

**ENGINEERING & LOGISTICS  
STATEMENT OF WORK  
FOR THE  
A/M32K-10 MUNITIONS TRAILER**



**FINAL  
SEPTEMBER 2010**

**Naval Air Systems Command  
Naval Air Warfare Center, Aircraft Division  
Research and Engineering Group  
SE and ALRE Department  
CSE/PSE DEV & ISE DIV  
Aircraft & Armament Handling Branch, Code 4.8.6.9  
Lakehurst, NJ 08733**

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## 1.0 SCOPE

This Statement of Work (SOW) establishes the tasks that must be performed by the contractor in order to fulfill the terms of the government solicitation for the A/M32K-10 Munitions Trailer, Stake Rack Set and Trailer Test Sets. This SOW addresses the performance of tasks associated with the manufacture and delivery of up to 800 each A/M32K-10 trailers, 200 each Stake Rack Sets, 110 Trailer test Sets and 80 Adjustment Fixtures.

## 2.0 APPLICABLE DOCUMENTS

The following documents indicated below form a part of this statement of work to the extent specified herein. In the event of a conflict between the documents referenced herein and the contents of this document, the contents of this document shall be considered a superseding requirement with the exception of the data package.

### 2.1 Government Documents.

DI-ALSS-81529	Logistics Management Information (LMI) Data Product(s)
NAVAIRINST 4355.19D	Systems Engineering Technical Review Process
MIL-STD-130M	Department Of Defense Standard Practice Identification Marking of U.S. Military Property
MIL-PRF-29612	Training Data Products
MIL-PRF-49506	Logistics Management Information
TMCR No. 06-034	Technical Manual Contract Requirement for A/M32K-10 Munitions Trailer

### 2.2 Other Government Documents, Drawings and Publications

DL3847AS100	Drawing Package for item Part Number 3847AS100-1, Nomenclature: A/M32K-10 Munitions Trailer.
DL3847AS122	Drawing Package for item Part Number 3847AS122-1, Nomenclature: Adjustment Fixture.
DL3847AS800	Drawing Package for item Part Number 3847AS800-1, Nomenclature: Trailer Test Set, 12 Pin-24V

DL3847AS810

Drawing Package for item Part Number  
3847AS810-1, Nomenclature: Trailer  
Test Set, 7 Pin-12V.

DL3847AS900

Drawing Package for item Part Number  
3847AS900-1, Nomenclature: Stake Rack  
Set.

### 3.0 REQUIREMENTS

#### 3.1 General

The contractor shall provide materials and services as required to manufacture, assemble, inspect/test and produce two prototype (2) A/M32K-10 (P/N: 3847AS100-1), one prototype (1) Stake Rack Sets (P/N: 3847AS900-1), one prototype (1) Trailer Test Set, 12 Pin-24V (P/N: 3847AS800-1), one prototype (1) Trailer Test Set, 7 Pin-12V (P/N: 3847AS810-1) and one prototype (1) Adjustment Fixture (P/N: 3847AS222-1). The contractor shall manufacture, assemble, inspect/test and produce these items in accordance with the government furnished drawing packages. The manufacturing, assembly, inspect/test of these items shall be accomplished at the contractor's facilities.

##### 3.1.1 Pilot-Production.

The pilot-production items shall be available for inspection and subsequent testing within 180 days after contract award. One pilot-production unit tested and accepted by the government shall remain at the contractor's plant until the end of the contract production to be used as manufacturing standard for the corresponding production items. The approved pilot-production units shall be tendered for delivery with the last shipment under this contract. The contractor shall refurbish the pilot production units to the production configuration as necessary to place it in ready for issue (RFI) condition.

**3.1.2 Production Deliveries.** The contractor shall deliver A/M23K-10 trailers at a rate of 16 per month, Stake Rack Sets at a rate of 4 per month commencing within 180 days after Government release for production.

The Electrical Test Sets shall be delivered at a rate of 10 per month commencing within 30 days after Pilot-Production acceptance.

The Adjustment Fixture shall be delivered at a rate of 10 per month commencing within 30 days after Pilot-Production acceptance.

