

2. Amendment/Modification No. 0005	3. Effective Date 2004AUG23	4. Requisition/Purchase Req No. SEE SCHEDULE	5. Project No. (If applicable)
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6. Issued By TACOM WARREN AMSTA-AQ-ADEAF DAVID FORSGREN (586)574-6880 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: FORSGRED@TACOM.ARMY.MIL	Code	W56HZV	7. Administered By (If other than Item 6)	Code	
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8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code)	<input checked="" type="checkbox"/>	9A. Amendment Of Solicitation No. W56HZV-04-R-0037		9B. Dated (See Item 11) 2004APR09		10A. Modification Of Contract/Order No.		10B. Dated (See Item 13)
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**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers  is extended,  is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning 2 signed copies of the amendments; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. Accounting And Appropriation Data (If required)**

**13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS**  
It Modifies The Contract/Order No. As Described In Item 14.

<input type="checkbox"/>	A. This Change Order is Issued Pursuant To: The Contract/Order No. In Item 10A.	The Changes Set Forth In Item 14 Are Made In
<input type="checkbox"/>	B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).	
<input type="checkbox"/>	C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of:	
<input type="checkbox"/>	D. Other (Specify type of modification and authority)	

**E. IMPORTANT:** Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the Issuing Office.

**14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

SEE SECOND PAGE FOR DESCRIPTION

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. Name And Title Of Signer (Type or print)	16A. Name And Title Of Contracting Officer (Type or print)
15B. Contractor/Offeror  _____ (Signature of person authorized to sign)	15C. Date Signed
	16B. United States Of America  By _____ (Signature of Contracting Officer)
	16C. Date Signed

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## SECTION A - SUPPLEMENTAL INFORMATION

1. The purpose of this amendment 0005 to Request for Proposals (RFP) W56HZV-04-R-0037 is to:

a. Change Section C paragraph C.2.2 as follows:

1) Delete the words "and five (5) years of production Pump and Tankrack Modules" from the second sentence.

2) Change both instances in the third sentence where it reads "(years 3 through 5)" to "(see Section B)" as shown on the attached continuation pages.

b. Change Section C to add paragraphs C.3.1.1.8 through C.3.1.1.45 addressing changes to ATPD 2336B as shown on the attached continuation sheets.

c. Add paragraph C.3.1.2 (Change to MIL PRF 370J dated 7 May 02), and paragraph C.3.1.2.1 as shown on the attached continuation sheets.

d. Make an administrative change to amendment 0004: Change paragraph C.2.2 to delete reference to option for Distance Learning as shown on the attached continuation sheets.

e. Add paragraph F.1 as shown on the attached continuation sheets.

f. Add the following attachments (drawings) to the list of attachments in Section J:

<u>Attachment</u>	<u>Drawing</u>
Attachment 010	13219E0462 Ground Rod (1)
Attachment 011	13219E0462 Ground Rod (2)
Attachment 012	13222E8212 Nato Adapter
Attachment 013	13222E8219 Coupling Rail Tanker

g. Revise Section L paragraph L.3.1 as shown on the attached continuation sheets.

h. Delete reference to Distance Learning in paragraph L.4.2.1.

i. Revise Section M paragraph M.3.2.3.1 as shown on the attached continuation sheets.

2. Offerors shall provide acknowledgement of receipt of Amendment 0005 to solicitation W56HZV-04-R-0037 by email message to Dave Forsgren (email: forsgred@taacom.army.mil).

3. All other terms and conditions of RFP W56HZV-04-R-0037 remain unchanged.

\*\*\* END OF NARRATIVE A 006 \*\*\*

**Name of Offeror or Contractor:**

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

## C.1 Load Handling System Modular Fuel Farm (LMFF)

The Load Handling System Modular Fuel Farm (LMFF) is a Palletized Load System (PLS) and Heavy Expanded Mobility Tactical Truck Load Handling System (HEMTT-LHS) compatible petroleum storage and distribution system. The LMFF is capable of receiving, storing, filtering, and issuing kerosene based fuels and diesel fuel. The LMFF is an ISO-compatible system that can be rapidly emplaced, operated, maintained, and recovered. A single LMFF unit will be primarily set up in two configurations: a 35,000-gallon capacity fuel farm consisting of fourteen tankrack modules and two pump filtration modules and a 45,000 gallon capacity fuel farm consisting of eighteen tankrack modules and two pump filtration modules. In addition, one pump module will be operable with any number of tankracks up to eighteen, and individual tankracks may be used for bulk distribution missions separate from the pumping modules.

## C.2 General

C.2.1 This solicitation is for the procurement of tank rack and pump modules to be fielded in the configuration of both 35,000 gallon and 45,000 gallon capacity Load Handling System Modular Fuel Farms. This solicitation will result in the award of a five (5) year Indefinite Delivery, Indefinite Quantity (IDIQ) contract. The Contractor, as an independent Contractor and not as an agent of the Government, shall provide the supplies and services required by this Statement of Work (SOW) and as required by Options issued by the Contracting Officer under this contract.

C.2.2 This Scope of Work (SOW) is for the Load Handling System Modular Fuel Farm, hereinafter referred to as the LMFF. The SOW for the LMFF will consist of a minimum ordering quantity of First Article Pump and Tankrack Modules, Contractor Support of Government Testing, a System Support Package, Data Requirements, and a Logistics Demonstration. Additionally, options exist for Contractor conducted New Equipment Training Classes for Operator and Maintainer Classes (see section B), and Contractor Technical Assistance/Field Service Representative (see Section B). Section C of the contract has been structured to this effect. Therefore; Paragraphs C.2 through C.18 applies to the base production of First Article Units and to any production effort under the 5 - year IDIQ contract. Paragraph C.19 shall apply if the option for New Equipment Training is exercised. Paragraph C.21 shall apply if the option for Contractor Technical Assistance/Field Service Representatives is exercised. (Changed by amendment 0004,0005)

C.3 The LMFF system shall meet the requirements stated in Purchase Description ATPD 2336B, dated 10 Mar 2004.

C.3.1 The Contractor shall produce and deliver each LMFF and associated data deliverables in accordance with Section B, and shall meet the delivery schedule in the Section F clause entitled "Delivery Schedule. The contractor shall deliver the LMFF with Basic Issue Items (BII) overpacked. The Government will provide the contractor with LMFF Technical Manuals, which the contractor shall overpack in every LMFF delivered to the Government.

C.3.1.1 Changes to ATPD 2336B dated 10 Mar 2004. These changes take precedence over ATPD 2336B dated 10 Mar 2004 that was issued as Attachment 002 to RFP W56HZV-04-R-0037 dated 2004APR09. (Added by amendment A001 (incorrectly as para C.3.1), paragraph numbering changed to C.3.1.1 and text added by amendment A004)

C.3.1.1.1 Delete the 4th sentence of paragraph 3.5.9.7 and replace with: "The tankrack shall be provided with an automatic shutoff control device to prevent over filling the tankrack under all bottom loading operations to include recirculating and defueling." (Added by amendment A001, changed by amendment A004)

C.3.1.1.2 Paragraph 3.5.6.2 Pump Filtration Module. Interface requirements for the additive fuel injector have been added. Replace paragraph 3.5.6.2 with the following:

The LMFF shall include a pump filtration module capable of refueling and defueling both ground vehicles and aircraft. The pump filtration module shall be capable of being transported by the HEMTT-LHS or PLS. A space of 40W x 48L x 40H shall be provided on the pump filtration module to integrate the Hammonds Fuel Additive Injector, part number TPI-4T-4A. This space shall be provided where the injector can easily be connected to the outlet of the pumping assembly. All necessary fittings shall be provided to connect the fuel additive injector to the outlet of the pumping assembly IAW 3.5.6.3. The pumping filtration module shall contain secure storage for hoses, fittings, nozzles as specified in 3.5.9.2, fire extinguishers, water containers, petroleum test kit, fuel spill control kit, strainer, and other equipment necessary to perform refueling operation. (Added by amendment A004) (Deleted and replaced with paragraph C.3.1.1.14 by amendment 0005)

C.3.1.1.3 Paragraph 3.5.6.3.4 Bottom fills and Discharge ports

The work "both" in the last sentence will be removed to avoid confusion.

The revised paragraph is:

The LMFF shall be equipped with an adequate number of 4-inch bottom discharge/suction port(s) capable of providing gravity and forced

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discharge, recirculation of filtered fuel, and bottom loading from an external pumped source rated up to 400GPM, with two discharge connections, unisex-type fittings. The port shall be equipped with a 4-inch female cam-lock fitting, IAW A-A-59326. In addition, all tankcracks shall be capable of being bottom loaded using a single point-refueling nozzle, IAW SAE-AS-5877. (Added by amendment A004)

C.3.1.1.4 Paragraph 3.5.7.2 Adapters

Replace the first sentence of paragraph 3.5.7.2 with:

The following quantity adapters and reducers shall be provided with each pump filtration module to allow interfacing with existing Army bulk storage and distribution equipment. (Added by amendment A004) (Deleted and replaced with paragraph C.3.1.1.15 by amendment 0005)

C.3.1.1.5 Paragraph 3.5.9.7 Fill and discharge

Change the word tanker to tank in the fifth sentence. The fifth sentence will read:

The fuel overflow control system shall have the capability to signal the tankcrack to shut off the flow of fuel into the tank when the fuel volume reaches 100 gallons less than the full rated capacity. (Added by amendment A004)

C.3.1.1.6 Paragraph 4.11 Corrosion Control Performance (Added by amendment A004)

Replace 4.11 with the following:

The contractor's compliance with the requirements of 3.11 and 3.11.1 shall be verified by CoC and supporting test data:

a. Corrosion Protection Testing: An accelerated corrosion test using GM9540, ASTM D 5894-96 or Government approved equivalent shall be performed to verify corrosion prevention for a 25 year period of performance (service life). See table below.

TEST	CYCLES	HOURS	TOTAL	SERVICE
		PER CYCLE	HOURS	LIFE
GM9540	120	24	2880	25 Years
ASTM D 5894-96	9	368	3312	25 Years

b. Scribe Test: Prior to the corrosion test, the item shall be scribed per ASTM D 3359. After completion of the test, the scribed area shall be scraped to determine the extent, if any, of coating undercutting/loss of adhesion.

c. All retest of failed parts shall be at the contractor's expense.

d. Due to changes in climatic conditions and the development of newer materials and processes, all accelerated corrosion tests undergo a continuous adjustment to reflect these conditions. Therefore, modifications to the testing are to be expected over time.

e. Any loss of form, fit or function shall be considered a corrosion failure and requires the same type of corrective action during or after the Acceptance Test as any other failure occurring during or after the First Article Test (FAT). Loss of coating adhesion or corrosion emanating from the scribe shall be limited to 3mm maximum at any point at the scribe. There shall be no blistering of the coating film in excess of 5 blisters in any 24 square inch area. The maximum blister size is 1mm. Expendable items (identified prior to the test) shall retain their function for their intended service life and are not subject to these criteria.

f. Recognizing that production schedules can be adversely affected by the duration required for the corrosion validation test, a waiver shall be granted so that limited production can proceed until the tests are completed. All deficiencies found during or after the completion of the tests must be corrected by the contractor on the previous and future production at contractor expense.

C.3.1.1.7 Delete paragraph 6.6 of the PD in its entirety. (Added by amendment A004)

C.3.1.1.8 (added by amendment 0005) Add to paragraph 2.2.2 (NORTH ATLANTIC TREATY ORGANIZATION (NATO) :

STANAG 3756 Facilities and Equipment for Receipt and Delivery of Aviation Kerosene and Diesel Fuels

C.3.1.1.9 (added by amendment 0005) Add to paragraph 2.2.2 (DRAWINGS):

13222E8212	Coupling Set, NATO, Tank Truck Adapter
13222E8219	Coupling, Rail Tanker, NATO
13219E0462	Ground Rod

Delete from paragraph 2.2.2 (DRAWINGS):

**CONTINUATION SHEET****Reference No. of Document Being Continued**

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13216E2773 Canister

C.3.1.1.10 (added by amendment 0005) Add to paragraph 2.3 (INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)):

ISO 228-1 Pipe Threads Where Pressure-Tight Joints Are Not Made on the Threads Part 1: Dimensions, Tolerances and Designation-Fourth Edition

C.3.1.1.11 (added by amendment 0005) Add to paragraph 2.3:

GENERAL MOTORS CORPORATION (GM)

GM 9540P Accelerated Corrosion Test

(Copies are available from Global Engineering Documents, an IHS GROUP company, 15 Inverness Way East, Englewood, Colorado 80112.)

C.3.1.1.12 (added by amendment 0005) Add to paragraph 2.3 (GERMAN INDUSTRIAL STANDARDS):

DIN 28450 Quick-acting Hose Couplings for Tank Trucks

C.3.1.1.13 (added by amendment 0005) Paragraph 3.3.3 Dissimilar Metals

Replace 3.3.3 with the following:

Dissimilar metals shall not be used in intimate contact with each other unless protected against galvanic corrosion.

