

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. Contract ID Code
Firm-Fixed-Price

Page 1 Of 31

2. Amendment/Modification No. 0006	3. Effective Date 2013MAR08	4. Requisition/Purchase Req No. SEE SCHEDULE	5. Project No. (If applicable)
---------------------------------------	--------------------------------	---	--------------------------------

6. Issued By U.S. ARMY CONTRACTING COMMAND TUYEN HUYNH WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: TUYEN.HUYNH@US.ARMY.MIL	Code W56HZV	7. Administered By (If other than Item 6)	Code
--	----------------	---	------

8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code)	<input checked="" type="checkbox"/>	9A. Amendment Of Solicitation No. W56HZV-12-R-0445
		9B. Dated (See Item 11) 2013JAN25
	<input type="checkbox"/>	10A. Modification Of Contract/Order No.
		10B. Dated (See Item 13)
Code	Facility Code	

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 _____ /SIGNED/ (Signature of Contracting Officer)	16C. Date Signed

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 2 of 31
	PIIN/SIIN W56HZV-12-R-0445	MOD/AMD 0006

Name of Offeror or Contractor:

SECTION A - SUPPLEMENTAL INFORMATION
SOLICITATION NUMBER: W56HZV-12-R-0445
AMENDMENT NUMBER: 0006

The purpose of this Amendment 0006 to solicitation W56HZV-12-R-0445 is to incorporate the following changes:

1. Update System for Award Management (SAM) website link in 52.204-4016(d)(1).
2. Update section reference in sections C.14.5 and C.14.6. The update in section C.14.5 and C.14.6 is identified with an asterisk (*) symbol.

Revised sections C.14.5 and C.14.6:

* C.14.5 Operator New Equipment Training (OPNET) (OPTION)

The contractor shall provide Operator NET to support fielding. The training locations will include, but not be limited to, the locations listed in Section H.4*. The classes may be comprised of military personnel, government employees, contractors, or civilians. OPNET shall consist of proper operating procedures, equipment and familiarization, safety precautions, operator Preventative Maintenance Checks and Services (PMCS), Operator maintenance tasks, and all necessary training materials and equipment required to support training of the BEB system. OPNET and Field Level Maintenance training events may require concurrent support and execution. The contractor shall be required to provide four (4) OPNET instructors per one week OPNET event. Each fielding will require OPNET. The price of the OPNET classes shall be inclusive of travel costs (airfare, local car rental, lodging, meals, and incidental expenses) associated with the contractor personnel performing the services. The travel costs shall be based on a per person 9-day trip. The Final Operator Technical Manual shall be provided to supplement development and training.

* C.14.6 Field Level Maintenance New Equipment Training (FLMNET) (OPTION)

The contractor shall provide Field Level Maintenance NET to support fielding. The training locations will include, but not be limited to, the locations listed in Section H.4*. The classes may be comprised of military personnel, government employees, contractors, or civilians. FLMNET shall consist of proper operating procedures, equipment and familiarization, safety precautions, operator and maintainer Preventative Maintenance Checks and Services (PMCS), maintenance tasks, and all necessary training materials and equipment required to support training of the BEB system. OPNET and Field Level Maintenance training events may require concurrent support and execution. The contractor shall be required to provide two (2) FLMNET instructors per one week FLMNET event. Each fielding will require FLMNET. The price of the FLMNET classes shall be inclusive of travel costs (airfare, local car rental, lodging, meals, and incidental expenses) associated with the contractor personnel performing the services. The travel costs shall be based on a per person 9-day trip. The Final Operator and Field Level Maintenance Technical Manuals shall be provided to supplement development and training.

3. Update language in section C.16.1.1 Supplier Quality Assurance. The revisions in section C.16.1.1 are identified with an asterisk (*) symbol.

Revised section C.16.1.1:

* C.16.1.1 Supplier Quality Assurance

The contractor shall have a supplier quality assurance program that follows* ISO/TS 16949:2009 or AS 9100 quality program requirements for each significant subcontractor.* The prime contractor shall verify each non-significant subcontractor has developed, has implemented, and will maintain an acceptable existing quality assurance plan that follows the guidance of a nationally recognized QMS.* The contractor's supplier quality assurance program shall assure each subcontractor* has a documented quality program that shall include, at a minimum,* quality control plans, Process Failure Mode Effects Analysis (PFMEA), conducting source inspections or receiving inspections and initiating investigations for manufacturing and test deficiencies* that will follow a standardized, systemic root cause analysis procedure. The contractor's plan shall include provisions for periodic internal audits and audits of subcontractors (CDRL A059).