**3.1.2.1 Production Readiness Review.** The Contractor shall host a Production Readiness Review (PRR) at their facility after completion of all testing (CDRL B031 and B032). The Contractor and the Government shall collaborate in preparing and conducting the PRR in accordance with the guidance of NAVAIRINST 4355.19D.

**3.1.2.2 Release for Production.** The contractor will be notified by the Government of release for production only after Contractor Pilot-production Test Report approval (B028).

### **3.2 MANAGEMENT**

The Contractor shall define how all aspects of the A/M32K-10 Trailer program will be managed and controlled using the following documents:

Integrated Master Schedule. (CDRL A009)  
Progress Reporting. (CDRL A010)  
Configuration Management Plan. (CDRL A011)  
Management Plan. (CDRL A012)

**3.2.1 Communications.** The Contractor shall establish a procedure to report the status of key events, problems and achieved milestones as they occur rather than rely solely on the various scheduled periodic reviews.

**3.2.2 Post Award Conference.** A Post Award Conference shall be held no later than 30 days after contract award to provide a common understanding of all contract requirements.

**3.2.3 Program Management Review.** The Contractor shall present a Program Management Review (PMR) to the Government program manager and team. The first PMR shall be with the post award guidance conference (see 3.2.2). The second PMR shall be with the Test Readiness Review (TRR) (3.4.1). Additional reviews may be requested by the Government. All PMRs shall be at the Contractor's facility and shall provide the Government with an accurate summary of the Contractor's technical progress, program planning and overall management approach and progress. Topics to be addressed at the PMRs shall include:

1. Contract status, progress tracking and reporting of milestones
2. Problem and risk identification, assessment, reduction and control
3. Streamlining recommendations
4. Technical review
5. Cost performance
6. Subcontract management
7. Action items completed, pending and forecasted

Agendas for the PMRs shall be developed by the Contractor (CDRL A013). Minutes and Action Items will be agreed to at the conclusion of each PMR and distributed by the Contractor to the entire team (CDRL A014). The presentation developed by the Contractor for the PMRs shall be provided to the Government program manager five working days prior to the review.

### **3.3 SYSTEMS ENGINEERING**

**3.3.1 Product Configuration Identification.** The current approved technical documentation for a Configuration Item (CI) as set forth in specifications, drawings, and associated lists and documents referenced therein.

**3.3.2 Configuration Control.** The contractor shall submit Class I and Class II Engineering Change Proposals (ECPs), and all minor, major, and critical Requests for Deviation/Waiver (CDRLs B020, B021 and B022).

**3.3.3 Hazardous Materials Management**

**3.3.3.1 Hazardous Materials Management Program Plan**

The Contractor shall prepare a HMMP Plan. The plan will be used to evaluate the Contractor's approach to, understanding of, and execution of a HMMP. The Contractor may satisfy this requirement with the submission of a plant-wide HMMP or similar previously prepared plan with any additional information added as an addendum. (CDRL A015)

**3.3.3.2 Hazardous Materials Management Program Report**

The Contractor shall ensure that all vendors and suppliers including those of sub-contractors provide all information to accurately and fully complete the HMMP requirements. A HMMP Report will be prepared by the contractor in accordance with CDRL A016. The report shall contain a well defined table that identifies and lists all HAZMAT as defined in the System Specification. As a minimum the following information is required.

- a) HAZMAT nomenclature/name
- b) Technical documentation and/or specification that require the use of the HAZMAT, if applicable
- c) Name and Part Number of the component/part that contains the HAZMAT or is associated with the use/generation of the HAZMAT
- d) Process associated with the use or generation of the HAZMAT.
- e) Material Safety Data Sheets (MSDS) for each HAZMAT.
- f) Chemical name(s) of hazardous component(s). (Sometimes found on MSDS).
- g) Chemical Abstract Service (CAS) number(s) of each hazardous component(s).
- h) Waste and disposal codes/regulations for the HAZMAT when appropriate.
- i) Source of HAZMAT (prime Contractor, subcontractor, material supplier)
- j) Weight of HAZMAT (as Parts Per Million (PPM) or per (SYSTEM NAME) as appropriate using best engineering judgment)

The Contractor shall maintain and update this report throughout the life of the contract. The table shall be dated and each addition/deletion or change shall be annotated to denote change and date. Documentation justifying use of Restricted Chemicals shall also be included in the report.

