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SECTION C DESCRIPTIONS AND SPECIFICATIONS

Clauses specified in Section C of the basic SeaPort-e contract are hereby fully and expressly incorporated into this task order.

Item 4000 and Option Items 4100, 7200, 4010, 4110 and 7210 - The contractor shall provide the supplies and services in accordance with the Section C Performance-Based Work Statement (PBWS).

Items 6000 and 6001 and Option Items 6100, 6101, 9200, 9201, 6010, 6110, 6111, 9210 and 9211- The contractor shall provide material, travel, and NMCI in accordance with paragraph 6.0 in the PBWS.

Items 4008 and 4009 and Option Items 4109, 7209, 4019, 4119 and 7219 - The contract data to be furnished hereunder shall be in accordance with Exhibit (A), DD Form 1423, Contract Data Requirements List (CDRL) and paragraph 3.9 in the PBWS.

PERFORMANCE-BASED WORK STATEMENT

NAVAL AIR SYSTEMS COMMAND HUMAN SYSTEMS DEPARTMENT (AIR-4.6)

HUMAN SYSTEMS INTEGRATION ENGINEERING AND TECHNICAL SUPPORT SERVICES

1.0 GENERAL

1.1 Background

As an integral part of the Naval Aviation Enterprise (NAE), the Naval Air Systems Command (NAVAIR) tasks the Naval Air Warfare Center Aircraft Division (NAWCAD) Patuxent River, MD to perform research and development type work in the area of Human Systems Integration (HSI). This ongoing requirement creates a need within the Human Systems Department (AIR-4.6) for expertise in systems engineering, analysis, development and the integration of warfare systems into Naval Aircraft (manned and Unmanned), weapons, ground stations and various other military systems as related to Human Systems Integration (HSI).

1.2 Scope

The Naval Air Systems Command, specifically AIR-4.6, has been directed to identify, develop and implement HSI analysis and design solutions for various (United States Navy/United States Marine Corps (USN/USMC) aviation weapon systems and their associated maintenance and training elements, Air-Ship Integration programs and various new special projects (including Naval Special Warfare, Flight Deck Crew Equipment, Combatant Craft Integration of Aviation HSI technologies, Aviation & Ships manning, Unmanned Air Vehicle (UAV) Ground Station HSI, UAV Flight/UxS (surface, sub-surface and air vehicles) Operations, Human Effectiveness Research, Development, Test and Evaluation (RDT&E) Network Architecture and Advanced Maritime Technology Center development and operation).

These projects begin with the development of concept definitions for human system performance requirements from approved operational requirements documents, followed by a detailed operational concept study describing the system life cycle from concept development through system disposal or any portion(s) in between. Top-level specifications are then developed for weapon systems through interaction between the HSD and the Systems Engineering Department and/or with external customers (i.e., Naval Sea Systems Command [NAVSEA], US Army, US Air Force, Foreign Military Sales, other Non-DoD, etc.). This includes adjusting and balancing the integration and performance allocations of the weapon system with the human elements within the vehicle or battle space. The

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contractor shall assist the Department with the development and adherence to necessary processes, knowledge management, analysis, flow down of design/performance requirements and operational support within the elements of HSI (Training Systems, Aviation Life Support Equipment, Escape Systems, Survival Systems, Human Factors Engineering, Manpower, Personnel and other interrelated human interfaces). The contractor shall be responsible for providing recommendations to the Department on the state-of-the-possible, technically achievable and realistic top-level requirements for Human System Interfaces.

The contractor shall provide human systems functions to support the new requirements of various projects and lab efforts. The human systems functions include, but are not limited to, performance of the systems analysis, functional allocations, synthesis and evaluation efforts necessary to transform an operational need into an effective, affordable and operable system. Included is the overall integration of all requirements in a manner that optimizes total system performance, quality, cost effectiveness and supportability.

Human Systems efforts will require support to the various Naval Aviation Systems Engineering Support Teams (SETS), Integrated Program Teams (IPT) and Externally Directed Teams (EDTs) for various projects within the HSD. A representative sample of the tasks the contractor shall support include: test and evaluation, research and analyses, formal design reviews, trade studies, mockup assessments, advisory panels and working groups, laboratory support, field test support, various organizational support and advanced technology searches and investigations. The contractor shall also support the development of new laboratory requirements and/or field facility test procedures and then sustain operations for this new HSI tasking.

