and EAR.

5.1.2 Surveillance

Surveillance methods may include but are not limited to: trend analysis, periodic inspections, 100% surveillance, contractor metrics, customer complaint, third party audits, or quality index. Methods of surveillance can change after contract award based on, but not limited to: accepted Contractor Quality Control Plan, adjustment to the metrics used, contractor performance.

5.1.3 Performance Evaluation

The Government (COR and QAE) will evaluate performance of a service to determine whether or not it meets the performance threshold. When the level of performance is not met, the Contractor will be advised and required to respond to the discrepancy. The contractor's response shall address why the performance threshold was not met, how performance will be returned to acceptable levels, and how recurrence of the cause will be prevented in the future. At the Governments' request, the contractor shall re-perform the service at no additional cost to the Government, to demonstrate successful meeting of the performance threshold.

5.2 Performance Requirements, Standards And Reporting

5.2.1 Quality Control

The Contractor shall follow the approved QC plan.

5.2.1.1 Service Summary – Operational Effectiveness

OE is a measure of operational support effectiveness for all scheduled periods as defined in

Section 1. OE is measured via quantifiable metrics for system effectiveness, system availability, and personnel performance. The Contractor shall report OE metrics in its MPSMR.

5.2.1.1.1 OE Definition – Effective Rating

‘Effective’ is defined as the system(s) operating within T.O. parameters, and successfully providing the specified training. (e.g., The WISS system is fully up and available for the scheduled mission, it is aimed at the correct Desired Mean Point of Impact (DMPI) and configured to score for the type of delivery occurring, the score is accurately recorded and then passed within specified time criteria.)

5.2.1.1.2 OE Definition - ACTS Related

5.2.1.1.3 Instrumented Range:

A range or MOA (e.g. R-2205, Yukon, Fox MOAs) that possesses ACTS system(s) for the purposes of live-fly monitor and control.

5.2.1.1.4 Non-instrumented Range:

A range or MOA that lacks resident ACTS system(s) (e.g. Naknek, Stony, Susitna, Galena MOAs).

5.2.1.1.5 Live Sorties Flown:

An aircraft that enters the instrumented range or MOA. Aircraft that ground / air abort or are cancelled prior to entering the airspace is not counted as a live flown sortie.

5.2.1.1.6 DRD Sorties Flown:

An aircraft that flies on a non-instrumented range or MOA and requires an ACTS debrief. DRD used to save / recover live missions will not be considered as DRD sorties flown.

5.2.1.1.7 Effective Live:

An aircraft effectively tracks on an instrumented range throughout a sortie.

5.2.1.1.8 Effective DRD:

An effective DRD is one that has recorded the entire mission.

5.2.1.1.9 OE Calculations

5.2.1.1.10 All Systems (except) ACTS

OE calculations for all systems, except ACTS, are based on each system’s availability during a required period, and whether it was effective during that required period. Therefore, the calculation shall be:

#15 MINUTE PERIODS REQUIRED AND EFFECTIVE (100%)

#15 MINUTE PERIODS REQUIRED

5.2.1.1.11 Personnel Performance Metrics.

Personal performance metrics require no special calculations. Their threshold values are

stipulated in Table 5-1.

5.2.1.1.12 Air Combat Training Systems - OE Calculations:

(a) Instrumented Range or MOA: P5 CTS ACTS:

$$\frac{((\text{Effective Live} + (0.25) \text{ Effective DRD})) (100\%)}{(\text{Live Sorties Flown} + \text{DRD Sorties Flown})}$$

(b) Non-Instrumented Range or MOA: P5CTS ACTS:

$$\frac{(\text{Effective DRD}) (100\%)}{(\text{DRD Sorties Flown})}$$

Table 5-1: Service Summary

Performance Objective	PWS Reference(s)	Performance Threshold
Material Status Report	3.1.6.2	- NO LATER THAN 25 October each year, 100% accurate
MICAP/DIFM	3.11.1.3.2	

Performance Objective	PWS Reference(s)	Performance Threshold
Management Responsiveness	3.2.2	- Timeliness, completeness and quality in problem identification, and corrective action plans. Proposal submittals within 5 working days of notification and 100% accurate. - Contractor maintains full task coverage.