**3.3.3.3 Lithium Batteries**

The use of lithium batteries as a part of the trailer system shall be documented in accordance with NAVSEA S9310-AQ-SAF-010, "Technical Manual for Batteries, Navy Lithium Safety Program Responsibilities and Procedures."

**3.3.4 Quality Assurance Program.** The contractor shall establish and maintain a quality system that adheres to the requirement of ANSI/ASQC-Q9002 or equivalent and all FAR clauses within the contract.

**3.3.4.1 Responsibility For Inspection.** The contractor is responsible for the performance of all inspection requirements. The contractor may use his own or any other facilities acceptable to the Government and suitable for

the performance of the inspection specified. The Government reserves the right to perform or witness any or all of the inspections.

### **3.4 TEST**

The Contractor shall establish, plan, maintain, conduct and support a test program to determine that the pilot-production and production trailer meet the requirements stated on NAVAIR drawings 3847AS110. The Contractor shall provide documentation on failures, their cause and the recommended corrective action. The Failure Report Analysis and Corrective Action System (FRACAS) shall be implemented for the duration of the pilot-production test program (CDRL B023 and B024).

**3.4.1 Test Readiness Review (TRR).** Prior to the start of Pilot-production testing the contractor shall host a TRR at their facility within 15 days prior to the start of testing (CDRL B025 and B026). The Contractor and the Government shall collaborate in preparing and conducting the TRR in accordance with the guidance of NAVAIRINST 4355.19D.

**3.4.2 Pilot-Production Contractor Testing.** Pilot-production testing shall be in accordance with NAVAIR drawing package DL3847AS100. Testing shall commence 180 after contract award.

**3.4.2.1 Pilot-Production Test Plan.** The contractor shall prepare and submit a pilot-production test plan in accordance with CDRL B027.

**3.4.2.2 Pilot-Production Test Report.** The contractor shall prepare and submit a pilot-production test report in accordance with CDRL B028.

**3.4.3 Pilot-Production Government Testing.** The government shall perform braking, swaying and tandem tow testing with the Medium Tactical Vehicle Replacement (MTVR) prime mover. Braking and sway testing shall be in accordance with NAVAIR drawing 3847AS110, notes 16, 17, 18, 19 and 20. Tandem tow testing shall be two trailers each loaded with 6,000 (+100, -0) pound test loads. The trailers shall be towed at a speed of 40 mph over level paved highway. A lane change / obstacle avoidance maneuver shall be executed. Any undesirable tendency to yaw, sway, dog walk or jackknife shall be cause for rejection. Government evaluation testing will commence 210 after contract award for duration of 60 days.

**3.4.4 Production Testing.** Each production trailer shall be tested in accordance with NAVAIR drawing package 3847AS100.

### **3.5 WARRANTY**

See section 3.8.5.

### **3.6 PRODUCTION PLANNING**

**3.6.1 Facility Planning.** The contractor shall ensure the required production delivery schedule and rate can be met, considering the overall demand for facilities and personnel from other programs. The contractor shall:

- a. Determine the types of manufacturing processes and methods required and the associated tooling and test equipment requirements. Where required processes or equipment do not exist, the contractor shall determine whether they will be developed or outsourced and shall identify appropriate schedules for design/purchase and installation.
- b. Identify manufacturing risks and strategies for their mitigation.
- c. Develop and set up the facility layout sufficient to ensure that machine loading, fabrication and assembly sequences, and part routings minimize part in-transit and queue time.

**3.6.2 Material Planning.** The contractor shall identify the types of materials and components as specified in the data package.

**3.6.3 Manpower Planning.** The contractor shall identify the number of shop personnel required in each labor category and the skills and training required. Considering the phasing of manpower requirements and the ability to add personnel to the workforce, the manpower planning process(es) shall schedule the acquisition and training of personnel.

**3.6.4 Work Planning.** The contractor shall determine and schedule work order and purchase order releases, parts and material procurement, part/component fabrication, evaluation, assembly, test, and delivery based on lead time required delivery dates, inventory records, bills of material, and available facilities and labor.