C.3.1.1.14 (added by amendment 0005) Paragraph 3.5.6.2 Pump Filtration Module. Replace paragraph 3.5.6.2 with the following:

The LMFF shall include a pump filtration module capable of refueling and defueling both ground vehicles and aircraft. The pump filtration module shall be capable of being transported by the HEMTT-LHS, PLS, and PLS trailer. A space of 40W x 48L x 40H shall be provided on the pump filtration module to integrate the Hammonds Fuel Additive Injector, part number 4TP-4A-800MIL. This space shall be provided where the Fuel Additive Injector can easily be connected to the outlet of the pumping assembly. All necessary fittings shall be provided to connect the Fuel Additive Injector to the outlet of the pumping assembly IAW 3.5.6.3. Handling of the Fuel Additive Injector shall be accomplished without restrictions or additional kits by US Army forklifts as specified in 3.4.3. The pump filtration module shall contain secure storage for hoses, fittings, nozzles as specified in 3.5.9.2, fire extinguishers, water containers, petroleum test kit, fuel spill control kit, strainer, and other equipment necessary to perform refueling operation.

C.3.1.1.15 (added by amendment 0005) paragraph 3.5.7.2 Adapters

Delete content of paragraph 3.5.7.2 and add:

The following quantity adapters and reducers shall be provided with each pump filtration module to allow interfacing with existing Army bulk storage and distribution equipment:

- (2) 2 - inch unisex to 2 - inch female cam-lock adapter
- (2) 2 - inch unisex to 2 - inch male cam-lock adapter
- (2) 4 - inch female to 2 - inch male cam-lock reducer
- (1) 4 - inch female to 3 - inch male cam-lock reducer
- (1) 4 - inch male to 3 - inch female cam-lock reducer
- (1) 6 - inch male to 4 - inch female cam-lock reducer

C.3.1.1.16 (added by amendment 0005) Add paragraph 3.5.7.2.2 NATO Standard Connector Adapters

The LMFF shall be capable of dispensing fuel to, receiving fuel from, and recirculating fuel within NATO fuel handling equipment via the 3-inch NATO Standard Connector as defined in STANAG 3756 Annex E. Each pump filtration module shall be provided with fittings as specified in 3.5.7.2.2.1 through 3.5.7.2.2.5.

C.3.1.1.17 (added by amendment 0005) Add paragraph 3.5.7.2.2.1 Coupling, rail tanker, NATO

The fitting shall be a coupling for attachment to (non-US) railroad fuel tank cars, with an angular orientation approximately as shown U.S. Army drawing # 13222E8219. It shall be provided with an inlet capable of clamping and locking onto 80 mm to 140 mm size outside diameter, male, tank car outlets. The clamping mechanism shall incorporate a tension-adjusting, quick release feature, and the coupling shall have a captivated, fuel resistant gasket. The coupling outlet shall have ISO 228/1 G3A external thread (80mm British Standard Pipe (BSP)) conforming to ISO228-1.

C.3.1.1.18 (added by amendment 0005) Add paragraph 3.5.7.2.2.2 Coupling-set, tank truck, NATO

The fittings defined in these subordinate paragraphs delineate specific interface requirements, governed by international standardization agreements and comprise the NATO tank truck coupling set. Each shall be made of materials as specified herein, and compatible with fittings conforming to DIN 28450 (reference: U.S. Army drawing #13222E8212).

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C.3.1.1.19 (added by amendment 0005) Add paragraph 3.5.7.2.2.2.1 Coupling half, female, NATO.

The fitting shall be a cam-locking, quick disconnect, 3-inch female coupling half in accordance with A-A-59326, except with an ISO 228/1 G3A internal thread (80mm BSP) conforming to ISO 228-1.

C.3.1.1.20 (added by amendment 0005) Add paragraph 3.5.7.2.2.2.2 Coupling half, male, NATO.

The fitting shall be a cam-locking, quick disconnect, 3-inch male coupling half in accordance with A-A-59326, except with an ISO 228/1 G3A internal thread (80mm BSP) conforming to ISO 228-1.

C.3.1.1.21 (added by amendment 0005) Add paragraph 3.5.7.2.2.2.3 Adapter, hose coupling, NATO

The fitting shall be a coupling with ISO 228/1 G3A external threads (80mm BSP) conforming to ISO 228-1 at both ends. The fitting shall not be greater than 3.00 inches long, and shall be provided with spanner wrenching lugs, approximately 90 apart.

C.3.1.1.22 (added by amendment 0005) Add paragraph 3.5.7.2.2.2.4 Coupling half, female, tank truck, NATO

The fitting shall be in accordance with DIN 28450, Blatt 3, size NW80, and type MK.

C.3.1.1.23 (added by amendment 0005) Add paragraph 3.5.7.2.2.2.5 Coupling half, male, tank truck, NATO

The fitting shall be in accordance with DIN 28450, Blatt 2, size NW80, and type VK.

C.3.1.1.24 (added by amendment 0005) Add paragraph 3.5.7.2.2.2.6 Adapter, NATO (NPSH)

The fitting shall be an adaptor with an ISO 228/1 G3A external thread (80mm BSP) conforming to ISO 228-1 at one end, and a 3-8 NPSH external thread conforming to ASME B1.20.7 at the other. The fitting shall not be greater than 3.25 inches long, and shall be provided with hammer-type lugs approximately 180 apart.

C.3.1.1.25 (added by amendment 0005) Add paragraph 3.5.7.2.2.2.7 Adapter, NATO (NPT)

The fitting shall be an adapter with an ISO 228/1 G3A external thread (80mm BSP) conforming to ISO 228-1 at one end, and a 3-8 NPT external thread conforming to ASME B1.20.1 at the other. The fitting shall not be greater than 3.25 inches long, and shall be provided with hammer-type lugs approximately 180 apart.

C.3.1.1.26 (added by amendment 0005) Add paragraph 3.5.7.2.2.3 NATO Standard Adapter or Tank Unit

This male coupling half adapter also known as Tank Unit shall be designed to permit connection via a bayonet style adapter without spillage when pressurized. The dimensions are considered interface dimensions and shall conform to Annex E of STANAG 3756 (PHE). The size (nominal 80 mm) and all other design requirements such as pressure rating, spillage, materials of construction, electrical continuity, clearance access, etc. are covered by the Annex E of STANAG 3756 (PHE). The attachment end may be a threaded end.

C.3.1.1.27 (added by amendment 0005) Add paragraph 3.5.7.2.2.4 NATO Standard Connector or Hose Unit

This female coupling half also known as the Hose Unit shall be designed to couple with the adapter/Tank Unit of the coupling in any of the three lug positions. The dimensions are considered interface dimensions and shall conform to Annex E of STANAG 3756 (PHE). The female half shall be interlocked in such a way that the product cannot flow until a seal is achieved between the adapter and this hose unit. The interlock shall ensure that flow will cease before the seal between the adapter and hose unit is broken. The attachment end of the hose unit shall be a nominal size 3, or nominal size 4, male cam-locking style coupling per A-A-59326.

C.3.1.1.28 (added by amendment 0005) Add paragraph 3.5.7.2.2.5 Reducers

(1) 4-inch male cam-lock to 3-inch female cam-lock

(1) 4-inch male cam-lock to 3-inch male cam-lock

(1) 2-inch sexless to 3-inch female cam-lock

(1) 2-inch sexless to 3-inch male cam-lock

C.3.1.1.29 (added by amendment 0005) Delete paragraph 3.5.8.1 Battery and replace with title 3.5.8.1 Battery Power Source

C.3.1.1.30 (added by amendment 0005) Add paragraph 3.5.8.1.1 Battery

All batteries, except non-rechargeable batteries as specified in 3.5.8.1.2, supplied with the LMFF shall be US Army approved 6TMF IAW ATPD 2206. Type III batteries shall be used for long-term storage (6 months or more) and Type II shall be used for immediate use/fielding as determined by the contract delivery order(s) (see 6.2). Batteries shall be connected in 24-volt configuration and be readily accessible for service, inspection, and removal. The batteries shall have sufficient capacity to start the system at -25 F three times within a 1-hour period with a minimum of 15 minutes between starts after a 5 minute run period. Insulated boots shall be installed over the battery terminals.

C.3.1.1.31 (added by amendment 0005) Add paragraph 3.5.8.1.2 Non-rechargeable battery

Non-rechargeable batteries may be used for low power consuming, wireless equipment. The batteries shall have a minimum continuous service life of three months, weigh less than one pound, and exist in the Department of Defense (DoD) inventory Defense Logistics Information System (DLIS)/Federal Logistics Information System (FLIS). Battery enclosures shall be provided and constructed so that battery venting or leakage will not damage any other components. Battery replacement shall not require any tools and shall not take more than one minute to safely replace. Spare batteries for one complete change-out shall be provided. Two storage container/compartments within the pump filtration module envelope shall be provided, one for new batteries and the other for used/dead

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batteries. Container/compartments shall be labeled NEW BATTERIES for the new batteries, and USED / DEAD BATTERIES and DO NOT USE for the used/dead batteries.

C.3.1.1.32 (added by amendment 0005) Paragraph 3.4.3 Forklift compatibility. Clarification has been added. Replace paragraph 3.4.3 Forklift compatibility with the following:

Each tankrack, pump filtration module, and any loads to be handled by a forklift, shall have forklift pockets, for lifting, conforming to ISO 1496-5. Tankracks shall be empty prior to handling by a forklift. Forklift pockets shall be shielded to prevent the tankrack from accidental piercing by the forklift tines. Each tankrack, pump filtration module, and any loads to be handled by a forklift shall be capable of being entirely lifted and secured IAW MIL-STD-1366D onto the HEMTT-LHS truck, PLS truck, PLS trailer, and conventional flatbed trailers, by the following standard U.S. Army forklifts: 10,000 Lb. All Terrain Lifter Army System (ATLAS) IAW ATPD 2325 and the M10A (ref. TM 10-3930-643-10). The tankrack and the pump filtration module components shall be within the physical envelope of the ISO frame to avoid contact with the forklift carriage.

C.3.1.1.33 (added by amendment 0005) Paragraph 3.5.7.5 Grounding, bonding, and clamps. Replace paragraph 3.5.7.5 Grounding, bonding, and clamps with the following:

3.5.7.5 Grounding and bonding.

The LMFF shall have complete electrical continuity (bonding) throughout the system when in operational service configuration. This includes all electrically conductive components of the LMFF that the fluid and the operator may come in contact with. All bonding and/or grounding connections shall be mechanically secure and shall measure 1 (one) ohm or less. Two manual reels each with one 15-ft grounding wires and plier-type clamps shall be provided for each tankrack and each pump filtration module.

C.3.1.1.34 (added by amendment 0005) Add paragraph 3.5.7.5.1 Grounding rods

One grounding rod shall be provided for each tankrack, each pump filtration module, and each refueling point. The grounding rods shall include an integral rod insertion device to drive the rods into compacted soil. Each grounding rod shall be of sufficient length to provide a minimum of 36 inches of ground penetration. A storage location shall be provided for grounding rods within the tankrack and pump filtration module envelopes. A storage location shall be provided for the refueling point grounding rods on the pump filtration module. (Reference: U.S. Army drawing 13219E0462 Ground Rod).

C.3.1.1.35 (added by amendment 0005) Paragraph 3.5.8.5 NATO Intervehicle cable and plug assembly.

Replace paragraph 3.5.8.5 NATO Intervehicle cable and plug assembly with the following:

A 20-ft. intervehicle cable and plug assembly, NSN 6150-01-022-6004 (Reference: drawing 11682336-1), IAW NATO STANAG 4074 shall be provided with each pumping assembly to provide emergency electrical power and emergency starting capability to the pumping assembly.

C.3.1.1.36 (added by amendment 0005) Paragraph 3.5.9.8 Gravity discharge

Replace paragraph 3.5.9.8 Gravity discharge with the following:

3.5.9.8 Auxiliary Pump

The tankrack modules shall be equipped with an auxiliary pumping capability that allows fuel to be dispensed in emergency situations, using gravity fuel flow at a minimum rate of 25 gpm. The tankrack modules shall be capable of dispensing fuel by gravity flow, while mounted or sitting on flat ground, a minimum of 99 percent of the tank volume. The auxiliary pump shall be capable of evacuating all hoses attached to the tankrack. The auxiliary pump shall include a 25-foot section of 2-inch hose equipped with sexless dry disconnect fittings and open-port nozzle equipped with a sexless fitting. The auxiliary pump shall have a removable metallic cover to protect it when not in use. Flow shall allow for gravity operations.

C.3.1.1.37 (added by amendment 0005) Paragraph 4.1.3 with the following:

4.1.3 First Article Test (FAT).

A FAT is required and will be performed by the Government on three pump filtration modules and three tank rank modules. The FAT will include the test conditions, examinations, tests, and certifications set forth in Sect 4.1 through 4.17 to include Table I (also see Sect 6.3). An evaluation will be made during FAT to determine whether the LMFF is designed to reduce or eliminate as many tools, special tools, and test equipment as possible. In addition, an examination will be made and recorded to ascertain whether all tools and test equipment required to support LMFF operation, maintenance, and repair are present and adequate to support the system at the required US Army maintenance levels for the life of the system. FAT test results will be part of the final test report.

C.3.1.1.38 (added by amendment 0005) 4.5.6.1.1 Capacity

Add to paragraph 4.5.6.1.1 Capacity the sentence:

Any leak or overflow outside the confines of the tank shall constitute a failure of this test.

C.3.1.1.39 (added by amendment 0005) 4.5.6.2 Pump filtration module.

Replace paragraph 4.5.6.2 Pump filtration module with the following:

Verify conformance to the requirements of 3.5.6.2 through visual inspection and demonstration. Verify that the fuel additive injector is easily accessible, securely mounted on the pump filtration module, and can be safely transported over all types of terrain as specified in the Operational Mode Summary/Mission Profile (OMS/MP) in appendix B. Testing of the fuel additive injector shall be performed using water or as otherwise specified by the manufacturer of the fuel additive injector assembly.

