

SECTION C – DESCRIPTION AND SPECIFICATIONS

C1 GOVERNMENT FURNISHED EQUIPMENT (GFE)

The Government will provide access to the Software Support Environment (SSE) GFE listed in Attachment 4 – Scheduled Government Furnished Property within 30 workdays after delivery order award. The GFE is located at the US Army Ordnance Center and School, 404 Aberdeen Avenue BLDG 18030, Fort Lee, VA 23801. The contractor shall be responsible for relocating the GFE to the contractor's facility for use during the performance of this effort and returning the GFE to the Fort Lee, VA facility after delivery order performance.

The approximate weight of the SSE is 1,200 Lbs. and the dimensions are identified on Attachment 5 – SSE Drawings 174406-F.

All GFE provided for this effort will remain the property of the Government and shall be under the contractor's control at all times. The Government retains the right to withdraw or reallocate these resources at any time, and without notice, during the performance of this contract.

C2 The spare parts identified under paragraph 3.2.9 System Technical Support are for incidental spare parts only.

C3 STATEMENT OF WORK

1. SCOPE

This Statement of Work (SOW) defines the effort required for designing, developing, integrating, testing, managing, documenting, and delivering the Stryker Phase IV Training System.

1.1 BACKGROUND

The Stryker Maintenance Training System (MTS) currently consist of two (2) twenty (20) student classrooms which utilize Diagnostic Troubleshooting Trainers (DTT's) and a series of Hands On Trainers (HOT) and Part Task Trainers (PTT). The training system provides maintenance training capability for the Army's 91S Military Occupational Specialty (MOS). This capability supports familiarization, institutional and unit training. The MTS provides training for maintenance personnel in system operation, symptom verification, troubleshooting, fault isolation, adjustment, servicing, and removal/replacement of Line Replaceable Units (LRUs). The training system provides an automatic capability to record, score, and store the performance of students on all tasks, as well as, evaluate the student's knowledge of the appropriate vehicle system's functioning theory. The training system provides real-time feedback and scoring capability, which displays and records all the information necessary to evaluate the student's performance and understanding of the training task. The general areas of scoring include as a minimum the management of switches and controls, response to

malfunctions, and actions required by the tasks identified in the Training Task List (TTL). The training system also provides real time display of errors generated by student(s) as they occur during real-time scenario execution.

Training is separated into two distinct categories: the Stryker automotive components and the Stryker weapon components. Currently the DTTs include weapons modules which support the Remote Weapon System (RWS), the Anti-Tank Guided Missile (ATGM) and Mortar Carrier (MC) variants. The use of a weapon Hands On Trainer (HOT) is only available for the Remote Weapon System (RWS). Training on the automotive system utilizes a Hull HOT, a Driveline, Suspension, Brake, and Engine PTTs.

The trainer operates in or supports various modes. The modes include Lesson Selection, Lecture, Demonstration, Training, and Diagnostics. The Lesson Selection and Diagnostics modes are operator selectable. The Lecture, Demonstration, and Training modes are a common mode of execution but differ in how the instructor makes use of each mode.

A separate Training Management System (TMS) maintains a library of lessons that can be selected for training. From the Instructor Operator Station (IOS), the instructor can select an appropriate lesson from that library to use for training. The TMS also provides the capability for the instructor to record, score, and store and retrieve the performance of students on all tasks.

1.2 NEW CAPABILITY

The intent of this effort is to seamlessly expand the capability of the current system by adding a DTT capability for the STRYKER Mobile Gun System (MGS). The existing system architecture, software design, functionality, user interface, and instructor capabilities must be maintained. The existing Instructor and Operator interface must be maintained. When fielded, the instructor must have the capability to select the lessons from any Training Task List, new or old, with the same type of graphical user interface that is used in the trainer today, but expanded to include the new DTT and HOT capabilities. The graphics for all new DTT lessons must be in a 3-D format. The remote Instructor/Operator capabilities must be migrated to a "Tablet" hardware solution.

The existing Software Support Environment (SSE) will be provided as Government Furnished Equipment (GFE), and must be utilized to generate the new capabilities. The SSE currently provides the hardware, software, and documentation resources for performing Post Deployment Software Support (PDSS) activities including identifying, documenting, and correcting system software faults, implementing system upgrades, generating application programs, managing databases, and providing configuration management of the training system(s) software baseline. The existing Stryker MTS documentation and Software Support Package (SSP) must be updated as part of this effort and at the end of the contract must provide the resources (i.e., source code, executable code, maintenance software, data base and scenario generation tools, documentation, installation hardware, software installation disk, etc.) for the purpose of maintaining computational systems in a fully operational condition.

The current Operating System (OS) parameters and user interfaces do not currently meet the Army Information Assurance requirements. Regardless, the entire system design when fielded (including the software, and hardware as necessary), must be hardened to meet Army Information Assurance requirements.

2. APPLICABLE DOCUMENTS

The following document is applicable to this SOW to the extent specified herein.

PRF-PT-00606	System Requirements Document for the Stryker Phase IV Training System
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2.1 Department of Defense Specifications

2.2 Department of Defense Standards.

MIL-STD-130N	Identification Marking of U.S. Military Property
MIL-STD-31000	Technical Data Packages
MIL-STD-40051-2A	Page-Based Technical Manuals
MIL-PRF-49506	Performance Specification, Logistics Management Information
MIL PRF 32216	Evaluation of Commercial Off The Shelf (COTS) Manuals

2.3 Availability of Department of Defense Standards

Copies are available on the WWW at URL: <http://assist.daps.dla.mil/quicksearch/>

2.4 Department of Defense Directives

DODD 8570.01	Information Assurance (IA) Training, Certification, and Workforce Management
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2.5 Availability of Department of Defense Directives

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

2.6 Department of Defense Instructions

DODI 5000.2	Operation of the Defense Acquisition System
DODI 8500.2	Information Assurance Implementation
DODI 8510.01	DOD Information Assurance Certification and Accreditation

Process (DIACAP)

2.7 Availability of Department of Instructions

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

2.8 Other Government Documents, Drawings, and Publications

DISR Department of Defense (DoD) Information Technology Standards
Registry

Copies are available on the WWW at URL <http://jtaonline.disa.mil/VJTA/index.jsp>

National Security Telecommunications and Information Systems Security
Policy (NSTISSP) No. 11, Subject: National Policy Governing the Acquisition of
Information Assurance (IA) and IA-Enabled Information Technology (IT) Products.

AR 380.5 Marking and Labeling

Copies are available on the WWW at URL http://www.apd.army.mil/pdf/r380_5.pdf

AR 25-2 Information Assurance

Copies are available on the WWW at URL http://www.apd.army.mil/pdf/r25_2.pdf

AR 25-2 BBP 08-CO-M-0001, Information Technology Contingency Plans and Testing.

DA PAM 25-1-2, Information Technology Contingency Planning, 16 November 2006

Copies are available on the WWW at URL http://www.apd.army.mil/pdf/p25_1_2.pdf

DIACAP Implementation Plan (DIP) for Stand-alone System for Mission Assurance
Category (MAC) III, Confidentially Level Sensitive. The Standalone DIP has 32 controls.

PEO STRI Basic Accreditation Manual (BAM), v6.0 dated 30 September 2011 -
Appendix D DIACAP Stand-alone System IA C&A Process

DA 09-EC-M-0010 IA Best Business Practice on Wireless Security Standards

2.9 Availability of Other Government Documents and Publications

Copies of the above documents are available at PEO STRI, ATTN: GCTT, 12350 Research
Parkway, Orlando, FL 32827-3275

2.10 Availability of Non-Government Standards and Other Publications

ANSI/EIA-748 Earned Value Management

Copies are available on the WWW at URL: <http://www.nssn.org/search.html>

3. REQUIREMENTS

3.1 Program Management

The Contractor shall provide the overall management and administrative effort necessary to ensure that the requirements of this contract are accomplished. The Contractor shall track program progress utilizing metrics. The Contractor shall plan, implement, and maintain a Life Cycle Cost (LCC) management process to minimize the system cost and use LCC to conduct trade studies, evaluate design and support alternatives, and select the resource support requirements. The Contractor shall define and monitor metrics and Technical Performance Measures (TPMs) to evaluate the performance of each critical technical and management process and conformance of the evolving products with contract requirements and objectives.

3.1.1 Integrated Master Plan (IMP)

The Contractor shall implement, manage to, update, and maintain the contract IMP. The Contractor shall develop the system in accordance with the IMP. The IMP shall be used throughout the contract as a management tool to assess progress and determine success in achieving program requirements. The Contractor shall report on work in progress in accordance with the IMP at each program review, at selected technical reviews and at Government discretion. The IMP shall depict the contract work breakdown structure.

3.1.2 Integrated Master Schedule (IMS)

The Contractor shall develop, implement, manage to, update, and maintain the contract IMS. All contract schedule information delivered or presented at program reviews shall originate from the IMS, shall be traceable to the IMP, and shall contain all critical events and exit criteria, accomplishments, predecessors and successors events, and their dependencies. The IMS shall address total program activities including activities performed by major subcontractors. The Contractor shall develop the logic resource network that accurately portrays the sequence and relationship of activities defining the total development and production program. These network activities shall be keyed to the Contract Work Breakdown Structure (CWBS). The network shall be implemented on a computer based program management control system which utilizes critical path method network analysis, accepts parametric data input, and can be utilized to determine a probabilistic estimate of the program schedules. The network activities time shall be updated to reflect accomplished activities and any changes in activity time. The Contractor shall conduct critical path analysis of the tasks and identify problem areas and corrective actions required to eliminate or reduce schedule impacts.

(DI-MGMT-81861) Program Management Report (IPMR)

3.1.3 Financial Management

The Contractor shall plan, budget, schedule, and control the resources allocated to meet the requirements of the contract. 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 subline item. The Contractor shall extend the Government-provided Program Work Breakdown Structure (PWBS) to lower levels in the Contractor's CWBS. It defines 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 are the Contractor's responsibility. The extended CWBS shall serve as the framework for contract planning, budgeting, 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 continually update an integrated database during contract performance with pertinent records and data that underlie and support the schedule data reported.

(DI-MGMT-81651) Contract Invoicing and Payment Report

3.1.3.1 Integrated Baseline Review

The Contractor shall participate with the Government in the assessment of program risk and the degree to which the following have been established:

- a. Technical scope of work is fully included and is consistent with authorizing documents.
- b. Project schedule key milestones are identified and supporting schedules reflect a logical flow to accomplish the work.
- c. Resources (budget, facilities, personnel, skills, etc.) are available and are adequate for the assigned tasks.
- d. Tasks are planned and can be measured objectively relative to the technical progress.
- e. Rationales underlying the review are reasonable.
- f. Management processes support successful execution of the project.

3.1.3.2 Contractor Manpower Reporting Application (CMRA)

The Contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services under this contract for the AMITS program via a secure data collection site. The Contractor is required to completely fill in all required data fields using the following web address: <http://www.ecmra.mil/>. Reporting inputs will be for labor executed during the period of performance during each Government Fiscal Year (FY) which runs October 1 through 30 September. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors can find User Guides, Frequently Asked Questions and may direct questions to the help desk at <http://www.ecmra.mil/>.

3.1.4 Configuration Management (CM)

The Contractor shall establish processes and tools to establish and maintain consistency between system requirements, system configuration information, and all relevant information about the system. The consistency established through the CM process shall ensure that the system

conforms to the requirements. The processes shall be identified and documented in sufficient detail to support the system life cycle. This shall ensure component interchangeability, accurate system information, and safety of system operation & maintenance. The Contractor shall define the performance, functional, and physical attributes in configuration documentation. As the configuration information becomes more detailed and definitive throughout the life cycle, The Contractor shall define configuration baselines. The Contractor shall archive the defined attributes in the baseline in an integrated database. Both the system and its information shall be verified for consistency. The Contractor shall identify and evaluate the impact of all proposed changes through the configuration change management process, including the verification that the system and all associated component information have been updated and continue to be consistent.

3.1.4.1 Configuration Management Planning and Management

The Contractor shall establish processes and tools to initiate and maintain consistency between system requirements, system configuration information, and all relevant information about the system. The configuration management process shall include changes made to the Information Assurance (IA) configuration and associated documentation. Failure to include IA considerations in the configuration management and engineering change control processes could adversely affect the program's ability to integrate and maintain IA in the functional design of the system. This will affect the system's ability to obtain IA accreditation. It may also increase the system's susceptibility to computer network attack from information operation activities. The Contractor shall:

- a. Plan implementation of the CM functions for the context and environment in which they are to be performed and manage in accordance with the planning.
- b. Determine the specific CM value-adding functions and levels of emphasis.
- c. Document how the Contractor's organization will implement CM functions to provide the consistency between the system's attributes, system definition information and the system's configuration information, throughout the applicable phases of the life cycle.
- d. Identify resources required to implement the CM functions and ensure they are applied throughout the systems life cycle.
- e. Assess the effectiveness of CM plan implementation and performance of the configuration management functions with performance measurements.
- f. Flow down responsibility for CM performance to subcontractors.
- g. Plan and identify information status levels for managing system configuration information and ensure that transmitted data products are usable.

3.1.4.2 Configuration Identification

The Contractor shall identify unique identifiers for selected system attributes, system information and components to be used as the basis for configuration management. The Contractor shall:

- a. Define the functional, performance, interface and physical attributes of the system and components.
- b. Determine the systems composition using its product definition information.
- c. Assign unique identifiers to configuration items so that they can be distinguished from other items, one configuration of the system can be distinguished from another, the source of a component can be determined, and the correct system definition information can be retrieved.
- d. Assign unique unit identifiers to individual components of the system.
- e. Update component identifiers when a system is modified reflecting the new configuration without altering the system identifier and model identifier.
- f. Uniquely identify information so that it can be correctly associated with the applicable configuration of the system.
- g. Apply information identification rules to maintain representation and version relationships.
- h. Maintain relationships between information, information requirements, and the related system configuration to ensure accurate information retrieval.
- i. Establish complete, valid and suitable for use agreed-to descriptions of the attributes of the system and components at a point in time and provide a known configuration to which changes can be addressed.
- j. Identify interfaces and establish mutually agreed-to control of common attributes for system or component boundaries that interface to the system or within the system.

3.1.4.3 Configuration Change Management

The Contractor shall establish a systematic and measurable configuration change management process for managing product configuration changes and variances. Once the system requirements have been approved by an authorized management activity, The Contractor shall effect changes to the baseline requirements only after the proposed change has been approved using the change process. The Contractor shall:

- a. Document and uniquely identify each change.
- b. Classify requested changes to aid in determining the levels of review and approval.
- c. Clearly and completely document request for change.
- d. Consider the technical, support, schedule, and cost impacts of a requested change before making a judgment as to whether the change should be approved for implementation and incorporation in the system and its documentation.
- e. Determine potential effects of a change and coordinate impacts with the impacted areas of responsibility.
- f. Determine the affectivity for each change and identify which units of the system are to be changed, the point of production break-in, and which units will be included in a retrofit.
- g. Verify implementation of a change to ensure consistency between the system, its documentation, and its support elements.

- h. Document variances, when authorized by the appropriate level of authority.

3.1.4.4 Configuration Status Accounting

The Contractor shall provide access to accurate, timely information about the system and its documentation through an Integrated Database Environment (IDE). The Contractor shall correlate, store, maintain, and provide readily available views and information of system configuration information including pending, current and historical data. The Contractor shall:

- a. Systematically record, safeguard, validate, and disseminate system information.
- b. Establish methods, processes and procedures to provide controlled access to system information.
- c. Capture configuration information as it evolves.

3.1.4.5 Configuration Verification and Audit

The Contractor shall verify and audit the system configuration information to ensure that requirement attributes are met and accurately documented. The Contractor shall;

- a. Verify the system attributes through a systematic comparison with the associated results of system tests, analyses, inspections, demonstrations or simulation models.
- b. Maintain surveillance over the configuration management process to ensure it is being followed and remains in compliance with requirements.

3.1.4.6 Contractor Internal Hardware Build-Up Physical Configuration Audit (PCA)

Concurrent with manufacture of piece parts and incoming inspection of procured parts, a 100% PCA shall be conducted by personnel approved by the Quality Assurance (QA) Manager to verify the as built configuration matches the design documentation prior to use of each part in production. During this process each product definition document will also be examined for proper format (compliance with ANSI Y14 series standards), completeness, currency of material references, accuracy of piece part identification, and adequacy of manufacturing instructions and any other information critical to acquire a like part, a record of each product attribute verified shall be maintained and available through the Integrated Digital Environment (IDE).

3.1.4.7 Government Sample PCA to verify Product Baseline

After completion of acceptance testing and any required design modifications, but prior to formal acceptance, the final product baseline shall be verified by the Government. This verification shall be accomplished by reviewing a representative number of drawings, associated technical manuals, logistics management information and manufacturing instructions. The review shall determine their accuracy in accordance with the final product configuration design.

3.1.4.8 Software Configuration Management

The Contractor shall establish and document a software configuration management process. The Contractor's software configuration management plan may be incorporated into the software development process plans or may be a separate configuration management plan.

3.1.4.9 Software Configuration Control Board

3.1.4.10 The Contractor shall establish and maintain a software configuration control board or equivalent responsible for configuration control of its software configuration items and related software products. The software configuration control board will be responsible for Commercial Off The Shelf (COTS) management including product and version identification. The Contractor shall obtain approval of the system Integrated Product Team (IPT) prior to committing to use any version of any COTS product. The Contractor shall ensure that all COTS products included in the system deliverable configuration are commercially supported.

3.1.4.11 Software Item Database

The Contractor shall capture software design data in an integrated database and shall provide a shared data source for the exchange and reuse of technical information. The Contractor shall develop software item data to populate the software database. The Contractor shall provide the capability to establish, modify, make available, and maintain the integrity of the database. The Contractor shall maintain the system software item database until transition.

3.1.4.12 Software Configuration Management Database

The Contractor shall establish and maintain a software configuration management database in accordance with the software development process plan. A schema shall be developed for identification of software items and their versions. The Contractor shall perform the following: identification and recording of change request, analysis and evaluation of the changes; approval or disapproval of the request, and implementation, verification, and release of the modified software item. The database shall contain an audit trail whereby each modification, the reason for the modification, and authorization of the modification can be traced.

3.1.4.13 System Engineering Interface.

The process shall allow simultaneous access to the common product data model coupled with the ability to coordinate and update immediate changes to the product definition data. The configuration management system must handle all levels of product and process integration to build and support the product as well as manage the sequence of significant events. The information architecture must permit capture of change information and notify affected team members.

3.1.4.14 Engineering Change Proposals (ECP) and Contract Change Proposals (CCP)

The Contractor shall document and the Integrated Product Team (IPT) shall review all changes to established baselines and all changes to the requirements (other than the functional baseline), including changes to the statement of work, contract data requirements list (CDRL), the contract schedule, and the general provisions of the contract.

3.1.4.15 Engineering and Contract Change Proposal Review

In coordination with the Government, The Contractor shall hold a requirements review on all proposed changes prior to the submittal of the engineering or contract change proposal in order to clarify requirements, format and content. Depending upon the criticality of the proposed changes, this review may take the form of a teleconference, a video-teleconference, a formal meeting at PEO STRI, or a formal meeting at the Contractor's facility. All appropriate parties shall be in attendance in order to conduct a thorough, effective review. Minutes shall be a historical record to allay any miscommunications.

3.1.4.16 Deviations

The Contractor shall document the rationale and the potential impact of any deviation. The Contractor shall obtain approval before deviating from any Government controlled baseline.

3.1.5 Technical Performance Measures (TPM)

The Contractor shall select technical performance parameters that reflect key indicators of program success. TPM parameter inter-relationships shall be depicted through construction of tiered dependency trees similar to the specification tree. Each parameter shall be correlated with a specific CWBS element. Parameters to be reported at each management review shall be selected from the total parameters tracked and shall be identified in the integrated master plan. As the design and development activity progresses, the achievement to data shall be tracked continually for each of the selected technical performance parameters. If the data falls outside the tolerance band a new profile or current estimate shall be developed immediately. The current estimate shall be determined from the "achievement to date" and the remaining time budgeted. An analysis shall be accomplished on the variation to determine the causes and to assess the impact on higher level parameters and on interface requirements.

3.1.6 Risk Management

The Contractor shall prepare, implement, and maintain a risk management process that includes identification, analysis, mitigation planning, mitigation plan implementation, and tracking. The Contractor shall develop and implement IA risk management, which will include security safeguards. These safeguards shall include but are not limited to local policy and guidance, identifies threats, problems and requirements, and adequately plan for the required resources. The Contractor's risk management process shall measure future uncertainties in achieving program goals within schedule and performance constraints. The IA risk shall be addressed across the risk management process and can be addressed in multiple areas.

3.1.7 Management Reviews

3.1.7.1 Start of Work Meeting

A start to work meeting shall be held at the Contractor's facility within 30 days after contract award. The start to work meeting shall be limited to the Contractor's key team members identified in the proposal, and will be a two-day session with emphasis on top level management of the program, agreement on metrics that will be used as management indicators during the program and partnering approach to implement.