**3.6.5 Production Scheduling and Control.** The contractor shall employ process(es) of its own design for production scheduling and control. Through the execution of its production scheduling and control process(es), the contractor shall monitor variances between actual and planned schedules and costs and shall use that feedback to identify and implement necessary corrective actions and to incorporate productivity improvements. The contractor shall notify the Defense Contract Management Agency (DCMA) of anticipated contract delivery schedule delinquencies, production difficulties, quality problems, or delays, which may adversely affect the program.

### **3.7 UNIQUE IDENTIFICATION REQUIREMENT**

Unique Identification (UID) is a Department of Defense (DoD) program that will enable easy access to information about DoD possessions that will make acquisition, repair, and deployment of items faster and more efficient. In accordance with DFARS Clause 252.211-7003 Item Identification and valuation, the contractor is required to mark and register all end items and their components meeting the requirements called out in MIL-STD-130M. UID Data is encoded into Data Matrix symbols that are applied directly to parts. The UID for these items shall be in accordance with NAVAIR drawing 3847AS409, 3847AS463, 3847AS505 and MIL-STD-130M.

### **3.8 INTEGRATED LOGISTICS SUPPORT**

The Integrated Logistical Support (ILS) requirements are designed to accomplish the following objectives:

- a. Establish valid contractual minimums relative to supportability requirements and facilitate planning, management, and execution of the trailer ILS Program.
- b. Provide specific requirements that will permit the contractor to respond with valid cost, schedule, and resource commitments to satisfy the trailer ILS Program.

The contractor shall provide the personnel, services, materials, and facilities to plan, implement and execute an ILS program for the duration of the contract and any related supplies and services contracts. This document sets forth the principle elements of ILS planning needed to satisfy the objectives of integrating all ILS elements with the delivery of the trailer.

**3.8.1 ILS PROGRAM MANAGEMENT.** In as much as possible the Contractor shall establish the management program to integrate/employ the A/M32K-10 Logistics effort simultaneously with the A/M32U-21 Logistics effort. The purpose of this integration is to ensure there is no duplication of effort

**3.8.1.1 Contractor ILS Manager (ILSM).** Management of the contractor's ILS program shall be vested in a single manager who has the responsibility and authority for execution of the complete trailer ILS program set forth in this document. The contractor ILSM shall serve as the focal point for relation/interface with the Navy in all matters pertaining to the ILS program.

**3.8.1.2 ILS Subcontractor(s).** An ILS subcontractor may be used to accomplish some or all of the ILS requirements of this document. The prime contractor's ILSM shall be responsible for the subcontractor's performance. Management of the ILS program may be delegated to a subcontractor provided the prime contractor maintains ultimate responsibility. All ILS efforts and data deliverables developed by an ILS subcontractor ILSM for delivery to the Navy, shall be the prime contractors responsibility for contract compliance.

**3.8.1.3 Navy/Contractor Interface.** The Navy ILS organization, identified herein, is intended to assist the contractor in developing and implementing the ILS program set forth in this document. The Navy ILS organization will consist minimally of a Naval Air Warfare Center Aircraft Division Lakehurst (NAVAIRLKE) Team Lead (TL), Assistant Program Manager Logistics (APML), Project Engineer (PE), Test Engineer (TE), and applicable Logistics Element Managers (LEMs).

**3.8.1.4 Integrated Logistics Support Team (ILST)(CDRL L013):** ILST review meetings will be scheduled in conjunction with other program reviews or as scheduled by mutual agreement of the Navy and the Contractor. These meetings will be used to provide additional guidance, review program status, logistics tradeoff/alternative decisions and/or clarify processes. The

contractor shall coordinate and provide administrative support, prepare agendas, take minutes and ensure timely distribution of said minutes to all attendees, and document and track action item status.

**3.8.1.5 ILS Program Progress Reports (CDRL L014):** The contractor shall prepare an ILS Program element status, action item status, and narrative summary identifying the progress, delays, and/or problems associated with each ILS element. As a minimum, the status summary shall correspond to each ILS element identified herein, along with each ILS deliverable identified within this document. The contractor shall provide reasons, recommendations concerning delays and/or problem areas.