Monthly Progress, Status, and Management Report (MPSMR)	3.1.6.1	- Contractor shall submit complete MPSMRs in current electronic format to the COR for review and signature no later than the 5th workday of the following month 100% of the time, and products are 100% accurate.
Within the MPSMR, the contractor shall include:		
Financial Reporting	3.2.3	
URL	3.2.3.1	
Summary of Inspections	3.2.5.2	
ACTS Status Reporting	3.9.8.5.5	
Open Purchase	3.11.1.3.3.2	
PQDR	3.11.1.3.4 & 3.2.5.1	
Shipping/Receiving Actions	3.11.1.4	
Gases/Fuels	3.11.1.5	
Overhaul Forecasts – Depot and Command Supported Systems	3.11.1.15	
Command Support Overhaul Status	3.11.1.16	
Missed PMIs	3.11.1.17	
AWM Equipment	3.11.1.21	
OE Metrics	5.1.1	
EAR Metrics	5.2.1.2	

Performance Objective	PWS Reference(s)	Performance Threshold
Quality Control	3.2.5.1 5.2.1	- The Contractor shall ensure: - QC plan is up to date and addresses all requirements - Proposed changes to QC plan are submitted to Contracting Officer prior to implementation. - 100% of submittals to Government are reviewed by QC function. - Records of inspections are given to CO and COR upon request within one working day, 95% of the time, and 100% within two working days - 100% of repeat equipment/personnel deficiencies are evaluated, with corrective actions recommended in coordination with QC personnel - Trend analysis is updated on a cycle not less than every 14 days and is 100% free of mathematical errors.
Personnel Management	3.2.8 and subparagraphs	The Contractor shall ensure: - 100% of personnel performing tasks hold appropriate level security clearances for assigned task - 100% of personnel trained and qualified for the task skill-level assigned - Contractor has training programs/processes to ensure continued qualification /certification for all personnel
Environmental, Safety, and Health	3.2.12.1 - 3.2.12.9	The Contractor shall ensure: - Zero violations of applicable environmental statutes - 100% compliance with local directives.

Performance Objective	PWS Reference(s)	Performance Threshold
Safety	3.2.12.10- 3.2.12.16	The Contractor shall ensure: - Zero reportable safety incidents, 100% of the time. - 100% monthly safety walk through inspections completed - 100% hazard abatement information documented for hazards not corrected within 30 days
Emergency Medical Support	3.2.15	The Contractor shall ensure: - Familiarization with Government medical support and assume responsibility for providing or enforcing the acquisition of reasonably required follow-on care.
Contractor Mission Preparation	3.9.3	The Contractor shall ensure: - 100% of required system available for scheduled mission – - Zero lost capability due to Contractor failing to address preparation items. This includes but is not limited to the requirement for properly loaded cryptographic keys; hardware, software, and networks properly configured for the mission, and scheduled systems being available on time. This applies universally to capabilities listed in 3.11 and will not be repeated therein.
Security	3.5 3.9.6.2 3.9.6.6	The Contractor shall ensure: - Zero notices of security violations. - Accurate SSPs. - Correct, usable, and loaded COMSEC key materials 100% of the time
Subject Matter Experts (SME)	3.8.1	The Contractor shall ensure: - Zero negative mission impacts due to inability to provide fully trained/qualified personnel for required tasks

Performance Objective	PWS Reference(s)	Performance Threshold
Air Surveillance Systems and networks	5.1.2, 5.2.1.1.10	The Contractor shall ensure: - 97.5% OE during scheduled periods.
ACTS – P5 CTS General	5.2.1.1.12	The Contractor shall ensure: - 92% calculated OE rate.
ACTS Pods	3.9.8 and subparagraphs	The Contractor shall ensure: - 100% of pods properly loaded with appropriate GPS almanacs and cryptographic keys. - 100% of pods loaded 1 hour prior to schedule takeoff. - 100% compliance with proper security handling of DRDs.
ACTS – P5 CTS Mission Preparation and Execution	3.9.8 and subparagraphs	The Contractor shall ensure: - 100% adherence to security and COMSEC requirements - 100% mission files prepared successfully - 100% correct CF-34 configured for live monitor - Live tracks optimized for High Activity Aircraft (HAA) if able
ACTS Post Mission Merge	3.9.8 and subparagraphs	The Contractor shall ensure: - 100% of merged mission files available NLT 1 hour after receipt of last DRD/ F-22 data/ GPS data logger/ other EAG systems.
ACTS Debrief Replay	3.9.8 and subparagraphs	The Contractor shall: - Provide accurate debriefing systems replay for scheduled events. - Include all participating high- and low-activity aircraft; to include all low-activity tracks requiring merging to high-activity status.