3.1.7.2 Program Management Reviews

The Contractor shall conduct formal program management reviews on an average of one every four months in accordance with the integrated master plan. The location of the reviews shall be mutually agreed upon. The program management review shall provide a program overview and a detailed discussion of pre-selected topics. Status and information at the review shall reflect currency since the previous review.

3.1.7.3 IA Control Review/DIACAP Implementation Plan Review (DIPR).

The Contractor shall support an IA Control Review / DIACAP Implementation Plan Review (DIPR) held at least 10 working days prior to the Critical Design Review (CDR). The IA Control Review/DIPR shall address at a minimum:

- Update on DIACAP Implementation Plan (DIP)
- Update Preliminary Data Flow and Accreditation Boundary Diagram
- Update on the hardware/software lists and procurement action
- Update on contractor IA training as applicable and the use of IA Scanning tools
- Update on design and system integration schedule

3.1.7.4 Technical Interchange Meetings (TIMs)

The Contractor shall conduct and participate in technical interchange meetings to be held at both contractor and Government facilities. The meetings shall be co-chaired by a Government and contractor representative. The Contractor shall be prepared to explain the reasoning, assumption, and methodologies in arriving at particular conclusions, recommendations, or alternatives in the accomplishment of the tasks required by the contract. The Contractor shall prepare drawings and other data, as required, to aid in the presentations. The Contractor shall have all the required personnel and resources present. The Contractor shall make available facilities for Government only meetings. These Government meeting facilities shall include direct internet access for Government personnel laptops. The Contractor shall prepare the meeting agendas and document the meeting results. Except where noted herein, meetings shall be considered fulfilled when all of the following items are completed:

- A formal review meeting has been conducted.

- All action items requiring contractor response have been documented and posted.

3.1.8 Visitor Support

The Contractor shall host very important person visits and arrange for and provide demonstrations of system performance, program progress, and other system characteristics when notified by the procurement contractor officer.

3.1.9 Integrated Digital Environment (IDE)

The Contractor shall establish, maintain and manage an interactive, online, protected, and access controlled IDE, such that the Government and contractor team members can contribute their ideas, comments and suggestions, exchange program information and collaborate in a distributed environment. The Contractor shall include software applications and data base services for the generation, integration, storage, indexing, distribution, simultaneous on-line sharing of digital data among all Government and contractor team members, and delivery of technical data products with associated contractors, subcontractors and Government organizations. The Contractor shall maximize the use and capabilities of existing open source software products as the Contractor defines the IDE components. Specifically, integrated automated databases are required which shall allow technical data sharing at the data base level, rather than at the physical file level, with multiple formats of the same data from a common, configuration-controlled source available to different users. The IDE shall provide program personnel complete visibility into the system at every stage of development, regardless of data location. The Contractor shall ensure that everyone associated with this project has access to information they need to properly perform their duties.

3.1.9.1 The IDE Development and Installation

The Contractor shall provide a IDE with the following capabilities:

- a. Ability to capture information as it's created.
- b. Ability to manage product and program management structures.
- c. Real-time information sharing and work flow implementation.
- d. Team access to the most current information.
- e. Ability to assign rules regarding information access.
- f. Common information architecture that is distributed geographically.
- g. Electronic notification of changes to program and product information.
- h. Ability to present a single interface to the entirety of the Contractor's and the Contractor's subcontractors' data creation activities.
- i. Ability to recover from unexpected loss of program data due to environmental disasters, operator error, equipment failure, and hostile intruders.

- j. Ability to provide access to program data using standards defined in section 2.3 of the Joint Technical Architecture-Army as defined in the DISR, or through an open systems approach.

3.1.9.2 IDE Administration

The Contractor shall provide a World Wide Web based electronic data management system to facilitate the electronic data interchange of non-classified data. Except where noted specifically on the DD Form 1423, The Contractor shall provide this service for items on the data accession list, management data, and technical data generated and maintained in digital format. The Contractor shall provide the Government and contractor team members with the capabilities for on-line review, and comment of deliverable data. The Contractor shall include these comments, approvals and acceptances in the database as well as mechanisms to establish appropriate audit trails to identify the sources of these additions and to maintain configuration control. The Contractor shall develop and implement procedures for establishing and administering user accounts for the IDE.

3.1.9.3 IDE Data Management

The Contractor shall establish, implement, and maintain a data management capability within the IDE for the integration, storage, access, management, delivery, and exchange of data furnished by the Government or generated by any contract work effort including subcontractors and vendors. The system shall be capable of maintaining a record and reporting the status of data accession and data deliveries for each unit delivered. The Contractor shall generate and maintain a master listing of all documents maintained in the training site libraries.

3.2 Systems Engineering

The Contractor shall translate the basic operational needs, requirements, objectives, interfaces and other design constraints into preliminary verifiable functional requirements and objectives and conduct cost-benefit trades to support refinement of the preliminary functional requirements. The Contractor shall complete the simulations, technology demonstrations, prototypes, parts characterization, or other risk reduction steps that provide the basis for engineering and manufacturing development and verify that the concept, technology, design approach or other results can meet the system requirements. The Contractor shall complete the system design (balanced with respect to performance, cost, schedule, and risk) and verify that it meets the systems requirements. The Contractor shall baseline balanced life-cycle verification, manufacturing, support, deployment, training, operating, disposal data, plans and update based on the results of both compliance verification under the contract and Government testing. As part of the system design and component selection process, IA shall be considered as a requirement for all systems used to enter, process, store, display, or transmit information.

3.2.1 System Design

The Contractor shall use PRF-PT-00606 as the basis for development of all lower level specifications. The Contractor shall perform trade off studies and then finalize the system design. The design concept shall include incorporate an open systems approach which shall be based on an engineering and business strategy to choose specifications and standards adopted by industry standards bodies or de facto standards (set by the market place) for selected system interfaces, products, practices and tools. Selected designs and specifications shall be based on performance, cost, IA, industry acceptance, long term availability and supportability, and upgrade potential.

3.2.2 Hardware Engineering

The Contractor shall integrate and assemble the system hardware that satisfies the performance and IA requirements stated in PRF-PT-00606. The Contractor shall conduct market surveillance and market investigations in order to maximize the use of commercial and non-developmental items. The Contractor shall apply the systems engineering process during each level of system development (system, subsystem, and component) to add value (additional detail) to the products defined in the prior application of the process. Through each of the following design stages, information generated shall be documented in an integrated database.

3.2.2.1 System Definition Stage

The Contractor shall establish the definition of the system with a focus on system products required to satisfy operational requirements. The Contractor shall complete the system, product, and subsystem interface requirements and verification definition, system and product requirements and verification definition, and preliminary subsystem requirement and verification definition; establish a system baseline; and complete technical reviews. The documentation generated during system definition shall be used to guide subsystem development. A systems definition review shall be completed at the completion of the systems definition stage for the purpose of determining whether the system definition is sufficiently mature to progress to subsystem definition. The system definition shall be reviewed to ensure that:

- a. The design is sufficiently mature to meet systems engineering criteria.
- b. System functional requirements and system non-functional requirements (e.g., performance, design goals (e.g., modular open system approach (MOSA)) are identified.
- c. System-level risks have been adequately addressed to justify continued development.
- d. Trade-study data are adequate to substantiate that system requirements are achievable.
- e. Interface requirements between human and products or subsystems have been identified, including performance, workloads, design constraints, and usability.
- f. Selected Information Assurance products that are NIAP-validated or on the DoD Unified Capability (UC) Approved Products List (APL) (<https://aplits.disa.mil/processAPList.do>).
- g. Decisions made in arriving at the system definition configuration are well supported by analysis, test, and other technical data.

3.2.2.2 Preliminary Design Stage

The Contractor shall initiate subsystem design and create subsystem-level definition and design-to baselines to guide component development. The Contractor shall ensure that the design considerations include systems functional requirements, systems non-functional requirements (e.g., performance, design goals (e.g., modular open system approach (MOSA)), and Human System Interfaces). The Contractor shall ensure that functional design considerations integrate IA functional requirements and that these requirements are included throughout the development process. The Contractor shall decompose identified subsystem functions into lower-level functions and allocate functional and performance requirements to component-level functional and physical architectures. Each preliminary subsystem requirements and verification definition and preliminary design-to baseline shall be evolved into a subsystem requirement and verification definition and design-to baseline. Preliminary component requirements and verification definition and build-to baselines shall be defined for the components and the subsystem being developed. Final subsystem definition shall include identification of recommended components and interfaces; resolution of subsystem-level risks; assessment of component risks; and design for quality factors to include producibility, verifiability, usability, IA, supportability, trainability and disposability for each subsystem. Subsystem reviews shall be completed for each subsystem at the completion of its preliminary design stage. The results of the evaluation shall be documented. The purpose of each review is to assure that:

- a. The subsystem definition is sufficiently mature to meet systems engineering criteria.
- b. The subsystem functional requirements and non-functional requirements (e.g., performance, design goals (e.g., modular open system approach (MOSA))) are identified in the subsystem design and are traceable to the system functional and non-functional requirements.
- c. Component allocations and preliminary component specifications are reasonable and provide a sound subsystem concept.
- d. Software architecture is described using three views: 1) software module view; 2) software runtime view, and 3) software deployment view.
- e. Subsystem risks have been assessed and mitigated to a level appropriate to continue development.
- f. Trade-study data are adequate to substantiate that subsystem requirements are achievable.
- g. Human system interfaces are identified and described in the subsystem design and are traceable to design requirements.
- h. Decisions made in arriving at the subsystem configuration definition are well supported by analysis and technical data.
- i. Security engineering processes (e.g., encrypt unclassified data for transmission to and from wireless device) are integrated into the design to achieve an integrated secure solution.

3.2.2.3 Detailed Design Stage

The Contractor shall complete subsystem design down to the lowest component level, and create a component requirements and verification definition and build-to component baseline for each component. Final component definition shall include identification of recommended parts and interfaces; resolution of component-level risks and for each component, down to the lowest sub-component, the design for quality factors to include producibility, verifiability, usability, IA, supportability, trainability and disposability. Component reviews shall be completed for each component at the completion of the detailed design stage. The Contractor shall integrate security engineering processes into the design to achieve an integrated secure solution. The results of the evaluation shall be documented. The purpose of this review shall be to ensure that:

- a. Each detailed component definition is sufficiently mature to meet measure of effectiveness and measure of performance criteria.
- b. Component specifications are reasonable and provide a sound component concept.
- c. Component and related life cycle process risks have been assessed and mitigated to a level appropriate to support the fabrication, assembly, integration and test phases.
- d. Trade-study data are adequate to substantiate that detailed component requirements are achievable.
- e. Software architecture is described using three views: 1) software module view; 2) software runtime view, and 3) software deployment view.
- f. Human system interfaces are identified and described in the detailed design and are traceable to design requirements.
- g. The detailed software design (to include COTS/GOTS product name and version number) is described in terms of the satisfaction of functional and non-functional systems requirements.
- h. Decisions made in arriving at the detailed component definition configuration are well supported by analysis and technical data.
- i. Security engineering processes are integrated into the design to achieve an integrated secure solution.

3.2.2.4 Fabrication, Assembly, Integration and Test Stage

The Contractor shall resolve product deficiencies when specifications for the system, product, subsystem, assembly, or component are not met, as determined by inspection, analysis, demonstration, or test. The Contractor shall verify that the products designed satisfy specifications. The Contractor shall integrate security engineering processes into the design to achieve an integrated secure solution. Functional configuration audits shall be completed to verify that products have achieved requirements; that they satisfy the characteristics as specified in specifications, interface specifications, and other baseline documentation; and that test plans and procedures were complied with. The results of the audit shall be documented.

3.2.3 Software Engineering

The Contractor shall develop the system software and firmware and shall follow the Contractor's organizational software development practices that are compliant with at least Level 3 of the Software Engineering Institute's Capability Maturity Model for Software (CMM). The Contractor shall provide sufficient evidence that the producing software development organizations are compliant with CMM Level 3 or higher. The design process shall incorporate features that promote assessment of open source software products, ease of operation, IA, ease of software maintenance, ease of future updates and modifications, data void work around, and also any smart designs that can justify a reduction in the amount of documentation. Computer programs and computer data system shall be fully integrated in accordance with the system specification. The Contractor shall conduct market surveillance and market investigations, in order to maximize the use of open source software, commercial software and non-developmental software. The Contractor shall maintain a software Controlled Development Environment that complies with the NIST SP 800-53 Revision 3. The Contractor shall employ well-defined security policy models, structured, disciplined, and rigorous hardware and software development techniques, and sound system/security engineering principles.

3.2.3.1 Software Requirements and Architecture Development and Review

The Contractor shall develop software requirements and architecture in accordance with the Contractor's software development process plan. All analysis and results shall be documented in an integrated database. The Contractor is encouraged to suggest revisions to Government requirements where such revisions would result in cost or schedule reduction or performance improvements. The Contractor shall define and record the operational concept for the system, and define and record the architectural design of the system (identifying the components of the system, their interfaces, and a concept of execution among them) and the traceability between the system components and system requirements. Based upon analysis of system requirements, system design, and other considerations, The Contractor shall define and record the software requirements to be met by each software item, the methods to be used to ensure that each requirement has been met, and the traceability between the software item requirements and system requirements. The Contractor shall evaluate the IA requirements to assess any impacts on developed software and provide potential solutions, if applicable. The Contractor shall use modeling and simulation as appropriate for architecture validation. In addition, The Contractor shall determine if existing open source software products are capable of meeting any operational capabilities, perform a detailed software reuse evaluation, and document the results of the analysis. The Contractor shall conduct architecture evaluations, including stakeholders external to the Contractor's organization, for each software build.

3.2.3.2 Software Design and Implementation

The Contractor shall design software, develop executable code, perform unit testing, and integrate software components (with each other and with hardware components) to meet system requirements. Software design includes not only design to requirements, but selection of existing software products including open source software to meet system requirements, and

iterating the requirements to allow use of existing products when indicated by cost as an independent variable (CAIV) or schedule as an independent variable (SAIV) trades. Products that perform information assurance functions are considered IA or IA-enabled IT products and shall be selected from the DoD Unified Capabilities (UC) Approved Product List (APL) and configured in accordance with DoD-approved security configuration guidelines. These include databases which must comply with the DISA database Security Technical Implementation Guide (STIG). The Contractor shall develop a Software Center Operation Manual (SCOM) to provide procedures for installing, operating, restart/recovery and for continuity of operations in the software support environment.

(DI-IPSC-81435A) Software Design Description (SDD)
(DI-IPSC-81441A) Software Product Specification (SPS)
(DI-IPSC-81442A) Software Version Description (SVD)
(DI-IPSC-81444A) Software Center Operation Manual (SCOM)

3.2.3.3 Software Development Test.

The Contractor shall establish and execute a software item qualification test program consisting of program or module and cycle or system levels of testing. For each software item, The Contractor shall determine if that item warrants a verification effort and the degree of organizational independence of that effort needed. If the item warrants an independent verification effort, a qualified organization responsible for conducting the verification shall be selected. The Contractor shall document the life cycle activities for each software item subject to verification, the required verification tasks for each life cycle activity, and related resources, responsibilities, and schedule. The Contractor shall establish test cases (in terms of inputs, expected results, and evaluation criteria) and establish traceability between the test case and the system requirements, detailed procedures for conducting the test, and test data for testing the software corresponding to each software item. The Contractor shall test the software corresponding to each software item. The testing shall be in accordance with the unit test cases and procedures. The Contractor shall analyze the results of item testing and shall record the test and analysis results. Prior to the start of final test, The Contractor shall upgrade the commercial off the shelf (COTS) products to the latest versions approved by the system software configuration control board. The Contractor shall conduct a software item test readiness review prior to initiating the formal qualification test.

3.2.3.4 Software Integrity Certification

The Contractor shall verify and certify that the system application software functions are designed in a properly secured operating system environment and is free of elements that might be detrimental to the secure operation of the resource operating system, as described in DODI 8500.2.

3.2.4 Hardware and Software Integration

The Contractor shall perform all activities to integrate and assemble the hardware and software to achieve a fully functional and accredit able system, with all support systems, that performs and operates in accordance with the system specification and contractor generated specifications. The Contractor shall verify the complete integration of the hardware and software of each hardware and software subsystem and the overall system through the utilization of formalized test procedures. A system level production approval review shall be completed to demonstrate that the total system has been verified to satisfy specification and baseline requirements for each system level, and to confirm readiness for production, distribution, operations, support, training, continuing improvement, and disposal. The review shall ensure that:

- a. Issues for the component, assemblies, subsystem, products and life cycle process and services are resolved.
- b. Test procedures for components, assemblies, and products were completed and were accurate.
- c. The system and products were confirmed ready for function and IA testing and accreditation.
- d. Test were conducted in accordance with established procedures.
- e. An audit trail from design reviews, held after detailed design, is established with changes substantiated, and all component, subsystem, and system products meet specification requirements.
- f. Risk-handling procedures are satisfactory for production.
- g. Evolutionary development requirements and plans have been refined.
- h. Planning is complete and procedures, resources, and other requisite people, products, and processes are available (or programmed to be available) to initiate production, distribution, operations, support, training, disposal, and evolutionary development (if any).

3.2.5 Information Assurance Hardware and Software Purchases

The Contractor shall purchase all Commercial Off-the-shelf desktop, notebook, computers and video teleconferencing equipment, by using Computer Hardware, Enterprise Software and Solutions (CHESS) website (<https://chess.army.mil>) in compliance with Army Policy Notice 09-44A; The Contractor shall use CHESS as the Primary Source for Procuring Commercial Information Technology (IT) Hardware and Software. The Army has mandated the Universal Gold Master (UGM) as the Windows-based standard operating system. UGM license can be obtained from CHESS or Softmart (<http://www.softmart.com>). If UGM cannot be used, (The Contractor shall provide written explanation as to why UGM cannot be used.) an IA approved operating system shall be configured in accordance with the latest DISA Security Technical Implementation Guides (STIG), written for that operating system.

For hardware and software products not available through CHESS or Softmart, the Contractor shall select the IA validated products from one of the links below.

1. Common Criteria Certified Products
<http://www.commoncriteriaportal.org/products.html>
2. The Common Criteria Evaluation and Validation Scheme - NIAP Validated Product List
<http://www.niap-ccevs.org/cc-scheme/vpl/>
3. Approved Products List Integrated Tracking System (APLITS) – CAC Card is required.
<https://aplits.disa.mil/processAPList.do>

*There will be no waiver issued by the Government for unapproved IA products.

3.2.5.1 Information Assurance Artifacts

The Contractor shall produce all components of the DIACAP package necessary to deliver and operate a fully accredited system. The Contractor shall ensure that the security requirements and procedures are met in accordance with all required DoD and Army regulation per the Mission Assurance Category and Confidentiality levels agreed upon for the system.

(DI-MISC-80711A) Scientific and Technical Reports (IA Scan Report)

3.2.5.2 Information Assurance Process and Controls

The Contractor shall establish an IA process in accordance with the PEO STRI Basic Accreditation Manual (BAM). The Contractor shall develop and maintain a robust information assurance process to guide the system's design, document IA decisions, and identify and implement IA requirements. The Contractor shall assist the Government in the preparation of IA system documentation. The Contractor shall establish configuration management of the product baseline, implement operational system security control measures and support IA certification testing. The Contractor shall identify and use IA approved solutions to include IA approved operating systems, IA approved network devices, and IA approved software.

The Contractor shall implement IA controls and take action to address inherent system vulnerabilities and weaknesses. The Contractor shall ensure that all Port Protocol Service (PPS) not required in the operation of the system have been disabled or shut down and implement "deny all, permit by exception" (DAPE) enforcement for all PPS not being used by the system. The Contractor shall plan and implement IA e.g. using Security Technical Implementation Guides (STIG), and Government approved IA scanning tools, as required for Standalone, MAC III CL of Sensitive, along with the corresponding IA Controls as identified in the Standalone DIP.

3.2.6 Specialty Engineering

3.2.6.1 Security Engineering

The Contractor shall ensure that system security engineering processes integrated, aligned to, and adequately documented in the SEMP, and are executed with sufficient rigor to ensure required

IA Controls are implemented, which culminates in the lowest level of residual risk to system operation.

3.2.6.2 Reliability Engineering

The Contractor shall develop, implement and manage a system reliability process satisfying all reliability objectives and be completely integrated within the systems engineering process. The reliability process shall support economical achievement of overall program objectives and ensure sustained product integrity, personal safety, and logistics support information is derived from early reliability engineering analysis such that reliability engineering can be applied to influence the design effort. The process shall:

- a. Improve operational readiness and mission success of the system.
- b. Reduce system demand for maintenance manpower and logistic support.
- c. Provide essential management information.
- d. Hold down the reliability programs own impact on overall program cost and schedule.

Specific reliability design and verification criteria shall be established. Quantitative reliability requirements for the system, all major subsystems, and equipment shall be included in section 3 and section 4 of the system and item specifications. All reliability data and information used for logistics support analysis and engineering activities shall be based upon, and traceable to, the outputs of the reliability process. Reliability status shall be included as part of each program review. The Contractor shall conduct trade off studies to ensure quantitative issues such as stress levels, selection of parts, parts simplicity and redundancy are properly considered in the design trade off. The Contractor shall verify that reliability requirements are attained through analyses and test.