4. Update CDRL A059 within Exhibit A in Section J of this solicitation.
5. Update the date listed next to Exhibit A in Section J of this solicitation from 31-JAN-2013 to 07-MAR-2013.
6. All other terms and conditions of solicitation W56HZV-12-R-0445, to include the closing date of 25-MAR-2013, remains unchanged.

*** END OF NARRATIVE A0007 ***

<u>Status</u> <u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
--------------------------------------	--------------	-------------

A-1 CHANGED 52.204-4016	WARREN ELECTRONIC CONTRACTING	DEC/2012
-------------------------	-------------------------------	----------

CONTINUATION SHEET**Reference No. of Document Being Continued****Page 3 of 31**

PIIN/SIIN W56HZV-12-R-0445

MOD/AMD 0006

Name of Offeror or Contractor:

(a) All Army Contracting Command - Warren (DTA) solicitations and awards are distributed on the Army Contracting Command - Warren Procurement Network (ProcNet) Business Opportunities website (<http://contracting.tacom.army.mil/opportunity.htm>) and are no longer available in hard copy. The Technical Data Packages (TDPs) and other documents, when available electronically, will be attachments or links to the solicitation package on ProcNet.

(b) You may need to use special software to view documents that we post on ProcNet. This viewing software is freeware, available for download at no cost from commercial websites like Microsoft and Adobe. In cases where such software is required, we provide a link from ProcNet to the commercial site where the software is available. Once you arrive at the software developer's site, follow its instructions to download the free viewer. You can then return to the ProcNet.

(c) Unless directed to do otherwise in Section L of this solicitation, you are required to submit your offer, bid, or quote electronically, via the Army Single Face to Industry (ASFI) Online Bid Response System (BRS). For detailed information about submitting your offer electronically, please see <http://contracting.tacom.army.mil/acqinfo/ebidnotice.htm>.

(d) Requirements for the online ASFI bid submission:

(1) You must be registered in the System for Award Management (SAM) at <https://www.sam.gov> (a Federal Government owned and operated free web site) and have a CAGE Code and CCR Marketing Partner Identification Number (MPIN).

(2) If you found the solicitation on ProcNet, use the following link to the Start Bid Page on the ASFI BRS website for this solicitation:

https://acquisition.army.mil/asfi/solicitation_view.cfm?psolicitationnbr=W56HZV12R0445

(3) If you found the solicitation by searching on ASFI, you can start the online bidding process by using the Start Bid button on the ASFI Solicitation View page. You may also access the ASFI BRS by going to <https://acquisition.army.mil/asfi/> and clicking on the Contracting Opportunities Search to find the solicitation.

(4) Once in the ASFI BRS, you will be asked to enter basic information and will then be directed to upload one or more files containing your offer and information required by the solicitation.

(5) You will receive a confirmation of your bid upon completion of the bid submission process.

(6) You can find detailed BRS user instructions on the ASFI website at https://acquisition.army.mil/asfi/BRS_guide.doc.

(e) Note to offerors:

Your attention is called to the solicitation closing date and time as stated on the cover page of this solicitation, local time for the Army Contracting Command - Warren (DTA), Michigan. In accordance with FAR 15.208(a), offerors are responsible for submitting proposals, and any revisions, and modifications, so as to be received by the Government office designated in the solicitation by the time specified.

It is the offeror's responsibility to assure their proposal is received by the date and time specified on the cover page of this solicitation. In accordance with FAR 15.208, if your proposal was not received at the initial point of entry to the Government infrastructure (in this case, received through ASFI) by the exact date and time specified on the cover page of this solicitation, it will be determined late. Proposal, as the term is used here, means ALL volumes and/or parts of the proposal.

Note: There is no "expected" or "target" length of time for proposal submission; size and content may be factors, therefore offerors are strongly cautioned to submit their proposals allowing adequate time for submission.

Solicitations may remain posted on the AFSI Open Solicitation Web page after the solicitation closes. Even though the system will allow you to submit a proposal after the closing date/time, your proposal will be considered late and may not be considered for award. If you are responding to a Request for Proposal, your offer will not be considered if it is submitted after the closing date and time unless one of the exceptions is met at FAR 15.208(b). If you are responding to a Request for Quotation, your quote may be considered if it is received after the closing date, and it will not unduly delay award.