No item in this Performance Based Work Statement (PBWS) shall be used to procure any services that are inherently governmental services or personal services as defined in Federal Acquisition Regulation (FAR) Parts 2.101 and 37.104, respectively. Additionally, no item in this PBWS shall be used to procure construction-related services as construction requirements are under the purview of the Naval Facilities Engineering Command (NAVFAC).

2.0 AIR-4.6 Development Cycle

The following sections (paragraphs 2.1 through 2.5) reflect those activities engaged in by AIR-4.6 as part of the development cycle. The contractor shall assist the department in the completion of the below phases of development by providing HSI driven advice, opinions and recommendations to the Human Systems Department.

2.1 Concept Refinement

Perform conceptual HSI studies and analyses

Perform human systems functional analyses

Determine human systems functional allocation

Determine HSI related training and manpower requirements

2.2 Technology Development

Perform human systems analyses and refinement of alternative system designs

Conduct feasibility demos of alternative designs and component level designs with an emphasis on

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mitigating risk

Conduct in-process reviews

Develop human systems task analyses

Develop a human systems requirements analysis

Develop an HSI analysis of required manpower knowledge, skills and abilities

Perform information requirements analyses

Conduct (predictive) human performance and system workload analyses

Provide contributions towards a Human Systems Requirements Document (HSRD)

Provide technical input to HSI performance specifications

Conduct HSI and domain level modeling and simulation

Develop system prototypes for HSI analysis

2.3 System Development and Demonstration

Conduct an HSI top down functional analysis for total manpower assessment

Conduct a detailed HSI Functional analysis for systems performance requirements

Conduct demonstration and validation of HSI requirements

Design, integrate and test full systems with regard to HSI requirements

Conduct trade off analyses between HSI domain development requirements

Conduct domain level HSI production risk analyses

Conduct formal audits in accordance with the System Engineering Technical Review (SETR) process

Conduct formal design HSI domain tradeoffs

Conduct systems integration analyses

Conduct formal test and evaluation (T&E), including both simulation and aircraft ground and flight tests.

Provide HSI domain design support

Conduct HSI domain level mockup inspection

Perform analyses of human systems platform integration

Support a HSI Program

Perform HSI analyses (at the domain level) for maintenance

Support the various design reviews and technical interchange meetings

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Transition HSI related developmental hardware and software tools in support of the development of training systems and the integration of training and weapons systems

Support HSI systems development process

2.4 Production and Deployment (P&D)

Evaluate the production aircraft and training system (courseware and training systems) for impact on fleet operations. Provide recommendations to the Program Manager (PM) for possible incorporation in future Engineering Change Proposals (ECPs). Evaluate mission effectiveness and its impact on cost and provide recommendations to the PM.

2.5 In-Service Engineering Support

Provide and maintain Technical Documentation and Drawing Repository System

Provide and maintain In-Service Engineering Tracking System

Conduct failure analyses

Conduct engineering investigations

Perform in-service equipment modifications

Provide in-service training systems support

Maintain configuration management

Ensure quality assurance of products and production facilities

Provide HSI / training systems support

3.0 CONTRACTOR TASKING STATEMENTS

3.1 Human Systems Engineering and Program Planning

The contractor shall support the preparation of a Plan of Action and Milestones for programs based on inputs from program leadership or requirements documents. The contractor shall identify major milestones, schedules and relevant information on resource requirements for the applicable Life Cycle phase. The contractor shall assist in the development of performance requirements for the applicable domains of Human Systems Integration by providing:

3.1.1 Requirement Definition and Concept Refinement

The contractor shall provide recommendations for the development of human systems performance requirements from approved Capabilities Development Documents provided by the Human Systems Department or applicable Program Office sponsor.

3.1.2 Operational Analysis

The contractor shall assist with detailed performance requirements analyses based on operational scenarios. Analyses will be used to determine operational utilization, system performance requirements, interoperability and operational concerns.

3.1.3 Schedule of Events and Major Decision Identification

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The contractor shall create a schedule organized by functional area, subsystems and task requirements. Based on the schedule, the contractor shall prepare, and submit for Government approval, a recommended set of milestones corresponding to tangible products and procurement cycle requirements.

3.1.4 Systems Engineering Plans

Using provided information, the contractor shall analyze and describe the components of specified Systems Engineering Plans in accordance with the Systems Engineering Technical Review (SETR) Process.