Performance Objective	PWS Reference(s)	Performance Threshold
Link-16/SADL	3.9.8.9	The Contractor shall ensure: - 95% OE during scheduled flying periods - 90% valid tracks processed and displayed throughout mission - 90% accurate transmission/reception of data and voice messaging
C2 Operations, Systems and Displays (BC3, ARES, ANGEL)	3.9.8.10, 3.9.8.10.1	The Contractor shall ensure: - 95% OE during scheduled periods
C2 Systems Operations	3.9.8.11	The Contractor shall ensure: - 100% of personnel trained to appropriate skill level for their job tasks
LVC Entity Management	3.9.9	The Contractor shall ensure: - 95% OE during scheduled periods - 100% adherence to COMSEC requirements
IADS - General	3.10.1	The Contractor shall ensure: - 100% Coverage of scheduled threat windows
FSU and International SA/GCI Radar Systems	3.10.2.1	The Contractor shall ensure: - 90% OE during scheduled flying periods - 100% of systems in-position prior to MFE/scheduled event start dates - 100% of scheduled systems with fully functioning data and video links - Re-position 100% of systems as scheduled within time criteria.

Performance Objective	PWS Reference(s)	Performance Threshold
FSU and International Replica/Threat Radar Systems	3.10.2.2	The Contractor shall ensure: - 90% OE during scheduled flying periods - 100% of systems in-position prior to MFE/scheduled event start dates - 100% of available systems with fully functioning data and video links - Re-position 100% of systems as scheduled within time criteria
Manned and Unmanned Threat Simulators (UMTE, ELITE, etc.)	3.10.2.3	The Contractor shall ensure: - 95% OE during scheduled flying periods - 100% of available systems with fully functioning data and video links - 100% of positioning/ re-positioning, and depot movements completed within time criteria.
Man-Portable Aircraft Survivability Trainer (MAST), and/or Mallina IR Stimulator	3.10.2.4	The Contractor shall ensure: - 95% OE during scheduled periods

Performance Objective	PWS Reference(s)	Performance Threshold
DIADS Modeling Software	3.10.2.5	The Contractor shall ensure: - 95% OE overall - Correctly configured for mission tasks - 85% of surface-to-air engagements analyzed and adjudicated in real-time - 85% of all engagement results accurately relayed to aircrews during live missions - 100% accurate documentation of engagement results provided to SAM1/GODFATHER post mission.
Smokey SAMs	3.10.2.6	The Contractor shall ensure: - 95% OE during scheduled flying periods
Mobile Decoy Targets, Threat Metal Objects, and Camouflage Netting	3.10.2.7	The Contractor shall ensure: - 90% OE during scheduled flying periods - 100% of systems in position prior to LFE/MFE start - Scheduled re-locations completed on time
GODFATHER	3.10.4.2	The Contractor shall: - Provide demonstrated tactical expertise in IADS systems and tactics - Demonstrate proficiency in the use of C2 and GATR equipment to effectively prosecute threat engagements to logical conclusions - Timely responses to engagement results - 100% accurate post-mission analysis and product

Performance Objective	PWS Reference(s)	Performance Threshold
IADS/Threat Operator Requirements	3.10.4.3	The Contractor shall ensure: - 100% of operators, with both a verbal and/or electronic point out, and with a target in range, be able to acquire and complete doctrinally correct engagement to its logical conclusion, providing accurate and pertinent commentary. - 100% of operators being able to recognize and grade ECM affects - 100% of operators knowing min, maximum intercept range, and maximum recommended intercept range for system being emulated.
CNKE/Comm-Jam/ICD	3.10.5	The Contractor shall ensure: - Zero Training Rules violations
Joint Advanced Weapons Scoring (JAWSS) – (WISS), IRSSS and Moving Strafe Target Systems	3.9.10	The Contractor shall ensure: - 100% accurate relay of weapons scoring events within time criteria
Heated Targets	3.9.10.6	The Contractor shall ensure: - 95% OE during scheduled periods
Video Systems Management – IADS Threat Video Recording /Digital Video Recording System (D-TVRS)	3.9.11	The Contractor shall ensure: - 95% OE during scheduled flying periods - 100% of available video archived and available for replay w/in 45 minutes post vulnerability period. - 100% of selected engagement clips merged into playable video w/in 1.5 hours post vulnerability period. - 100% of available JAWSS weapons impact video available w/in 30 minutes after last attack