3.2.6.3 Maintainability Engineering

The Contractor shall develop, implement and maintain a system maintainability process satisfying all maintainability and related objectives and be completely integrated within the systems engineering process. The maintainability process shall form the basis of concurrent and subsequent life cycle planning. The maintainability effort shall measure complexity, accessibility, and testability to enhance servicing, preventive maintenance, corrective maintenance, and diagnostic capabilities. Specific design and verification criteria shall be established through performance specifications, of qualitative and quantitative factors to be expressed as measures of maintainability achievement, for system, segment, subsystem, and equipment levels.

3.2.6.4 Testability Engineering

The Contractor shall develop, implement, and maintain a system testability process satisfying all testability requirements which is traceable throughout the design process, is integrated with other system engineering requirements, and is disseminated to design personnel and subcontractors.

The Contractor shall establish controls for ensuring that each subcontractor's testability practices are consistent with overall system requirements. The Contractor shall define the means for demonstrating and validating that the diagnostic capability meets specified requirements, using maintainability demonstrations, test program verification, and other demonstration methods. The Contractor shall ensure that as test and evaluation of the system progresses, problems presented by new failure modes, test voids, ambiguities, and test tolerance difficulties are recognized and defined, and solutions are traceable to diagnostic hardware and software, and technical publication procedures are updated. The Contractor shall define an approach for the analysis of acceptance test and evaluation results to determine how built in test hardware and software, automatic test equipment hardware and software, and maintenance documentation performed as a means for satisfying production testing, and meeting testability requirements. The Contractor shall establish a testability program that accomplishes the following:

- a. Establishment of sufficient, achievable and affordable diagnostic concept and state-of-the-art testability built-in and off-line test performance requirements.
- b. Integration of testability into equipment and systems during the design process in coordination with the maintainability design process.
- c. Evaluation of the extent to which the design meets testability requirements.
- d. Inclusion of testability in the program review process.

3.2.6.5 Safety Engineering

The Contractor shall develop and implement tasks and activities to identify, evaluate, and eliminate or control hazards throughout the systems life cycle. The Contractor shall ensure the safety of the system's design, operation, transportation, maintenance, support, and disposal. The Contractor shall conduct safety analyses, hazard identification and classification and hazards tracking integral to the system design effort. A hazard risk index including hazard severity and hazard probability levels shall be developed for all hazards.

(DI-SAFT-80102B) Safety Assessment Report (SAR)

3.2.6.6 Producibility Engineering

The Contractor shall perform producibility engineering tasks during development to ensure a smooth, timely, and cost effective transition from development to production. These tasks shall include those actions required to try out and prove that the product definition data package and all manufacturing resources will perform as expected during production. Plan the overall manufacturing approach to assure a stabilized manufacturing process designed to: ensure high quality, minimize scrap, rework and repair; minimize lead and cycle times; and minimize use of strategic, critical, and hazardous materials. Participate in defining initial program cost, schedule and performance objectives. Refine the manufacturing planning tailored to the systems emerging definition to assure a stabilized manufacturing process is in place and ready for the transition from development to production. Assist in the translation of the most promising

design approach developed into a stable, producible, and cost effective system design. Maintain a stabilized efficient production program with emphasis on constant surveillance of the manufacturing process, identifying deficiencies and implementing corrective actions and improvements to assure a high quality end item.

3.2.6.7 Quality Engineering

The Contractor shall establish measurement points that will provide maximum visibility into new and prior processes to assure contractual requirements are being met. The Contractor shall select the proper methods to analyze these processes to continuously improve the system. Metrics shall be developed to assist management visibility into an adequate process control system. The Contractor shall establish and maintain a computerized discrepancy tracking system within the IDE with the ability to produce complete permanent records of all discrepancy or database listing. The Contractor shall establish a suspense system to ensure timeliness of analysis and corrective action for discrepancies and risk reduction items. All discrepancy correction shall be documented and entered in an integrated database.

3.2.6.8 Human Factors Engineering

The Contractor shall plan and implement a human factors engineering program to insure the satisfaction of system objectives and personnel safety of the operator and maintainer. Identify and eliminate program risk associated with critical human factors that have a significant impact on readiness, life cycle cost, schedule, performance, or safety. Ensure manpower, personnel, training, and logistics support information is derived from early human engineering analyses such that human factors engineering can be applied to influence the design effort. Verify through test and evaluation that trained personnel can safely and effectively operate, maintain and control the system in its intended operational environment.

3.2.6.9 Contaminate and Corrosion Control

The Contractor shall incorporate the latest state-of-the-art corrosion control technology as determined by logistic support analysis into the system design process, into the manufacturing process, in all levels of maintenance, in supply, and in the storage processes. The objective is to minimize corrosion by using design and manufacturing practices that address selection of materials; coatings and surface treatments; production processes; process specifications; system geometry; material limitations; environmental extremes; storage and ready conditions; preservation and packaging requirements; and repairs, overhaul, and spare parts requirements. Design concepts shall reflect realistic environments and resource availability as determined by logistic support analysis.

3.2.6.10 Standardization

The Contractor shall influence the system design to achieve maximum subsystem, component and repair parts commonality. The Contractor shall minimize equipment and parts proliferation through a standardization effort. The standardization effort shall include coordination with PEO

STRI Life Cycle Contractor Support (LCCS) contractors to maximize use of parts already in the inventory or to determine that the existing logistics support resources will benefit from the items chosen for the system.

3.2.6.11 Manpower and Personnel Integration (MANPRINT)

The Contractor shall conduct a program integrating the activities of the seven domains of MANPRINT to influence design decisions beginning at program conception and continuing through the development and fielding phases. The Contractor shall track domain issues as an integral part of scheduled program reviews. The Contractor shall arrange for MANPRINT assessments to be conducted prior to milestone decision reviews to ensure requirements have been properly applied and impacts of any issues identified. The seven MANPRINT domains include: 1) Manpower, 2) Personnel, 3) Training, 4) Human Factors, 5) System Safety, 6) Health Hazards, and 7) Survivability. The program shall be coordinated with the training, test, and supportability engineering activities to achieve an integrated effort without duplication. The Contractor shall conduct MANPRINT reviews as an integral part of scheduled program and design reviews.

3.2.6.12 Human System Integration (HSI)

The Contractor shall establish a plan for Human System Integration for any program that requires personnel (as operators, maintainers or supporters) to ensure a total system approach that will accommodate the cognitive, physical and sensory skills of the specified user population.

Systems utilizing personnel will implement a human centered design process outlined in a Human System Integration Plan (HSIP). The HSIP will describe how HSI will be applied to system development consistent with program specifications, requirements and user characteristics. The HSIP will describe the relative program elements and how the HSI effort will be managed, tested and verified.

3.2.7 Design Reviews

The Contractor shall conduct reviews, to include design reviews (system, subsystem, component, life cycle processes, test readiness, production approval) and audits (functional and physical configuration), for the purpose of assessing technical progress. The Contractor shall document the results of the review, including any resulting action items. Normally, a design review shall be conducted at the completion of each application of the system-engineering phase. Each review shall accomplish the following:

- a. Assess the system requirements and allocations to ensure that requirements are unambiguous, consistent, complete, feasible, verifiable, and traceable to top-level system requirements.
- b. Assess the design maturity based on technical development goals, IMS events and accomplishments, and empirical analysis and test data supporting progress to date.
- c. Present the risks associated with a continued development effort.

- d. Assess the life cycle processes and infrastructure necessary for product sustainment throughout the system life cycle.
- e. Identify resources required for continued development;
- f. Determine whether to proceed with the next application of the systems engineering process, to discontinue development, or to take corrective actions before proceeding with the development effort.

Component, subsystem, and system design reviews shall be conducted, for each level of development. Depending on the complexity of the system, lower-level reviews may be needed. Trade-off analysis and verification results should be available during design reviews in order to substantiate design decisions. Reviews may result in the need to iterate through the system engineering process to resolve identified deficiencies before progressing further into the development activity. Component, subsystem, and system functional- and design-configuration audits shall be performed to ensure that supporting documentation has been satisfactorily completed, that qualification tests for each specification requirement have been completed and all requirements satisfied or products comply with final drawings.

At design reviews, The Contractor shall present the systems security design, initial security risk assessment, security test approach, security training approach, and any other security relevant information.

3.2.7.1 Preliminary Design Review (PDR)

The Preliminary Design Review (PDR) is a multi-disciplined product and process assessment to ensure that the system can proceed into detailed design, and can meet the stated performance requirements within cost (program budget), schedule (program schedule), risk, and other system constraints. This review will assess the system preliminary design as captured in performance specifications for each configuration item in the system (allocated baseline), and ensures that each function in the functional baseline has been allocated to one or more system configuration items. PDR determines whether the hardware, human and software preliminary designs are complete, and the IPT is prepared to start detailed design and test procedure development.

3.2.7.2 Critical Design Review

The Critical Design Review (CDR) is a multi-disciplined product and process assessment to ensure that the system can proceed into system fabrication, demonstration, and test, and can meet the stated performance requirements within cost (program budget), schedule (program schedule), risk, and other system constraints. This review will assesses the system final design as captured in product specifications for each configuration item in the system (product baseline), and ensures that each product in the product baseline has been captured in the detailed design documentation. Product specifications for hardware must enable the fabrication of configuration items, and shall include product definition data. Product specifications for software (e.g. Software Design Documents) must enable coding of a Computer Software Configuration Item (CSCI). Configuration items may consist of hardware and software elements.

The subsystem detailed designs shall be evaluated to determine whether they correctly and completely implement all system requirements allocated to the subsystem, and whether the traceability of final subsystem requirements to final system detail design is maintained. At this review the IPT shall also review the results of peer reviews on requirements and final detail design documentation. A successful review is predicated on the IPT's determination that the subsystem requirements, subsystem detail design, results of peer reviews, and plans for testing form a satisfactory basis for proceeding into system fabrication, demonstration and test.

3.2.8 Product Definition Data (PDD)

During the systems engineering and design, and in accordance with MIL-STD-31000, The Contractor shall develop, produce, and maintain product definition data (PDD) that accurately depicts the final product. The PDD is the technical description of items adequate for supporting an acquisition strategy, production, engineering, IA and logistics support. The PDD shall disclose complete design, IA, logistics, manufacturing requirements, and the means of measuring compliance with the requirements. Piece part information (drawings, computer aided design files and meta data.) and associated lists shall provide the necessary design, engineering, IA, manufacturing, and quality assurance requirements information necessary to enable the procurement or manufacture of an interchangeable item that duplicates the physical, IA and performance characteristics of the original product, without additional design engineering effort or recourse to the original design activity. The Contractor shall produce and maintain documentation for all electrical assemblies and subassemblies in such a manner to ensure their functional integration without recourse to special test equipment (STE) or installation of the assemblies or subassemblies into a next higher assembly. Utilizing the established logistic repair procedures, The Contractor shall identify the higher level components and assemblies to be repetitively procured as spare components and assemblies or which may be procured independently. For each higher level component or assembly, The Contractor shall determine and document the functional requirements for the item, the environment in which it must operate, interface and interchangeability characteristics, and criteria for verifying Logistics Support criteria. The Contractor shall conduct engineering analyses to establish quantitative and qualitative supportability design guidelines. The Contractor shall conduct trade studies, evaluate design and support alternatives, and establish system supportability preliminary design configurations consistent with system readiness and availability and life cycle cost goals. The Contractor shall develop initial fielding plans for the system and verify that the maintenance actions and support structure are aligned with the maintenance concept. Reference to company unique standards is not allowed. The Contractor shall obtain document numbers from the Government for the PDD elements.

(DI-SESS-81000E) Product Drawings/Models and Associated List
Technical Data Package Option Selection Worksheet
(DI-SDMP-81493A) Program Unique Specification Documents

3.2.9 System Technical Support

The Contractor shall provide support for undefined mission support requirements that include training, logistics functions, hardware and software engineering functions, software licensing, support services, spare parts, travel, overtime, maintenance, supply, replacement of non-fair wear and tear parts, contractor activity and facility relocations, adding and deleting training devices, transportation of equipment, development, production, installation of software upgrades, re-host and modification kits as authorized by individual contract work directives. The Contractor shall document the description of each task, the man-hours spent, cost of materials and services and the results of each service(s).

(DI-MISC-80711A) Scientific and Technical Reports

3.3 Integrated Logistics Support (ILS) Program

The Contractor shall implement and maintain a comprehensive ILS program to provide technical support data, commercial documentation for COTS, spares, tools and test equipment, interim support items and technical documentation required to maintain and operate the training system. The logistics program shall enable a total maintenance and support capability for the training system. The ILS program's progress and status shall be reviewed and discussed at each scheduled IPT meeting and program review.

3.3.1 Maintenance Planning (MP)

The Contractor shall implement a MP program encompassing all aspects of logistics support including reliability, maintainability and safety to ensure that design features enhance cost effective logistics support over the life cycle of the trainers. The Contractor shall conduct MP to ensure that the trainer equipment and deliverable technical data/documentation supports the training system maintenance concept. The recommended support resources shall be sufficient to allow another contractor with comparable skills to assume operation and maintenance of the system and sustain the system availability requirement.

3.3.1.1 Maintenance Concept and Skills

The Contractor shall develop the trainer equipment and associated support products to support the trainer's maintenance concept. The Contractor shall develop trainer equipment and support products that support the following skill requirements:

- a. Field maintenance shall be preventive and corrective on-site maintenance of the training system utilizing on-site spare parts, technical documentation, diagnostics tools (such as Built-In Test (BIT)), standard tools and test equipment for removal and replacement of LRUs. The trainer technical publications, repair parts, tools and test equipment shall support all trainer equipment at the Field maintenance level.
- b. Sustainment maintenance shall be corrective maintenance performed on failed LRUs (such as circuit cards, power supplies, projectors, and computers) that have been functionally and physically removed from the trainer as part of Field maintenance. Sustainment maintenance task shall include analysis, troubleshooting, disassembly, repair

or replacement, reassembly, adjustment, calibration and testing using general purpose electronic test equipment to correct malfunctions and to test and verify proper operation. The trainer technical publication, repair parts, tools and test equipment shall support all trainer equipment at the Sustainment maintenance level.

3.3.2 Total Ownership Costs (TOC)

TOC shall be controlled by minimizing Logistics Cost Drivers (LCDs). LCDs are defined as:

- a. Any individual item whose unit purchase cost or spare price is greater than \$25,000
- b. Any individual item that has a projected removal/replacement rate greater than once per year
- c. Any item that has a projected annual maintenance cost for the total quantity per training device of greater than \$10,000
- d. Any item that requires special or extraordinary handling, disposal, usage rate, or maintenance procedures
- e. Any item that will be unsupported and out of production by the OEM within 36 months after the Ready For Training (RFT) date.

3.3.3 Obsolescence Management

3.3.3.1 Diminishing Manufacturing Sources & Material Shortages (DMSMS)

The Contractor shall establish an obsolescence management program. Obsolescence management includes an on-going review and identification of actual and potential obsolescence issues including, but not limited to, obsolescence of components, assemblies, sub-assemblies, piece parts and material through the systems life cycle. The obsolescence program shall consider both production and repair requirements. The Contractor shall be responsible for identification, resolution and implementation for all DMSMS/Obsolescence/Producibility issues associated with design, production, and delivery of hardware under this contract. The identification of DMSMS/Obsolescence/Producibility issues and the necessary correction thereof shall not be cause under this contract for any price increase or revision in the delivery schedule. The Contractor is encouraged to use the DoD DMSMS Center of Excellence Shared Data Warehouse for the purpose of exchanging obsolescence information across the DoD enterprise. The obsolescence program shall address the following items and be an agenda item at each scheduled requirements, design, and progress review (listing of all actual and potentially obsolete piece parts, noting both the configuration part number and associated vendor part number):

- a. Management of loss or impending loss of manufacturers or suppliers of parts and/or material required
- b. Approach for providing the Government with information regarding obsolescence and DMSMS issues
- c. Access and insight into the Contractor's DMSMS forecasting tool
- d. Planned resolution of current obsolescence and DMSMS issues
- e. Parts list screening and parts list monitoring
- f. Processing Government Industry Data Exchange Program (GIDEP) DMSMS alerts

- g. Processing Defense Logistics Agency (DLA) DMSMS alerts
- h. Approach for establishing obsolescence and DMSMS solutions and plan for conducting DMSMS predictions
- i. Mitigation plans for all known and forecasted DMSMS issues

3.3.3.2 DMSMS Predictive Tool

The Contractor shall load into a DMSMS Predictive Tool, the indentured Bill of Materials (BOMs) for all systems/equipment prior to the Preliminary Design Review (PDR), Critical Design Review (CDR), and Spares Selection Review. The Contractor shall document the Source Data For Forecasting DMSMS (i.e. the indentured BOM). The Contractor shall provide a Systems' Predictive Health Analysis of the systems, identifying the components with a predicted life expectancy (limited supportability) at each design and program review.

3.3.4 Supportability Analysis and Logistics Product Data

The Contractor shall conduct repair level analysis, develop diagnostic, preventative maintenance and repair procedures, conduct facilities analyses, refine hardware and software maintenance and support concepts and identify support resource requirements including initial spares and repair parts list, common and bulk item list, tools and test equipment list and spare parts list. The Contractor shall identify any/all post production support issues that may pose Life Cycle support risks. The Contractor shall develop operator and maintenance procedures, component failure data and forecast out-year maintenance support requirements and cost. The Contractor shall include the following in the analysis:

- a. Maintenance planning used to develop initial fielding plans and support structures,
- b. Repair analysis shall include identification of repairable item and level of maintenance, cost, operational readiness, allocation and placement of spares, support equipment and personnel,
- c. Support and test equipment shall include Test Measurement Diagnostic Equipment (TMDE) calibration procedures and technical parameters for any piece of support equipment needed to support the system,
- d. Supply support shall include maintenance coding, overhaul rates, roll-up quantities, long lead items, bulk items, tools and test equipment,
- e. Manpower, personnel and training shall include corrective and preventive maintenance tasks, operations tasks and manpower estimates for each task by maintenance level, skill required to perform the tasks and training in order for tasks to be performed,
- f. Facilities shall identify requirement to maintain, operate, train and test,
- g. Package, handling, storage and transportation shall identify shipping requirements as they pertain to the item(s) on contract,
- h. Post production support shall analyze life cycle support requirements for (LCCS) on system/equipment/software to identify problems due to inadequate sources of supply, support capability, and modification after shutdown of the production lines.

(DI-SESS-81759) Logistics Product Data Summaries

(DI-SESS-81758A) Logistics Product Data

3.3.5 Initial Spares List (ISL) and Repair Parts.

The Contractor shall recommend the range and quantity of spare and repair parts required to support the training device for twelve (12) months. The ISL shall consist of spare, repair parts, tools and test equipment, and common bulk items (consumables) that are purchased, manufactured and delivered concurrently with like items of the training device and shall include the lowest replaceable units (i.e. circuit cards, power supplies and electronic assemblies). The ISL requirements will be recommended and selected from the LPD. Recommendations shall include consideration of the system maintenance concept, essentiality of the component, price, lead times and failure factors

3.3.5.1 Tools and Test Equipment (TTE)

The Contractor shall identify all TTE required for the repair and use of the system. TTE shall include all common tools and test equipment required to inspect, test, calibrate, service, repair, or overhaul the system or its constituent components.

3.3.5.2 Common / Bulk Items (Consumables)

The Contractor shall identify and develop a Common and Bulk Items List (CBL) for all items required to operate and support the system for which there is a recurring demand. This includes, but is not limited to gels, fluids, filters, ink cartridges, batteries and other consumable/disposable items.

3.3.6 Technical Publications

The Contractor shall revise existing Government documents to describe each operation and maintenance task in detail and in logical, systematic steps. The operations and maintenance instructions shall accurately provide all the information needed to keep the equipment operational. The Technical Publications shall provide system and subsystem oriented instructions for installation, operation, maintenance and testing. All tools, test equipment, and consumable items required to accomplish any operation, maintenance or installation shall be identified in advance and be available for the task. All publications shall reflect the configuration of the fielded training device as documented in the product baseline. The Contractor shall identify and document maintenance tasks for the two (2) level maintenance concept. The Contractor shall identify all required spare parts, consumables, tools, and test/support equipment associated with each task and identify the level of maintenance at which each task shall be performed.

3.3.6.1 Operator User Manual

The Contractor shall revise existing Government documents to describe operational tasks and specific operator level preventive maintenance checks, inspection, lubrication, adjustment and operator level repair and replacement tasks. The Contractor shall identify all required spare

parts, consumables, tools and test/support equipment associated with the operator tasks. The Contractor shall prepare the Operator's User Manual IAW the CDRL.

**DI-ADMN-80925 Revision to Existing Government Documents
Operator User Manual**

3.3.6.2 System Maintenance Manual (SMM)

The Contractor shall revise existing Government documents to describe maintenance tasks that provide detailed installation/removal procedures, fault isolation, Line Replaceable Unit (LRU) procedures, firmware update procedures, preventive/scheduled maintenance and unscheduled/corrective maintenance procedures, calibration, and proper use of test equipment for the training system. The manual shall contain two (2) separate chapters for Field and Sustainment maintenance tasks respectively. The manual shall describe system initialization processes for each system/subsystem to include all configuration setup options, settings, and system requirements necessary to establish the system/subsystem to the documented product baseline. The Contractor shall identify all required spare parts, consumables, tools and test/support equipment associated with the maintenance tasks.