C.3.1.1.40 (added by amendment 0005) 4.5.7.2 Adapters

Replace paragraph 4.5.7.2 Adapters with the following:

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Verify conformance to the requirements of 3.5.7.2 through 3.5.7.2.2 by CoC, visual inspection, and operation.

C.3.1.1.41 (added by amendment 0005) 4.5.7.5 Grounding, bonding and clamps

Replace 4.5.7.5 Grounding, bonding, and clamps with the following:

4.5.7.5 Grounding and Bonding

The requirements of 3.5.7.5 through 3.5.7.5.1 shall be verified by contractor CoC, which shall include analysis, test and evaluation, and modeling and simulation where available/appropriate. In addition, performance and suitability for intended use shall be demonstrated by operational test during the conduct of the FAT. The absence of the item or insufficient quantities of this item; absence or inadequacy of the contractor's CoC, unsuitability for intended use; inability to perform the installation, set-up/takedown, and unrestricted operation with the required number and types of the system personnel; and failure to comply with the requirements of 3.5.7.5 shall constitute failure.

C.3.1.1.42 (added by amendment 0005) Paragraph 4.5.8.1 Battery. Replace the first sentence of paragraph 4.5.8.1 Battery with the following:

Verify conformance to the requirements of 3.5.8.1 through 3.5.8.1.2 by CoC, operational test, and verification of cold starts.

C.3.1.1.43 (added by amendment 0005) Paragraph 4.6.1.4 Air Transport. Replace paragraph 4.6.1.4 Air Transport with the following paragraph:

Conformance to 3.6.1.4 shall be verified by CoC and demonstration. The tankrack in its airlift shipping configuration, full, shall not leak while the tank is tipped at 60 degree angle in each flight orientation (Port, Starboard, Aft, and Forward with respect to the aircraft). Tipping of the tank may be accomplished using ramps or a crane. The tankrack shall be held in each tipped condition for a minimum of 15 minutes and be observed for leakage. With the tankrack in each of the tilted conditions, measure weight of each corner when assembly is at 45 degrees from horizontal. Re-measure weight on each corner after returning to horizontal position. Verify that weight of opposing corners does not increase or decrease by more than 250 lbs when the tankrack is tilted at 45 degrees. Any sign of leakage, permanent deformation, or failure causing an unsafe condition as a result of this test shall constitute failure of this test.

C.3.1.1.44 (added by amendment 0005) Paragraph 4.6.1.6 Rail impact test. Replace first sentence of paragraph 4.6.1.6 Rail Impact Test with the following:

To verify conformance to 3.6.1.5, the rail impact test shall be conducted IAW MIL-STD-810, Procedure VII of method 516.5, with testing of the LMFF, with fuel, on COFC flatcar and of the LMFF when mounted on its prime movers.

C.3.1.1.45 (added by amendment 0005) Paragraph 4.8.7 Salt fog. Replace first sentence of paragraph 4.8.7 Salt fog with the following:

The LMFF shall be tested for conformance to the requirements of 3.8.7 in a salt fog environment according to Procedure I of Test Method 509.4 of MIL-STD-810 in normal operating mode.

C.3.1.2 Change to MIL PRF 370J dated 7 May 02. This change takes precedence over MIL PRF 370J dated 7 May 02.

C.3.1.2.1 (added by amendment 0005) Paragraph 3.3.5.5 Quick-disconnect, sexless couplings. Replace paragraph 3.3.5.5 with the following:

The sexless couplings shall be type 1, class A or B, IAW A-A-59377. The couplings shall be reusable and sized to mate with type A, B, C, and D hoses, size 06 and 08. In addition to the specification requirements, the couplings shall be compatible with fuel as listed in 3.4.2.

C.3.2. Tiering of Specification and Standards. The following documents used for the procurement of this system(s) shall be 1) designated as first tier requirements, and all requirements therein shall be applicable to this procurement. Design and performance data identified in commercially-based standards, practices, and specifications as General Notes and "Notes (e.g. ASTM, CID and similar) shall be required for the purposes of design and performance criteria, Government and contractor-conducted testing, and other verification activities. The Governments objective in requiring what would normally be considered secondary/tertiary-level and referenced information is due to the non-availability of a traditional Government or commercial-style data package that would satisfy the procurement requirements.

a. CID (Commercial Item Descriptions IAW the Federal Standardization Manual)

b. ASME

c. SAE

d. ASTM

e. Other specified commercially-based specifications/requirements

f. Other specified regulatory-based requirements (EPA, OSHA, UL, NSF, NOAA)

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C.4 Integrated Product Team (IPT)

C.4.1 The contractor and the Government shall use an Integrated Product Team (IPT) jointly chaired by both Government and contractor as the primary management vehicle for monitoring the status of the work described in this contract. The Government and contractor shall use teleconferencing, Internet Home Pages, and shared common databases to ease communication if agreed upon by all parties. IPT members may include personnel designated by the contractor, the Contracting Officer, the Product Manager (PM), and other offices or agencies.

C.4.2 The Government proposes to enter into a voluntary Partnering arrangement with the contractor. Partnering is a commitment between Government and industry to improve communications and avoid disputes. It is accomplished through an informal process with the primary goal of providing American soldiers with quality supplies and services, on time, and at a reasonable price. Should the contractor and Government agree to voluntarily enter into a Partnering relationship, we will follow the guidance in the Army Materiel Command (AMC) Guide: "Partnering for Success". This guide is located on the Internet at:  
[http://www.amc.army.mil/amc/command\\_counsel/resources/documents/Partneringguide/partnering\\_guide.pdf](http://www.amc.army.mil/amc/command_counsel/resources/documents/Partneringguide/partnering_guide.pdf)

C.5 Data Submission Requirements

C.5.1 The contractor shall deliver all data under this contract, in English, electronically (unless otherwise specified) via Web site, electronic mail, or compact disc, and in MS Office 97 compatible format. Required data shall be delivered to the Government in accordance with the requirements of Exhibit A, the Contract Data Requirements List (CDRL). The Government will provide electronic mail addresses during the start of work meeting.

C.5.2 In addition to the addresses listed in block 14 of the CDRL, an electronic copy of the cover letter accompanying data deliverables shall be submitted to the System Acquisition Manager (SAM) and the Procuring Contracting Officer (PCO).

C.5.3 The contractor shall prepare technical data and reports as specified in the applicable Data Item Description (DID), or as described elsewhere in the contract. In the case of an inconsistency between the DID and the contract, the requirements of the contract shall prevail. Tailored DIDs referenced in the contract SOW and CDRLs (identified by (T) following the DID number) are identified in Section J as attachments to the contract. Should the contractor need to review DID that are not tailored in the Contract or Delivery Orders, refer to the database at "<http://dodssp.daps.mil/assist.htm>".

C.6 Meetings and Reviews

C.6.1 The contractor shall conduct meetings and reviews to provide the Government the means to assess the progress of the total technical effort and to address identified program issues and risks. Before such meetings and reviews, the Government and contractor shall agree upon a common agenda. Meetings and reviews shall be conducted at the contractor's facility unless otherwise jointly agreed upon between the contractor and the Government contracting agency. The Government reserves the right to call informal meetings and reviews as deemed necessary during the course of this contract, including weekly telephonic reviews. The contractor shall prepare the minutes of the meetings and reviews, including action items and suspense dates, and deliver them in accordance with:  
CDRL A001

C.6.2 Resources and Materials. The contractor shall provide the necessary resources and materials to conduct the meetings and reviews effectively.

C.6.3 Start of Work Meeting. Within 30 calendar days after contract award, the Government and the contractor will hold a Start of Work Meeting. The meeting shall be held at the contractor's facility and shall include approximately twenty-five (25) Government personnel. The purpose of this meeting is to review, at a minimum, contract terms, contract conditions, contract requirements, data items, required specifications, test requirements, and logistic requirements. The contractor shall also review and demonstrate to the Government their management procedures, review technical and other status, identify program implementation processes, and establish schedule dates for near term critical meetings and actions. The contractor shall also introduce key management and contract personnel.

C.6.4 Program Status Reviews (PSR). Joint Government-contractor program status reviews shall be held quarterly for the first three years then semi-annually thereafter until completion of the contract. Typically these reviews will last one to two days. Initial program status review shall be conducted approximately 90 days after the start of work meeting. Program status reviews shall be held at the contractor's facility unless agreed to otherwise by the parties. PSRs shall address but not be limited to the following agenda items: the contractor's progress, management, technical support services (if any), integrated logistics support, systems engineering, administrative, contract compliance, program status, funding issues, problem identification and resolutions, and deliverables. Actual versus expected performance of each area shall be addressed. The contractor shall prepare presentation materials providing an overview of all agenda items.

C.6.5 Logistics and Engineering Working Group Meetings. The initial Logistics Working Group meeting and Engineering Working Group meeting shall be held concurrently with the Program Status Reviews. Logistics and Engineering Working Group meetings shall include discussion pertaining to development of technical manuals, training, provisioning, drawings, and any other logistics or engineering issues that need to be addressed. Additional working group meetings shall be convened as necessary.

C.7 Configuration Management

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C.7.1 Configuration Control. The contractor shall be responsible for configuration control, disposition, and control of all nonconforming material throughout the program. The contractor shall establish a configuration baseline following testing and acceptance of the FAT/IO&T by the Government. This baseline will identify and document the functional and physical characteristics of the LMFF at that time.

C.7.2 Engineering Change Proposals. Changes to established baselines shall only be made after Government approval of an Engineering Change Proposal (ECP). Changes shall be identified to affected assembly serial number, or if not part of an assembly, to the affected equipment serial number. All Class I ECPs shall require Government approval prior to implementation. Class II ECPs do not require prior approval; however, the contractor shall notify the Contracting Officer, by means of an ECP, not less than 60 days prior to implementing any configuration changes. ECPs shall be prepared in accordance with Attachment 001 and delivered in accordance with: CDRL A002

C.7.3 Requests for Deviation. The contractor shall submit Requests for Deviation (RFD) from current approved configuration documentation. Authorized deviations are a temporary departure from the requirements and do not constitute a change in an approved baseline. Where it is determined that a change should be permanent, the contractor shall submit an ECP. RFDs shall be prepared in accordance with Attachment 002 and submitted in accordance with: CDRL A003

**C.8 Integrated Logistics Support (ILS) Program**

C.8.1 The contractor shall assist the Governments Logistics Support Contractor in developing, testing, producing, and delivering the logistic data to support the Load Handling Modular Fuel Farm (LMFF) as described in paragraphs C.8.2 through C.9.7.

C.8.2 The contractor shall plan, manage and ensure ILS considerations are an integral part of the overall system.

**C.9 Contractor Support and Support Data During Publications and Provisioning Development**

C.9.1 The contractor shall attend the Maintenance, Publications and Provisioning (MPP) start-of-work meeting for the Government Logistics Support contractors contract. The contractor shall also attend, at a minimum, two In-Process Reviews (IPRs) for the Government Logistics Support contractors contract. The contractors representatives in attendance at the IPR shall be subject matter experts (SME) in the operation and maintainability of the LMFF system. Location of said meetings/reviews will be determined upon selection of Governments Logistics Support contractor.

C.9.2 The contractor shall designate a point of contact (POC) to receive and respond to any issues that arise for both publications and provisioning efforts. The POC is to respond to the Government and the Government Logistics Support contractors requests for information in writing within three business days, to acknowledge receipt and establish time frame for a technical answer.

C.9.3 The contractor shall provide the Government and the Governments Logistics Support contractor ongoing technical support and information, to include at a minimum, clarification of operation, troubleshooting, maintenance, repair parts and special tools until material fielding is accomplished.

C.9.4 The contractor shall provide the Government and the Governments Logistics Support contractor access to the contractors production facility to view, photograph, measure, and witness operation of the LMFF as required, regardless of the status of the production build. This support also includes access to office space, telephone, fax, modem line and Internet access. The Government will coordinate all site visits with contractor management.

C.9.5 Logistics Management Information (LMI) Data Products. The contractor shall provide to the Government and the Governments Logistics Support contractor the following data and support for the complete development of the provisioning and publications submissions:

(1) Parts List containing at a minimum:

- a) CAGE/Source of Supply and Part Number for all items, including tools and test equipment
- b) Item nomenclature
- c) Estimated unit price for each item listed
- d) Quantity per assembly / end item
- e) Maintenance replacement rate/failure factors derived from Reliability and Maintainability (R&M) information
- f) Identify a minimum of two approved sources of supply (or justification for single source of supply).
- g) Bill of Material (BOM) before and after test

(2) Descriptive or supporting technical data for all replaceable items includes engineering drawings, brochures, schematics, catalog pages, commercial manuals or pamphlets to depict the following:

- a) Parts breakout of assemblies to the component level including vendor components

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- b) Relationship breakdown with reference to the end item:
  - end item
  - assembly
  - subassembly
  - component
  - attaching hardware
- c) Hardware descriptive data such as:
  - thread diameter
  - quantity of threads per inch
  - fastener length
- d) Type of Material
- e) Dimensions

The LMI data shall be prepared and delivered in accordance with:  
CDRL A005

C.9.6 The Government will conduct a technical manual validation/verification and provisioning conference will be conducted at the Contractors facility. The contractor shall provide the following:

- (1) Qualified personnel to perform disassembly and assembly of the unit.
- (2) Production version of the LMFF
- (3) Special and common tools
- (4) Support equipment
- (5) Facilities and office space
- (6) Mandatory replacement parts needed for assembly/disassembly tasks
- (7) Expendable supplies and materials
- (8) Spare parts consumed or destroyed during any disassembly or assembly process (such as gaskets and seals).
- (9) Technical support and information, to include as a minimum, clarification of operation, troubleshooting, maintenance and repair parts and special tool list, as provided to the Governments Logistics Support contractor.