**3.8.2 ILS REQUIREMENTS.** The Government will provide source data that reflects the baseline configuration.

**3.8.2.1 LOGISTICS MANAGEMENT INFORMATION (LMI) CANDIDATE LISTS (CDRL L015):**

The Contractor shall provide logistics Management Information in accordance with MIL-PRF-49506 and submit a Three Part Maintenance Plan (LSA .024 rpt) with top down breakdown of components and recommended appropriate preventative and corrective maintenance instructions, operating precautions, preparation for shipment, storage and recommended support equipment. He drawing package shall be a production level with top down breakdown. The documentation shall also include any additional data required for the Navy to finalize the Three Part Maintenance Plan in accordance with MIL-PRF-49506, the A/M32K-10 PSOW (Appendix C), refer to DATA ITEM DESCRIPTION DI-ALSS-81529.

**3.8.2.2 Maintenance Planning Technical Data Package (MPTDP) (CDRL L016):**

The contractor shall submit using contractor format, A MPTDP identifying indenture block diagram of parts will be submitted in English, sixty (60) days after contract award.

**3.8.2.3 Documentation.** All documentation listed on the MPTDP shall be considered part of the MPTDP and shall be submitted by the contractor as part of the MPTDP with the same rights in technical data as described in the contract.

**3.8.2.4 Baseline Configuration.** The contractor shall establish a production baseline configuration based on the Original drawing package. All ILS deliverables shall include any/and all the corrections, deletions, and modifications having occurred during production.

**3.8.2.5 Source Control Drawings.** The contractor shall develop a Source Control Drawing which discloses size, configuration, and dimensions of envelope, interface dimensional characteristics, specifications and item testing. The contractor shall develop a Source Control Drawing which depicts a commercially or vendor available item which exclusively provides the performance and specification required. The contractor shall list at least one approved source on the drawing, while identification of the approved source(s) is not to be construed as a guarantee of present or continued availability as a source of supply. The contractor's source control drawings as a minimum shall reference the criteria necessary for evaluating a proposed substitute as an alternate item. The contractor shall identify criteria to include the technical data required for evaluation and

approval, any testing required to demonstrate compliance with specified characteristics and requirements and establish responsibility for accomplishment of item testing. The contractor shall prepare source control drawings when:

- a) The item(s) has critical interface and specification requirements.
- b) Performance requirements of the item can only be met by one of several approved sources.
- c) Testing has demonstrated that the items have met stated requirements.

**3.8.2.6 Altered Item Drawings.** The contractor shall develop an altered item drawing to delineate complete details of the alterations, selections of special requirements. The contractor shall include data necessary to identify the vendor item prior to its alteration or selection, including the original part. The contractor shall identify the original vendor part by placing the words "SEE NOTES" in the stock selection of the list of materials. In the notes the vendor, CAGE code, address and vendor part number shall be identified by the contractor. In the case in which the original part is a Government or commercial standard item, the original part number shall be identified in the stock section of the list of materials following the 'MAKE FROM'.

**3.8.3 SUPPLY SUPPORT.**

The Provisioning Statement of Work (PSOW) (Appendix C), which has been prepared by the Naval Inventory Control Point (NAVICP), specifies the supply support and provisioning documentation required.

**3.8.3.1 Provisioning Documentation.** The contractor is requested to provide, as part of their contract with the United States Navy, information on all maintenance, supply support and warranties that he offers in conjunction with the purchase of the units.

**3.8.3.2 Provisioning Pats List (PPL) (CDRL P002).** The contractor is to deliver an initial Provisioning Parts list (PPL). The contractor will be required to submit a final PPL (LSA 036.seq) within 30 days after Pilot Production test Report Approval. The PPL is to provide a top down breakdown of the unit. The top down breakdown is accomplished by sequencing all parts comprising the end item in a lateral and descending "family/generation breakdown." The breakdown shall consist of the end item including all components, listing every assembly and part, which can be disassembled, reassembled and/or replaced.