(f) Any award issued as a result of this solicitation will be distributed electronically. Awards posted on ProcNet represent complete OFFICIAL copies of contract awards and will include the awarded unit price. This is the notice required by Executive Order 12600 (June 23, 1987) of our intention to release unit prices in response to any request under the Freedom of Information Act (FOIA), 5 USC 552. Unit price is defined as the contract price per unit or item purchased as it appears in Section B of the contract and is NOT referring to nor does it include Cost or Pricing data/information. If you object to such release, and you intend to submit an offer, notify the contracting officer in writing prior to the closing date identified in this solicitation and include the rationale for your objection consistent with the provisions of FOIA. A release determination will be made based on rationale given.

(g) If you have questions or need help using ProcNet, call our E-commerce Contracting Help Desk at (586) 282-7059, or send an email to

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-12-R-0445 MOD/AMD 0006	Page 4 of 31
---------------------------	---	----------------------------

Name of Offeror or Contractor:

usarmy.detroit.acc.mbx.wrn-web-page-request@mail.mil. If you have questions about the content of any specific item posted on the ProcNet, please call the contract specialist or point of contact listed for the item. For technical assistance in doing business with the Government, and doing business electronically, please visit the Procurement Technical Assistance Center website at <http://www.dla.mil/SmallBusiness/Pages/ProcurementTechnicalAssistanceCenters.aspx> to find a location near you.

End of Provision

Name of Offeror or Contractor:

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

- C.1 GENERAL
- C.2 HARDWARE AND DELIVERABLES
- C.3 GOVERNMENT FURNISHED PROPERTY (GFP)
- C.4 PROGRAM MANAGEMENT
- C.5 ENVIRONMENTAL, SAFETY ENGINEERING AND HEALTH HAZARDS
- C.6 CONFIGURATION MANAGEMENT (CM) AND TECHNICAL DATA PACKAGE (TDP)
- C.7 RELIABILITY, AVAILABILITY, MAINTAINABILITY (RAM) PROGRAM
- C.8 WARRANTY
- C.9 TRANSPORTABILITY REPORT
- C.10 CONTRACTOR SERVICE REPRESENTATIVE (CSR)
- C.11 INTEGRATED LOGISTICS SUPPORT
- C.12 PROVISIONING SPECIFICATIONS
- C.13 TECHNICAL PUBLICATIONS
- C.14 TRAINING
- C.15 PACKAGING DATA DEVELOPMENT
- C.16 QUALITY ASSURANCE MANAGEMENT
- C.17 GOVERNMENT TEST OVERVIEW
- C.18 BEB INSPECTION OVERVIEW
- C.19 CERTIFICATIONS TO ATPD 2392 PERFORMANCE REQUIREMENTS
- C.20 CARE AND STORAGE PRIOR TO SHIPMENT

C.1 GENERAL

C.1.1 Introduction

This Statement of Work (SOW) is for the production of the Bridge Erection Boat (BEB).

C.1.2 The contractor shall be responsible for the overall component selection, integration, design, development, fabrication, of the production boats to meet the requirements of Army Technical Purchase Description (ATPD) 2393 (Attachment 0001), and for providing test support for Government conducted production verification, logistics demonstration, technical manual validation/verification and operational tests. All testing must be successfully completed prior to full rate production approval by the Government.

C.1.3 Data

The contractor shall prepare deliverable program data in accordance with the format and content specified in the Data Item Descriptions (DID) and deliver data in accordance with the Contract Data Requirements List (CDRL). Unless otherwise stated, all data shall be submitted by email or by other electronic means mutually agreed to by both parties. Data submitted by email shall not exceed 10 megabytes (MB) in file size. Data over 10 MB shall be transmitted on a CD via regular mail or AMRDEC Secure Access File Exchange (SAFE) Web application.

C.2 HARDWARE AND DELIVERABLES

C.2.1 The contractor shall manufacture BEBs in accordance with the requirements of the ATPD 2393. The Government developed and will maintain ATPD 2393.