Performance Objective	PWS Reference(s)	Performance Threshold
Audio-Visual and VTC Systems Support	3.9.11.1	The Contractor shall ensure: - 100% percent of scheduled requests supported - 95% OE during scheduled periods - 100% of cryptographic materials loaded, when required
Duty Desk Display System	3.9.11.3	The Contractor shall ensure: - 95% OE during exercise periods - 100% pre-exercise verification of functioning equipment
PDL	3.11.3.1	The Contractor shall ensure: - 97.5% OE during scheduled periods - 30 minute in-building response, and/or 2 hours to on-site response for problems impacting flying operations. - Temporary repairs w/in 4 hours - Full system restoral w/in 24 hours.
Range Data and Video Encryption	Table 5-3	The Contractor shall ensure: - 95% OE - 100% pre-exercise verification of circuits and systems - 100% positive accountability of CCI equipment - 100% of Encryption Modules loaded with proper cryptographic keys in time to support scheduled operations - 100% positive control of encryption/decryption devices - Zero security incidents - 97.5% overall OE of JPARC-SAP, JPARC-Rel, JPARC-Red, JPARC-Black Networks, and LMOC.
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Performance Objective	PWS Reference(s)	Performance Threshold
Risk Management Framework (RMF)	3.12.7	The Contractor shall ensure: - 100% compliance with host-base Communications Squadrons' RMF requirements for NIPRNET - 100% of systems/networks properly configured per applicable STIGs - Current and accurate software/hardware inventory, network topology drawings - Current library of backup software - 100% of RMF products delivered on-time and 100% accurate - 100% compliance with systems scanning and patching/updates completed within time criteria
Cross-Domain-Solution (CDS)	3.11.3.6.2	The Contractor shall ensure: - 97.5% overall OE - 100% configured in time for scheduled combat training events
Communication Switching System	3.11.4.1	The Contractor shall ensure: - 97.5% OE during scheduled periods - 100% of Range and Flight Safety frequencies available during flying windows - 100% of required MIs configured pre-mission - 85% of MIs reconfigurations completed during mission periods - 95% of required secure GATR missions correctly configured, keyed and performed. - 30 minute in-building response to systems outages - Temporary repairs w/in 1 hour - Full system restoral w/in 24 hours

Performance Objective	PWS Reference(s)	Performance Threshold
Communication Support - (GATRs)	3.11.4.2	The Contractor shall ensure: - 97.5% OE during scheduled periods, with no more than one radio down at each of Fox Relay and Taylor Mtn sites during MFEs. - 100% capability of Range and Flight Safety frequencies
GATR Audio Integration to debriefing systems; ICADS, ANGEL, and subsequent systems.	3.11.4.2.1	The Contractor shall ensure: - 97.5% OE during scheduled periods
Live-to-Simulated Communications Interface (LSCI)	3.9.9.2.3	The Contractor shall ensure: - 97.5% overall OE - 100% OE during MFE vults - 100% configured in time for scheduled combat training events
IT Services: NIPRNET	3.12.1	The Contractor shall ensure: - 95% OE during required usage periods (as scheduled) for Servers, Networks, Printers, and Clients - 100% of customer problems addressed w/in 1 hour (80% during RF-A events) - 80% of customer problems solved w/in 2 hours - 100% of participant desktops configured prior exercise start
Deployment Support – ACTS, LINK-16/SADL	3.9.4.2	The Contractor shall ensure: - 100% prepared, tested, and ready for shipment three working days prior to deployment - 90% OE Rates during deployed operations
MAINTENANCE - General	3.11 See table 5-2 for Reportable EAR categories.	The Contractor shall: - Support fielded equipment to at least minimum EAR as noted in Table 5-2 - Zero impacts to missions due to lost time, 100% of the time

Performance Objective	PWS Reference(s)	Performance Threshold
Supply – Fuels	3.11.1.5	The Contractor shall ensure: - Zero lost equipment usage due to late, non-supplied, or contaminated product on-site
Power Production/Generation	3.11.1.7	The Contractor shall ensure: - No lost systems up-time during flying training periods due to power generation failures - No site or equipment damage from cold weather due to power generation failures
Maintenance Documentation	3.11.1.24	The Contractor shall ensure: - Clear, concise, and accurate data entered for all equipment Maintenance and repair actions - Logical work order entries that allow reconstruction of maintenance activities taken during job completion - Zero incomplete/inaccurate maintenance/Maintenance documentation actions
Command Supported Equipment and Spares Management Plan	3.11.1.12	The Contractor shall ensure: - Plan addresses all Command Supported equipment
Preventative Maintenance	3.11.1.17	The Contractor shall ensure: - 100% all PMIs completed prior to equipment entering Red Status - Zero deferred PMIs due to lack of required support/test equipment/qualified personnel