3.1.5 Test and Evaluation Plans

Using provided information, the contractor shall analyze and describe the components of specified mission/operational requirements, component identification, system development, integrated T&E requirements and test plans. Test article readiness level includes items undergoing both developmental test and operational test phases.

3.2 Acquisition Support

The contractor shall provide the following technical support to human systems program and laboratory initiatives:

3.2.1 HSI Program Development

When tasked, the contractor shall provide technical inputs towards HSI Program Plans and HSI Charters, detailing HSI support required for the Program Office to meet its HSI commitments in accordance with DoD 5000 series policy. The contractor shall support development of HSI Program Performance Specifications and Performance Statements of Work in support of the Human Systems Integration principal domains.

3.2.2 HSI Engineering Management Support

The contractor shall provide required support to AIR-4.6 Management in the form of process logic and flow charts of NAE and NAVAIR- level organization, HSI input and output requirements, levels of responsibility, levels of action, etc.

3.2.3 HSI Requirements and Processes

The contractor shall assist in the performance of functional requirements analyses. These analyses shall be based upon detailed operational scenarios and mission timeline data. System functional analyses will be used to analytically derive operator, hardware and software functionality. The contractor shall support the development of system performance requirements by providing recommendations.

3.2.4 Performance HSI Studies and Analysis

The contractor shall assist with detailed performance requirements analyses using operational scenarios and system functional requirements as baselines. The performance analyses will identify the specific airframe and avionics capabilities required at the system and subsystem levels. These analyses will include review of proposed airframe modification.

3.2.5 User Mission/Task Requirements Analysis

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The contractor shall conduct mission timeline analyses to estimate Human Performance as it relates to crew task loading. The contractor shall support the performance of analyses leading to the determination of task partitioning and its effects on all of the HSI domains. The contractor shall assist in the identification of functional requirements of operating systems necessary for the efficient and effective execution of the mission. The contractor shall make recommendations for any required trade-off analyses between existing technologies and new technology insertion as it relates to HSI.

3.2.6 Top Down Functional Analysis

The contractor shall support the Department in identifying the minimum quantitative and qualitative manpower requirements essential to operation, maintenance and support of the platform under given conditions of readiness. The contractor shall support the development of an HSI Top-Down Functional Analysis for given platforms in conjunction with other IPTs to support the total manpower assessment and provide analysis for HSI support and requirements definition and decomposition. The contractor shall ensure that human factors, training factors and other HSI domains are considered in the design at the earliest possible stages while keeping shipboard workload reduction in focus.

3.2.7 HSI Platform Coordination

The contractor shall provide support to AIR-4.6 in their HSI leadership role over the seven disciplines that comprise HSI. The contractor shall support the establishment of an HSI Working Group to ensure the Program Manager is provided HSI representation and accountability.

3.3 Platform Systems/Subsystems Human Systems Performance Analysis

The contractor shall perform engineering analyses pertaining to systems and system controls/automation considered for inclusion in various platforms. These analyses will provide the Human Systems Department with prediction data relative to anticipated platform performance with the system and system controls, as well as provide a definition of required new or upgraded system functions.

3.3.1 General Technical Support

The contractor shall support Human Systems Department hosted meetings and reviews, to include Design Reviews, Technical Interchange Meetings, Human Systems Integration and Working Group meetings. The contractor shall prepare draft agendas, meeting minutes and trip reports. The contractor shall produce presentation materials and prepare and present materials on subjects pertaining to HSI and other aircraft systems.

3.3.2 Documentation

The contractor shall provide support in the review of technical documentation in support of major aircraft programs and other Human Systems Department related projects, to include Human Systems Integration Plans, Training Plans, Manpower Analysis, Human Engineering Program Plans, Human Engineering System Analysis Reports, Human Engineering Design Approach Documents for Operator (HEDAD-O), Maintainer (HEDAD-M) and dynamic Simulation Plans. The contractor shall conduct engineering analyses to support the development and/or review of specifications/requirements. Examples include:

- Joint Service Specification Guides
- System Specifications

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- Performance Specifications
- Human Systems Integration Interface Specifications
- User / Computer Software Interface Specifications
- Software Program Performance Requirements
- Test/Verification Specifications
- Production Specifications
- Procurement Systems Statement of Work Requirements

3.3.3 Reviews and Analysis

The contractor shall perform engineering reviews and analyses of Government furnished data pertaining to new or modified components to determine the optimal approach to incorporate changes, enhancements, planned product improvements and new capabilities into test bed and production platforms. This task will include combining independent components or subsystems on particular aircraft configurations. The scope of this task will include interfaces, modes of operations of equipment, mission computers, protocols, power, signal conditioning, sensors and controls and displays issues.