**DI-ADMN-80925 Revision to Existing Government Documents
System Maintenance Manual**

3.3.6.3 Commercial Off-the-Shelf (COTS) Manuals

The Contractor shall revise existing Government documents to deliver Commercial Off-the-Shelf (COTS) technical publications for all commercial equipment delivered with the training system. The COTS manuals shall be sufficient to support the operation, service and maintenance of all COTS components per MIL-PRF-32216. The Contractor shall review the COTS documentation and identify deficiencies or deviations in the manuals. If the COTS document is not sufficient to support the operation and maintenance and the Contractor is unable to retrieve the required data from the vendor, the Contractor shall develop supplementary data for inclusion in the main text of the Technical Manual ensuring that all required data for the COTS item is presented.

**DI-ADMN-80925 Revision to Existing Government Documents
Commercial-Off-The-Shelf (COTS) Manuals**

3.3.6.4 Technical Manual (TM) Verification & Validation (V&V)

The Contractor shall verify all publications for operation and maintenance to ensure they meet the requirements of the system. Verification shall be accomplished on all technical publications, changes, supplemental data and revisions thereto. The Contractor shall verify all technical data and publications prepared by subcontractors and vendors. The Contractor shall provide the Government opportunity to observe all contractors' verification efforts. The Contractor shall provide the Government with the dispositions/resolutions to document TM verification discrepancies and findings. A contractor generated Verification Incorporation Certificate shall

be provided to assure that the Contractor has resolved and incorporated into the final TM, corrections resulting from discrepancies/findings noted during the verification. TMs shall be validated by the Government prior to system testing. The Contractor shall support the Government during the TM validation to ensure that the content is adequate and sufficient to support operation and maintenance and that the information provided is comprehensible, accurate, usable and complete. The Contractor shall provide all facilities, equipment, spares, tools, and technical assistance to support the V&V effort. A production model of the training system shall be available for all V&V efforts. A technical publication shall not be ready for validation until the following conditions have been fulfilled:

- a. Engineering technical review has been completed
- b. Information, illustrations and parts lists reflect correct configurations of the system and equipment, to include all engineering changes
- c. Procedural instructions are readily understandable and adequate to perform all operations and maintenance functions
- d. All procedures have been performed to assure accuracy and performance requirements
- e. Adequacy of data is checked to ensure that it supports the maintenance and support concept
- f. Hardware of the proper configuration is available for the validation effort
- g. All safety hazards identified in the safety assessment report are resolved and identified within the text as Warnings, Caution and Note statements necessary to protect the equipment and personnel
- h. All hazardous materials are identified

DI-TMSS-81820 - Technical Manual Verification Discrepancy/Disposition Record

DI-TMSS-81821 - Technical Manual Verification Incorporation Certificate

3.3.7 Logistics Reviews and Verifications.

3.3.7.1 Spares Selection Review

The Contractor shall hold a Spares Selection Review (SSR) 15 days after CDR. The purpose of the SSR is for the Government to select the spares, which include repair parts, TTE and CBL items, from the LPD, that the Government desires to purchase and have delivered to the device site(s). During the SSR, the Government will review the Contractor's LPD and determine the range and depth for the recommended spares. All elements shall be reviewed for reliability and criticality to mission and probable replacement lead-time to determine recommended quantities. The Contractor shall demonstrate the approach to developing and populating the data elements of the LPD. This demonstration shall include representation of the top-down breakdown structure of all training system components reduced to the line replaceable unit (LRU). The Contractor shall provide technical representatives to support this effort. In addition, draft engineering drawings shall be made available to the maximum extent practicable to support the selections. After conduct of the Spares Selection Review, the Government will authorize the purchase of initial spare parts, repair parts, TTE, and CBL as required to support the training system.

3.3.7.2 Technical Publications In Process Reviews (IPR)

3.3.7.3 80% Technical Publications IPR

The 80% TP IPR shall be conducted when the publications are at the 80% completion level. This IPR shall address, in detail, the completeness, and accuracy of the technical content of the TPs, COTS documentation, and the inclusion of Notes, Cautions, and Warnings. Training courses shall also be addressed as part of this IPR.

3.3.7.4 80% IPR Entry Criteria

Entry criteria for the 80% IPR shall consist of:

- a. Tentative date for 80 percent TD IPR is listed in the IMS
- b. Agenda approved by Government
- c. Draft copies distributed IAW CDRL requirements
- d. 40% Technical Publications IPR action items resolved
- e. New engineering drawings available for review
- f. Maintenance significant drawing list is available for review
- g. Electronic data submission (i.e., style and format, layout, viewing, hyperlinks, etc) available for review
- h. Subsystems identified to LRU level of assembly
- i. OUM & SMM text in advanced development (Description, Installation, Operation, Theory of Operation, Maintenance tasks)
- j. COTS manuals listing available for review
- k. Acquired COTS manuals available for review
- l. Maintenance tasks identified by work areas and maintenance intervals established, text development begun
- m. Text supporting training system software in development (IOS functionality, malfunctions etc)
- n. Screen capture and operating procedures development has begun
- o. Finalized breakout and description of trainer hardware by category (GFE, CAO, TPE, Commercial Items, or NDI) for review and concurrence
- p. Satisfactory discussion of CDRL items included as a part of TD IPR entry criteria
- q. Finalized list of major subsystems and reference designators assigned to include any changes to the existing reference designation system
- r. Review of training documents to include operating procedures, screen captures and text content to be included as part of training course

3.3.7.5 80% IPR Exit Criteria

Exit criteria for the 80% IPR shall consist of:

- a. Draft minutes approved by attendees
- b. Action items assigned with suspense dates, as required
- c. Comments and discrepancies identified during TD IPR documented

- d. Contractor's plan for TD Quality Assurance/Validation has been discussed and is acceptable
- e. Maintenance significant drawing list is acceptable
- f. COTS manuals' listing is acceptable
- g. Available COTS manuals are acceptable according to criteria in CDRL or identified as requiring supplementation
- h. Screen captures reviewed reflect the current software load and are clear and reproducible
- i. Updates to trainer hardware by category (GFE, CAO, TPE, Commercial items, or NDI) provided
- j. Satisfactory discussion of CDRL items included as a part of 80% TD IPR entry criteria

3.3.8 Item Unique Identification (IUID)

The Contractor shall implement an Item Unique Identification of tangible items program to meet the marking specification/PRF PT-00606 and MIL-STD-130N. These requirements apply to developed and commercial items. The Contractor shall coordinate with the Government IPT to determine items requiring unique identification. The Contractor shall submit the data to the UID central registry. UID marking design for each item shall be both machine readable and human readable.

DI-MGMT-81804A – Item Unique Identification (IUID) Marking Activity, Validation & Verification Report

3.3.9 Training Program.

The training program shall consist of two (2) training courses. The Contractor shall revise existing Government documents to develop training documentation for use during training and for follow-on training. The Contractor shall present the training for the Instructor Operator course and Maintenance course.

3.3.9.1 Training Materials.

The Contractor shall follow the guidance in TRADOC REGULATION 350-70 Army Learning Policy and Systems and MIL-PRF-29612B to properly analyze, design, develop, implement, and evaluate training and training products. The training courses and data products/materials shall support both instructor/operator and maintainer personnel courses of instruction. The Contractor shall develop and conduct both courses of instruction using a 25% classroom and 75% hands-on practical exercise ratio. The Contractor shall develop a complete training package for both courses that includes the syllabus, list of exercises conducted during the course, and a dialog of the course. The training packages shall be designed as a leave-behind training package to each site. The Instructor Operator and the Maintenance training package shall be bound so that the course is easily accessible for hard copy reference and reproduction. The Contractor shall load all training materials onto each IOS.

3.3.9.2 Instructor Operator Training.

The Contractor shall conduct a 5-day (40 hours) I/O Training Course at each delivery location. The training shall provide the necessary skills for device instructors to operate the trainer and conduct user level maintenance. The Instructor/Operator Training Courses shall be designed to support ten (10) students with training material and hands-on practical exercises. In addition, the classroom instruction shall include capacity for an additional six (6) students auditing the course that will receive training material, but not hands on instruction. The Instructor/Operator Training Course shall be conducted by the Contractor at the trainer site on the first Monday following training device installation and acceptance on site, or as mutually agreed upon.

DI-ADMN-80925 Revision to Existing Government Documents
Instructor Operator Training Course

3.3.9.3 Maintenance Training.

The Contractor shall conduct a 1-day (8 hour) Maintenance Training Course at the Government's designated maintenance facility or at a mutually agreed location. The Maintenance Training Course shall consist of classroom presentations and hands-on exercises, utilizing the delivered Technical Data (TD) to familiarize maintenance technicians with the diagnostics, maintenance, software support/reload, and repair of the training device. The Contractor shall provide the course to a maximum of ten (10) maintenance personnel. Specifically, the Maintenance Training Course shall provide training to include instructions in maintenance, troubleshooting, alignment, and diagnostics of sufficient depth to ensure all students have the knowledge in the training device maintenance to keep the equipment up and operational. The Contractor shall ensure that the course instructor(s) are members of the design, development, and production team fully knowledgeable in the technical aspects and who will be able to explain the equipment concepts to the trainees. The Contractor shall conduct the course immediately following the instructor operator training or as mutually agreed.

DI-ADMN-80925 Revision to Existing Government Documents
Maintenance Training Course

3.3.10 Software Support Environment (SSE).

The Contractor shall provide the hardware, software, and documentation resources for performing Post Deployment Software Support (PDSS) activities including identifying, documenting, and correcting system software faults, implementing system upgrades, generating application programs, managing databases, and providing configuration management of the training system(s) software baseline. The Contractor shall provide disaster recovery procedures with any and all resources necessary to recover the SSE.

3.3.11 Site Activation/Installation Support.

3.3.11.1 Installation.

The Contractor shall deliver, off-load, assemble and install each training system device and support equipment in the designated facilities. The Contractor shall provide all support equipment, tools, special handling equipment, data and qualified technicians required to support the installation efforts. The Contractor shall be responsible for any damage to the equipment during transportation, off-loading, installation and test.

3.3.11.2 Disposal.

The Contractor shall ensure proper disposal, IAW local, state and federal regulations, of packaging and equipment that are in excess as a result of the installation, as coordinated with the Government.

3.3.11.3 Facility Repairs.

The Contractor shall repair/replace any aesthetic or structurally damaged floors, walls, doors, etc., that are damaged as a result of the installation of the system at each site. The Contractor shall utilize protective means to safeguard against facility damage.

3.3.11.4 Packing, Handling, Storage, and Transportation (PHST).

The Contractor shall package the training device for shipment to the designated site. Packaging shall be designed to avoid loss due to the elements, pilferage, and hazards of handling and storage. Packaging shall be strong enough to minimize breakage and leakage. Fragile items or items requiring special handling shall be boldly marked as such. Transportation shall be by commercial means and shall be the responsibility of the Contractor. Marking for shipment of the training devices shall be IAW the contract terms. The Contractor shall insure the device during shipment. The Contractor shall prepare and document packaging data IAW the contract terms.

3.4 Integrated Testing

The Contractor shall plan, coordinate, establish and implement a comprehensive test and evaluation (T&E) program to include all configurations of the system. The Contractor shall integrate all IA testing, to include a Vulnerability/Susceptibility Assessment if applicable, into routine test objectives and test plans flowing from the Test and Evaluation Master Plan. System T&E refers to the test and evaluation activities which use the development and production hardware together with the software to validate that the system meets the operational and technical performance requirements as stated in the system specifications. System T&E also includes all efforts associated with the design and production of models, specimens, fixtures and instrumentation in support of the T&E program. System test shall include a process to prepare the executable software, including any batch files, data files, or other software files needed to install and operate the software on a newly formatted (blank media) target computer. The Contractor shall develop step-by-step testing operations to be performed on items undergoing

developmental testing. The Contractor shall identify items to be tested, the test equipment and support required, the test conditions to be imposed, the parameters to be measured, and the pass and fail criteria against which the test results will be measured. The test planning and test procedures shall be structured to integrate all developmental, operational, and modeling and simulation activities to concentrate upon generation of data needed to insure that a decision on the systems capability to meet the objectives identified in the systems specification is made with a minimum amount of uncertainty.

(DI-NDTI-80603A) Test Procedure
(DI-NDTI-80809B) Test/Inspection Report

3.4.1 Test Readiness Review (TRR).

Readiness to convene a TRR is predicated on the Program/ IPT's determination that preliminary testing, functional testing, and pre-qualification testing results form a satisfactory basis for proceeding with a TRR and initiation of formal system level testing. The TRR shall assess test objectives, test methods and procedures, scope of tests, and determines if required test resources have been properly identified and coordinated to support planned tests. The TRR shall also verifies the traceability of planned tests to program requirements. The Contractor shall address the following key issues at the system engineering TRR prior to the start of formal testing to ensure that the system and all test resources are ready to begin testing:

- a. Test procedures comply with plans and descriptions, are adequate to accomplish test requirements and satisfy requirements for verification.
- b. Pre-test predictions and informal tests indicate testing will confirm performance.
- c. New or modified test equipment and facilities and procedure manuals required to accomplish planned test and evaluation, are available and satisfy the test requirements.
- d. Data acquisition and reduction provisions are in place.

The following documentation shall be reviewed during the TRR:

- a. Evidence that the test management system as required under the contract is ready to accept the qualification tests and their results.
- b. Evidence that the requirements in the development specification have been traced to qualification tests or tests on which the qualification tests rely.
- c. A list of outstanding problem reports, both external and internal cross-referenced to the contracted deliverable end items or development hardware and software products.
- d. Test requirements.
- e. Requirements changes pending.
- f. Design changes since the last design review.
- g. Test constraints based on previous testing or test hardware limitations.

- h. Test configuration (test article and instrumentation and support equipment).
- i. Detailed test procedures.
- j. Plans for collection, reduction and analysis of the test data.
- k. Calibration plan and status.
- l. Problem areas and their resolution.

3.4.2 Developmental Test.

The Contractor shall conduct an engineering development test to provide data on performance, safety, achievement of critical technical parameters, refinement and ruggedization of hardware configurations, and determination of technical risk. The test shall provide data to verify that the design solution meets the system technical requirements and the system is prepared for successful operational test and evaluation. The Contractor shall ensure that systems and test equipment are operational and properly calibrated and tuned prior to start of test. The Contractor shall analyze the results of each test and shall record the test and analysis results.

3.4.3 Information Assurance Scan(s).

During system development the Contractor shall periodically scan the system using the latest DoD approved scanning tools. The Contractor shall maintain Information Assurance Vulnerability Alert (IAVA) compliance of the system baseline(s), and provide software patch updates to the Government as required throughout the life of the delivery order.

3.4.4 Certification Test and Evaluation (CT&E)

The Contractor shall support a CT&E Readiness Review held no more than 7-14 working days prior to the CT&E Event. The CT&E Readiness Review and Scan Report shall address at a minimum:

- Final IA Scans Report of the system
- Corrective actions taken and written analysis of any open deficiencies
- Update of IA system documents
- Finalization of travel arrangement in support of the CT&E event

(DI-MISC-80711A – Scientific and Technical Reports, IA Scan Reports).

3.4.5 Certification, Test and Evaluation (CT&E) Event.

The Contractor shall support the CT&E event. The CT&E event is conducted by the IA independent certifier to assess the overall security posture of the system prior to Government Acceptance Test (GAT). The status of the results for all assigned IA controls and security requirements are complied and discussed with the Contractor. The Contractor shall provide support to address the findings from the CT&E events to the Government's satisfaction after the

Scorecard is tabulated, and assist the Government in the preparation of the Plan of Action and Milestone (POA&M).

3.4.6 Operational Test Support.

The Contractor shall support operational test and ensure that any unique facilities, equipment, and instrumentation required will be available at the test sites and that sufficient test articles (including support items) are available. Technical support shall include troubleshooting, repair and replacement of failed systems and subsystems, LRUs, or components, and preventive maintenance. The Contractor shall analyze all failures that occur during all operational tests.

3.4.7 Test Discrepancies.

The Contractor shall document all test discrepancies for Contractor conducted tests and track the failure analysis and corrective action for each test discrepancy until correction and regression tests are successfully completed. The Contractor shall establish a suspense system to ensure timeliness of analysis and corrective action of each test discrepancy. Upon correction of the test discrepancies, the Contractor shall test the system to ensure that the correction of the test discrepancies did not interfere with or alter the functionality of the system. Upon closeout of a discrepancy, the Contractor's process shall notify the Government designated test director that an integrated database has been updated.

3.4.7.1 Test Discrepancy Processing.

The Contractor shall document a detailed description defining the changes made to the equipment, hardware, and software to correct each discrepancy. Each discrepancy correction that modifies or changes any baseline shall be documented and entered in the configuration management system. Discrepancies ready for recheck shall normally accumulate into sufficient quantities to permit at least eight hours of continuous testing.

3.4.7.2 Test Discrepancy Priorities.

The Contractor shall assign level of effort to test discrepancies based on the priority codes assigned by the test team, in accordance with the ground rules established by the IPT. The following priorities shall be assigned, with the Government reserving the right to make the final determination of the priority of any test discrepancy:

<u>Priority</u>	<u>Description</u>	<u>Schedule Impact</u>
1	Safety item or system failure	Testing halted
2	Subsystem failure	Some testing impossible
3	Training impact which may affect testing	Fix prior to next assessment milestone
4	Training impact which has no testing impact	Fix prior to DD Form 250

- | | | |
|---|---|---|
| 5 | IA Vulnerabilities (CAT I & II)
CAT III vulnerabilities must have
mitigations approved by the DAA | Fix prior to becoming operational and
Prior to DD Form 250 |
| 6 | Minor training impact | Fix TBD |

APPENDIX A - Design Review (Entry and Exit Criteria)

A1. Systems Requirements Review (SRR) Entry Criteria

- a. A preliminary agenda has been coordinated (nominally) 15 days prior to the SRR.
- b. SRR technical products listed below for both hardware and software system elements have been made available to the cognizant SRR participants prior to the review:
 - 1) System Performance specification,
 - 2) System software functionality description,
 - 3) System/Subsystem Design Specification (SSDD),
 - 4) Preferred system solution definition,
 - 5) Updated risk assessment,
 - 6) Compare and update both Government SEP and Contractor SEMP,
 - 7) Updated schedule data,
 - 8) Preliminary logistics documentation summary,
 - 9) Preliminary ICS planning,
 - 10) Human Systems Integration (HSI) related documentation
 - 11) Software Development Plan (SDP) is complete.

B1. SRR Completion/Exit Criteria

- a. The SRR is considered complete when all draft Request for Action (RFAs) are signed off, and an acceptable level of program risk is ascertained.
- b. Exit Criteria shall include:
 - 1) The system requirements, as presented can satisfy the Stryker Phase IV PRF-PT-00606.
 - 2) The system requirements are sufficiently detailed and understood to enable system functional definition and functional decomposition, test and evaluation.
 - 3) The requirements can be met given the technology maturation is achieved.
 - 4) There system performance specification is approved.
 - 5) Adequate processes and metrics are in place for the program to succeed.
 - 6) HSI and sustainment requirements have been reviewed and included in the overall system design.
 - 7) The program risks are known and manageable for development.
 - 8) The program is properly staffed.
 - 9) The program is executable within the existing budget.
 - 10) The software functionality in the system specification is consistent with the software sizing estimates and the resource-loaded schedule.
 - 11) All system elements are sufficiently matured to enable low risk entry into engineering and manufacturing development.
 - 12) The critical sustainment enablers are sufficiently matured to implement the support strategy and achieve the needed materiel availability.

- 13) The preliminary software development estimates are established with effort, schedule analysis.
- 14) Programming languages and architectures, security requirements and operational and support concepts have been identified.
- 15) Hazards have been reviewed and mitigating courses of action have been allocated within the overall system design.
- 16) The Information Assurance requirements have been documented.

C1. PDR Entry Criteria

- a. A System Requirements Review (SRR) has been successfully completed, and all SRR Request for Action (RFAs) have been responded to.
- b. A DIACAP Implementation Plan Review (DIPR) has been successfully completed.
- c. A preliminary agenda has been coordinated (nominally) 15 days prior to the PDR.
- d. PDR technical products for each system hardware and software configuration item have been made available to the cognizant PDR participants prior to the review:
 - 1) Refined System Performance Specification and Environmental Constraints
 - 2) System Functional Specification and Verification Plan
 - 3) Preliminary subsystem design specifications for each configuration item (H/W and S/W), with supporting tradeoff analyses and data, as required. The preliminary software design specification must include a completed definition of the software architecture, and a preliminary database design description is applicable
 - 4) Updated risk assessment
 - 5) Updated Systems Engineering Plan (SEP) or Systems Engineering Management Plan (SEMP).
 - 6) Updated logistics documentation (Acquisition Logistics Support Plan, Logistics Requirements and Funding Summary, Preliminary Maintenance Plan, etc.)
 - 7) Updated Human Systems Integration (HSI) related documentation
 - 8) Selection of Software CM tools
 - 9) Identify Developmental and Non-developmental Software and Databases
 - 10) Prepare the Preliminary Data Flow and Accreditation Boundary Diagram
 - 11) Prepare a Network Topology Diagram

D1. PDR Completion/Exit Criteria

- a. The PDR is considered complete when all draft RFAs are signed off, and an acceptable level of program risk is ascertained.
- b. Typical Exit Criteria shall include:
 - 1) Technical effort and design indicate operational evaluation success (operationally suitable and effective).
 - 2) The preliminary design, as disclosed, satisfies the Capabilities Development Document and/or Training Systems Requirements Document.