Performance Objective	PWS Reference(s)	Performance Threshold
Structures, Shelters, and Towers Repairs	3.11.1.19	The Contractor shall ensure: - 100% compliance with annual integrity and serviceability inspections - 100% of Air Force Material Command (AFMC) supported shelters and/or structures scheduled with depot for periodic/programmed overhaul and maintenance actions. - 100% corrosion control prevention conducted on shelters and structures. - 100% processes to ensure no water/weather intrusion onto electronics equipment
Cannibalization	3.11.1.23	The Contractor shall ensure: - 100% Cannibalization actions taken after requisite troubleshooting in order to minimize potential damage to cannibalized components. - Zero cannibalization actions taken without COR approval
Snow Removal	3.11.1.28	The Contractor shall ensure: - Zero lost scheduled systems capability due to failure to clear snow and ice, and/or damage to structures/equipment
Vegetation Control	3.11.1.29	The Contractor shall ensure: - Zero lost system operability due: to inability of personnel access, and/or camera, transmitter systems obscuration - 100% safe fire zone out to specified distances.

Performance Objective	PWS Reference(s)	Performance Threshold
Surface Transport	3.11.2.1	The Contractor shall ensure: - Zero lost training capability due to inability to provide surface transport of personnel or equipment. - 100% of drivers licensed/certified as required
Air Transport	3.11.2.2	The Contractor shall ensure: - 100% on-time schedule request submissions - Zero late or missed airlift sorties due to Contractor lateness. - 100% fully qualified riggers and certifiers to meet operational mission requirements. - 100% of all external loads are properly and safely rigged
Engineering Services	3.11.5	The Contractor shall provide: - Technically competent personnel with experience in Focus Areas as defined in 3.18.1(a). - Technical reports and products delivered on-time, with zero errors in technical data and/or analysis.
Configuration Management	3.6.1	The Contractor shall ensure: - Configuration Management documentation is accurate and submitted / provided as required. - Reviews are submitted as scheduled. - 100% Annual audits are accomplished
Frequency Management	3.6.1.1	The Contractor shall ensure: - 100% of required RF surveys conducted. - Survey reports are accurate and published on time.

5.2.1.2 Equipment Availability Rate

EAR is a measure of maintenance effectiveness. The Contractor shall maintain a minimum EAR of 90 percent for all scheduled systems as listed in Appendix 8, and Table 5-2 below. Contractor shall report EAR metrics as part of its MPSMR. Included shall be both original EAR, and EAR calculated as a result of granted relief

5.2.1.2.1 EAR Calculations

EAR calculations shall be based on equipment status (RED vs. GREEN) and calculated against a 24- hour clock, 7 days per week, without exclusion. EAR is calculated as follows:

$$EAR = \frac{\text{Number of 15-minute blocks the equipment is GREEN for the period}}{\text{Total number of 15-minute blocks in the period}}$$

5.2.1.2.2 EAR Relief.

The Government may assess EAR relief at the end of each monthly reporting period, if required. Relief may be granted by the contracting officer when EAR for specific systems is below threshold values due to circumstances beyond the Contractor's control. The Contractor must document these specific circumstances and what the Contractor has done/is doing to intensely pursue all means to restore the EAR. Periods that will NOT be excluded from EAR calculations are: PMIs, relocation to facilitate or expedite repair, and Government approved maintenance downtime requests.

5.2.1.2.3 Reportable EAR Categories:

See Tables 5-2 and 5-3 for reportable EAR categories.

Table 5-2: Reportable EAR Categories

System	Report: System(s) as a whole	Reporting: Major sub-components/systems	Notes
JPARC-SAP, JPARC-Rel, JPARC-Red and JPARC-Black Networks, LMOC	Yes	TENA Gateway Portal, and LSCI	N/A
Cross-Domain- Solution Systems	Yes	SimShield servers	N/A