3.3.4 Technologies Insertion

The contractor shall assess the application of human systems aspects of technology inserts into systems and subsystems for the Navy airborne platforms concerning available technology, technology maturity, technical cost and schedule risk and platform applicability. The assessment shall consider, at a minimum, the application of commercial off-the-shelf (COTS) technologies, degree of platform commonality, technology availability, maturity and stability, interfaces, protocols and support requirements for the current and proposed weapon system configuration.

3.3.5 Validation

The contractor shall prepare platform-specific recommendations and provide technical contributions to option papers that validate technology insertion objectives. Independent technology considerations and commonality efficiencies shall be included in the analyses.

3.3.6 Facility Coordination

The contractor shall assist in the research, analysis and definition of weapon systems/platform human systems requirements and design implementation for specific project support. The contractor shall also support the identification of AIR-4.6 laboratory and simulation facilities that may be tasked to accomplish experiments, studies and simulations to determine platform requirements and design implementations.

3.4 Human System Test & Evaluation

The contractor, when tasked, shall support the T&E process as it relates to the AIR-4.6 HSI domain responsibilities, including providing recommendations related to development and operational test support of human systems engineering functions. This support includes, but is not limited to, up front analyses, test conduct and reporting.

3.4.1 Development of Requirements

The contractor shall assist in the preparation of T&E requirements and analyses that identify test activities required to verify compliance with platform/training system/functional and performance

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requirements. As part of these analyses, the contractor shall support and provide recommendations towards the development of a T&E matrix that identifies system functional requirements and test activities that demonstrate satisfactory compliance.

3.4.2 Test & Evaluation Preparation

The contractor shall provide inputs and review Human Systems Department detailed test plans and procedures. The contractor shall research and prepare recommended resources and equipment/material lists for items needed during testing.

3.4.3 Test Set-up

The contractor shall design, develop, fabricate, integrate and/or modify, maintain and calibrate off-the-shelf or specialized state-of-the-art simulation and modeling systems, test equipment or system components and other interfaces necessary to conduct testing and/or simulations prescribed in approved test plans.

3.4.4 Test & Evaluation Execution

The contractor shall operate required test equipment and participate in test pre-briefs and de-briefs, as well as collect, reduce and analyze both ground, flight and simulation test data, providing statistical analyses in accordance with approved test plans.

3.4.5 Evaluation and Reports

The contractor shall assist Human Systems Department in the development and dissemination of T&E reports in accordance with published NAVAIR processes and documents.

3.5 Human Systems Laboratory/Facilities Support

The contractor shall provide support to the Human Systems Department laboratory facilities. The contractor shall provide engineering and program support including software/hardware development, configuration, technical and engineering coordination control, documentation librarian, computer networking accordance with existing directives and specifications. The contractor shall also perform analyses and integration of advanced technology simulation equipment and technologies in accordance with Human Systems Integration / Human Performance mission requirements. Specific support tasks are as follows:

3.5.1 Laboratory Methodologies/SOP

The contractor shall support the development of new laboratory methodologies and standard operating procedures for HSI requirements to meet test objectives.

3.5.2 Laboratory Operations

The contractor shall operate laboratory equipment, instrumentation, facilities and/or aircraft systems during simulation and laboratory/ground tests in accordance with approved test plans/aircraft operating and maintenance manuals.

3.5.3 Laboratory Training

The contractor shall conduct training and document compliance with established Certification Standards for Human Systems laboratories and test facilities.

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3.5.4 Ordnance Compliance

The contractor shall implement ordnance certification and operations including personnel trained to all operational AIR-4.6 Human Survivability facilities, laboratories and devices, in compliance with Navy and DoD regulations.

3.5.5 Human Systems Integration Survivability Practices / Procedures

The contractor shall support the Government with the maintenance, instrumentation and improvement of human survivability test devices. These items are required to be maintained for suitable use in the total Human Systems Integration testing at the NAVAIR facilities, as well as remote sites.

3.5.6 Laboratory Maintenance

The contractor shall maintain laboratory facilities, systems administration, specialized test equipment, cable harnesses, instrumentation connections, off-the-shelf- test equipment, peculiar test equipment and other interfaces (hardware, fiber optic, coaxial, etc.) integral to test article assessment.