- 3) The system allocated baseline has been established and documented to enable detailed design to proceed with proper configuration management.
- 4) Relevant supportability requirements have been addressed.
- 5) Adequate processes and metrics are in place for the program to succeed.
- 6) Human Systems Integration design factors have been reviewed and included, where needed, in the overall system design.
- 7) Relevant Information Assurance requirements have been addressed.
- 8) The program risks are known and manageable for testing.
- 9) The program schedule is executable (technical/cost risks).
- 10) The computer system and software architecture design have been established, and have all Computer Software Configuration Items (CSCIs), Computer Software Components (CSCs), and Computer Software Units (CSUs) been defined.
- 11) Software Requirements Specifications and Interface Requirement Specifications, including verification plans, are complete and baselined for all CSCs and do they satisfy the system/subsystem functional requirements.
- 12) Software trade studies addressing Commercial-off-the-shelf, reuse, and other software-related issues have been completed.
- 13) IA considerations have been addressed (system hardware and software).

E1. CDR Entry Criteria

- a. A Preliminary Design Review (PDR) has been successfully completed, and all PDR RFAs have been responded to.
- b. All PDR exit criteria key issues have been satisfied, if applicable.
- c. A preliminary agenda has been coordinated (nominally) 15 days prior to the CDR.
- d. CDR technical products (hardware and software elements of the product baseline to be reviewed and approved at the CDR) have been made available to the cognizant CDR participants prior to the review:
 - 1) Updates to the system performance specification and functional performance specification,
 - 2) Product specifications for each hardware and software configuration item, along with supporting trade-off analyses and data, such as manufacturer, type, model number, and version,
 - 3) Current risk assessment,
 - 4) Systems Engineering Plan (SEP) or Systems Engineering Management Plan (SEMP) changes (if any),
 - 5) Updated Human Systems Integration document,
 - 6) Updated logistics documentation,
 - 7) Updated Human Systems Integration (HSI) related documentation,
 - 8) The Software Design Document(s) (SDD) is complete and ready to be placed under configuration management,
 - 9) The Software Interface Design Document(s) (IDD) is complete and ready to be placed under configuration management,

- 10) The preliminary Test Procedures for Software Integration and Systems testing are available for review,
- 11) The training to use IA Scanning tools is completed,
- 12) Port, Protocols, and Services (PPS) are identified.

F1. CDR Completion/Exit Criteria

- a. The CDR is considered complete when all draft RFAs are signed off, and an acceptable level of program risk is ascertained.
- b. Exit Criteria include:
 - 1) The status of the technical effort and design indicate operational success (operationally suitable and effective).
 - 2) The detailed design (hardware and software), as disclosed, satisfy the CDD or TSRD, and CPD.
 - 3) The system product baseline has been established and documented to enable hardware fabrication and software coding to proceed with proper configuration management.
 - 4) The detailed design satisfies the Human Systems Engineering requirements.
 - 5) Adequate processes and metrics are in place for the program to succeed.
 - 6) The risks are known and manageable.
 - 7) The program schedule is executable (technical/cost risks).
 - 8) The program is properly staffed.
 - 9) The program is executable with the existing budget and the approved product baseline.
 - 10) The detailed design is producible within the production budget.
 - 11) The updated CARD is consistent with the approved product baseline.
 - 12) The Critical Safety Items and Critical Application Items are identified.
 - 13) The software functionality in the approved product baseline is consistent with the updated software metrics and resource-loaded schedule.
 - 14) IA considerations are addressed (system hardware and software).

G1. TRR Entry Criteria

- a. Configuration of system under test has been defined and agreed to. All interfaces have been placed under configuration management or have been defined in accordance with an agreed to plan.
- b. All applicable functional, unit level, subsystem, system, and qualification testing has been conducted successfully.
- c. All TRR specific materials such as test plans, test cases, and procedures have been available to all participants prior to conducting the review (minimum of 7 working days).
- d. All known system discrepancies have been identified and resolved in accordance with an agreed to plan.

- e. All previous design review exit criteria and key issues have been satisfied in accordance with an agreed to plan.
- f. All required test resources (people, facilities, test articles, test instrumentation) have been identified and are available to support required tests.
- g. Roles and responsibilities of all test participants are defined and agreed to.
- h. IA CT&E completed with an approved IA baseline agreed to.

H1. TRR Exit Criteria

- a. The TRR is considered complete when:
 - 1) All draft RFA forms have been addressed, assessed, and agreed upon, and
 - 2) An acceptable level of program risk is ascertained.
- b. The proper Government disciplines are represented at the review. If applicable were all of the required independent evaluators involved and do they concur with the planned tests, expected results.
- c. Exit Criteria include:
 - 1) Test plans completed and approved for the system under test.
 - 2) Identification and coordination of required test resources.
 - 3) The Subject Matter Expert's (SMEs) have gone through an agreed upon subset of the Test Procedures to ensure satisfactory system performance.
 - 4) Risk level has been identified and accepted by the program leadership.

SECTION D - PACKAGING AND MARKING

CLAUSES INCORPORATED BY FULL TEXT

5152.247-5006 PRESERVATION, PACKAGING, PACKING AND MARKING (PEO-STRI) (SEP 2006)

(a) Preservation, packaging and packing shall conform to prevailing industry standards for the type of commodity purchased under this contract.

(b) All packages will be clearly marked with applicable contract number/delivery order number, and will contain appropriate packing slip. All deliveries will be marked for the appropriate delivery IAW Section F.

(c) In the event of any discrepancy in material shipped (overage, technical rejection, damage), the contractor shall, immediately upon request of the Contracting Officer, furnish disposition instructions. Normally, such disposition instruction shall be a properly completed Commercial Bill of Lading, which includes, but is not limited to, the mode of shipment, routing, special handling, and so forth.

(d) If the contractor is required to install equipment upon delivery, then the contractor shall inform the Government of the date of shipment from the contractor's facilities and the anticipated date of arrival at the site. This report shall be made no later than the actual date that the shipment is made from the contractor's facilities. The report may be made by facsimile or e-mail, to the point of contact listed in Section G. All transportation, rigging, drayage, packing, unpacking, and handling necessary to accomplish the installation shall be the responsibility of the contractor.

(End of clause)

5152.247-5009 TECHNICAL DATA PACKING INSTRUCTIONS (PEO-STRI) (SEP 2006)

Technical Data and Information shall be packed and packaged for domestic shipment in accordance with best commercial practices. The package or envelope should be clearly marked with any special markings specified in this contract (or delivery/task order), e.g., Contract Number, CLIN, Device No., and document title must be on the outside of the package. Classified reports, data and documentation, if applicable, shall be prepared for shipment in accordance with Defense Industrial Manual for Safeguarding Classified Information, DoD 5220.22M.

(End of clause)

SECTION E - INSPECTION AND ACCEPTANCE

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	Destination	Government	Destination	Government
0002	Destination	Government	Destination	Government
0003	Destination	Government	Destination	Government
0004	Destination	Government	Destination	Government
0005	Destination	Government	Destination	Government
0006	Destination	Government	Destination	Government
0007	Destination	Government	Destination	Government
0008	Destination	Government	Destination	Government

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make the full text available. Also, the full text of a clause may be accessed electronically via the following websites:

<http://farsite.hill.af.mil/>
<http://acquisition.gov/far/>

(End of clause)

CLAUSES INCORPORATED BY REFERENCE

52.246-2	Inspection Of Supplies--Fixed Price	AUG 1996
52.246-4	Inspection Of Services--Fixed Price	AUG 1996
52.246-6	Inspection--Time-And-Material And Labor-Hour	MAY 2001
252.246-7000	Material Inspection and Receiving Report	MAR 2008

CLAUSES INCORPORATED BY FULL TEXT

5152.246-5003 INSPECTION AND ACCEPTANCE OF TECHNICAL DATA AND INFORMATION (JAN 2008)

Inspection and acceptance of technical data and information will be performed by the Procuring Contracting Officer (PCO) or his duly authorized representative. Inspection of technical data and information will be performed by ensuring successful completion of the requirements set forth in the DD Form 1423, Contract Data Requirements List (CDRL) and incorporation/resolution of Government review comments on the data items. Acceptance will be evidenced by execution of an electronic Wide Area Work Flow Receiving Report.

(End of clause)

SECTION F - DELIVERIES OR PERFORMANCE

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0001	18 Months After Delivery Order Award	1	US ARMY ORDNANCE CENTER & SCHOOL POC WILL BE PROVIDED AFTER DELIVERY ORDER AWARD 404 ABERDEEN AVENUE, BLDG 18030 FORT LEE, VA 23801 POC PHONE NUMBER WILL BE PROVIDED AFTER DELIVERY AWARD FOB: Destination	W56B6Y
0002	18 Months After Delivery Order Award	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56B6Y
0003	Within 18 Months After Delivery Order Award	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56B6Y
0004	Within 18 Months After Delivery Order Award	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56B6Y
0005	Within 18 Months After Delivery Order Award	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56B6Y
0006	Within 18 Months After Delivery Order Award	2	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56B6Y
0007	NA	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56B6Y
0008	Within 18 Months After Contract Award	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56B6Y

CLAUSES INCORPORATED BY REFERENCE

52.211-17	Delivery of Excess Quantities	SEP 1989
52.242-15	Stop-Work Order	AUG 1989
52.242-17	Government Delay Of Work	APR 1984
52.247-34	F.O.B. Destination	NOV 1991

SECTION G - CONTRACT ADMINISTRATION DATA

CLAUSES INCORPORATED BY REFERENCE

252.232-7003 Electronic Submission of Payment Requests and Receiving Reports JUN 2008

CLAUSES INCORPORATED BY FULL TEXT

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (MAY 2013)

(a) Definitions. As used in this clause--

Department of Defense Activity Address Code (DoDAAC) is a six position code that uniquely identifies a unit, activity, or organization.

Document type means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

Local processing office (LPO) is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) Electronic invoicing. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall--

(1) Have a designated electronic business point of contact in the System for Award Management at <https://www.acquisition.gov>; and

(2) Be registered to use WAWF at <https://wawf.eb.mil/> following the step-by-step procedures for self-registration available at this Web site.

(d) WAWF training. The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the “Web Based Training” link on the WAWF home page at <https://wawf.eb.mil/>.

(e) WAWF methods of document submission. Document submissions may be via Web entry, Electronic Data Interchange, or File Transfer Protocol.

(f) WAWF payment instructions. The Contractor must use the following information when submitting payment requests and receiving reports in WAWF for this contract/order:

(1) Document type. The Contractor shall use the following document type(s):

(2) Inspection/acceptance location. The Contractor shall select the following inspection/acceptance location(s) in WAWF, as specified by the contracting officer.

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	Destination	Government	Destination	Government
0002	Destination	Government	Destination	Government
0003	Destination	Government	Destination	Government
0004	Destination	Government	Destination	Government
0005	Destination	Government	Destination	Government
0006	Destination	Government	Destination	Government
0007	Destination	Government	Destination	Government
0008	Destination	Government	Destination	Government

(3) Document routing. The Contractor shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Receiving Report (DD 250) and Invoice (COMBO) Destination Inspection and Destination Acceptance	
Pay DoDAAC	WILL BE PROVIDED AFTER DELIVERY ORDER AWARD
Issue By DoDAAC	W900KK
Admin DoDAAC	WILL BE PROVIDED AFTER DELIVERY ORDER AWARD
Inspect By DoDAAC	W906ZL
Accept By DoDAAC	W906ZL
Ship To Code	W56B6Y

(4) Payment request and supporting documentation. The Contractor shall ensure a payment request includes appropriate contract line item and subline item descriptions of the work performed or supplies delivered, unit price/cost per unit, fee (if applicable), and all relevant back-up documentation, as defined in DFARS Appendix F, (e.g. timesheets) in support of each payment request.

(5) WAWF email notifications. The Contractor shall enter the email address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

Name	Email	Phone	Role
John E. Bishop, PD/COR	john.e.bishop30.civ@mail.mil	407-384-3731	Acceptor
Wayne Golon, Lead Engineer	joseph.w.golon.civ@mail.mil	407-384-3949	Inspector
ACO – WILL BE PROVIDED AFTER DELIVERY ORDER AWARD			Alt - Acceptor
Patricia C. Soucy, Procuring Contracting Officer	patricia.c.soucy.civ@mail.mil	407-380-4874	View Only
Carolyn J. Wardell, Contract Specialist	carolyn.j.wardell.civ@mail.mil	407-208-5812	View Only

(g) WAWF point of contact. (1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact.

(1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact:

Ron Crowder / WAWF Group Administrator (GAM) / 407-208-3032

Thomas Bunch / WAWF GAM-Alternate / 407-384-3792

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.

(End of clause)

5152.201-5001 DESIGNATION OF CONTRACTING OFFICER'S REPRESENTATIVE
(COR) (PEO-STRI) (SEP 2006)

(a) The Contracting Officer has designated the following individual as the authorized Contracting Officer's Representative (COR) for this contract:

John E. (Jeb) Bishop, Jr.
Project Director, PM GCTT
U.S. Army PEO-STRI
12350 Research Parkway, Orlando, FL 32826-3276
Office: 407-384-3731
Cell: 321-228-8749
Fax: 407-384-5180

(b) The duties of the COR are limited to the following: [WILL BE PROVIDED AFTER DELIVERY ORDER AWARD]

(End of Clause)

5152.242-5002 CONTRACT ADMINISTRATION DATA (PEO-STRI) (SEP 2006)

(a) Contract Administration Office.

(1) Contract administration functions (see FAR 42.302 and DFARS 242.302) are assigned to: WILL BE PROVIDED AFTER DELIVERY ORDER AWARD

(2) Contract administration functions withheld (see FAR 42.202) are: 42.302 (a)(3).

(3) The Accounting Classification Reference Numbers (ACRN) assigned by the Standard Procurement System (SPS) shall be used in applicable contract modifications or orders or modifications thereto issued by the cognizant contract administration office. If no ACRN is assigned by the SPS, the contract administration office may assign a two-position ACRN that can be either alpha-numeric (A1 through B9 and continuing, if necessary through Z9, excluding the letters "I" and "O") or alpha (AA through ZZ, excluding the letters "I" and "O"), (see DFARS 204.7101).

(b) Inquiries regarding payment should be referred to the DFAS MyInvoice at <https://myinvoice.csd.disa.mil//index.html>. Payment information can be traced using the contract number, check number, CAGE code, DUNS number, or invoice number. The information is available for 90 days after payment is made.

(End of Clause)

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 TIME AND MATERIAL (T&M) RATES APPLICABLE TO CONTRACT LINE ITEM NUMBER (CLIN) 0003 SYSTEM TECHNICAL SUPPORT

Each offeror shall provide their fully burdened STOCII T&M labor categories and rates or lower T&M rates into the Time and Material Rates Table below for use under CLIN 0003, System Technical Support. The Government will confirm that the fully burdened T&M labor categories and rates provided matches or are lower than the fully burdened STOCII T&M labor categories and rates. If an offeror proposes a T&M labor category that is not listed or a higher rate than those on their STOCII contract and they are the successful offeror, the labor category or rate will not be included in the award document.

Each offeror shall provide the most recent Administrative Contracting Officer (ACO) letter regarding the status of their accounting system. If that letter is more than a year old and the offeror has a more current DCAA audit report commenting on the status of their accounting system, a copy of that report shall also be submitted. If the offeror’s accounting system was disapproved or deemed to be not adequate, the offeror must identify all deficiencies along with steps taken, or to be taken, to correct the deficiencies and a timeline to include audit by the cognizant audit agency after corrective action has been implemented. If the offeror’s accounting system has never been audited by their cognizant federal audit agency, the offeror will so state.

Each offeror shall complete and return the Attachment 6 - Modified SF 1408 Checklist if a copy of written documentation (from either DCMA or DCAA) states that its accounting system is adequate or approved for accumulating and reporting costs under Government contracts is not otherwise provided.

Each offeror shall submit contact information (name, telephone number and email address) for their cognizant Defense Contract Management Agency (DCMA) Administrative Contracting Officer (ACO) and cognizant Defense Contract Audit Agency (DCAA) supervisory auditor. If the Offeror is not assigned to DCMA for contract administration or is not assigned to DCAA for contract audit, the Offeror will identify its cognizant federal agency or agencies (and include the individual contact information).

The following rates are applicable to the T&M CLIN contained within Section B of this Delivery Order only. The respective labor categories are fully burdened and fixed per FAR 16.601 (a).

Time and Material Rates Table				
Labor Categories	FY13	FY14	FY15	FY16

The above requested information may be provided in the Cost/Price volume or as stand-alone documents. Be advised, if the requested information is provided in the Cost/Price volume it will not be evaluated.

H.2 ELECTRONIC TRANSMISSION OF PROPRIETARY DATA

Awardees shall be fully capable and willing to electronically transmit proprietary data to the Government. This data may consist of contract deliverables or pricing data required for proposal evaluation. Any software required by the Government to receive the contractor-transmitted proprietary data that the Government does not already possess shall be provided by the contractor at no cost to the Government.

CLAUSES INCORPORATED BY REFERENCE

252.204-7000 Disclosure of Information

DEC 1991

CLAUSES INCORPORATED BY FULL TEXT

252.211-7003 ITEM IDENTIFICATION AND VALUATION (JUN 2013)

(a) Definitions. As used in this clause'

Automatic identification device means a device, such as a reader or interrogator, used to retrieve data encoded on machine-readable media.

Concatenated unique item identifier means--

(1) For items that are serialized within the enterprise identifier, the linking together of the unique identifier data elements in order of the issuing agency code, enterprise identifier, and unique serial number within the enterprise identifier; or

(2) For items that are serialized within the original part, lot, or batch number, the linking together of the unique identifier data elements in order of the issuing agency code; enterprise identifier;

original part, lot, or batch number; and serial number within the original part, lot, or batch number.

Data qualifier means a specified character (or string of characters) that immediately precedes a data field that defines the general category or intended use of the data that follows.

DoD recognized unique identification equivalent means a unique identification method that is in commercial use and has been recognized by DoD. All DoD recognized unique identification equivalents are listed at http://www.acq.osd.mil/dpap/pdi/uid/iuid_equivalents.html.

DoD unique item identification means a system of marking items delivered to DoD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items. For items that are serialized within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier and a unique serial number. For items that are serialized within the part, lot, or batch number within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier; the original part, lot, or batch number; and the serial number.

Enterprise means the entity (e.g., a manufacturer or vendor) responsible for assigning unique item identifiers to items.

Enterprise identifier means a code that is uniquely assigned to an enterprise by an issuing agency.

Government's unit acquisition cost means--

- (1) For fixed-price type line, subline, or exhibit line items, the unit price identified in the contract at the time of delivery;
- (2) For cost-type or undefinitized line, subline, or exhibit line items, the Contractor's estimated fully burdened unit cost to the Government at the time of delivery; and
- (3) For items produced under a time-and-materials contract, the Contractor's estimated fully burdened unit cost to the Government at the time of delivery.

Issuing agency means an organization responsible for assigning a globally unique identifier to an enterprise (e.g.,

Dun & Bradstreet's Data Universal Numbering System (DUNS) Number, GS1 Company Prefix, Allied Committee 135 NATO Commercial and Government Entity (NCAGE)/Commercial and Government Entity (CAGE) Code, or the Coded Representation of the North American Telecommunications Industry Manufacturers, Suppliers, and Related Service Companies (ATIS-0322000) Number), European Health Industry Business Communication Council (EHIBCC) and Health Industry Business Communication Council (HIBCC)), as indicated in the Register of

Issuing Agency Codes for ISO/IEC 15459, located at <http://www.nen.nl/web/Normen-ontwikkelen/ISOIEC-15459-Issuing-Agency-Codes.htm>.

Issuing agency code means a code that designates the registration (or controlling) authority for the enterprise identifier.

Item means a single hardware article or a single unit formed by a grouping of subassemblies, components, or constituent parts.

Lot or batch number means an identifying number assigned by the enterprise to a designated group of items, usually referred to as either a lot or a batch, all of which were manufactured under identical conditions.

Machine-readable means an automatic identification technology media, such as bar codes, contact memory buttons, radio frequency identification, or optical memory cards.

Original part number means a combination of numbers or letters assigned by the enterprise at item creation to a class of items with the same form, fit, function, and interface.

Parent item means the item assembly, intermediate component, or subassembly that has an embedded item with a unique item identifier or DoD recognized unique identification equivalent.

Serial number within the enterprise identifier means a combination of numbers, letters, or symbols assigned by the enterprise to an item that provides for the differentiation of that item from any other like and unlike item and is never used again within the enterprise.