C.9.7 After submitting LMI data, if the contractor changes form, fit or function or any parts vendor, prior to First Article Test (FAT) approval, the contractor shall provide the Government and the Governments Logistics contractor notification in writing within three business days. Contractor shall provide updated LMI data, including a summary of changes and revised BOM, within five business days after the implementation of hardware change.

**C.10 Military Packaging Documentation Requirements**

The contractor shall develop packaging requirements for the complete system. The system requirements are developed as part of the Shipment and Storage (S&S) instructions.

C.10.1 Shipment and Storage (S&S) instructions. The contractor shall provide and update S&S instructions. When preparing the S&S instructions, the contractor shall ensure those instructions are consistent with the transportability requirements stated in the PD and transportability report required elsewhere in this contract. The S&S instructions shall detail procedures required to prepare the system for storage and for transport after it has been in operation. The S&S instructions shall be formatted and delivered in accordance with:  
CDRL A006

**C.10.2 S&S processing instructions required:**

a. Short Term Storage (180 days maximum in an unheated warehouse) for application when items are in transit. Short term S&S processing instructions will be sufficient to protect the items when they are intended for immediate use.

b. Long Term Storage Instructions. The Government will use these instructions to prepare a system for open storage for a period of up to 2 years. The contractor shall ensure these instructions include any cyclic maintenance and exercising requirements necessary to prevent the system from deteriorating due to inactivity.

C.10.3 Compliance with Federal and Industry Transportation Requirements. The Government ships using truck, rail, plane, and ship. The contractor shall develop packaging requirements and S&S instructions for these modes of transportation and identify unique requirements for each mode of transport. This will allow the Government to process for shipment based on the intended mode of transport. The contractor shall comply with the applicable codes and standards listed here:

- (1) Code of Federal Regulation Titles 29, 40 and 49
- (2) International Maritime Dangerous Goods Code, for vessel transport
- (3) AFMAN 24-204, Preparing Hazardous Materials for Military Air Shipments
- (4) International Air Transportation Association (IATA) Dangerous Goods Regulations.

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The contractor shall include disassembly procedures to meet the requirements of the codes and standards mentioned above.

C.10.4 Packaging Instructions for Basic Issue Items. The contractor shall ensure that the shipment and storage instructions include packaging instructions for the Basic Issue Items (BII) and Components of the End Item (COEI). The contractor shall ensure the instructions require that BII shall be packed separately from the COEI.

C.10.4.1 BII and COEI Packaging. The contractor shall identify, in the shipment and storage instructions, provisions for stowage location and security for the BII and COEI. The contractor shall provide that HAZMAT COEI shall be shipped separately from the system and packaged according to mode of transportation. The instructions shall address selection of stowage locations which deter pilferage. Compliance with S&S instructions shall not interfere with lifting, tie down or other transportation handling requirements.

C.10.5 Updates and Changes to Shipment and Storage Instructions. The contractor shall revise the shipment and storage instructions to reflect design changes that affect the system's shipment configuration, weight, or transportability. The contractor shall also provide revisions to the shipment and storage instructions for each logistics change affecting packaging instructions for BII or COEI.

C.10.6 Validation of Shipment and Storage Instructions. The contractor shall validate the shipment and storage instructions. Both long term and short-term storage instructions shall be validated at this time. The purpose of validation is to verify the adequacy of the preservation, packaging, packing and stowage of BII/COEI, preservation procedures for shipment and storage, and the cyclic maintenance requirements for systems in long-term storage. The Government representative will verify and witness validation procedures. The contractor shall notify the Government 14 days prior to scheduled validation. The final submittal of the Shipment and Storage Instructions (CDRL A006) shall reflect the corrections required as a result of the validation.

C.10.7 Packaging Requirements. The contractor shall develop packaging data for spare and repair parts, as determined during the provisioning process. This shall consist of coded packaging data (select group items per MIL-STD-2073) and Special Group Items requiring Special Packaging Instructions (SPIs). The contractor shall provide Logistics Management Information (LMI) Data Products for packaging data systems entry as specified in MIL-PRF-49506 (see DI-ALSS-81529), and Attachment 004 titled Logistics Management Information (LMI) Packaging Data Products. Data is required for all parts that are provisioned (P-source coded) and field level kits (KF-source coded).

C.10.7.1 Coded Packaging Data/Select Group Items. Select group items are items where packaging can be adequately described using the codes in Appendix J of MIL-STD-2073. The Government will provide the Contractor with quarterly reports showing status of the packaging program. Data is critical to populating the National Stock Number Master Data Record (NSNMDR) and the Federal Logistics Information System (FLIS) Government data files and shall be 90% accurate. The contractor shall rework submittal errors within 20 days after rejection by the Government. The contractor shall provide the necessary personnel, facilities, equipment, material, and the electronic data interface. The contractor shall include information for each of the items so TACOM can determine the adequacy of the packaging submittal. This includes item drawings and data, as finalized at the provisioning conference, such as Source, Maintenance & Recoverability codes, Unit of Issue codes, Unit of Measure, Measurement Quantity, and copies of applicable Material Safety Data Sheets. The contractor shall furnish item drawings, photo documentation and notes sufficient for reviewing the packaging designs. Submission shall be in accordance with:

CDRL A007

C.10.7.2 Special Packaging Instructions (SPI). The contractor shall prepare SPIs for each reparable item, each hazardous material item, each fragile, sensitive, critical item, and any item that cannot be adequately packaged/defined as a Select item, following MIL-STD-2073-1D. Compliance with SPIs shall assure meeting performance requirements of ASTM D4169, Distribution Cycle 18, Assurance Level I, with Acceptance Criterion 3 (Product is damage free and package is intact). Each SPI submittal shall have a test report, including photographs, attached showing the condition of the package and part before and after the testing. Acceptable photographic evidence shall show the product is undamaged from all angles. SPI shall be in a format that can be viewed, changed, and commented upon (for example, Microsoft Word 6.0, see CDRL A008 and DID DI-PACK-80121B). The contractor shall provide read/write access to SPI. All data submitted shall be contractor validated and 95% accurate. The contractor shall rework submittal errors within 20 days after rejection by the Government. Submission shall be in accordance with:

CDRL A008

C.10.7.3 Excluded Items. Excluded items are those items with packaging data already in the TACOM Packaging File "PACQ", FEDLOG, Federal Logistics Information System (FLIS), and those assigned a Contractor and Government Entity Code (CAGE) of: 1T416, 21450, 80204, 96906, 10060, 24617, 80205, 99237, 80244, 81343, 81346, 81348, 81349, 81352, or 88044. Also EXCLUDED are items for:

- (1) not mission capable supply
- (2) depot operational consumption
- (3) not-for-stock supply.

C.10.7.4 Change Notices. The contractor shall assess engineering and logistic changes for packaging impact, provide revisions and additions to the packaging information when there is a packaging impact, and provide packaging impact statements with change notices with a 90% accuracy rating. The Government will verify contractor impact statements.

C.11 Safety Engineering and Health.

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C.11.1 Safety Engineering Principles. The contractor shall address the Safety and Health requirements of the PD in technical reviews. The contractor shall follow good safety engineering practices in establishing the LMFF design and operational procedures, to include modifications to commercial components. The contractor may use MIL-STD-882D as a guide in determining whether safety engineering objectives are met. As a minimum, the contractor shall:

a. Identify hazards associated with the system by conducting safety analyses and hazard evaluations. Analyses shall include operational, maintenance, and transport aspects of the LMFF.

b. Eliminate or reduce significant hazards by appropriate design or material selection. If hazards to personnel cannot be avoided or eliminated, take steps to control or minimize those hazards.

C.11.2 Safety Assessment Report (SAR). As a result of system safety analyses, hazard evaluations, and any independent testing, the contractor shall perform and document a safety assessment and health hazard assessment. The safety and health hazard assessment shall identify all safety features of the hardware, system design and inherent hazards and shall establish special procedures and/or precautions to be observed by our test agencies and system users. The contractor shall identify health hazards associated with the system and incorporate them into the SAR. MIL-STD-882D provides guidance in the preparation of the SAR and Health Hazard Assessment. In preparing the health hazard portion of the SAR, the contractor shall provide a description and discussion of each potential or actual health hazard issue of concern for each subsystem or component. The contractor shall include classification of severity and probability of occurrence, and when the hazards may be expected under normal or unusual operating or maintenance conditions. The contractor shall include in the SAR copies of Material Safety Data Sheets (MSDS) for all hazardous materials incorporated into the system. The use of such materials shall be in accordance with the requirements set forth in ATPD 2336B, dated 10 Mar 2004. The final SAR is subject to Government approval. The Contractor shall prepare the SAR in accordance with:

CDRL A009

**C.12 Environmental Requirements**

C.12.1 The contractor shall not use cadmium, hexavalent chromium, asbestos or Class I or Class II Ozone-Depleting Substances, or other highly toxic or carcinogenic materials without Government approval. The contractor shall not use materials that are identified in the Registry of Toxic Effects of Chemical Substances, published by the National Institute for Occupational Safety and Health, as materials that will produce toxic effects via the respiratory tract, eye, skin or mouth. Moderately toxic materials may be used provided the design and control preclude personnel from being exposed to environments in excess of that specified in 29 CFR 1910, Occupational Safety and Health Standards.

C.12.2 The contractor shall manage the efforts described by this contract to ensure that all aspects of the contract execution, including, but not limited to the following contractor activities: design, manufacturing, testing, and storage activities, are in compliance with Federal, State and Local environmental regulations and requirements. The contractor shall notify the PCO immediately, if the Government gives any direction that could result in permit violations.

C.12.3 The contractor shall prepare a Hazardous Material Management Report which, at a minimum, shall identify all hazardous materials (as defined in FED-STD- 313D, paragraph 3.2) required for system production, and sustainment, including the parts/process that requires them. This report should be prepared in accordance with National Aerospace Standard 411, section 4.4.1, and shall be briefed at all Program Review Meetings.

C.13 Transportability Report. The contractor shall submit a transportability report for the LMFF that includes data on recommended procedures for positioning and securing the LMFF modules for transportation by highway, rail, marine, and air and slinging procedures for lifting the modules in accordance with:

CDRL A010

**C.14 Logistics Demonstration and Plan**

C.14.1 Logistics Demonstration Plan. The Government and contractor shall jointly develop a Logistics Demonstration (LD) plan. The LD Plan shall contain the Government and contractor plans and procedures for demonstrating the logistic supportability of the system. The plan shall contain a statement of demonstration objectives and the qualitative and quantitative requirements to be demonstrated. The contents of the plan shall contain a description of the demonstration conditions. The following areas shall be addressed:

(a) A listing of tasks to be demonstrated.

(b) Demonstration conditions including the following:

(1) The principal operating modes, operating time and cycling conditions to be imposed.

(2) A description of the demonstration facilities and instrumentation requirements, including location.

(3) The mode of operation during the demonstration considering configuration and mission requirements.

(4) Demonstration constraints such as manpower (by number and skill level), test equipment and their

relationship to the eventual use of the items.

(c) The types and quantities of equipment and materials to be used including government furnished equipment.

(d) The maintenance concept.

(e) Provisions for a pre-demonstration phase to prepare facilities, personnel and equipment for the formal demonstration.

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(f) Expected results, including the following:

(1) The method to be used to report test levels.

(2) The data expected from each test along with the recording methodology and definition of provisioning data elements to be collected.

(3) Analytical methods and calculation procedures to be used to analyze demonstration data.

(4) The criteria for classifying demonstration results as successes or failures. Definition of failure must relate to expected symptoms that will be observed by operators and maintenance personnel.

(g) The plan of action to be used when demonstration failures occur.

(h) The participating agencies including:

(1) Organization.

(2) Degree of participation by each in terms of managerial, technical, maintenance and operating personnel.

(3) Assignment of specific responsibilities.

(4) Qualifications, quantity, sources, training and indoctrination requirements needed for the personnel participating in the LD.

C.14.2 Logistics Demonstration. The Government will conduct a Logistics Demonstration (LD). The LD shall be conducted over ten (10) business days. A LD is a nondestructive disassembly and re-assembly of the LMFF tankrack and pumping module. System peculiar Test Measurement and Diagnostic (TMDE) and support equipment, as well as the system support package, is also tested to determine their logistic status. The LD will include performance of all the operational tasks and scheduled maintenance tasks required for the LMMF:

(a) The achievement of maintainability goals

(b) The adequacy and suitability of tools and test equipment

(c) Maintenance instructions and personnel skill requirements

(d) The selection and allocation of repair parts, other equipment, and tasks to appropriate maintenance levels; and the adequacy of maintenance time standards.

C.14.3 The contractor shall supply all expendable and durable items required to perform the LD tasks. The contractor shall provide technical and engineering support, as required to assist the Government in the performance of the LD effort. The contractor shall provide the facilities to support the LD. These facilities shall include an operations site, a shop area equipped with lifting equipment and all the tools and diagnostic equipment required to perform all operations and maintenance tasks.