3.5.7 Laboratory Documentation

The contractor shall support the preparation of draft reports and messages in accordance with existing directives and equipment and/or maintain records of other associated NAVAIR and DoD documentation.

3.5.8 Preventive Maintenance

The contractor shall provide labor and materials necessary to perform preventive maintenance services on pertinent equipment as required by Government safety requirements and to ensure continued operational readiness of the facilities. The contractor shall also provide labor and materials to perform the timely repair of pertinent equipment including mechanical, electronic, controllers and analytic devices when failure occurs.

3.5.9 Laboratory Equipment Analysis

The contractor shall perform failure analyses and failure-modes-and-effects analyses of pertinent equipment. For each facility, the contractor shall develop a list of unreliable system components which are essential for facilities operation.

3.5.10 Risk Hazard Analysis

The contractor shall perform System Risk Hazard Analyses to determine how system operation and failure modes can affect the safety of the system, subsystems and operational personnel.

3.5.11 Instrumentation

The contractor shall provide instrumentation engineering, technician support and materials in order to configure the associated facility data acquisition systems.

3.5.12 Laboratory / Equipment Modifications

The contractor shall provide services and materials necessary to create or modify equipment and

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fixtures to enhance facility capabilities.

3.5.13 Personnel Certification

The contractor shall provide personnel certified in the operation of facilities and ordnance operations, in accordance with approved program plans and Government directives.

3.5.14 Test/Study Support

The contractor shall provide support, for the conduct of test programs and studies being conducted on the facilities, including preparation and review of test plans, data acquisition and data analysis.

3.5.15 Medical Support

The contractor shall assist Government-qualified medical personnel in performing pre-test health screening of human subjects, medical monitoring of human subjects during tests, post-test examinations and follow-up.

3.5.16 Laboratory Design Support

The contractor shall provide recommendations for facility development and improvement based on maintenance analysis, the needs of scheduled programs and the objectives of marketing plans. The contractor shall provide support for the design of any upgrades or improvements that the Government considers desirable or necessary.

3.5.17 Software Development

The contractor shall design, develop and support software solutions for both laboratory and operational applications. This might include flight simulation, advanced visualization systems, training systems and situational awareness solutions.

3.6 HSI Research and Development (R&D) Systems Support

The contractor shall provide a wide range of R&D activities in areas related to Human Systems Integration with a special emphasis on training, human learning and performance. Areas of research may include, but are not limited to:

- Human Performance Requirements Development
- Tactical Decision-Making Processes
- Individual and Team Training Methodologies
- Individual and Team Performance Assessment
- Training Effectiveness
- Aviation Team Training Processes

3.6.1 Research

The contractor shall provide direct research support, based in behavioral and cognitive sciences, oriented toward developing new or improved interfaces and methodologies for cost effective applications in military environments.

3.6.2 Technology Transition

The contractor shall support the HSI R&D efforts for all Naval warfare areas and platforms,

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contribute to the expansion of the technology base and provide transitions of results to the fleet.

3.7 Human Systems Design, Development and In-service Support

The contractor shall provide HSI analytical support to quantify operational needs and requirements. This analysis shall permit system and component definition in measurable terms for inclusion in specifications, drawings, procurement-packages and test plans.

3.7.1 Flight Certification

The contractor shall provide support to the development and application of the NAVAIR Flight Certification Process.

3.7.2 Needs/Requirements Analysis

The contractor shall provide analytical support to establish if the Fleet HSI domain level needs and requirements can be satisfied by the candidate system and if not, support the development of candidate solutions.

3.7.3 Prototype Design

The contractor shall provide Human Systems domain level design support and provide recommendations towards the determination of the installation and modification method and/or requirements for equipment into new or existing aircraft platforms. The design shall provide all requirements peculiar to the affected aircraft platform.

3.7.4 Article Configuration Management

The contractor shall provide technical support for the preparation, revision, proofing and issuance of DoD drawings which fully determine the optimum arrangement and configuration of the physical elements and components to satisfy the form, fit and functional requirements. Drawing requirements shall be identified in accordance with MIL-T-31000, DoD-STD-1000 and DoD-STD-100.