Serial number within the part, lot, or batch number means a combination of numbers or letters assigned by the enterprise to an item that provides for the differentiation of that item from any other like item within a part, lot, or batch number assignment.

Serialization within the enterprise identifier means each item produced is assigned a serial number that is unique among all the tangible items produced by the enterprise and is never used again. The enterprise is responsible for ensuring unique serialization within the enterprise identifier.

Serialization within the part, lot, or batch number means each item of a particular part, lot, or batch number is assigned a unique serial number within that part, lot, or batch number assignment. The enterprise is responsible for ensuring unique serialization within the part, lot, or batch number within the enterprise identifier.

Unique item identifier means a set of data elements marked on items that is globally unique and unambiguous. The term includes a concatenated unique item identifier or a DoD recognized unique identification equivalent.

Unique item identifier type means a designator to indicate which method of uniquely identifying a part has been used. The current list of accepted unique item identifier types is maintained at http://www.acq.osd.mil/dpap/pdi/uid/uii_types.html.

(b) The Contractor shall deliver all items under a contract line, subline, or exhibit line item.

(c) Unique item identifier.

(1) The Contractor shall provide a unique item identifier for the following:

(i) All delivered items for which the Government's unit acquisition cost is \$5,000 or more.

(ii) The following items for which the Government's unit acquisition cost is less than \$5,000:

Contract line, subline, or exhibit line	Item description
item No.	

(iii) Subassemblies, components, and parts embedded within delivered items as specified in Attachment Number ----.

(2) The unique item identifier and the component data elements of the DoD unique item identification shall not change over the life of the item.

(3) Data syntax and semantics of unique item identifiers. The Contractor shall ensure that--

(i) The encoded data elements (except issuing agency code) of the unique item identifier are marked on the item using one of the following three types of data qualifiers, as determined by the Contractor:

(A) Application Identifiers (AIs) (Format Indicator 05 of ISO/IEC International Standard 15434), in accordance with ISO/IEC International Standard 15418, Information Technology--EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance and ANSI MH 10.8.2 Data Identifier and Application Identifier Standard.

(B) Data Identifiers (DIs) (Format Indicator 06 of ISO/IEC International Standard 15434), in accordance with ISO/IEC International Standard 15418, Information Technology--EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance and ANSI MH 10.8.2 Data Identifier and Application Identifier Standard.

(C) Text Element Identifiers (TEIs) (Format Indicator 12 of ISO/IEC International Standard 15434), in accordance with the Air Transport Association Common Support Data Dictionary; and

(ii) The encoded data elements of the unique item identifier conform to the transfer structure, syntax, and coding of messages and data formats specified for Format Indicators 05, 06, and 12 in ISO/IEC International Standard 15434, Information Technology--Transfer Syntax for High Capacity Automatic Data Capture Media.

(4) Unique item identifier.

(i) The Contractor shall--

(A) Determine whether to--

(1) Serialize within the enterprise identifier;

(2) Serialize within the part, lot, or batch number; or

(3) Use a DoD recognized unique identification equivalent; and

(B) Place the data elements of the unique item identifier (enterprise identifier; serial number; DoD recognized unique identification equivalent; and for serialization within the part, lot, or batch number only: original part, lot, or batch number) on items requiring marking by paragraph (c)(1) of this clause, based on the criteria provided in the version of MIL-STD-130, Identification Marking of U.S. Military Property, cited in the contract Schedule.

(ii) The issuing agency code--

(A) Shall not be placed on the item; and

(B) Shall be derived from the data qualifier for the enterprise identifier.

(d) For each item that requires unique item identification under paragraph (c)(1)(i) or (ii) of this clause, in addition to the information provided as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the Contractor shall report at the time of delivery, either as part of, or associated with, the Material Inspection and Receiving Report, the following information:

(1) Unique item identifier.

(2) Unique item identifier type.

- (3) Issuing agency code (if concatenated unique item identifier is used).
- (4) Enterprise identifier (if concatenated unique item identifier is used).
- (5) Original part number (if there is serialization within the original part number).
- (6) Lot or batch number (if there is serialization within the lot or batch number).
- (7) Current part number (optional and only if not the same as the original part number).
- (8) Current part number effective date (optional and only if current part number is used).
- (9) Serial number (if concatenated unique item identifier is used).
- (10) Government's unit acquisition cost.
- (11) Unit of measure.

(e) For embedded subassemblies, components, and parts that require DoD unique item identification under paragraph (c)(1)(iii) of this clause, the Contractor shall report as part of, or associated with, the Material Inspection and Receiving Report specified elsewhere in this contract, the following information:

- (1) Unique item identifier of the parent item under paragraph (c)(1) of this clause that contains the embedded subassembly, component, or part.
- (2) Unique item identifier of the embedded subassembly, component, or part.
- (3) Unique item identifier type.**
- (4) Issuing agency code (if concatenated unique item identifier is used).**
- (5) Enterprise identifier (if concatenated unique item identifier is used).**
- (6) Original part number (if there is serialization within the original part number).**
- (7) Lot or batch number (if there is serialization within the lot or batch number).**
- (8) Current part number (optional and only if not the same as the original part number).**
- (9) Current part number effective date (optional and only if current part number is used).**
- (10) Serial number (if concatenated unique item identifier is used).**

(11) Description.

** Once per item.

(f) The Contractor shall submit the information required by paragraphs (d) and (e) of this clause in accordance with the data submission procedures at http://www.acq.osd.mil/dpap/pdi/uid/data_submission_information.html.

(g) Subcontracts. If the Contractor acquires by subcontract, any item(s) for which unique item identification is required in accordance with paragraph (c)(1) of this clause, the Contractor shall include this clause, including this paragraph (g), in the applicable subcontract(s), including subcontracts for commercial items.

(End of clause)

252.211-7007 REPORTING OF GOVERNMENT-FURNISHED PROPERTY (AUG 2012)

(a) Definitions. As used in this clause—

“Commercial and Government entity (CAGE) code” means—

(i) A code assigned by the Defense Logistics Agency Logistics Information Service to identify a commercial or Government entity; or

(ii) A code assigned by a member of the North Atlantic Treaty Organization that the Defense Logistics Agency Logistics Information Service records and maintains in the CAGE master file. The type of code is known as an “NCAGE code.”

“Contractor-acquired property” has the meaning given in FAR clause 52.245-1. Upon acceptance by the Government, contractor-acquired property becomes Government-furnished property.

“Government-furnished property” has the meaning given in FAR clause 52.245-1.

“Item unique identification (IUID)” means a system of assigning, reporting, and marking DoD property with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items.

``IUID Registry" means the DoD data repository that receives input from both industry and Government sources and provides storage of, and access to, data that identifies and describes tangible Government personal property. The IUID Registry is—

(i) The authoritative source of Government unit acquisition cost for items with unique item identification (see DFARS 252.211-7003) that were acquired after January 1, 2004;

(ii) The master data source for Government-furnished property; and

(iii) An authoritative source for establishing the acquisition cost of end-item equipment.

``National stock number (NSN)" means a 13-digit stock number used to identify items of supply. It consists of a four-digit Federal Supply Code and a nine-digit National Item Identification Number.

``Nomenclature" means—

(i) The combination of a Government-assigned type designation and an approved item name;

(ii) Names assigned to kinds and groups of products; or

(iii) Formal designations assigned to products by customer or supplier (such as model number or model type, design differentiation, or specific design series or configuration).

``Part or identifying number (PIN)" means the identifier assigned by the original design activity, or by the controlling nationally recognized standard, that uniquely identifies (relative to that design activity) a specific item.

``Reparable" means an item, typically in unserviceable condition, furnished to the Contractor for maintenance, repair, modification, or overhaul.

``Serially managed item" means an item designated by DoD to be uniquely tracked, controlled, or managed in maintenance, repair, and/or supply systems by means of its serial number.

``Supply condition code" means a classification of materiel in terms of readiness for issue and use or to identify action underway to change the status of materiel (see <http://www2.dla.mil/j-6/dlmsso/elibrary/manuals/dlm/dlm--pubs.asp>).

``Unique item identifier (UII)" means a set of data elements permanently marked on an item that is globally unique and unambiguous and never changes, in order to provide traceability of the item throughout its total life cycle. The term includes a concatenated UII or a DoD recognized unique identification equivalent.

``Unit acquisition cost" has the meaning given in FAR clause 52.245-1.

(b) Reporting Government-furnished property to the IUID Registry. Except as provided in paragraph (c) of this clause, the Contractor shall report, in accordance with paragraph (f), Government-furnished property to the IUID Registry as follows:--

(1) Up to and including December 31, 2013, report serially managed Government-furnished property with a unit-acquisition cost of \$5,000 or greater.

(2) Beginning January 1, 2014, report—

(i) All serially managed Government-furnished property, regardless of unit-acquisition cost; and

(ii) Contractor receipt of non-serially managed items. Unless tracked as an individual item, the Contractor shall report non-serially managed items to the Registry in the same unit of packaging, e.g., original manufacturer's package, box, or container, as it was received.

(c) Exceptions. Paragraph (b) of this clause does not apply to—

(1) Contractor-acquired property;

(2) Property under any statutory leasing authority;

(3) Property to which the Government has acquired a lien or title solely because of partial, advance, progress, or performance-based payments;

(4) Intellectual property or software;

(5) Real property; or

(6) Property released for work in process.

(d) Data for reporting to the IUID Registry. To permit reporting of Government-furnished property to the IUID Registry, the Contractor's property management system shall enable the following data elements in addition to those required by paragraph (f)(1)(iii)(A)(1) through (3), (5), (7), (8), and (10) of the Government Property clause of this contract (FAR 52.245-1):

(1) Received/Sent (shipped) date.

(2) Status code.

(3) Accountable Government contract number.

(4) Commercial and Government Entity (CAGE) code on the accountable Government contract.

(5) Mark record.

(i) Bagged or tagged code (for items too small to individually tag or mark).

(ii) Contents (the type of information recorded on the item, e.g., item internal control number).

(iii) Effective date (date the mark is applied).

(iv) Added or removed code/flag.

(v) Marker code (designates which code is used in the marker identifier, e.g., D=CAGE, UN=DUNS, LD=DODAAC).

(vi) Marker identifier, e.g., Contractor's CAGE code or DUNS number.

(vii) Medium code; how the data is recorded, e.g., barcode, contact memory button.

(viii) Value, e.g., actual text or data string that is recorded in its human-readable form.

(ix) Set (used to group marks when multiple sets exist).

(6) Appropriate supply condition code, required only for reporting of reparable, per Appendix 2 of DoD 4000.25-2-M, Military Standard Transaction Reporting and Accounting Procedures manual

(<http://www2.dla.mil/j-6/dlms0/elibrary/manuals/dlm/dlm--pubs.asp>).

(e) When Government-furnished property is in the possession of subcontractors, Contractors shall ensure that reporting is accomplished using the data elements required in paragraph (d) of this clause.

(f) Procedures for reporting of Government-furnished property. Except as provided in paragraph (c) of this clause, the Contractor shall establish and report to the IUID Registry the information required by FAR clause 52.245-1, paragraphs (e) and (f)(1)(iii), in accordance with the data submission procedures at

http://www.acq.osd.mil/dpap/pdi/uid/data_submission_information.html.

(g) Procedures for updating the IUID Registry.

(1) Except as provided in paragraph (g)(2), the Contractor shall update the IUID Registry at <https://iuid.logisticsinformationservice.dla.mil/> for changes in status, mark, custody, condition code (for reparable only), or disposition of items that are—

- (i) Received by the Contractor;
 - (ii) Delivered or shipped from the Contractor's plant, under Government instructions, except when shipment is to a subcontractor or other location of the Contractor;
 - (iii) Consumed or expended, reasonably and properly, or otherwise accounted for, in the performance of the contract as determined by the Government property administrator, including reasonable inventory adjustments;
 - (iv) Disposed of; or
 - (v) Transferred to a follow-on or other contract.
- (2) The Contractor need not report to the IUID Registry those transactions reported or to be reported to the following DCMA etools:
- (i) Plant Clearance Automated Reutilization and Screening System (PCARSS); or
 - (ii) Lost, Theft, Damaged or Destroyed (LTDD) system.
- (3) The contractor shall update the IUID Registry as transactions occur or as otherwise stated in the Contractor's property management procedure.

(End of clause)

252.227-7013 RIGHTS IN TECHNICAL DATA--NONCOMMERCIAL ITEMS. (JUN 2013)

(a) Definitions. As used in this clause--

- (1) Computer data base means a collection of data recorded in a form capable of being processed by a computer. The term does not include computer software.
- (2) Computer program means a set of instructions, rules, or routines recorded in a form that is capable of causing a computer to perform a specific operation or series of operations.
- (3) Computer software means computer programs, source code, source code listings, object code listings, design details, algorithms, processes, flow charts, formulae and related material that would enable the software to be reproduced, recreated, or recompiled. Computer software does not include computer data bases or computer software documentation.

(4) Computer software documentation means owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software.

(5) Covered Government support contractor means a contractor under a contract, the primary purpose of which is to furnish independent and impartial advice or technical assistance directly to the Government in support of the Government's management and oversight of a program or effort (rather than to directly furnish an end item or service to accomplish a program or effort), provided that the contractor--

(i) Is not affiliated with the prime contractor or a first-tier subcontractor on the program or effort, or with any direct competitor of such prime contractor or any such first-tier subcontractor in furnishing end items or services of the type developed or produced on the program or effort; and

(ii) Receives access to technical data or computer software for performance of a Government contract that contains the clause at 252.227-7025, Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legends.

(6) Detailed manufacturing or process data means technical data that describe the steps, sequences, and conditions of manufacturing, processing or assembly used by the manufacturer to produce an item or component or to perform a process.

(7) Developed means that an item, component, or process exists and is workable. Thus, the item or component must have been constructed or the process practiced. Workability is generally established when the item, component, or process has been analyzed or tested sufficiently to demonstrate to reasonable people skilled in the applicable art that there is a high probability that it will operate as intended. Whether, how much, and what type of analysis or testing is required to establish workability depends on the nature of the item, component, or process, and the state of the art. To be considered "developed," the item, component, or process need not be at the stage where it could be offered for sale or sold on the commercial market, nor must the item, component, or process be actually reduced to practice within the meaning of Title 35 of the United States Code.

(8) Developed exclusively at private expense means development was accomplished entirely with costs charged to indirect cost pools, costs not allocated to a government contract, or any combination thereof.

(i) Private expense determinations should be made at the lowest practicable level.

(ii) Under fixed-price contracts, when total costs are greater than the firm-fixed-price or ceiling price of the contract, the additional development costs necessary to complete development shall not be considered when determining whether development was at government, private, or mixed expense.

(9) Developed exclusively with government funds means development was not accomplished exclusively or partially at private expense.

(10) Developed with mixed funding means development was accomplished partially with costs charged to indirect cost pools and/or costs not allocated to a government contract, and partially with costs charged directly to a government contract.

(11) Form, fit, and function data means technical data that describes the required overall physical, functional, and performance characteristics (along with the qualification requirements, if applicable) of an item, component, or process to the extent necessary to permit identification of physically and functionally interchangeable items.

(12) Government purpose means any activity in which the United States Government is a party, including cooperative agreements with international or multi-national defense organizations, or sales or transfers by the United States Government to foreign governments or international organizations. Government purposes include competitive procurement, but do not include the rights to use, modify, reproduce, release, perform, display, or disclose technical data for commercial purposes or authorize others to do so.

(13) Government purpose rights means the rights to--

(i) Use, modify, reproduce, release, perform, display, or disclose technical data within the Government without restriction; and

(ii) Release or disclose technical data outside the Government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose that data for United States government purposes.

(14) Limited rights means the rights to use, modify, reproduce, release, perform, display, or disclose technical data, in whole or in part, within the Government. The Government may not, without the written permission of the party asserting limited rights, release or disclose the technical data outside the Government, use the technical data for manufacture, or authorize the technical data to be used by another party, except that the Government may reproduce, release, or disclose such data or authorize the use or reproduction of the data by persons outside the Government if--

(i) The reproduction, release, disclosure, or use is--

(A) Necessary for emergency repair and overhaul; or

(B) A release or disclosure to--

(1) A covered Government support contractor in performance of its covered Government support contract for use, modification, reproduction, performance, display, or release or disclosure to a person authorized to receive limited rights technical data; or

(2) A foreign government, of technical data other than detailed manufacturing or process data, when use of such data by the foreign government is in the interest of the Government and is required for evaluational or informational purposes;

(ii) The recipient of the technical data is subject to a prohibition on the further reproduction, release, disclosure, or use of the technical data; and

(iii) The contractor or subcontractor asserting the restriction is notified of such reproduction, release, disclosure, or use.

(15) Technical data means recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial and/or management information.

(16) Unlimited rights means rights to use, modify, reproduce, perform, display, release, or disclose technical data in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so.

(b) Rights in technical data. The Contractor grants or shall obtain for the Government the following royalty free, world-wide, nonexclusive, irrevocable license rights in technical data other than computer software documentation (see the Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation clause of this contract for rights in computer software documentation):

(1) Unlimited rights.

The Government shall have unlimited rights in technical data that are--

(i) Data pertaining to an item, component, or process which has been or will be developed exclusively with Government funds;

(ii) Studies, analyses, test data, or similar data produced for this contract, when the study, analysis, test, or similar work was specified as an element of performance;

(iii) Created exclusively with Government funds in the performance of a contract that does not require the development, manufacture, construction, or production of items, components, or processes;

(iv) Form, fit, and function data;

(v) Necessary for installation, operation, maintenance, or training purposes (other than detailed manufacturing or process data);

(vi) Corrections or changes to technical data furnished to the Contractor by the Government;

(vii) Otherwise publicly available or have been released or disclosed by the Contractor or subcontractor without restrictions on further use, release or disclosure, other than a release or disclosure resulting from the sale, transfer, or other assignment of interest in the technical data to another party or the sale or transfer of some or all of a business entity or its assets to another party;

(viii) Data in which the Government has obtained unlimited rights under another Government contract or as a result of negotiations; or

(ix) Data furnished to the Government, under this or any other Government contract or subcontract thereunder, with--

(A) Government purpose license rights or limited rights and the restrictive condition(s) has/have expired; or

(B) Government purpose rights and the Contractor's exclusive right to use such data for commercial purposes has expired.

(2) Government purpose rights.

(i) The Government shall have government purpose rights for a five-year period, or such other period as may be negotiated, in technical data--

(A) That pertain to items, components, or processes developed with mixed funding except when the Government is entitled to unlimited rights in such data as provided in paragraphs as provided in paragraphs (b)(1)(ii) and (b)(1)(iv) through (b)(1)(ix) of this clause; or

(B) Created with mixed funding in the performance of a contract that does not require the development, manufacture, construction, or production of items, components, or processes.

(ii) The five-year period, or such other period as may have been negotiated, shall commence upon execution of the contract, subcontract, letter contract (or similar contractual instrument), contract modification, or option exercise that required development of the items, components, or processes or creation of the data described in paragraph (b)(2)(i)(B) of this clause. Upon expiration of the five-year or other negotiated period, the Government shall have unlimited rights in the technical data.

(iii) The Government shall not release or disclose technical data in which it has government purpose rights unless-

(A) Prior to release or disclosure, the intended recipient is subject to the non-disclosure agreement at 227.7103-7 of the Defense Federal Acquisition Regulation Supplement (DFARS); or

(B) The recipient is a Government contractor receiving access to the data for performance of a Government contract that contains the clause at DFARS 252.227-7025, Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legends.

(iv) The Contractor has the exclusive right, including the right to license others, to use technical data in which the Government has obtained government purpose rights under this contract for any commercial purpose during the time period specified in the government purpose rights legend prescribed in paragraph (f)(2) of this clause.

(3) Limited rights.

(i) Except as provided in paragraphs (b)(1)(ii) and (b)(1)(iv) through (b)(1)(ix) of this clause, the Government shall have limited rights in technical data--

(A) Pertaining to items, components, or processes developed exclusively at private expense and marked with the limited rights legend prescribed in paragraph (f) of this clause; or

(B) Created exclusively at private expense in the performance of a contract that does not require the development, manufacture, construction, or production of items, components, or processes.

(ii) The Government shall require a recipient of limited rights data for emergency repair or overhaul to destroy the data and all copies in its possession promptly following completion of the emergency repair/overhaul and to notify the Contractor that the data have been destroyed.

(iii) The Contractor, its subcontractors, and suppliers are not required to provide the Government additional rights to use, modify, reproduce, release, perform, display, or disclose technical data furnished to the Government with limited rights. However, if the Government desires to obtain additional rights in technical data in which it has limited rights, the Contractor agrees to promptly enter into negotiations with the Contracting Officer to determine whether there are acceptable terms for transferring such rights. All technical data in which the Contractor has granted the Government additional rights shall be listed or described in a license agreement made part of the contract. The license shall enumerate the additional rights granted the Government in such data.