C.14.4 The contractor shall develop and conduct an introduction to the vehicle for Government support personnel and data collectors prior to the Logistics Demonstration. Training dates will be negotiated between the contractor and the Government. The training will cover system operation and controls required to safely operate the vehicle. The training shall be at least 50% hands-on training. The maximum length of the training class is 8 hours. The training shall be conducted at the test site. The contractor may use commercially available material for this course, or use material developed to be used for the test training personnel. The projected class size for this training is 12 students, with the option for the Government to have additional observers.

**C.15 Contractor Support Of Government Testing**

C.15.1 The contractor shall provide qualified technical personnel to support Government conducted tests required in this contract on an as needed basis to provide advice, troubleshooting, maintenance assistance, and repair of the LMFF when requested by the Government. The contractor personnel shall be at the test site within 48 hours of notification by the Government. The contractor shall obtain specific requirements, if any, for access to Government test facilities 30 days prior to the start of testing. If a security clearance is needed the contractor shall be responsible for ensuring all coordination is made with the appropriate personnel. The contractor may be required to provide personal vital statistics, including documentary evidence, such as a birth certificate and such other evidence to affect a security clearance.

**C.15.2 System Support Package (SSP).**

C.15.2.1 The contractor shall deliver a SSP to support both the FAT and IOT&E testing. The SSP shall include:

(1) Parts needed for scheduled maintenance or replacement items that will be consumed during the life of the tests

(2) Unique, non-military standard, expendable supplies such as petroleum, oils, and lubricants

(3) Basic Issue Items and Components of End Items as required by its design per system

(4) Any tool or Test Measurement and Diagnostic Equipment (TMDE) required to perform maintenance and any diagnostic maintenance procedures, to include vendor or manufacturer software programs and/or hardware that are not identified in the Army Supply Catalogs.

(5) One each, Hammonds Fuel Additive Injector, part number 4TP-4A-800MIL. The Government will take possession of this SSP item after completion of testing in accordance with clause F.1. (added by amendment 0005)

C.15.2.2 The contractor shall provide a list of the SSP contents in accordance with:

CDRL A011

C.15.3 The contractor shall provide a replacement for any part or item that fails to perform its function during the test within 48

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hours of notification.

C.15.4 Following completion of the tests, the contractor shall submit a list of remaining parts with the current price information to the Government. The Government reserves the right to provide the unused/remaining parts as Government Furnished Material (GFM) under this contract. If so, an equitable adjustment to the contract shall be made.

C.15.5 If re-testing is necessary as the result of contractor failures, the contractor shall provide the necessary SSP items to support this additional testing at no cost to the government.

C.16 Test Unit Refurbishment Cost Reimbursement

C.16.1 Following completion of the Logistics Demonstration, FAT, and IOT&E, the Government in conjunction with the contractor will examine the test units to determine if it is feasible to refurbish the test units. The Contractor shall submit a cost proposal for refurbishment cost by unit. Final decision of refurbishment shall remain solely with the Government. Should the Government direct refurbishment of any or all units, the contractor shall refurbish the units to the current (all approved corrective actions and engineering changes) production baseline. Refurbishment shall be completed within ninety (90) days of Government notice. Thirty days following completion of each unit, the contractor shall submit a proposal for equitable adjustment. All refurbishment costs will include transportation costs from the test site to the contractors facility.

C.16.2 The effort shall include but is not limited to the contractor:

- (1) Replacing all oils and lubricants
- (2) Replacing all filters
- (3) Repainting the exterior of the units as required

C.16.3 Following refurbishment the contractor shall present the units to the Government for acceptance.

C.16.4 All effort under this paragraph shall be paid under a cost reimbursement CLIN of the contract.

C.17 Retrofit Of Units Built Prior To FAT Approval. The contractor shall, following PCO notification that FAT has been approved, retrofit all LMFF modules (excluding test units) built or in process at time of notification to the configuration baseline established after successful completion of the FAT. Configuration changes made at the direction of the Government shall be subject to an equitable adjustment. Configuration changes made by the contractor shall be at no additional cost to the Government.

C.18 Training Requirements

C.18.1 General Operator and Maintainer Courses. The contractor shall develop training material (courseware) to cover one course for operator and one course for maintenance tasks for the LMFF. The contractor shall be responsible for initial training and all courseware to support it. Training and courseware shall be on the operation, maintenance, and repair of all components and ancillary equipment (if any) unique to the LMFF. Trainees may either be Government personnel or Government support contractors. The training shall include any necessary equipment to support operation, Preventive Maintenance Checks and Services (PMCS), and operator and unit maintenance of the LMFF. Instruction shall consist of approximately 40% classroom and 60% practical exercise, and teach operation, setup and disassembly, PMCS, inspection, testing, troubleshooting, and safety procedures.

C.18.2 First Article Test (FAT) Operator and Maintainer Training. Training to support the FAT shall consist of one operator course and one maintainer course in accordance with C.18.1. The contractor shall conduct FAT training prior to the beginning of the FAT (See clause E-4) for a maximum of 20 students at Yuma Proving Ground, AZ. The Government reserves the right to have additional personnel present during conduct of course. These courses shall be targeted to the personnel who will operate and maintain the system. The operator course shall not be more than 40 hours in length; the maintainer course shall not be more than 40 hours in length. The total time of the FAT training shall not exceed 80 hours. The contractor shall deliver the LMFF, all lesson materials, training literature, training aids, special tools & test equipment, and all tools necessary to disassemble and assemble, to the training site not later than seven days prior to the training.

C.18.3 FAT Data Collector Orientation. This orientation is a general overview of the system. Data requirements are not applicable. The contractor shall develop and conduct an introduction to the system for Government support personnel and data collectors prior to FAT (See clause E-4). Orientation dates will be negotiated between the contractor and the Government. The orientation will cover system operation and controls required to safely operate the system. The orientation shall be at least 50% hands-on. The maximum length of the orientation class is 8 hours. The orientation shall be conducted at the test site. The contractor may use commercially available material for this course, or use material developed to be used for the test training personnel. The projected class size for this orientation is 12 students, with the option for the Government to have additional observers.

C.18.4 Initial Operational Test and Evaluation (IOT&E) Operator and Maintainer Training. Training to support the Initial Operational Test and Evaluation (IOT&E) shall consist of one operator course and one maintainer course in accordance with C.18.1. The contractor shall conduct IOT&E training for a maximum of 20 students at Ft. Hood, TX prior to the beginning of the IOT&E (See clause E.1.2). The Government reserves the right to have additional personnel present during conduct of course. These courses shall be targeted to the

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personnel who will operate and maintain the system. The IOT&E courses shall be taught by the contractor utilizing draft courseware. The operator course shall not be more than 40 hours in length; the maintainer course shall not be more than 40 hours in length. Total time of the IOT&E training shall not exceed 80 hours. The contractor shall deliver all lesson materials, training literature, training aids, special tools & test equipment, and all tools necessary to disassemble and assemble, to the training site not later than seven days prior to the training.

C.18.5 IOT&E Data Collector Orientation. This orientation is a general overview of the system. Data requirements are not applicable. The contractor shall develop and conduct an introduction to the system for Government support personnel and data collectors prior to IOT&E (See clause E.1.2). Orientation dates will be negotiated between the contractor and the Government. The orientation will cover system operation and controls required to safely operate the system. The orientation shall be at least 50% hands-on. The maximum length of the orientation class is 8 hours. The orientation shall be conducted at the test site. The contractor may use commercially available material for this course, or use material developed to be used for the test training personnel. The projected class size for this training is 12 students, with the option for the Government to have additional observers.

C.18.6 Training Course Outline. The contractor shall deliver a training course outline for all training courses in accordance with DI-ILSS-80872(T). The outline is a schedule of events and includes a breakdown of individual topics showing the time allotted, materials required (TV, VCR, etc.), facility requirements, reference materials, type of instruction (practical exercise, lecture, demonstration, video, etc.) and tools required for each topic. Commercial format is acceptable; a sample outline will be provided to the contractor at the start of work meeting. The Training Course Outline shall be formatted and delivered in accordance with:  
CDRL A012

C.18.7 Training Materials. The contractor shall deliver an Instructor Guide and a Student Training Guide for all training courses in accordance with DI-ILSS-80272(T). Training Materials shall contain equipment and component description, functional data, training handbooks that include, by sub-component for LMFF operation, setup and disassembly, inspection, testing, troubleshooting, and safety procedures. All training materials shall be formatted and delivered in accordance with:  
CDRL A013

C.18.8 Training Course Completion Report. The contractor shall deliver a Training Course Completion Report for all training courses in accordance with DI-ILSS-80872 (T). The contractor shall data fax or e-mail to the Government a list of students in attendance on the first day of training. The Government will send completed Certificates of Training to the instructor after the Government receives the list of students in attendance, to be presented at the end of the class. The contractor may also provide corporate certificates if desired. The Government will provide the contractor with course critiques that the contractor shall administer to each student at the end of each class conducted. For each class the Government will provide a student attendance list, to be administered by the instructor. The contractor shall submit the critiques and completed student attendance list on later than 10 days after completion of each class. Training Course Completion Report shall be formatted and delivered in accordance with:  
CDRL A014

C.18.9 Instructor and Key Personnel (I&KP) Operator and Maintainer Training. The contractor shall provide I&KP training and shall utilize developed courseware. I&KP training shall consist of courses for actual Army operators and maintainers. The contractor shall conduct a total of two classes consisting of one class for Army operators and one class for Army maintainers, for a maximum of 20 students each. The Government reserves the right to have additional personnel present during the conduct of course. Training will be conducted at Ft. Lee, VA. Each course shall not exceed 40 hours. These courses shall be targeted to instructor and key personnel who will operate and maintain the system. Following completion of I&KP training, approved Government comments shall be incorporated into the courseware to yield a final product. If Distance Learning is available, the contractor shall maximize the use of distance learning to reduce platform instruction through videotape, Internet web based, computer based, CDROM, and interactive CDROM training programs. The contractor shall deliver all the lesson materials, training literature, training aids, special tools and test equipment, and all tools necessary to disassemble and assemble, to the training sites not later than seven days prior to the training.

C.19 New Equipment Training Classes - Option.

C.19.1 The Government may require the contractor to conduct New Equipment Training (NET) to take place at Government sites, at the using units locations, at the prices stated in Section B and under the option clause H.1.1. Trainees may either be Government personnel or Government support contractors. Class size shall be no more than twelve (12) students. Course requirements and course content shall utilize Government approved training materials. Both operator and maintainer classes shall not be more than 40 hours in length. The Government will provide the contractor 30 days notification for CONUS classes. The Government will provide the contractor 90 days notification for OCONUS classes. It is estimated that a total of 40 classes (20 operator and 20 maintainer) over the 5 year contract will be required. Duration and number of courses will be defined upon exercise of option/delivery order. The per class rate is exclusive of subsistence, lodging, and incidental expense incurred for NET. The Government will pay these expenses on a cost reimbursable basis.

C.20 (RESERVED, Changed by amendment 0004)

C.20.1 (RESERVED, changed by amendment 0004)

C.20.2 (RESERVED, changed by amendment 0004)

**Name of Offeror or Contractor:****C.21 Contractor Field Service Representative Requirements (FSR) Option**

C.21.1 If the option under paragraph H.1.3 for Field Service Representative is exercised, the contractor shall provide technically qualified personnel to provide support to the Total Packaging Fielding team (defined as representatives of the Government) during the handoff to the U.S. Army receiving units or other activities designated by the Government.

C.21.2 Total Package Fielding/Handoff Support. The contractor shall provide technical qualified personnel to accomplish deprocessing of the end item and its components, assist in unit joint inventory, prepare unit shortage list, and the quality deficiency reports (QDR, SF 368). Completed customer documentation shall remain with the Government TPF personnel.

C.21.2.1 Deprocessing. The contractor shall perform on-site preparation of equipment at hand-off site, including complete operator and maintainer preventive maintenance checks & services (PMCS). Upon completion of deprocessing, the equipment shall be 100% fully mission capable.

C.21.2.2 Joint Unit Inventory. The Government materiel fielding team, contractor, and unit gaining representative shall conduct a joint inventory of all major items and components. The customer documentation packages will be completed and turned over to the Government Material Fielding Representatives. The Government will provide the contractor with the joint inventory form (DA Form 5684-R).

C.21.2.3 Shortage List. The Material Fielding Team and contractor shall prepare a shortage list (DA 2062) of all missing items prior to fielding with a description of the item, nomenclature, NSN, part number, quantity and date of availability. This list shall be attached to the joint inventory.

C.21.3 The Field Service Representative shall be paid on man-days as reflected in Section B of the contract. Travel expenses and per diem will be paid on cost reimbursable basis in accordance with JTR.

C.21.3.1 The Contractor shall provide qualified Contractor Field Service Representative(s) (FSR) in support of Total Packaging Fielding who shall advise/make recommendations to orient and instruct key Government personnel regarding operations, maintenance, repair, and supply of contractor parts for the LMFF, including all components.

C.21.3.2 The PCO shall designate the times and locations of the service to be performed by e-mail, but will not supervise or otherwise direct activities. Within a half working day of notification, if possible, the contractor shall notify the TACOM Contract Specialist of the transportation costs (best commercially available round trip airfare, if air transportation is necessary, and hours of travel required to and from the site) to be included in the order. Following receipt of the information and negotiation, the contract will be equitably adjusted prior to the FSR commencing travel or effort.

C.21.3.3 The Contractor will obtain specific requirements, if any, for access to Government facilities located in CONUS 30-days prior to each fielding and 90 days prior to fielding in OCONUS. If a security clearance is needed at the site where the FSR will perform his/her services, the contractor shall be responsible for insuring all coordination is made with the appropriate personnel. The Contractor may be required to provide personal vital statistics related to the FSR, including documentary evidence, such as a birth certificate and such other evidence to effect a security clearance. It is recommended, though not a contract requirement, that the contractor initiate clearances for potential FSRs following award.