3.7.5 Technical Documentation and Drawing Repository

The contractor shall provide technical services support for technical documentation and drawing depository system maintenance in accordance with the contract. The contractor shall maintain technical documentation, drawings and a film media depository system for recording and maintaining all pertinent program documentation for the various Human Systems Department programs. The technical documentation and drawings repository system requires the collecting, categorizing, logging and filing of all data. Additionally, for in service equipment, the contractor shall maintain a working knowledge of the Naval Logistics Library/2002Vb (NLL), Information Handling Service Engineering Resources Center (IHSERC), Message Dissemination Subsystem (MDS) and Technical Documentation Library database (TDL) and update and submit the Technical Procurement Data List (TPDL).

3.7.6 Data Tracking

The contractor shall provide technical support for data tracking systems relevant to Human Systems research, development, test and evaluation, acquisition and anticipated service life. Tasks shall include, but not be limited to, maintaining a closed-loop tracking system which ensures that all action items are logged, distributed and tracked through complete resolution. The tracking system shall

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enclose Fleet correspondence on all in-service equipment.

3.7.7 Failure Analysis

The contractor shall support the review of all available failure data to determine the nature and extent of design and/or maintenance deficiencies and determine the desirability and/or necessity for design and/or procedural corrective action. This includes assessment of user/producer failure defect and deficiency information and quality trends to support the resolution of existing and potential quality control and equipment problems.

3.7.8 Engineering Investigation

The contractor shall support NAVAIR with respect to engineering investigations of aircraft mishap related equipment for the purpose of identifying injury and recommending hardware and procedural changes to enhance mission effectiveness and human performance.

3.7.9 Investigation of Operational Compliance

The contractor shall support NAVAIR in the investigation and HSI domain level analysis of aircraft mishap related data.

3.7.10 In-Service Equipment Modification

The contractor shall support design and configuration concepts to meet or exceed the requirements of the equipment as it relates to the HSI AIR-4.6 engineering domains. This support includes the systems and basic design engineering review of changes in configuration as proposed in Class I and II Engineering Change Proposals (ECPs), Requests for Deviation or Waiver (RFDs/RFWs), Beneficial Suggestions (BENESUGGs) and Rapid Action Minor Engineering Changes (RAMECs) for assigned development, production and programs.

3.7.11 Design/Configuration Change Support

Of prime importance is the ability of the proposed design/configuration change to effect an improvement in operations capability and still remain within defined key performance parameters. In cases where the development concept or proposed change causes failure of the item to meet established requirements in operational performance or mission capability, the contractor shall develop, provide recommendations to revise, or assist in generating technical input for a proposed configuration or concept change(s) to ensure compliance with existing requirements.

3.7.12 Deficiency Reporting Evaluation and Response

The contractor shall assess service deficiencies and recommend corrective action(s) to implement solutions related to maintenance engineering, procedures and practices. The contractor shall support liaison with fleet activities concerning equipment performance and provide engineering consulting services in support of fleet operating activities pertaining to introduction, installation and support of systems/equipment.

3.7.13 Simulation and Analysis

The contractor shall provide engineering support to Human Systems in the areas of simulation and analysis. The contractor shall support the development of simulations, use analytical models and develop new capabilities and software to generate simulations in support of evaluations relevant to

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HSI.

3.8 Human Systems Integration Project Management

The contractor shall provide and lead a fully integrated contractor team representing the full range of Human Systems Integration domains represented in the Human Systems Department. This team shall provide comprehensive engineering and management support to the entire Human Systems Department and the Human Systems product line throughout the full life-cycle, including Concept Refinement, Technology Development, System Development and Demonstration, Production and Deployment and Operations and in-service engineering support. The contractor shall provide quality and cost-wise engineering, technical and management support as well as effectively monitor schedules, progression of programs and program status and provide solutions/corrective action plans to ameliorate any potential impacts of schedule delays and/or cost growth. HSI and administrative recommendations shall be made by the contractor to the Department by way of effective coordination and response to all requirements.

3.9 Contract Data Requirements

The Contract Data Requirements Lists (CDRLs) associated with this requirement are:

- Funds and Man-Hours Expenditure Report (CDRL A001)
- Status Report (CDRL A002)
- Operations Security (OPSEC) Plan (CDRL A003)
- Conference Report (CDRL A004)
- Presentation Material (CDRL A005)
- Technical Report – Study/Services (CDRL A006)
- Incurred Cost and Progress Reporting for Services (CDRL A007)

On a monthly basis, the contractor shall provide data in accordance with CDRLs A001 (Funds and Man-Hours Expenditure Report) and A002 (Status Report). The contractor shall also submit an Operations Security (OPSEC) Plan identifying critical program information (CPI), potential OPSEC threats and vulnerabilities and OPSEC risk analysis, measures and operations security responsibilities in accordance with CDRL A003 as discussed in PBWS paragraph 9.0. Other data deliverables shall be dependent on the tasking.