(iv) The Contractor acknowledges that--

(A) Limited rights data are authorized to be released or disclosed to covered Government support contractors;

(B) The Contractor will be notified of such release or disclosure;

(C) The Contractor (or the party asserting restrictions as identified in the limited rights legend) may require each such covered Government support contractor to enter into a non-disclosure agreement directly with the Contractor (or the party asserting restrictions) regarding the covered Government support contractor's use of such data, or alternatively, that the Contractor (or party asserting restrictions) may waive in writing the requirement for a non-disclosure agreement; and

(D) Any such non-disclosure agreement shall address the restrictions on the covered Government support contractor's use of the limited rights data as set forth in the clause at 252.227-7025, Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legends. The non-disclosure agreement shall not include any additional terms and conditions unless mutually agreed to by the parties to the non-disclosure agreement.

(E) The Contractor shall provide a copy of any such non-disclosure agreement or waiver to the Contracting Officer, upon request.

(4) Specifically negotiated license rights.

The standard license rights granted to the Government under paragraphs (b)(1) through (b)(3) of this clause, including the period during which the Government shall have government purpose rights in technical data, may be modified by mutual agreement to provide such rights as the parties consider appropriate but shall not provide the Government lesser rights than are enumerated in paragraph (a)(14) of this clause. Any rights so negotiated shall be identified in a license agreement made part of this contract.

(5) Prior government rights.

Technical data that will be delivered, furnished, or otherwise provided to the Government under this contract, in which the Government has previously obtained rights shall be delivered, furnished, or provided with the pre-existing rights, unless--

(i) The parties have agreed otherwise; or

(ii) Any restrictions on the Government's rights to use, modify, reproduce, release, perform, display, or disclose the data have expired or no longer apply.

(6) Release from liability.

The Contractor agrees to release the Government from liability for any release or disclosure of technical data made in accordance with paragraph (a)(14) or (b)(2)(iii) of this clause, in accordance with the terms of a license negotiated under paragraph (b)(4) of this clause, or by others to whom the recipient has released or disclosed the data and to seek relief solely from the party who has improperly used, modified, reproduced, released, performed, displayed, or disclosed Contractor data marked with restrictive legends.

(c) Contractor rights in technical data. All rights not granted to the Government are retained by the Contractor.

(d) Third party copyrighted data. The Contractor shall not, without the written approval of the Contracting Officer, incorporate any copyrighted data in the technical data to be delivered under this contract unless the Contractor is the copyright owner or has obtained for the Government the license rights necessary to perfect a license or licenses in the deliverable data of the appropriate scope set forth in paragraph (b) of this clause, and has affixed a statement of the license or licenses obtained on behalf of the Government and other persons to the data transmittal document.

(e) Identification and delivery of data to be furnished with restrictions on use, release, or disclosure. (1) This paragraph does not apply to restrictions based solely on copyright.

(2) Except as provided in paragraph (e)(3) of this clause, technical data that the Contractor asserts should be furnished to the Government with restrictions on use, release, or disclosure are identified in an attachment to this contract (the Attachment). The Contractor shall not deliver any data with restrictive markings unless the data are listed on the Attachment.

(3) In addition to the assertions made in the Attachment, other assertions may be identified after award when based on new information or inadvertent omissions unless the inadvertent omissions would have materially affected the source selection decision. Such identification and assertion shall be submitted to the Contracting Officer as soon as practicable prior to the scheduled date for delivery of the data, in the following format, and signed by an official authorized to contractually obligate the Contractor: Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of Technical Data.

The Contractor asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data should be restricted--

Technical data to be Furnished With Restrictions \1/	Basis for Assertion \2/	Asserted Rights Category \3/	Name of Person Asserting Restrictions \4/
(LIST)	(LIST)	(LIST)	(LIST)

\1/ If the assertion is applicable to items, components or processes developed at private expense, identify both the data and each such items, component, or process.

\2/ Generally, the development of an item, component, or process at private expense, either exclusively or partially, is the only basis for asserting restrictions on the Government's rights to use, release, or disclose technical data pertaining to such items, components, or processes. Indicate whether development was exclusively or partially at private expense. If development was not at private expense, enter the specific reason for asserting that the Government's rights should be restricted.

\3/ Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited or government purpose rights under this or a prior contract, or specifically negotiated licenses).

\4/ Corporation, individual, or other person, as appropriate.

Date _____

Printed Name and Title _____

Signature _____

(End of identification and assertion)

(4) When requested by the Contracting Officer, the Contractor shall provide sufficient information to enable the Contracting Officer to evaluate the Contractor's assertions. The Contracting Officer reserves the right to add the Contractor's assertions to the Attachment and validate any listed assertion, at a later date, in accordance with the procedures of the Validation of Restrictive Markings on Technical Data clause of this contract.

(f) Marking requirements. The Contractor, and its subcontractors or suppliers, may only assert restrictions on the Government's rights to use, modify, reproduce, release, perform, display, or disclose technical data to be delivered under this contract by marking the deliverable data subject to restriction. Except as provided in paragraph (f)(5) of this clause, only the following legends are authorized under this contract: the government purpose rights legend at paragraph (f)(2) of this clause; the limited rights legend at paragraph (f)(3) of this clause; or the special license rights legend at paragraph (f)(4) of this clause; and/or a notice of copyright as prescribed under 17 U.S.C. 401 or 402.

(1) General marking instructions. The Contractor, or its subcontractors or suppliers, shall conspicuously and legibly mark the appropriate legend on all technical data that qualify for such

markings. The authorized legends shall be placed on the transmittal document or storage container and, for printed material, each page of the printed material containing technical data for which restrictions are asserted. When only portions of a page of printed material are subject to the asserted restrictions, such portions shall be identified by circling, underscoring, with a note, or other appropriate identifier. Technical data transmitted directly from one computer or computer terminal to another shall contain a notice of asserted restrictions. Reproductions of technical data or any portions thereof subject to asserted restrictions shall also reproduce the asserted restrictions.

(2) Government purpose rights markings. Data delivered or otherwise furnished to the Government purpose rights shall be marked as follows:

Government Purpose Rights

Contract No. _____

Contractor Name _____

Contractor Address _____

Expiration Date _____

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(2) of the Rights in Technical Data--Noncommercial Items clause contained in the above identified contract. No restrictions apply after the expiration date shown above. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings.

(End of legend)

(3) Limited rights markings. Data delivered or otherwise furnished to the Government with limited rights shall be marked with the following legend:

Limited Rights

Contract No. _____

Contractor Name _____

Contractor Address _____

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause contained in the above identified contract. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify the above named Contractor.

(End of legend)

(4) Special license rights markings. (i) Data in which the Government's rights stem from a specifically negotiated license shall be marked with the following legend:

Special License Rights

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these data are restricted by Contract No. _____ (Insert contract number) _____, License No. _____ (Insert license identifier) _____. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings.

(End of legend)

(ii) For purposes of this clause, special licenses do not include government purpose license rights acquired under a prior contract (see paragraph (b)(5) of this clause).

(5) Pre-existing data markings. If the terms of a prior contract or license permitted the Contractor to restrict the Government's rights to use, modify, reproduce, release, perform, display, or disclose technical data deliverable under this contract, and those restrictions are still applicable, the Contractor may mark such data with the appropriate restrictive legend for which the data qualified under the prior contract or license. The marking procedures in paragraph (f)(1) of this clause shall be followed.

(g) Contractor procedures and records. Throughout performance of this contract, the Contractor and its subcontractors or suppliers that will deliver technical data with other than unlimited rights, shall--

(1) Have, maintain, and follow written procedures sufficient to assure that restrictive markings are used only when authorized by the terms of this clause; and

(2) Maintain records sufficient to justify the validity of any restrictive markings on technical data delivered under this contract.

(h) Removal of unjustified and nonconforming markings. (1) Unjustified technical data markings. The rights and obligations of the parties regarding the validation of restrictive markings on technical data furnished or to be furnished under this contract are contained in the Validation of Restrictive Markings on Technical Data clause of this contract. Notwithstanding any provision of this contract concerning inspection and acceptance, the Government may ignore or, at the Contractor's expense, correct or strike a marking if, in accordance with the procedures in the Validation of Restrictive Markings on Technical Data clause of this contract, a restrictive marking is determined to be unjustified.

(2) Nonconforming technical data markings. A nonconforming marking is a marking placed on technical data delivered or otherwise furnished to the Government under this contract that is not in the format authorized by this contract. Correction of nonconforming markings is not subject to the validation of Restrictive Markings on Technical Data clause of this contract. If the Contracting Officer notifies the Contractor of a nonconforming marking and the Contractor fails to remove or correct such marking within sixty (60) days, the Government may ignore or, at the Contractor's expense, remove or correct any nonconforming marking.

(i) Relation to patents. Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government under any patent.

(j) Limitation on charges for rights in technical data. (1) The Contractor shall not charge to this contract any cost, including, but not limited to, license fees, royalties, or similar charges, for rights in technical data to be delivered under this contract when--

(i) The Government has acquired, by any means, the same or greater rights in the data; or

(ii) The data are available to the public without restrictions.

(2) The limitation in paragraph (j)(1) of this clause--

(i) Includes costs charged by a subcontractor or supplier, at any tier, or costs incurred by the Contractor to acquire rights in subcontractor or supplier technical data, if the subcontractor or supplier has been paid for such rights under any other Government contract or under a license conveying the rights to the Government; and

(ii) Does not include the reasonable costs of reproducing, handling, or mailing the documents or other media in which the technical data will be delivered.

(k) Applicability to subcontractors or suppliers. (1) The Contractor shall ensure that the rights afforded its subcontractors and suppliers under 10 U.S.C. 2320, 10 U.S.C. 2321, and the identification, assertion, and delivery processes of paragraph (e) of this clause are recognized and protected.

(2) Whenever any technical data for noncommercial items, or for commercial items developed in any part at Government expense, is to be obtained from a subcontractor or supplier for delivery to the Government under this contract, the Contractor shall use this same clause in the subcontract or other contractual instrument, including subcontracts or other contractual instruments for commercial items, and require its subcontractors or suppliers to do so, without alteration, except to identify the parties. This clause will govern the technical data pertaining to noncommercial items or to any portion of a commercial item that was developed in any part at Government expense, and the clause at 252.227-7015 will govern the technical data pertaining to any portion of a commercial item that was developed exclusively at private expense. No other clause shall be used to enlarge or diminish the Government's, the Contractor's, or a higher-tier subcontractor's or supplier's rights in a subcontractor's or supplier's technical data.

(3) Technical data required to be delivered by a subcontractor or supplier shall normally be delivered to the next higher-tier contractor, subcontractor, or supplier. However, when there is a requirement in the prime contract for data which may be submitted with other than unlimited rights by a subcontractor or supplier, then said subcontractor or supplier may fulfill its requirement by submitting such data directly to the Government, rather than through a higher-tier contractor, subcontractor, or supplier.

(4) The Contractor and higher-tier subcontractors or suppliers shall not use their power to award contracts as economic leverage to obtain rights in technical data from their subcontractors or suppliers. (5) In no event shall the Contractor use its obligation to recognize and protect subcontractor or supplier rights in technical data as an excuse for failing to satisfy its contractual obligations to the Government.

(End of clause)

252.227-7017 IDENTIFICATION AND ASSERTION OF USE, RELEASE, OR DISCLOSURE RESTRICTIONS. (JAN 2011)

(a) The terms used in this provision are defined in following clause or clauses contained in this solicitation--

(1) If a successful offeror will be required to deliver technical data, the Rights in Technical Data--Noncommercial Items clause, or, if this solicitation contemplates a contract under the Small Business Innovation Research Program, the Rights in Noncommercial Technical Data and Computer Software--Small Business Innovation Research (SBIR) Program clause.

(2) If a successful offeror will not be required to deliver technical data, the Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation clause, or, if this solicitation contemplates a contract under the Small Business Innovation

Research Program, the Rights in Noncommercial Technical Data and Computer Software--Small Business Innovation Research (SBIR) Program clause.

(b) The identification and assertion requirements in this provision apply only to technical data, including computer software documents, or computer software to be delivered with other than unlimited rights. For contracts to be awarded under the Small Business Innovation Research Program, the notification requirements do not apply to technical data or computer software that will be generated under the resulting contract. Notification and identification is not required for restrictions based solely on copyright.

(c) Offers submitted in response to this solicitation shall identify, to the extent known at the time an offer is submitted to the Government, the technical data or computer software that the Offeror, its subcontractors or suppliers, or potential subcontractors or suppliers, assert should be furnished to the Government with restrictions on use, release, or disclosure.

(d) The Offeror's assertions, including the assertions of its subcontractors or suppliers or potential subcontractors or suppliers shall be submitted as an attachment to its offer in the following format, dated and signed by an official authorized to contractually obligate the Offeror:

Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of Technical Data or Computer Software.

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data or Computer Software to be Furnished	Name of Person Asserting
With Restrictions *	Basis for Assertion **
	Asserted Rights Category ***
	Restrictions ****
(LIST) *****	(LIST)
	(LIST)
	(LIST)

*For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such items, component, or process. For computer software or computer software documentation identify the software or documentation.

**Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished

at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

***Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).

***Corporation, individual, or other person, as appropriate.

*****Enter "none" when all data or software will be submitted without restrictions.

Date _____

Printed Name and Title _____

Signature _____

(End of identification and assertion)

(e) An offeror's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.

(f) If the Offeror is awarded a contract, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that contract. Upon request by the Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.

(End of provision)

5152.204-5002 CONTRACTOR MANPOWER REPORTING APPLICATION (CMRA)
(NOV 2006)

The Contractor Manpower Reporting Application (CMRA) is a business process for collecting information on contracts that provide services to the Department of the Army. The contractor and all subcontractors are required to create an account and input data for all services performed under this contract within CMRA, to include all delivery/task orders issued against this contract. This input is required to be accomplished on a Government fiscal year basis (1st of October through 30th of September). All contractor/subcontractor input will be accomplished between the 1st and the 15th of October of each year for the previous year or upon completion of performance, whichever is earliest. More information can be found within the User Guides tab at <https://cmra.army.mil/>.

Contract number and contractor identity will be treated as proprietary information when they are associated with the direct labor hours and direct labor dollars. At no time will any data be released to the public, with the contractor name and contract number associated with the data.

(End of clause)

5152.210-5000 AVAILABILITY OF UNIQUE DATA ITEM DESCRIPTIONS (UDIDs)
AND DATA ITEM DESCRIPTIONS (DIDs) (PEO-STRI) (SEP 2006)

Access Procedures for Acquisition Management System and Data Requirements Control List (AMSDL), DoD 5010.12-L, and DIDs listed therein. The AMSDL and all DIDs and UDIDs listed therein are available online via the Acquisition Streamlining and Standardization Information System located at <http://quicksearch.dla.mil> or <http://assist.dla.mil/online/start/index.cfm>. To access these documents, select the Quick Search link on the site home page.

(End of Clause)

5152.227-5000 INVENTION DISCLOSURES AND REPORTS (SEP 2006)

(a) In accordance with the requirements of the Patent Rights clause of this contract, the contractor shall submit "Report of Inventions and Subcontracts" (DD Form 882) along with written disclosure of inventions to the designated Contract Administrator.

(b) The Contract Administrator will forward such reports and disclosures directly to the appropriate Patent Counsel, designated below, for review and recommendations, after which the reports will be returned to the Contract Administrator.

Name and address of Patent Counsel:

Judge Advocate General
Department of the Army
Attn DAJA-IP
901 N. Stuart Street
Arlington, VA 22203-1837

(c) The above designated Patent Counsel will represent the Procurement Contracting Officer with regard to invention reporting matters arising under this contract.

(d) A copy of each report and disclosure shall be forwarded to the Procuring Contracting Officer.

(e) The contractor shall furnish the Contracting Officer a final report within three (3) months after completion of the contracted work listing all subject inventions or certifying that there were no such inventions, and listing all subcontracts at any tier containing a patent rights clause or certifying that there were no such subcontracts.

(End of clause)

5152.227-5002 NOTICE REGARDING THE DISSEMINATION OF EXPORT-CONTROLLED TECHNICAL DATA (PEO-STRI) (SEP 2006)

(a) Export of information contained herein, which includes release to foreign nationals within the United States, without first obtaining approval or license from the Department of State for items controlled by the International Traffic in Arms Regulations (ITARs), or the Department of Commerce for items controlled by the Export Administration Regulations (EAR), may constitute a violation of law.

(b) For violation of export laws, the contractor, its employees, officials or agents are subject to:

(1) Imprisonment and/or imposition of criminal fines; and

(2) Suspension or debarment from future Government contracting actions.

(c) The Government shall not be liable for any unauthorized use or release of export-controlled information, technical data or specifications in this contract.

(d) The contractor shall include the provisions or paragraphs (a) through (c) above in any subcontracts awarded under this contract.

(End of Clause)

5152.227-5005 DISCLOSURE, USE AND PROTECTION OF PROPRIETARY INFORMATION (PEO-STRI) (SEP 2006)

(a) During the performance of this contract, the Government may use an independent services contractor (ISC), who is neither an agent nor employee of the Government. The ISC may be used to conduct reviews, evaluations, or independent verification and validations of technical documents submitted to the Government during performance.

(b) The use of an ISC is solely for the convenience of the Government. The ISC has no obligation to the prime contractor. The prime contractor is required to provide full cooperation, working facilities and access to the ISC for the purposes stated in paragraph (a) above.

(c) Since the ISC is neither an employee nor agent of the Government, any findings, recommendations, analyses, or conclusions of such a contractor are not those of the Government.

(d) The prime contractor acknowledges that the Government has the right to use ISCs as stated in paragraph (a) above. It is possible that under such an arrangement the ISC may require access to or the use of information (other than restricted cost or pricing data), which is proprietary to the prime contractor.

(e) To protect any such proprietary information from disclosure or use, and to establish the respective rights and duties of both the ISC and prime contractor, the prime contractor agrees to enter into a direct agreement with any ISC as the Government requires. A properly executed copy (per FAR 9.505-4) of the agreement will be provided to the Procuring Contracting Officer.

(End of Clause)

5152.243-5000 AUTHORIZED CHANGES ONLY BY THE CONTRACTING OFFICER (SEP 2006)

(a) Except as specified in paragraph (b) below, no order, statement, or conduct of Government personnel who visit the contractor's facilities or in any other manner communicates with contractor personnel during the performance of this contract shall constitute a change under the "Changes" clause of this contract.

(b) The contractor shall not comply with any order, direction or request of Government personnel unless it is issued in writing and signed by the Contracting Officer, or is pursuant to specific authority otherwise included as a part of this contract.