C.21.3.4 Within ten working days of completion of an assignment, the FSR shall prepare and deliver via e-mail a report, in contractor format, which synthesizes his/her activities in accordance with:  
CDRL A016.

C.21.4 Man-Day of Service. The FSR shall work no more than eight (8) hours per day, excluding travel time, unless authorized by the PCO. A man-day of service includes any period during which the FSR is delayed or prevented from performing any task only if the delay or non-performance is solely the fault of the Government.

C.21.4.1 Travel time for initial travel from the contractor facility to the work site, for travel between work sites, and for travel back to the contractor's facility shall be paid as a daily rate of service and may be over/above the eight hours allowed per work day.

C.21.4.2 The man-day rate is exclusive of subsistence, lodging, and incidental expense incurred by the FSR while performing the services. The Government will pay these expenses on a cost reimbursable basis.

C.21.4.3 The man-day rate of service is exclusive of all transportation costs, which includes airfare and local rental car in and around the job site. The Government will pay the contractor on a cost reimbursable basis for auto rental rates for the site of the service as well as airfare, if air transportation is necessary, during performance of services under orders issued in accordance with this scope of work.

C.21.4.4 The man-day of service includes all Government delays, travel time (all-inclusive), and report preparation completed at the duty location. In addition to payment for actual days worked, the Government will pay for official U.S. holidays if it is necessary for the representative to be present on those days to complete the technical assistance assignment that would be normal workday (s) at the

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FSRs facility. When the FSR is on site on a Saturday or Sunday but is not working, the Government will pay only the per diem and local transportation costs. The granting of vacation time off, holidays other than official US holidays, sick and emergency leave is solely the responsibility of the contractor and shall not be paid for by the Government under terms of this contract. It is immaterial whether the same representative completes an assignment, but the Government will not pay additional travel costs or time if the contractor decides to rotate personnel during the course of an assignment, unless authorized by the PCO.

\*\*\* END OF NARRATIVE C 001 \*\*\*

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SECTION F - DELIVERIES OR PERFORMANCE

F.1 (Added by amendment 0005)

Ownership and disposition of System Support Package (SSP) after completion of PVT and IOT&E.

After completion of PVT and IOT&E any materials or equipment purchased or manufactured for the Government, (including the fuel additive injector) in accordance with Clause C.15.2.1 shall be retained at the test facility as Government property. The Government Program Management Representative will provide shipping instructions for the Fuel Additive Injector to the Government's test manager at the test site 30 days after completion of all testing.

\*\*\* END OF NARRATIVE F 001 \*\*\*

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## SECTION J - LIST OF ATTACHMENTS

<u>List of Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number of Pages</u>	<u>Transmitted By</u>
Attachment 010	DRAWING 13219E0462 GROUND ROD	02-JUN-2000	001	ELECTRONIC IMAGE
Attachment 011	DRAWING 13219E0462 GROUND ROD (2)	06-APR-1995	001	ELECTRONIC IMAGE
Attachment 012	DRAWING 13222E8212 NATO ADAPTER	02-JUN-2000	001	ELECTRONIC IMAGE
Attachment 013	DRAWING 13222E8219 COUPLING RAIL	14-OCT-1994	001	ELECTRONIC IMAGE

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## SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

## PROPOSAL INSTRUCTIONS

The offerors shall submit their proposals in 4 volumes. The volumes should be clearly labeled as Vol. 1 Solicitation (1 copy); Vol. 2 Technical Area (4 copies); Vol. 3 Past Performance Area/Small Business Participation (2 copies); and Vol. 4 Price Area (2 copies).

## L.1 VOLUME I - SOLICITATION (Certifications/Representations)

## L.2 VOLUME II - TECHNICAL

## L.2.1 ELEMENT 1 - TECHNICAL APPROACH

The offeror shall identify its technical proposal for meeting the following performance requirements:

(a) Tankrack capacity and weight. Each offeror shall identify and support its approach for meeting the requirements of Purchase Description ATPD 2336, paragraphs 3.5.6.1.1, Capacity, and 3.5.4, Weight as it relates to tank capacity and weight. Offerors shall provide sufficient detailed information and engineering data to demonstrate how their approach will meet or exceed the requirements. The offeror shall provide a description of the tankrack containing: a list of components with specifications (including dimensions, weight, capacity, material of construction and its characteristics, and any other pertinent information), sketches, and location of components. Any modeling, calculations, and details concerning assumptions used in modeling or calculations shall be provided to validate any claims made about performance regarding these requirements. All information and data relating to these requirements shall be provided in U.S. customary units of measurement.

(b) Control Panel. In accordance with paragraphs 3.5.6.2.4 of Purchase Description ATPD 2336, the offeror shall provide information detailing its proposed technology (sensors, user interface, and communications, if applicable). The offeror shall also provide the specifications of its proposed sensors and devices. The offeror shall describe the method of relaying the fluid level of each tankrack to the panel and volume determination. The offeror is to describe how the information (level and volume of each tankrack and total volume) will be displayed for the user.

(c) Pump Filtration Module. 3.5.6.2.1, Pumping Assembly. The offeror shall provide detailed drawings of the pump filtration module. All parts in the drawings shall be in the same relative scale. The drawings shall include all required components and shall be accompanied with full data descriptions of the components, including manufacturers, pump curves, filter and engine certifications, etc. The offeror shall provide projected filtered flow rates in gallons per minute. The offeror shall provide estimates of pressure head losses and energy efficiency losses to justify projected performance values. All major components and interfaces shall be highlighted or labeled in the drawings. Dimensions and weights of all the components shall be included in the descriptions, and the total weight of the pump filtration module shall be stated.

## L.2.2 ELEMENT 2 - EXPERIENCE

The offeror shall identify its experience, background and knowledge with respect to the following:

(a) Your experience, background and knowledge pertaining to the design and production of the following:

1. Tank and Tank-rack Modules
2. Pump Modules
3. Integration of Fuel Distribution Systems

Each offeror shall detail its experience as required below and how relevant its proposed system is to that experience. If an offeror lacks experience, that offeror shall detail how it intends to compensate for such lack of experience.

(1) Tanks and Tank-rack modules: The offeror shall detail its corporate experience in the design and mass production of tanks and tank-racks for the containment of fuel. The offeror shall provide detailed information about contracts performed for the Government and commercial entities which demonstrate relevant experience in the design and production of tanks and tank rack modules similar to its proposed system. Provide proof of certifications held for manufacturing ISO tankracks and ASME certification for pressure vessels or equivalent.

(2) Pump modules, to include filtration system and integrated control panel. The offeror shall detail its corporate experience in the design and mass production of pump modules, filtration systems and integrated control panels. The offeror shall provide detailed information about contracts performed for Government and commercial entities which demonstrate relevant experience in the design and production of pump modules to include filtration systems and control panels similar to its proposed system.

(3) Integration of fuel distribution systems. The offeror shall detail its corporate experience in the design and mass production of integrated fuel distribution systems to include measurement of fluid levels and volume measurements. The offeror shall provide

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detailed information about contracts performed for the Government and commercial entities which demonstrate relevant experience in the design and production of integrated fuel distribution systems similar to its proposed system.

## L.3 VOLUME III - PAST PERFORMANCE / SMALL BUSINESS PARTICIPATION

## L.3.1 ELEMENT 1 - PAST PERFORMANCE:

(Changed by Amendment 0005) Provide information for your recent, relevant contracts, and those of your proposed significant subcontractors, including Federal, State, and local Government and private industry contracts. Significant subcontractors are subcontractors, exclusive of raw material, whose total work contribution exceeds 10% of the total proposed price. Recent contracts are your current contracts and those past contracts with any performance taking place approximately within three (3) years prior to the date this solicitation was issued. Relevant contracts are those that are similar in scope (products and/or processes) to the requirements of this solicitation. Highly relevant contracts will tend to include contracts you have performed as:

- a. A manufacturer of petroleum tanks
- b. A manufacturer of pump modules to include filtration systems and integrated control panels.
- c. A system integrator for fuel distribution systems.

Do not provide past performance information for subcontractors who do not meet the definition of "significant" or do not meet the definition of "recent".

1. For each of your recent relevant past contracts you shall provide the following information. It is important to provide complete information and to avoid providing information on contracts that do not represent relevant performance within the last three years.

- a. Contract Number.
- b. Contract Type.
- c. Award Price/Cost
- d. Original delivery schedule.
- e. Final, or projected final, delivery schedule.
- f. Your (and any significant subcontractors') CAGE and DUNNS numbers.
- g. Government or commercial contracting activity address and telephone number.
- h. Procuring Contracting Officer's (PCO's) or commercial Point of Contact (POC) name, telephone number and e-mail address.
- i. Government or commercial contracting activity technical representative or Contracting Officer's Representative (COR), telephone number and e-mail address.
- j. Government or commercial contracting activity, and the name, telephone number and e-mail address of the Administrative Contracting Officer (ACO).
- k. Description of scope of work requirements and a discussion of similarities between the contract scope and the scope of this solicitation.
  1. Description of the objectives achieved to date on the contract. Include an explanation of instances where technical or schedule requirements were not met and any corrective actions taken to avoid such problems in the future.

2. Cancellations and terminations. Identify any recent contracts, which have been terminated, or canceled for any reason, in whole or in part. Include prime contracts, contracts under which you were a subcontractor, and any of your significant subcontractors' contracts. Provide the information requested in paragraph 1 above for any of these contracts. If there were no cancellations or terminations, please state that.

3. Corporate entities: If any contract listed in 1 above was performed by a corporate entity or division other than the corporate entity or division that would perform work under the instant RFP, please identify them and indicate to what extent those entities will perform this effort. If they have relocated or changed ownership since performance of the listed efforts, please describe any changes in terms of personnel, facilities, or equipment, from those expected to perform this effort.

4. Key Personnel: If you have limited or no recent or relevant past performance, but have key personnel who will be playing a significant role in this contract performance and who have had significant and similar responsibilities in conjunction with recent, relevant contracts or subcontracts of a previous employer, we may consider the performance of these individuals in our evaluation of performance risk. In order for us to consider such performance, please identify these key personnel, their roles and responsibilities for their previous employer and their roles and responsibilities as planned for the current requirement of this solicitation. Also provide similar information to that identified in 1 above for those contracts that these key personnel were involved in with those previous employers.

5. Predecessor Companies: Likewise, if you or a significant subcontractor only has relevant and recent performance history as a part of a predecessor company, we may consider that past performance in our evaluation of performance risk. Please provide the information identified in 1 through 3 above for those recent, relevant contracts of that predecessor company.

6. We may use data you provide and data we gather from other sources to evaluate past performance. Since we may not interview all the sources you provide, it is incumbent upon you to explain all the data you provide. If we find past performance problems as a result of the data you provide, we will not assume the responsibility to find other data which mitigates or resolves the problems. That burden,

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of providing thorough and complete past performance information, remains with you. We may assign a "higher risk" rating to your proposal or reject your proposal if it does not contain the information requested.

**L.3.2 ELEMENT 2- SMALL BUSINESS PARTICIPATION (changed by amendment 0003)**

This provision applies to every offeror (U.S. and non-U.S.), regardless of size status or location of its facility or headquarters.

a. All offerors, including offerors who are either (1) themselves U.S. small business concerns based on the NAICS code assigned to this requirement or (2) non-U.S. based foreign firms, are to identify the extent to which U.S. small business concerns would be utilized as first tier subcontractors in the performance of the proposed contract. U.S. small business concerns are defined (1) in FAR 19.001 and (2) by the criteria and size standards in FAR 19.102 for the applicable North American Industry Classification System code. U.S. Small Business concerns include small businesses (SBs), small disadvantaged businesses (SDBs), HUBZone small businesses (HUBZone SBs), woman-owned small businesses (WOSBs), veteran-owned small businesses (VOSBs), service-disabled veteran owned small businesses (SDVOSBs) and historically black colleges/universities and minority institutions (HBCU/MI).

If the prime offeror, (to include any U.S. small business concerns who are proposing as part of a joint venture or teaming arrangement), is itself a U.S. small business concern, the offeror's own participation, as a SB, SDB, WOSB, VOSB, SDVOSB, HUBZone SB, and/or HBCU/MI, will also be considered small business participation for the purpose of this evaluation. In this event, the extent of prime offeror participation as a U.S. small business concern shall be detailed, as described below, in the same manner as subcontracts to first tier U.S. small business concerns.