4.0 PLACE OF PERFORMANCE, WORK FACILITY & SCHEDULE

4.1 Place of Performance

Tasks shall be performed at the contractor's facility, at the authorized Government facilities at Patuxent River, MD and at the authorized travel/visit sites outside of Patuxent River, MD. Face to face meetings shall be required to necessitate a quick response and turnaround.

4.2 Work Facility

The Government will provide physical space, desks, chairs and telephone services for approximately 50 contractor employees to sit on-site in Government facilities. The Government will provide access to the Technical Library and to the duplicating equipment. These services shall be available to the contractor throughout the period of performance of the contract and shall be used exclusively for the purpose of satisfying the requirements of the contract.

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5.0 LABOR CATEGORIES & QUALIFICATIONS

The contractor shall provide personnel having professional and technical experience necessary to ensure accomplishment of the tasks specified in this performance-based work statement. The following list represents those labor categories identified by the Government as associated with the contract. Minimum Labor Qualifications for the labor categories are incorporated into the contract as Attachment 5.

Senior Engineer (**Key**)
(SECRET Clearance Eligible)

Engineer
(SECRET Clearance Eligible)

Junior Engineer
(SECRET Clearance Eligible)

Senior Training Specialist (**Key**)
(SECRET Clearance Eligible)

Training Specialist
(SECRET Clearance Eligible)

Senior Human Systems Specialist (**Key**)
(SECRET Clearance Eligible)

Human Systems Specialist
(SECRET Clearance Eligible)

Junior Human Systems Specialist
(SECRET Clearance Eligible)

Senior Computer Scientist (**Key**)
(SECRET Clearance Eligible)

Computer Scientist
(SECRET Clearance Eligible)

Junior Computer Scientist
(SECRET Clearance Eligible)

Senior Operational Specialist
(SECRET Clearance Eligible)

Operational Specialist
(SECRET Clearance Eligible)

Senior Engineering Specialist
(SECRET Clearance Eligible)

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Engineering Specialist
(SECRET Clearance Eligible)

Senior Engineering Technician
(SECRET Clearance Eligible)

Support Specialist
(SECRET Clearance Eligible)

Human Systems Engineering Aide
(SECRET Clearance Eligible)

Project Analyst
(SECRET Clearance Eligible)

Engineering Technician
(SECRET Clearance Eligible)

6.0 OTHER DIRECT COSTS (ODCs)

6.1 Travel

The contractor shall travel, as required, during the performance of this contract. The Government shall reimburse the contractor for allowable, allocable and reasonable travel costs, exclusive of fee, incurred by the contractor in performance of the contract in accordance with FAR Subpart 31.2 and with rules set forth for temporary duty travel in the Department of Defense Joint Travel Regulations, Volume II, for civilian personnel. Travel and subsistence are authorized for travel beyond a 50-mile radius of the contractor's office or regular work site whenever a task assignment requires work to be accomplished at a temporary alternate work site. Travel other than local travel must receive prior written authorization by the Contracting Officer's Representative (COR). The contractor is responsible for making all travel arrangements for its personnel. The costs associated with obtaining passports for contractor personnel shall not be billed as a direct charge to this contract. The cost for travel will be reimbursed in accordance with the ODC CLINs included in this contract.

Contractor required access to Government-owned facilities will be authorized with the proper clearances and visit requests. Travel to various worldwide locations to attend meetings, monitor testing, conduct necessary validation and verification exercises and develop technical findings may require passport and country clearances. The contractor shall provide all necessary information, as required, to support such clearances and visit requests.

Travel requirements are anticipated to be primarily within the continental United States (CONUS) but are not limited to CONUS. Based on the historical nature of travel associated with this effort, typical travel requirements are anticipated to be 20-25% of the time when tasking is associated with weapon systems acquisition.

6.2 Material

The contractor shall purchase material as required/applicable during the performance of this contract. Material estimates are based on a per annum not-to-exceed amount. Material shall be purchased in accordance with NAVAIR clause 5252.242-9515 (Restriction on the Direct Charging of