(c) The Contracting Officer is the only person authorized to approve changes in any of the requirements of this contract and notwithstanding provisions contained elsewhere in this contract, the said authority remains solely the Contracting Officer's. In the event the contractor effects any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any increase in charges incurred as a result thereof. The address and telephone number of the Contracting Officer is:

Patricia (Pat) Cole Soucy, Contracting Officer
U.S. ARMY PEO-STRI, Acquisition Center
12350 Research Parkway, Orlando, FL 32826

Ofc: 407-380-4874, DSN: 960-4874
Email: patricia.c.soucy.civ@mail.mil

(End of Clause)

SECTION I - CONTRACT CLAUSES

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://farsite.hill.af.mil/>

<http://acquisition.gov/far/>

(End of clause)

CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	JAN 2012
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions On Subcontractor Sales To The Government	SEP 2006
52.203-7	Anti-Kickback Procedures	OCT 2010
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	JAN 1997
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	JAN 1997
52.203-12	Limitation On Payments To Influence Certain Federal Transactions	OCT 2010
52.203-16	Preventing Personal Conflicts of Interest	DEC 2011
52.204-2	Security Requirements	AUG 1996
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	MAY 2011
52.204-7	System for Award Management	JUL 2013
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	JUL 2013
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	AUG 2013
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	JUL 2013
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations	MAY 2012
52.211-5	Material Requirements	AUG 2000

52.215-8	Order of Precedence--Uniform Contract Format	OCT 1997
52.215-19	Notification of Ownership Changes	OCT 1997
52.219-28	Post-Award Small Business Program Representation	JUN 2007
52.222-19	Child Labor -- Cooperation with Authorities and Remedies	MAR 2012
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	MAR 2007
52.222-29	Notification Of Visa Denial	JUN 2003
52.222-35	Equal Opportunity for Veterans	SEP 2010
52.222-36	Affirmative Action For Workers With Disabilities	OCT 2010
52.222-37	Employment Reports on Veterans	SEP 2010
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	DEC 2010
52.222-50	Combating Trafficking in Persons	FEB 2009
52.222-54	Employment Eligibility Verification	AUG 2013
52.223-6	Drug-Free Workplace	MAY 2001
52.223-18	Encouraging Contractor Policies To Ban Text Messaging While Driving	AUG 2011
52.225-13	Restrictions on Certain Foreign Purchases	JUN 2008
52.225-14	Inconsistency Between English Version And Translation Of Contract	FEB 2000
52.227-1	Authorization and Consent	DEC 2007
52.227-19	Commercial Computer Software License	DEC 2007
52.229-6	Taxes--Foreign Fixed-Price Contracts	FEB 2013
52.230-2	Cost Accounting Standards	MAY 2012
52.230-3	Disclosure And Consistency Of Cost Accounting Practices	MAY 2012
52.232-1	Payments	APR 1984
52.232-7	Payments under Time-and-Materials and Labor-Hour Contracts	AUG 2012
52.232-8	Discounts For Prompt Payment	FEB 2002
52.232-9	Limitation on Withholding of Payments	APR 1984
52.232-11	Extras	APR 1984
52.232-16	Progress Payments	APR 2012
52.232-17	Interest	OCT 2010
52.232-23	Assignment Of Claims	JAN 1986
52.232-25	Prompt Payment	JUL 2013
52.232-33	Payment by Electronic Funds Transfer--System for Award Management	JUL 2013
52.233-1 Alt I	Disputes (Jul 2002) - Alternate I	DEC 1991
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004

52.234-1	Industrial Resources Developed Under Defense Production Act Title III	DEC 1994
52.242-4	Certification of Final Indirect Costs	JAN 1997
52.242-13	Bankruptcy	JUL 1995
52.243-1	Changes--Fixed Price	AUG 1987
52.243-1 Alt I	Changes--Fixed Price (Aug 1987) - Alternate I	APR 1984
52.244-5	Competition In Subcontracting	DEC 1996
52.245-1	Government Property	JUN 2007
52.245-9	Use and Charges	APR 2012
52.246-23	Limitation Of Liability	FEB 1997
52.246-25	Limitation Of Liability--Services	FEB 1997
52.249-2	Termination For Convenience Of The Government (Fixed-Price)	APR 2012
52.249-8	Default (Fixed-Price Supply & Service)	APR 1984
52.251-1	Government Supply Sources	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	SEP 2013
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7006	Billing Instructions	OCT 2005
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7002	Disclosure Of Ownership Or Control By A Foreign Government	JUN 2010
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country	DEC 2006
252.211-7000	Acquisition Streamlining	DEC 1991
252.217-7028	Over And Above Work	DEC 1991
252.222-7002	Compliance With Local Labor Laws (Overseas)	JUN 1997
252.225-7005	Identification Of Expenditures In The United States	JUN 2005
252.225-7006	Quarterly Reporting of Actual Contract Performance Outside the United States	OCT 2010
252.225-7013	Duty-Free Entry	OCT 2013
252.225-7021	Trade Agreements	OCT 2013
252.225-7036	Buy American--Free Trade Agreement--Balance of Payments Program	DEC 2012
252.225-7041	Correspondence in English	JUN 1997

252.226-7001	Utilization of Indian Organizations and Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	SEP 2004	
252.227-7014	Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation	MAY 2013	
252.227-7015	Technical Data - - Commercial Items	NOV 1995	
252.227-7016	Rights in Bid or Proposal Information		JAN 2011
252.227-7019	Validation of Asserted Restrictions--Computer Software		JUN 1995
252.227-7022	Government Rights (Unlimited)		MAR 1979
252.227-7023	Drawings And Other Data To Become Property of Government		MAR 1979
252.227-7024	Notice And Approval Of Restricted Designs		APR 1984
252.227-7025	Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legend		JUN 1995
252.227-7026	Deferred Delivery of Technical Data or Computer Software		APR 1988
252.227-7027	Deferred Ordering of Technical Data or Computer Software		APR 1988
252.227-7028	Technical Data or Computer Software Previously Delivered to the Government		JUN 1995
252.227-7030	Technical Data--Withholding Of Payment		MAR 2000
252.227-7037	Validation of Restrictive Markings on Technical Data		SEP 1999
252.232-7010	Levies on Contract Payments		DEC 2006
252.239-7001	Information Assurance Contractor Training and Certification		JAN 2008
252.243-7001	Pricing Of Contract Modifications		DEC 1991

CLAUSES INCORPORATED BY FULL TEXT

52.223-11 OZONE-DEPLETING SUBSTANCES MAY 2001

(a) Definition. Ozone-depleting substance, as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR part 82 as--

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including, but not limited to, hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

“WARNING: Contains (or manufactured with, if applicable), a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.”-----

The Contractor shall insert the name of the substance(s).

(End of clause)

52.243-7 NOTIFICATION OF CHANGES (APR 1984)

(a) Definitions.

"Contracting Officer," as used in this clause, does not include any representative of the Contracting Officer.

"Specifically authorized representative (SAR)," as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this subparagraph and shall be issued to the designated representative before the SAR exercises such authority.

(b) Notice. The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing, within 30 calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state--

- (1) The date, nature, and circumstances of the conduct regarded as a change;
- (2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;
- (3) The identification of any documents and the substance of any oral communication involved in such conduct;
- (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
- (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including--
 - (i) What contract line items have been or may be affected by the alleged change;

(ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;

(iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;

(iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and

(6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.

(c) Continued performance. Following submission of the notice required by (b) above, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in (b) above, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall countermand any action which exceeds the authority of the SAR.

(d) Government response. The Contracting Officer shall promptly, within 30 calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either--

(1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;

(2) Countermand any communication regarded as a change;

(3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or

(4) In the event the Contractor's notice information is inadequate to make a decision under (1), (2), or (3) above, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

(e) Equitable adjustments.

(1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made--

(i) In the contract price or delivery schedule or both; and

(ii) In such other provisions of the contract as may be affected.

(2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in (b) and (c) above.

Note: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

(End of clause)

252.225-7012 PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (FEB 2013)

(a) Definitions. As used in this clause--

Component means any item supplied to the Government as part of an end product or of another component.

End product means supplies delivered under a line item of this contract.

Qualifying country means a country with a reciprocal defense procurement memorandum of understanding or international agreement with the United States in which both countries agree to remove barriers to purchases of supplies produced in the other country or services performed by sources of the other country, and the memorandum or agreement complies, where applicable, with the requirements of section 36 of the Arms Export Control Act (22 U.S.C. 2776) and with 10 U.S.C. 2457. Accordingly, the following are qualifying countries:

Australia
Austria
Belgium
Canada
Czech Republic
Denmark
Egypt
Finland
France
Germany
Greece
Israel
Italy
Luxembourg
Netherlands
Norway
Poland
Portugal
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland.

Structural component of a tent--

(i) Means a component that contributes to the form and stability of the tent (e.g., poles, frames, flooring, guy ropes, pegs);

(ii) Does not include equipment such as heating, cooling, or lighting.

United States means the 50 States, the District of Columbia, and outlying areas.

U.S.-flag vessel means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b) The Contractor shall deliver under this contract only such of the following items, either as end products or components, that have been grown, reprocessed, reused, or produced in the United States:

(1) Food.

- (2) Clothing and the materials and components thereof, other than sensors, electronics, or other items added to, and not normally associated with, clothing and the materials and components thereof. Clothing includes items such as outerwear, headwear, underwear, nightwear, footwear, hosiery, handwear, belts, badges, and insignia.
- (3) (i) Tents and structural components of tents;
- (ii) Tarpaulins; or
- (iii) Covers.
- (4) Cotton and other natural fiber products.
- (5) Woven silk or woven silk blends.
- (6) Spun silk yarn for cartridge cloth.
- (7) Synthetic fabric, and coated synthetic fabric, including all textile fibers and yarns that are for use in such fabrics.
- (8) Canvas products.
- (9) Wool (whether in the form of fiber or yarn or contained in fabrics, materials, or manufactured articles).
- (10) Any item of individual equipment (Federal Supply Class 8465) manufactured from or containing fibers, yarns, fabrics, or materials listed in this paragraph (b).
- (c) This clause does not apply--
- (1) To items listed in section 25.104(a) of the Federal Acquisition Regulation (FAR), or other items for which the Government has determined that a satisfactory quality and sufficient quantity cannot be acquired as and when needed at U.S. market prices;
- (2) To incidental amounts of cotton, other natural fibers, or wool incorporated in an end product, for which the estimated value of the cotton, other natural fibers, or wool--
- (i) Is not more than 10 percent of the total price of the end product; and (ii) Does not exceed the simplified acquisition threshold in FAR part 2;
- (3) To waste and byproducts of cotton or wool fiber for use in the production of propellants and explosives;

(4) To foods, other than fish, shellfish, or seafood, that have been manufactured or processed in the United States, regardless of where the foods (and any component if applicable) were grown or produced. Fish, shellfish, or seafood manufactured or processed in the United States and fish, shellfish, or seafood contained in foods manufactured or processed in the United States shall be provided in accordance with paragraph (d) of this clause;

(5) To chemical warfare protective clothing produced in a qualifying country; or

(6) To fibers and yarns that are for use in synthetic fabric or coated synthetic fabric (but does apply to the synthetic or coated synthetic fabric itself), if--

(i) The fabric is to be used as a component of an end product that is not a textile product. Examples of textile products, made in whole or in part of fabric, include--

(A) Draperies, floor coverings, furnishings, and bedding (Federal Supply Group 72, Household and Commercial Furnishings and Appliances);

(B) Items made in whole or in part of fabric in Federal Supply Group 83, Textile/leather/furs/apparel/findings/ tents/flags, or Federal Supply Group 84, Clothing, Individual Equipment and Insignia;

(C) Upholstered seats (whether for household, office, or other use); and

(D) Parachutes (Federal Supply Class 1670); or

(ii) The fibers and yarns are para-aramid fibers and continuous filament para-aramid yarns manufactured in a qualifying country.

(d)(1) Fish, shellfish, and seafood delivered under this contract, or contained in foods delivered under this contract--

(i) Shall be taken from the sea by U.S.-flag vessels; or

(ii) If not taken from the sea, shall be obtained from fishing within the United States; and

(2) Any processing or manufacturing of the fish, shellfish, or seafood shall be performed on a U.S.-flag vessel or in the United States.

(End of clause)

(a) Definition. United States, as used in this clause, means, the 50 States, the District of Columbia, and outlying areas.

(b) Except as provided in paragraph (c) of this clause, the Contractor and its subcontractors, if performing or traveling outside the United States under this contract, shall--

(1) Affiliate with the Overseas Security Advisory Council, if the Contractor or subcontractor is a U.S. entity;

(2) Ensure that Contractor and subcontractor personnel who are U.S. nationals and are in-country on a non-transitory basis, register with the U.S. Embassy, and that Contractor and subcontractor personnel who are third country nationals comply with any security related requirements of the Embassy of their nationality;

(3) Provide, to Contractor and subcontractor personnel, antiterrorism/force protection awareness information commensurate with that which the Department of Defense (DoD) provides to its military and civilian personnel and their families, to the extent such information can be made available prior to travel outside the United States; and

(4) Obtain and comply with the most current antiterrorism/force protection guidance for Contractor and subcontractor personnel.

(c) The requirements of this clause do not apply to any subcontractor that is--

(1) A foreign government;

(2) A representative of a foreign government; or

(3) A foreign corporation wholly owned by a foreign government.

(d) Information and guidance pertaining to DoD antiterrorism/force protection can be obtained from Information and guidance pertaining to DoD antiterrorism/force protection policy for contracts that require performance or travel outside the United States can be obtained from the following offices:

(1) For Army contracts: HQDA-AT; telephone, DSN 222-9832 or commercial (703) 692-9832.

(2) For Navy contracts: Naval Criminal Investigative Service (NCIS), Code 21; telephone, DSN 288-9077 or commercial (202) 433-9077.

(3) For Marine Corps contracts: CMC Code POS-10; telephone, DSN 224-4177 or commercial (703) 614-4177.

(4) For Air Force and Combatant Command contracts: The appropriate Antiterrorism Force Protection Office at the Command Headquarters. Also see <https://atep.dtic.mil>.

- (5) For defense agency contracts: The appropriate agency security office.
 - (6) For additional information: Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, ASD (SOLIC); telephone, DSN 227-7205 or commercial (703) 697-7205.
- (End of clause)

252.246-7001 WARRANTY OF DATA (DEC 1991) - ALTERNATE II (DEC 1991)

(a) Definition. "Technical data" has the same meaning as given in the clause in this contract entitled, Rights in Technical Data and Computer Software.

(b) Warranty. Notwithstanding inspection and acceptance by the Government of technical data furnished under this contract, and notwithstanding any provision of this contract concerning the conclusiveness of acceptance, the Contractor warrants that all technical data delivered under this contract will at the time of delivery conform with the specifications and all other requirements of this contract. The warranty period shall extend for three years after completion of the delivery of the line item of data (as identified in DD Form 1423, Contract Data Requirements List) of which the data forms a part; or any longer period specified in the contract.

(c) Contractor notification. The Contractor agrees to notify the Contracting Officer in writing immediately of any breach of the above warranty which the Contractor discovers within the warranty period.

(d) Remedies. The following remedies shall apply to all breaches of the warranty, whether the Contractor notifies the Contracting Officer in accordance with paragraph (c) of this clause or if the Government notifies the Contractor of the breach in writing within the warranty period:

(1) Within a reasonable time after such notification, the Contracting Officer may--

(i) By written notice, direct the Contractor to correct or replace at the Contractor's expense the nonconforming technical data promptly; or

(ii) If the Contracting Officer determines that the Government no longer has a requirement for correction or replacement of the data, or that the data can be more reasonably corrected by the Government, inform the Contractor by written notice that the Government elects a price or fee adjustment instead of correction or replacement.

(2) If the Contractor refuses or fails to comply with a direction under paragraph (d)(1)(i) of this clause, the Contracting Officer may, within a reasonable time of the refusal or failure--

(i) By contract or otherwise, correct or replace the nonconforming technical data and charge the cost to the Contractor; or

(ii) Elect a price or fee adjustment instead of correction or replacement.

(3) In addition to the remedies under paragraphs (d)(1) and (2) of this clause, the Contractor shall be liable to the Government for all damages to the Government as a result of the breach of the warranty.

(i) The additional liability under paragraph (d)(3) of this clause shall not exceed ten percent of the total contract price.

(ii) If the breach of the warranty is with respect to the data supplied by an equipment subcontractor, the limit of the Contractor's liability shall be--

(A) Ten percent of the total subcontract price in a firm fixed-price subcontract;

(B) Seventy-five percent of the total subcontract price fee in a cost-plus-fixed-fee or cost-plus-award-fee subcontract; or

(C) Seventy-five percent of the total subcontract target profit or fee in a fixed-price or cost-plus-incentive-type contract.

(iii) The additional liability specified in paragraph (d)(3) of this clause shall not apply--

(A) With respect to the requirements for product drawings and associated lists, special inspection equipment (SIE) drawings and associated lists, special tooling drawings and associated lists, SIE operating instructions, SIE descriptive documentation, and SIE calibration procedures under MIL-T-31000, General Specification for Technical Data Packages, Amendment 1, or MIL-T-47500, General Specification for Technical Data Packages, Supp 1, or drawings and associated lists under level 2 or level 3 of MIL-D-1000A, Engineering and Associated Data Drawings, or DoD-D-1000B, Engineering and Associated Lists Drawings (Inactive for New Design) Amendment 4, Notice 1; or drawings and associated lists under category E or I of MIL-D-1000, Engineering and Associated Lists Drawings, provided that the data furnished by the Contractor was current, accurate at time of submission, and did not involve a significant omission of data necessary to comply with the requirements; or

(B) To defects the Contractor discovers and gives written notice to the Government before the Government discovers the error.

(End of clause)

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SECTION J - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

Exhibit/Attachment Table of Contents

DOCUMENT TYPE	DESCRIPTION	PAGES	DATE
Exhibit A	Exhibit A - CDRLS A001, A003 Thru A011	12	March 12, 2014
Exhibit B	Exhibit B - CDRLS B001 Thru B006	8	March 12, 2014
Exhibit C	Exhibit C - CDRLS C002 Thru C008	12	March 12, 2014
Attachment 1	LPD Worksheet Annex to Exhibit A	18	August 1, 2014
Attachment 2	TDP Option Selection Worksheet Annex to Exhibit B	27	January 1, 2014
Attachment 3	System Requirements Document	239	March 5, 2014
Attachment 4	Scheduled Government Furnished Property	2	March 5, 2014
Attachment 5	SSE Drawings 174406-F	2	March 19, 2014
Attachment 6	Modified SF 1408 Checklist	2	March 19, 2014

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SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

CLAUSES INCORPORATED BY FULL TEXT

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

(a) The offeror certifies that --

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to –

(i) Those prices,

(ii) The intention to submit an offer, or

(iii) The methods of factors used to calculate the prices offered:

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory --

(1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision; or

(2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision

_____ (insert full name of person(s)
in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);

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(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision.

(c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of provision)

52.209-5 CERTIFICATION REGARDING RESPONSIBILITY MATTERS (APR 2010)

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that-

(i) The Offeror and/or any of its Principals-

(A) Are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have () have not (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property (if offeror checks "have", the offeror shall also see 52.209-7, if included in this solicitation); and

(C) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.; and

(D) Have , have not , within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied.

(1) Federal taxes are considered delinquent if both of the following criteria apply:

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(i) The tax liability is finally determined. The liability is finally determined if it has been assessed. A liability is not finally determined if there is a pending administrative or judicial challenge. In the case of a judicial challenge to the liability, the liability is not finally determined until all judicial appeal rights have been exhausted.

(ii) The taxpayer is delinquent in making payment. A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(2) Examples. (i) The taxpayer has received a statutory notice of deficiency, under I.R.C. Sec. 6212, which entitles the taxpayer to seek Tax Court review of a proposed tax deficiency. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek Tax Court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(ii) The IRS has filed a notice of Federal tax lien with respect to an assessed tax liability, and the taxpayer has been issued a notice under I.R.C. Sec. 6320 entitling the taxpayer to request a hearing with the IRS Office of Appeals contesting the lien filing, and to further appeal to the Tax Court if the IRS determines to sustain the lien filing. In the course of the hearing, the taxpayer is entitled to contest the underlying tax liability because the taxpayer has had no prior opportunity to contest the liability. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek tax court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(iii) The taxpayer has entered into an installment agreement pursuant to I.R.C. Sec. 6159. The taxpayer is making timely payments and is in full compliance with the agreement terms. The taxpayer is not delinquent because the taxpayer is not currently required to make full payment.

(iv) The taxpayer has filed for bankruptcy protection. The taxpayer is not delinquent because enforced collection action is stayed under 11 U.S.C. 362 (the Bankruptcy Code).

(ii) The Offeror has () has not (), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) Principal, for the purposes of this certification, means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

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(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS (JULY 2013)

(a) Definitions. As used in this provision--

Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.

Federal contracts and grants with total value greater than \$10,000,000 means--

(1) The total value of all current, active contracts and grants, including all priced options; and

(2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

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Principal means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror () has () does not have current active Federal contracts and grants with total value greater than \$10,000,000.

(c) If the offeror checked “has” in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

(1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:

(i) In a criminal proceeding, a conviction.

(ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more.

(iii) In an administrative proceeding, a finding of fault and liability that results in--

(A) The payment of a monetary fine or penalty of \$5,000 or more; or

(B) The payment of a reimbursement, restitution, or damages in excess of \$100,000.

(iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

(2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.

(d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIS as required through maintaining an active registration in the System for Award Management database via <https://www.acquisition.gov> (see 52.204-7).

(End of provision)

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52.225-25 Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran--Representation and Certifications. (DEC 2012)

(a) Definitions. As used in this provision--

Person--

(1) Means--

(i) A natural person;

(ii) A corporation, business association, partnership, society, trust, financial institution, insurer, underwriter, guarantor, and any other business organization, any other nongovernmental entity, organization, or group, and any governmental entity operating as a business enterprise; and

(iii) Any successor to any entity described in paragraph (1)(ii) of this definition; and

(2) Does not include a government or governmental entity that is not operating as a business enterprise.

Sensitive technology--

(1) Means hardware, software, telecommunications equipment, or any other technology that is to be used specifically--

(i) To restrict the free flow of unbiased information in Iran; or

(ii) To disrupt, monitor, or otherwise restrict speech of the people of Iran; and

(2) Does not include information or informational materials the export of which the President does not have the authority to regulate or prohibit pursuant to section 203(b)(3) of the International Emergency Economic Powers Act (50 U.S.C. 1702(b)(3)).

(b) The offeror shall email questions concerning sensitive technology to the Department of State at CISADA106@state.gov.

(c) Except as provided in paragraph (d) of this provision or if a waiver has been granted in accordance with 25.703-4, by submission of its offer, the offeror—

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(1) Represents, to the best of its knowledge and belief, that the offeror does not export any sensitive technology to the government of Iran or any entities or individuals owned or controlled by, or acting on behalf or at the direction of, the government of Iran;

(2) Certifies that the offeror, or any person owned or controlled by the offeror, does not engage in any activities for which sanctions may be imposed under section 5 of the Iran Sanctions Act. These sanctioned activities are in the areas of development of the petroleum resources of Iran, production of refined petroleum products in Iran, sale and provision of refined petroleum products to Iran, and contributing to Iran's ability to acquire or develop certain weapons or technologies; and

(3) Certifies that the offeror, and any person owned or controlled by the offeror, does not knowingly engage in any transaction that exceeds \$3,000 with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.) (see OFAC's Specially Designated Nationals and Blocked Persons List at <http://www.treasury.gov/ofac/downloads/t11sdn.pdf>).

(d) Exception for trade agreements. The representation requirement of paragraph (c)(1) and the certification requirements of paragraphs (c)(2) and (c)(3) of this provision do not apply if—

(1) This solicitation includes a trade agreements notice or certification (e.g., 52.225-4, 52.225-6, 52.225-12, 52.225-24, or comparable agency provision); and

(2) The offeror has certified that all the offered products to be supplied are designated country end products or designated country construction material.

(End of provision)