Regarding Small business concern participation, offerors shall address anticipated subcontracting based on the offeror receiving a single contract with delivery orders for each year of the 5 year IDIQ contract in the estimated/total quantities specified in Section L, Price Area. The required information shall be identified in a table format substantially in accordance with the following example:

BASE YEAR	Dollar amount (all SubKs)*	Percentage of SB of SB Participation	Total Subcontracting
(LB+SB)	\$43M	100%	
SB	\$10M	23.3%	(\$10M of \$43M)
SDB	\$2.15M	5.0%	(\$2.15M of \$43M)
WOSB	\$2.36M	5.5%	(\$2.36M of \$43M)
VOSB	\$0.3M	0.7%	(\$0.3M of \$43M)
SDVOSB	\$0.1	0.2%	(\$0.1M of \$43M)
HUBZone SB	\$1.0M	2.3%	(\$1.0M of \$43M)
HBCU/MI	\$0.15M	0.4%	(\$0.15M of \$43M)

\*Includes 1st tier subcontractors only; Interdivisional transfers are considered subcontracts; includes prime offeror participation if the prime is a U.S. small business concern.

b. All offerors, regardless of size and whether the offeror is a U.S. or non-U.S. firm, are to provide (individually for each base year and for each option/out year (if any), the names of small business concerns (including the prime offeror if a small business concern) who would participate in the proposed contract; the small business classification of each small business concern (i.e. SB, SDB, WOSB, VOSB, HUBZone SB, and/or HBCU/MI; a short description of the specific services to be provided or components to be produced by each small business concern; and the estimated total dollars for each product or service. This data shall be provided in a table format substantially as follows:

Base Year Dollars	Name of Small Business Concern	Small Business Classification	Description of Service/Product	Total Dollars
	ABC Co.	SB	Wire	\$0.50M
	ABC Co.	SB	Plating	\$0.75M
	EFG Inc (Prime Offeror)	SB, WOSB, VOSB	Circuit Cards	\$1.20M

c. As defined below, offerors shall also provide the following:

(1) Offerors who ARE either (1) a U.S. large business, as defined by the North American Industry Classification System code applicable to this solicitation, or (2) a firm who has previously performed a contract containing FAR 52.219-9, are to provide a description of their performance in complying with the requirements of FAR 52.219-9, including documentation of their accomplishment of the goals established under Subcontracting Plans of prior contracts. This data shall include contracts performed over the last three (3) calendar years. Firms which have never held a contract incorporating FAR 52.219-9 shall so state.

(2) All offerors who ARE NOT either (1) a U.S. large business, as defined by the North American Industry Classification System code

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applicable to this solicitation, or (2) a firm who has previously performed a contract containing FAR 52.219-9, shall substantiate their proposed approach to meeting the requirements of FAR 52.219-8. Substantiation may include providing (1) a description of the offeror's performance, over the past three (3) calendar years, in complying with the requirements of FAR 52.219-8 (Note: if the offeror has not performed a contract, over the past three (3) years, which included FAR 52.219-8, the offeror shall so state); (2) a description and available documentation of any methods or techniques used to promote small business participation; (3) any listings of U.S. small business concerns who are subcontracting candidates; (4) the internal procedures used to monitor small business participation during contract performance, and/or (5) any other information substantiating that the offeror will satisfy the requirements of FAR 52.219-8.

## L.4 VOLUME IV - PRICE AREA

## L.4 PRICE AREA

L.4.1 General: The Price Area volume shall include all data and information necessary to allow for an assessment of the realism and reasonableness of the offeror's proposed prices. Realism seeks to determine whether the proposed prices are reflective of and consistent with the proposed technical approach in accomplishing the requirements and objectives of the solicitation. Reasonableness is defined as a price that does not exceed what would be incurred by a prudent person in the conduct of competitive business. Other significant aspects of the pricing proposal include the following:

(a) the estimated price to the Government must reflect the use of prudent judgment and sound business practices. Sound business practices include compliance with applicable Government contracting regulations and proper estimating and accounting of costs.

(b) the price volume must be consistent with the offeror's technical solution. The consistency between the offeror's price and technical approach reflects upon the offeror's understanding of the requirements and their ability to perform the effort contained in the statement of work. Any inconsistency, if unexplained, raises a fundamental question as to the offeror's inherent understanding of the required work and their ability to perform the work at the stated price.

L.4.1.1 Offerors shall submit their Price Area Volume in both hard copy (2 each) and electronic format (2 each). Electronic submission shall use Microsoft Office Package; Excel for spreadsheets and Word for narrative files. Submitted electronic spreadsheets must contain all formulas and computations which calculate out to the proposed amounts. Print image files or files containing only values are not acceptable.

L.4.1.2 Offerors shall be held accountable for the validity of all information contained in their proposal. The Government does not assume the duty to search for data to cure problem areas it may find in the proposal. The burden of providing thorough and complete pricing information remains with the offeror. Should subsequent investigation uncover that the facts and/or conditions were not as stated, the proposal may be rejected.

L.4.1.3 To supplement the evaluation conducted by the Source Selection Evaluation Board, TACOM may request assistance from your cognizant DCAA or DCMAO office. As such, offerors shall provide notice within its proposal as to which DCAA office is responsible for audit or the DCMAO office which administers your Government contracts along with a point of contact, phone number and e-mail address.

L.4.2 Proposal Structure: The instructions that follow are not intended to be restrictive or all inclusive. Offerors may submit any other cost or financial information they consider relevant and useful in the evaluation of their cost proposal. Pricing information is required for those Contract Line Item Numbers (CLINS) contained in Section B of the solicitation as well as data items from the CDRL listing where a request for a separate price is indicated. Offerors should note where the instructions ask for pricing based on a total value and those items where unit pricing is requested.

The requirements identified in the solicitation and which serve as the basis for the pricing proposal include the following efforts:

- \*\* LMFF First Article Test Units
  - Pump Modules
  - Tankracks
- \*\* LMFF Production Units
  - Years 1 through 5.
- \*\* System Support Package
- \*\* Log Demo
- \*\* Training for FAT
- \*\* Training for IOT&E
- \*\* IKP Training
- \*\* Contract Data Items
- \*\* Short term and long term packaging
  - \*\*Option Years 6 through 8.
- \*\* New Equipment Training (Option)
- \*\* (RESERVED) changed by amendment 0004)
- \*\* Field Service Representatives (option)

**Name of Offeror or Contractor:**

L.4.2.1 Projected Quantities. Offerors shall utilize the following projection of quantities per program year in developing their pricing. Some requirements will not require annual/program year pricing, rather, the value shall be based upon an occurrence of the event and/or session. The projected quantities per requirement and the manner in which the pricing shall be submitted is as follows:

## LMFF 1st Article and Production Units

	Yr1	Yr1	Yr2	Yr3	Yr4	Yr5
Tank Racks	17	14	42	306	378	792
Pump Modules	5	2	6	34	44	88

## LMFF Test Support (Sec C.14 and C.15)

Offerors shall price out all Test Support related activities which are addressed in Section C of the solicitation. Efforts such as the following constitute the Test Support function ...Logistics Demonstration (LD) Plan; LD Test and related support; LD Introductory Training session; SSPs; Contractor Support of Government Testing. The quantity for this effort is projected to be 1 lot.

## Contract Data Items (CDRLs)

An attachment included in the solicitation identifies each CDRL requirement and whether they should be priced or not-separately priced (NSP). Offerors shall adhere to those instructions for the CDRLs requirement.

## Training (Section C.18)

Offerors shall address all of the Government's training needs specified in the solicitation. Pricing shall be presented on a 'per course' basis.

## New Equipment Training (Section C.19)

Offerors shall furnish pricing on a 'per course' basis.

## Contractor Field Service Representatives (Section C.21)

Offerors shall base their pricing for Field Service Representatives on a 'per man-day' basis, exclusive of travel and subsistence costs.

L.4.3 Presentation of Cost Data. The offeror, as an independent contractor and not as an agent of the Government, shall provide all labor, materials, supplies, services, facilities and equipment necessary to accomplish the requirements within the statement of work. The offeror is required to submit a sufficient level of cost data in support of the proposed amounts for each of the efforts under contract. The level of detail must be sufficient to allow the Government to perform its assessment of the reasonableness and realism of the proposed amounts. All cost elements must include a brief written narrative which describes the purpose of the element and its method of derivation. The narrative shall be suitable for detailed analysis and traceable to its relevant cost within the price schedule. Any efforts performed by a subcontractor shall also be described and supported with the same level of detail as required of the prime contractor. All costs must be in U.S. Dollars only, including amounts for the prime contractor or any of its subcontractors. Additionally, all costs must be provided in "then-year" dollars for each of the performance (production) periods.

L.4.3.1 Offerors shall submit cost data in support of the following elements as they apply for each CLIN. Any other cost elements not identified below, which are part of your proposal cost, shall also be explained and supported. Failure to adhere to these instructions may result in the rejection of your proposal.

L.4.3.1.1 Materials (Raw Material/Purchased Parts). Provide a priced Bill of Material (BOM) for each CLIN. The following information shall be included in the BOM; part number (if applicable), nomenclature, vendor name, quantity per unit, unit price, extended price, basis of price (quote, estimate or history) and indicate whether the item is sole source or competitively priced. Narratively address any escalation adjustments, contingencies or negotiation challenges associated with the material costs.

L.4.3.1.2 Labor Hours (Manufacturing and Engineering). Provide a breakdown of the labor hours associated with the manufacturing and engineering (if applicable) efforts involved for each CLIN and CDRL requirement. Identify each labor category and/or classification having its own labor rate and in accordance with your accounting system. Provide a narrative explanation for the basis of the proposed labor hours, including how the impacts from learning may reduce the manufacturing hours across production years.

L.4.3.1.3 Labor Rates. Identify the labor rates for each labor category and/or classification that are applied against the proposed hours for each CLIN and CDRL requirement. Provide a narrative explanation of how the rates were developed. Address any economic adjustments made to the labor rates across program years.

L.4.3.1.4 Indirect Rates. Identify the indirect rates included in developing program year costs for each CLIN and CDRL requirement. Indirect rates include, but are not limited to, Overhead, Fringe Benefits, Material Burden, General and Administrative Expense. Provide a narrative which explains the basis for the indirect rates. Also provide for those rates contained in your proposal what the actual/booked rates were for the preceding two years (per accounting year) and explain any significant variances between these historical rates and the rates used in your proposal. If your rates are based on a negotiated Forward Pricing Rate Agreement (FPRA), furnish the POC of the Government agency with whom they were negotiated and the date of settlement.

L.4.3.1.5 Other Direct Costs. Identify any other direct costs included in your proposal that are necessary to accomplish the efforts under each CLIN and CDRL requirement. Examples may include, but are not limited to, equipment, tooling, travel. Provide an explanation

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**Name of Offeror or Contractor:**

of the purpose for these items and the basis of their price.

L.4.3.1.6 Profit. Identify the profit rate included in the prices for each CLIN and CDRL requirement. Provide an explanation for the basis of this rate.

L.4.4 Section B identifies certain CDRL requirements that are not-separately-priced (NSP). For these NSP CDRLs, offerors shall provide, for informational purposes only, the total cost for each CDRL, and indicate which CLIN the CDRL is allocated to.

\*\*\* END OF NARRATIVE L 001 \*\*\*

**Name of Offeror or Contractor:**

## SECTION M - EVALUATION FACTORS FOR AWARD

## ENCLOSURE M

M.1 BASIS OF AWARD

M.1.1 Determination of Responsibility It is DOD policy (FAR Part 9.103) that contracts be placed only with responsible contractors, that is, contractors who satisfactorily perform the necessary tasks and/or delivery of the required item(s) on a timely basis. Prospective offerors, in order to qualify as sources for this acquisition, must be able to demonstrate that they meet the standards of responsibility set forth in FAR 9.104.1 and FAR 9.104-3 (b). In addition, the Government may assess the offerors financial capabilities to meet the solicitation requirements. Accordingly, the Government reserves the right to reject an offeror who is considered unable to satisfy the Governments requirements set forth in the solicitation. The Government reserves the right to conduct a pre-award survey on any or all of the offerors, or their significant subcontractors, to aid the Procuring Contracting Officer (PCO) in the responsibility determination. No award can be made to an offeror who has been determined not to be responsible by the PCO.

M.1.2 General. Proposals submitted in response to this solicitation will be evaluated on a best value basis, utilizing the trade-off process. The government will weigh the merits of the evaluated non-cost areas against the evaluated cost of each offerors proposal. The trade-off process provides the flexibility to select the proposal that offers the best value, which may not always be the lowest cost alternative. The objective of the evaluation is to select a source that provides superior technical capability and low risk at a reasonable and realistic price. The Government will select that offeror whose proposal reflects the best overall value in meeting that objective.

M.1.2.1 The selection of the successful offeror will be made following an assessment of each proposal against the solicitation requirements and the evaluation criteria. Proposals which are unrealistic in terms of technical or schedule commitments or unrealistically high or low in cost will be deemed reflective of an inherent lack of technical competence or indicative of a failure to comprehend the magnitude of the requirements set forth in the solicitation. Such lack of technical competency or an unrealistic or unreasonable cost situation may be grounds for rejection of the proposal.

M.1.2.2 Proposals containing significant inconsistencies between the proposed technical performance and cost, if unexplained, may be grounds for rejection of the proposal due to an offerors misunderstanding of the work required or their inability to perform in any resultant contract. Offerors are further cautioned that their costs must be fair and reasonable, balanced and consistent with their technical approach. Any offer failing to meet these criteria may be rejected. An unbalanced offer is one where the costs are significantly high or low for one given period versus another period. The offerors price must demonstrate a direct relationship between the effort expended and its cost.

M.1.3 The decision as to which offeror will perform in the best interests of the government will be based on a comprehensive evaluation of the competing proposals. This is a Best Value Acquisition using the trade-off process. As such, the SSA, in making the final Source Selection Trade-Off judgment, will weigh the merits of the non-Price areas of the proposal against the Price area in arriving at their final source selection decision. The trade-off between the non-cost areas against the total evaluated price, could result in an award to someone other than the lowest bidder. However, the closer the evaluations are in the non-cost areas, the more significant does cost become. Notwithstanding the fact that cost is not the most important area in the evaluation, it may become controlling when (1) two or more proposals are otherwise considered equal; (2) an otherwise superior proposal is unaffordable; (3) the advantages of a proposal with a high cost are not considered to be worth paying the price premium; or (4) when an offeror proposes prices that pose an unacceptable level of risk to successful contract performance.