**3.8.3.3 INTERIM SUPPORT ITEMS LIST (CDRL L017).** The contractor shall submit in writing an initial Interim Support Items List (ISIL) of spare and repair parts for the support of the trailer for a period of 24 months. The ISIL shall be prepared utilizing the government provided Interactive Computer Aided Provisioning System (ICAPS) database and submitted to NAVICP in ICAPS format. The Government will use the data to identify, select and procure the minimum spares and repair parts necessary to permit interim and continued supply support. The Government during this process will take

warranty into consideration in determining stocking levels. The contractor will be required to submit a final ISIL no later than 120 days prior to first production deliveries (CDRL L017 applies).

The contractor shall provide as part of the contract response information on parts and end item unit warranties that he offers in conjunction with the purchase of units.

#### **3.8.4 PROVISIONING CONFERENCES**

The contractor shall host a Provisioning Guidance Conference to assist in preparing the provisioning documentation, if required. The provisioning guidance conference provides information concerning preparation of the data for compatibility with the NAVICP database. The contractor shall provide consulting support via phone to the provisioning effort, as required.

**3.8.5 WARRANTY.** The contractor shall provide a minimum 12-month warranty for the trailer system and electrical test sets to include its component parts covering repair parts, labor and transportation. The warranty period shall begin with acceptance by the Government.

#### **3.8.6 TECHNICAL MANUAL CONTRACT REQUIREMENTS (CDRL L018)**

This section specifies the requirements for development, validation/verification and delivery of the Trailer Technical Manuals (TMs). The TMs shall be delivered in accordance with the Technical Manual Contracts Requirements (Appendix B); Number 06-034 dated 04 March 2010 (TMCR 06-034). The requirements established herein are designed to provide accurate, comprehensible, and usable TMs, which are based upon the approved Maintenance Plan (MaPl). The TMs will become property of the U.S. Government. CDRL L018 applies.

**3.8.6.1 TECHNICAL MANUAL REQUIREMENTS (CDRL L018).** There shall be a Work Package (WP) format TM with Illustrated Parts Breakdown (IPB) for Operation and Maintenance of the Trailer. Pre-Operational (Pre-OP) Checklists and Periodic Maintenance Requirements Manual (PMRM) shall also be developed for the Trailer.

#### **3.8.6.2 APPLICATION OF SERVICES TO STANDARD GOVERNMENT TECHNICAL MANUAL**

Standard Government TMs are those, which address common maintenance practices such as corrosion control and treatment, hydraulic hose/tubing repair, electrical wiring/harness repair, etc. Services related to these TMs are limited to "reference to" in the Trailer TMs for applicable maintenance actions. Procedures in standard Government TMs shall not be duplicated in Trailer TMs.

**3.8.6.3 TECHNICAL MANUAL VALIDATION/VERIFICATION CERTIFICATION (CDRL L019)**

A Contractor/Government TM Validation and Validation shall be conducted for all developed TMs. A Validation and a Verification Certificate shall be submitted by the Contractor, CDRL L019 applies.

**3.8.7 Training.** The training method established herein is designed to ensure adequate Navy training capability for the A/M32K-10 Munitions Trailer. Based on results of supportability task analysis and test evaluation. The training shall enable Navy/Marine Corps maintenance and instructor artisans to provide initial familiarization and/or formal follow-on training to the Fleet Support Equipment (SE) operators/maintainers.

**3.8.7.1 Training Requirements.**

The contractor shall evaluate the data and develop the training deliverables in accordance with the Contract Data Requirements Lists and stated requirements contained herein.

**3.8.7.2 Government Furnished Information.**

The following materials, upon request, will be provided by the Government at, or soon after, the Post Award Guidance Conference to assist in the development of training course materials by the contractor:

a. Available Technical Manuals for comparison equipment will be provided, as approved by the Contracting Officer, for source data analysis and comparison by the contractor during development of course material.

b. All referenced Data Item Descriptions (DID) can be found on the Human Performance Center website: <https://www.spider.hpc.navy.mil/>. Select the Acquisition tab and then the Policy/Guidance tabs. DIDs can be found under MIL-PRF-29612B Data Item Descriptions (DIDs).