AN/TPS-77	Yes	Primary and secondary radar transmitters/receivers (PSR/SSR); Environmental Control System (ECS), Shelters and Electronics Group	By Site
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System	Report: System(s) as a whole	Reporting: Major sub-components/systems	Notes
ACTS (P-5 CTS)	Yes	Transportable Ground System (TGS), Portable Ground Systems (PGS), Remote Range Units (RRU), and DMDs	N/A
ACTS (P-5 CTS) Pods	Yes	Air Instrumentation Sub-system (AIS) Pods, and Mx Test Sets/ CDU Laptops	N/A
LINK-16/SADL	Yes	Fixed Element and Remote Elements, including remote Safes, power supplies, and Tactical Data Toolkit (TDT) computer systems, JRE, Virtual ADSI, and Remote Re-keying systems	By Site.
BC3	Yes	Servers, clients, networks	N/A
ANGEL	Yes	Servers, switches, and displays; TENA Live Viewer/Situation Display	By system if in a manned threat
DIADS	Yes	Servers, and PCs	N/A
FSU/International SA/GCI Radar Systems	Yes	Transmitter, receiver, ECS, cameras, displays	N/A
Replica/ FSU/International Threat Radar Systems	Yes	Transmitter, receiver, ECS, cameras, displays	N/A
FSU/International - Service transport and support vehicles	Yes	KRAZ, 5-ton Truck, Trailers, Storage Van, and Tractor-Trailer combination	

Manned Threat Simulators	Yes	Transmitter, receiver, ECS, cameras, displays	Per each nomenclature system
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System	Report: System(s) as a whole	Reporting: Major sub-components/systems	Notes
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		9C2/ARES/ACTS/ LINK16/ TDT and TVT/ SimShield/ DIADS/ and TENA Networks systems	
Unmanned Threat Emitter Simulators (UMTE): AN/TPTT1(V)	Yes	Remote Element Unit (REU) including the Common Electronic Attack Receiver (CEAR), Remote Power Unit (RPU); Operator Control Group (OCG), Data Communications Computer (DCC), Supervisory Control and Data Acquisition (SCADA) systems, and video systems	By REU, includes forward deployed and/or TDY systems
YETI Support	Yes	TACLANE, Networking and Communications Equipment,	N/A
ELITE	Yes	Transmit antenna, remote operations module, solar power module	
MAST UV Stimulators	Yes	Laptop	N/A
Mallina UV Stimulators	Yes	N/A	N/A
Mobile Inflatable Decoys/Targets	Yes	Inflation systems, Generators, Trailers	N/A
Flatbed Trailer – Missile TEL Emulators	Yes	N/A	Per trailer.
AN/LMU-24A/E	Yes	N/A	N/A

JAWSS (WISS)	Yes	N/A	N/A
JAWSS (IRSSS)	Yes	N/A	N/A
Heated Targets at LANTIRN Village	Yes	N/A	N/A

System	Report: System(s) as a whole	Reporting: Major sub-components/systems	Notes
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Video Systems	N/A	DTVRS	N/A
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Table 5-3: Reportable EAR Categories

System	Report: System(s) as a whole	Reporting: Major sub-components/systems	Notes
Range Threat Video Systems	N/A	Microwave radios	N/A
Range Data and Video Encryption Systems	Yes	Encryptors/Decryptors, Cisco Switches	N/A
Compunetix CSS	Yes	MVPs, Remote Cages, PM, MIs, Legal Voice Recorder System	N/A
GATRs	N/A	N/A	By type, and installed locale
IT Systems - NIPRNET	Yes	Servers	Both Eielson and JBER
Facility Uninterrupted Power Supplies/ Battery Plants	N/A	Does not include office-based PC UPS.	By site.

Remote Weather and Security Cameras	Yes	Cameras	By Site
Automated Surface Observation System (ASOS) / FMQ23	Yes	N/A	By Site; (2) systems – Camera Site – 2, and R-2211 Blair Lakes

System	Report: System(s) as a whole	Reporting: Major sub-components/systems	Notes
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Refuel/Fuel Supply Systems	Yes	Diesel and Propane tanks and piping, containment systems, and GFE pumps, and/or monitoring systems	By Site
Mobile/System – Specific Power Generation	Yes	Diesel and gasoline GenSets, UMTE RPU, FSU unique power plants, power converters, and switching gear.	By site and system, if applicable
Fixed Site Power Generation Systems	Yes	Diesel and Propane prime power and/or site back up Gensets, Solar systems, power/frequency/voltage converters, Site UPS and Battery Plants	By site
Structures, shelters, and towers	Yes		By Site
PARC Data Link (PDL)	Yes	Fiber Optic and microwave system networks, routers/switches/hubs and multiplexors. SCADA systems.	By segment and data loss.
SCADA Systems	Yes		By Site