## M.1.4 Selection of successful Offeror:

a. The Government intends to award one Indefinite Delivery Indefinite Quantity (IDIQ) contract to the offeror whose proposal offers the best value to the Government. The Government will weigh the merits of the evaluated proposals (other than price) against the evaluated price. The Government will consider the relative advantages and disadvantages of each proposal in its determination of which proposal offers the best value. The Governments program objective for the LMFF is a non-developmental item approach due to current level and/or availability of commercial technology, using readily adaptable commercial components modified to meet LMFF requirements with less risk and to accelerate fielding of a system.

b. Rejection of Offers: The Government may reject any proposal which:

- i. merely offers to perform work according to the RFP terms or fails to present more than a statement indicating its capability to comply with the RFP terms without support and elaboration specified in Section L of this solicitation; or
- ii. reflects an inherent lack of technical competence or a failure to comprehend the complexity and risks required to perform the RFPs requirements due to submission of a proposal which is unrealistically high or low in price and/or unrealistic in terms of technical or schedule commitments; or
- iii. contains any unexplained significant inconsistency between the proposed effort and Price, due to the offerors apparent misunderstanding of the work required or its inability to perform any resultant contract;
- iv. fails to meaningfully respond to requirements of Section L, Proposal Submission Information; or
- v. is materially unbalanced as to price. An offeror is materially unbalanced as to price when, in the judgment of the PCO, it cites prices that are significantly less than cost for some work and significantly more than cost for other work.

**Name of Offeror or Contractor:****M.2 Evaluation Process**

a. Evaluation. The Government will have a Source Selection Evaluation Board (SSEB) evaluate proposals submitted by offerors. The SSEB will assess the advantages, disadvantages, and relative risks associated with each offeror and proposal, and then assign an appropriate adjectival rating for each area and element evaluated (except in the Price area), and narratively support the rating. The Government reserves the right to reject offers, in accordance with M.1 above, without evaluation.

b. Risk Assessment: The Government will assess the risk of successful or unsuccessful performance of each evaluated proposal. Risk is defined as the probability that the offeror will not provide goods and/or services in accordance with the terms and conditions of the contract.

c. It is important to note the distinction between proposal risks and performance risks. Proposal risks are those risks associated with an offerors proposed approach in meeting the Government requirements. Proposal risk is assessed by the SSEB and is integrated into the rating of the Technical/Experience and Price Areas. Performance risks are those risks associated with the probability an offeror will successfully perform the solicitation requirements as indicated by that offerors record of past and current performance, and is associated with the Past Performance/Small Business Participation Area.

d. Desired Performance Requirements (applicable to the Technical Approach Element of the Technical Area only): The Technical Approach Element of the Technical Area includes assessment of two desired performance characteristics. Should the offeror propose to meet a desired performance characteristic, the risk of successfully accomplishing that level of performance will be evaluated. To receive credit for the desired performance characteristic, the offerors proposal must demonstrate to the Government that the desired performance characteristic is achievable at no greater than moderate risk. Proposals which are evaluated to have more than moderate risk associated with meeting the proposed desired level, or which are deemed to increase risk associated with meeting other technical requirements to either high or very high risk, will be given no additional credit nor will they be considered advantages to the Government. If the Government evaluation shows that an offeror has demonstrated, in accordance with Section M evaluation criteria, that he can achieve a particular desired performance objective, it will be noted as an advantage in the element and area assessment to which it belongs. Advantages may also result in an increase in the assigned rating for the appropriate element and area. If Government evaluation of the proposal indicates that achievement of the proposed desired characteristic is likely with moderate risk, the specified proposed desired characteristic so evaluated will be included as a requirement of the resulting contract. The Desired Performance Characteristics within the Technical Approach Element of the Technical Area subject to this provision are identified as follows:

Desired Performance Characteristics: (1) Meet 3,000 gallon capacity of the tankrack  
(2) Meet 600 Gallon Per Minute filtered flow rate for Pump Modules

**M.3 Evaluation Criteria**

M.3.1 Evaluation Areas. The three evaluation areas are:

Technical  
Past Performance/Small Business Participation  
Price

The Technical Area is most important and is more important than either the Past Performance/Small Business Participation Area or the Price Area. The Past Performance/Small Business Participation Area is slightly more important than the Price Area. Additionally, as required to be defined by FAR 15.304(e), the non-price areas, when combined, are significantly more important than the Area of Price.

**M.3.2 Evaluation Areas/Elements**

The Technical Area consists of 2 Elements, Technical Approach and Experience. Within the Technical Area, Element 1, Technical Approach is significantly more important than Element 2, Experience.

**M.3.2.1 Element 1 Technical Approach**

(a) Tank Capacity and Weight.

The Government will assess the proposal risk probability that the offeror will meet the tank capacity and weight requirements of Purchase Description (PD) ATPD 2336 paragraphs 3.5.6.1.1 Capacity and 3.5.4 Weight. Additionally, the Government will assess the risk of achievement of meeting the desired capability of a 3,000-gallon capacity tank-rack.

(b) Control Panel.

The proposed control panel will be evaluated for risk in the application of the proposed technology and its accuracy, resolution and repeatability in measuring the level and volume of the tankracks positioned on a slope of up to 5 degrees in any direction. Offerors proposed control panel will also be evaluated for reliability and robustness and user interface and clarity.

(c) Pump Filtration Module.

**Name of Offeror or Contractor:**

The proposed Pump Filtration Module will be evaluated for risk based on the inclusion of all required components, features and interfaces to achieve performance and functionality. Additionally, the justification of estimated performance and the desired capability of meeting 600 Gallons per minute filtered flow rate will be evaluated for risk using the data descriptions provided and the total weight of the pump filtration module as described.

**M.3.2.2 Element 2 - Experience**

The Technical Experience Element will assess the proposal risk probability that the prime offeror and any proposed subcontractors will, based upon the depth and breadth of experience and in light of the proposed performance approach, successfully perform in accordance with the RFPs Statement of Work and Purchase Description.

This assessment will specifically include an evaluation of the probability that the offeror, based on his and his subcontractors experience, background and knowledge, will be able to successfully meet the performance requirements of the RFP.

The following 3 paragraphs focus on characteristics of the LMFF which are relevant to the system being procured and are valued as approximately equal under the experience element.

**M.3.2.2.1 Tank and Tank-rack module Experience.** The Government will assess the proposal risk probability that the offeror will be able to design and produce a tank rack module which meets the requirements of the Purchase Description (PD) ATPD 2336 Paragraph 3.5.6.1, based upon the offerors detailed description of its experience with similar tanks designed and produced to contain bulk petroleum products which meet Department of Transportation (DOT), OSHA and EPA or equivalent international requirements and standards for the transport of hazardous petroleum products.

**M.3.2.2.2 Pump Module Experience.** The Government will assess the proposal risk probability that the offeror will be able to design and produce a pump filtration module which meets the requirements of the Purchase Description (PD) ATPD 2336 Paragraph 3.5.6.2, based upon the offerors detailed description of its experience with similar pump and filtration modules produced to handle the refueling of both ground vehicles and aircraft.

**M.3.2.2.3 Integration of Fuel Distribution Systems Experience.** The Government will assess the proposal risk probability that the offeror will be able to integrate the components of the LMFF into a system which meets the requirements of the RFP based upon the offerors detailed description of its and its subcontractors experience in designing and producing a similar fuel distribution system.

A superior proposal would generally reflect significant experience in all three of the elements described above.

To the extent that an offeror and its significant subcontractors have limited or no experience regarding the three elements above, but have key personnel who will be playing a significant role in this effort who do have relevant experience, the key personnel may be considered in the Governments evaluation. Key Personnel experience may be considered to the extent that the experience is recent (within 3 years of issuance of this solicitation) and relevant (in terms of its similarity to the current procurement), and is a meaningful and credible predictor of the proposal risk probability that the offeror and its significant subcontractors will be successful in performing the scope of work requirements of the RFP.

**M.3.2.3 Past Performance/Small Business Participation Area**

This area is comprised of two elements. Element 1 is significantly more important than Element 2.

**M.3.2.3.1 Element 1. Past Performance: (Changed by Amendment 0005)**

The government will assess each offeror's risk that they will not be able to meet the contract delivery schedule and meet contract requirements based on an assessment of their current/recent and relevant previous performance. Only relevant performance on projects and programs which have taken place in the last three years will be considered. If an offeror does not have recent and relevant performance history, we will assign a risk rating of unknown risk which is neither favorable nor unfavorable.

In evaluating each offeror's performance history, the Government will look at the offeror's delivery performance, and that of any significant subcontractors, against the contract's original delivery schedule unless the delay was Government caused. Schedule extensions that were the fault of the offeror, or a proposed subcontractor's fault, even if consideration was provided, will be counted against the offeror. The Government will also evaluate general trends in past performance, including demonstrated corrective actions. The Government's evaluation of each offeror's past performance will be assessed in terms of the offeror's performance risk as well as that of each proposed significant subcontractor. Performance risk will be assessed on the following:

- compliance with contractual terms and conditions;
- adherence to schedules and mission requirements;
- demonstration of the ability to overcome program, technical, or schedule difficulties;
- responsiveness to technical direction;

**Name of Offeror or Contractor:**

ability to solve business management problems without extensive guidance from the procuring activity;  
 responsiveness and reasonableness with regard to negotiating changes and modifications;  
 adequacy of labor force in terms of qualifications to perform the work required;  
 willingness and ability to integrate as a team with the government and/or other contractors;  
 ability to retain a stable work force for the term of the contract;  
 exercise of proper management control over personnel;  
 exercise of proper management control over the subcontractor(s);  
 adequate work control procedures in place;  
 adequate estimating system (accuracy of proposals, consistency and quality of estimates);  
 development and use of key personnel.

M.3.2.3.2 Element 2. Small Business Participation:

(a) The Government will evaluate the extent of small business concern participation in terms of the percentage of total subcontracted dollars which the offeror credibly proposes to subcontract to U.S. small business concerns (SB, SDB, WOSB, VOSB, HUBZone SBs and/or HBCU/MIs) in the performance of the contract. For the purpose of this evaluation, the extent of prime offeror (or joint venture partner/teaming arrangement) participation in proposed contract performance, where the offeror is a U.S. small business concern, for the NAICS code applicable to this solicitation, will also be considered small business participation.

(b) The evaluation will include the following:

- (1) the extent to which the proposal identifies participation of U.S. small business concerns (to include, as described above, the participation of the offeror if it is a U.S. small business concern). The extent of participation of such concerns will be evaluated in terms of the percentage of the total subcontract amount (to include, as described above, the extent of participation of the offeror if it is a U.S. small business concern);
- (2) the complexity of the items/services to be furnished by U.S. small business concerns;
- (3) an assessment of the probability that the offeror will satisfy the requirements of FAR 52.219-8/9 (as applicable to the offeror) and achieve the levels of Small Business Participation identified in the proposal. This assessment will be based upon both (a) a proposal risk assessment of the offerors proposed Small Business Participation approach, and (b) a performance risk assessment of prior achievements (past performance) in satisfying commitments and requirements under FAR 52.219-8/9; and
- (c) Offerors are advised that they will be evaluated, under the Small Business Participation Area, based upon the risk, and extent, of the offeror credibly achieving the Government's goals for U.S. small business concern participation. Goals include (1) U.S. small business concern participation of 23% or more, (2) U.S. small disadvantaged business concern participation of 5% or more; and (3) U.S. small business concern participation by furnishing items/services of extreme complexity.

M.4 PRICE AREA

M.4.1 Price Area Evaluation Criteria. An assessment will be made of each offeror's proposal to determine the realism and reasonableness of the proposed prices to accomplish the solicitation requirements and objectives. Realism measures "does the proposal price accurately reflect the offeror's technical approach in meeting the solicitation requirements and objectives, as well as an expectation that the solicitation requirements and objectives will be met at a price that will not result in a net loss to the offeror". Reasonableness exists when you are offered a price that does not exceed what would be incurred by a prudent person in the conduct of competitive business. The Government may reject a proposal which is not realistic, or not reasonable, as to price.

M.4.1.1 In conjunction with an assessment of realism and reasonableness, the evaluation team will calculate a "Total Evaluated Price" that will be considered in the trade-off process. The Total Evaluated Price shall consist of the sum of:

a. The proposed unit prices for the tank rack and pump module for test units and years 1 through 5 production (\*to include the amount for short term packaging for all tankracks and pump modules for test units and years 1 through 5 production units except for one of each type for each year, which will be evaluated to include the amount for long term packaging) CLINs, extended by the estimated quantities in Section B of the solicitation, and

b. The proposed prices for all other CLINs (besides tank racks and pump modules), based on the maximum quantities (where applicable) that the Government can order, and

c. Government-assessed transportation costs for the tank rack and pump module CLINs. For the purposes of this transportation cost assessment, the Government shall assume that the first 6 pump modules and the first 42 tank racks shall be shipped to Ft. Lewis, WA, and that all remaining shipments shall be divided equally between Ft. Lee, VA and Ft. Hood, TX.

*Clarification	Ordering Year	Tank-racks (short term/long term pkg.)	Pump Modules (short term/long term pkg.)
	1(test units)	16/1	4/1
	1	13/1	1/1
	2	41/1	5/1
	3	305/1	33/1

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\*\*\* END OF NARRATIVE M 001 \*\*\*

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