**3.8.7.3 Initial Factory Training.**

The contractor shall provide initial Operator training for the production system to Navy instructors, initial cadre of fleet personnel, and other personnel deemed essential. The training program stresses the performance of job related tasks in a practical/laboratory environment and shall be directly traceable to the TM and MP for the end item. Classroom/lecture time shall be held to a minimum. Trainees shall have as much time as can be given to learn/perform the tasks that will be required in the performance of future job(s). The contractor shall also develop a Course Completion Data (CCD) package for this training session. It shall be developed and delivered as per CDRL L020. The student-instructor ratio shall not be greater than 10 to 1 in the theoretical phase of the course, and no greater than 5 to 1 in the practical application phase. The contractor shall provide an Initial Factory Training outline per CDRL L021. Initial Factory Training shall take place no later than 120 days prior to the delivery of the production end item to the fleet. Training shall consist of the following:

- a. Operation Instruction, (As a minimum, they must include Start-up and Shut-down procedures along with all applicable Safety Instructions, Cautions, Warning, etc.)
- b. Use of the Technical Manual to trouble-shoot and operate the unit.
- c. Instruction on maintenance, spare parts and consumable replacements. During this portion of the training the Contractor shall provide users with an overview of spare parts replacement, and shall provide instructions pertaining to any disassembly or components required so that replacement may proceed in the future. As part of this training, spare parts need not be replaced to complete the familiarization, but must be illustrated in the unit Technical Manual. Training shall take place at a Government designated facility (facility to be designated at a later date). Contractor is required to supply all parts, material and labor to perform this effort. The contractor shall provide an Initial Factory Training Outline per (CDRL L021).

**3.9 PACKING, HANDLING, STORAGE AND TRANSPORTATION**

Packaging, Preservation and Shipping shall be in accordance with best commercial practices available and shall provide protection from normal climatic / weather conditions and incidental mishandling during shipping. The items shall be shipped "FOB Origin" (TAC code and destinations will be provided after contract award.)

**3.10 DATA DELIVERY**

The contractor shall deliver all Contract Data Requirement Documents in electronic format unless otherwise specified in the CDRL. The documents shall be developed using commercially available software. Microsoft Word is the preferred word processing software. AutoCAD 2000, or higher is the preferred drawing/modeling software.

**3.10.1 Contract Data Requirement List (CDRL) DD FORM 1423.** All deliverable data items required by this SOW are cited in Appendix A. For reference purposes they are listed below.

CDRL No.	Title	Subtitle
A009	Integrated Master Schedule	
A010	Progress Reporting	
A011	Configuration Management Plan	
A012	Management Plan	Program planning, control and subcontractor control
A013	Conference Agenda	Program Management Review
A014	Conference Minutes	Program Management Review
A015	Hazardous Material Management Program Plan	
A016	Hazardous Material Management Program Report	
B020	Engineering Change proposal	
B021	Request for Deviation	
B022	Request for Waiver	

CDRL No.	Title	Subtitle
B023	Technical Report	Failed Item Analysis
B024	Technical Report	Failure Summary and Analysis
B025	Conference Agenda	Test Readiness Review
B026	Conference Minutes	Test Readiness Review
B027	Pilot-Production Test Plan	
B028	Pilot-Production Test Report	
B031	Conference Agenda	Production Readiness Review
B032	Conference Minutes	Production Readiness Review
L013	ILST	ILST REVIEW MEETINGS
L014	Logistics Progress Reports	Progress Report ILS
L015	Logistics Management Information	LMI Candidate List
L016	Maintenance Planning Data	MPTDP
L017	Interim Support Items List	ISIL
L018	Technical Manual	TM
L019	TM Validation/Verification	Validation Certification
L020	Course Completion Data	CCD
L021	Training Outline	Training Outline
P001	Long Lead Time Items List	LLTIL
P002	Provisioning Parts List	PPL
P003	Design Change Notices	DCN
P004	Engineering Data for Provisioning	EDFP
P005	Statement of Prior Submission	SPS

**3.10.2 Data Item Approval.** For those data items for which approval is required, the approving agency/code is the first addressee in Block 14 of the CDRL.