C.2.1.1 Environmental Protection Agency (EPA) Compliance

If the contractor proposes a Tier II compliant engine, the contractor shall provide technical justification in accordance with CDRL A001 to support the Government request for a National Security Exemption (NSE) from EPA Tier III engine emission standards in accordance with 40 Code of Federal Regulation (CFR), Part 94.905, which would allow continued production of the Tier II engines. If a NSE is required, the contractor shall ensure NSE labeling requirements are met in accordance with EPA regulations. It is incumbent upon the contractor to determine the configuration which will meet the performance requirements and be available throughout the BEB production contract.

C.2.2 Crew Protection Kit (CPK)

The contractor shall manufacture CPKs in accordance with Annex C of ATPD 2393 and deliver in a container in accordance with Section D.

C.2.3 Basic Issue Items (BII)

The contractor shall provide BII for each BEB. The BII List is the essential, ancillary items, required to place the equipment into operation and perform emergency repairs, enabling it to perform the mission and function according to design. The contractor shall provide a BII list which lists all BII including the BII required by ATPD 2393 for each BEB (CDRL A002). The contractor shall over-pack

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 6 of 31
	PIIN/SIIN W56HZV-12-R-0445	MOD/AMD 0006

Name of Offeror or Contractor:

the BII, to include the BII list, with each BEB.

C.2.4 Initial Support Package (ISP)

The contractor shall provide an ISP for each production BEB. The ISP shall consist of all service parts/items, with the exception of petroleum, oils and lubricants, required to meet service intervals during the first two years of service. The contractor shall mark each item/package with the nomenclature and part number. The contractor shall over-pack the ISP, to include the ISP list, with each BEB.

C.2.4.1 ISP List

The contractor shall provide an ISP list detailing all of the items to be included in the ISP. A complete ISP list shall include each item identified by nomenclature, part number and NSN (if assigned) (CDRL A003).

C.2.5 Component of End Items (COEI)

COEI are components that are part of the end item but must be removed and separately packaged for military transportation. The contractor shall over-pack the COEI with each BEB.

C.2.6 Modifications for BEB Interface

If any modifications are required for the CBT, PLST, IBC, or BAP to interface with the BEB, the contractor shall provide an installation modification kit and installation instruction over-packed with each BEB

C.3 GOVERNMENT FURNISHED PROPERTY (GFP)

The Government will provide GFP in accordance with Attachment 0003. The contractor shall manage the GFP in accordance with FAR 52.245-1.

C.3.1 Contractor Requirements for Operating GFE

The contractor shall have Operators/Maintainers who have an appropriate commercial drivers license to operate a CBT with and without the PLST.

C.3.2 GFE Familiarization Training

The contractor shall attend Government provided familiarization training at the contractors facility upon delivery of GFE. The Government will provide basic familiarization training to facilitate contractor operation of the GFE. Familiarization training will not exceed 40 hours. The contractor shall provide a list of attendees (not to exceed 12) to the Government at the Start of Work Meeting (SOWM).

C.3.3 Preventive Maintenance for GFP

The contractor shall conduct Preventive Maintenance Checks and Services (PMCS) outlined in the appropriate operator manuals.

C.4 PROGRAM MANAGEMENT

C.4.1 Participation/Logistics

The contractor shall participate in the meetings and reviews required in this statement of work with Government attendance. The Government will determine when meetings shall be held by electronic means (via tele-conferences, email, etc). Physical meetings shall be synchronized to minimize personnel resources and travel expenses.

C.4.2 Integrated Product Team (IPT)

An Integrated Product Team (IPT) shall be established to serve as the primary management tool and key method of communication for this contract. As part of the SOWM, the Government and contractor will form IPTs. The Government IPT will be detailed in Attachment 0004. IPTs and membership shall be assigned in the areas of contract and program management, engineering, Integrated Logistics Support (ILS), publications, packaging, training, quality assurance, safety, human factors/MANPRINT, test progress and production status. The contractor shall be prepared to address all schedule, performance, supportability and risk issues during IPT meetings.

C.4.3 Project Schedule

The contractor shall deliver a project schedule for the BEB Production phase. The project schedule shall include all milestones, system design and integration events, design meetings, Program Management Reviews, CDRL deliverable dates, test, modification, and logistics

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 7 of 31
	PIIN/SIIN W56HZV-12-R-0445	MOD/AMD 0006

Name of Offeror or Contractor:

tasks required to complete the program, schedule, performance, and supportability requirements. The contractor shall maintain the project schedule, present the project schedule at each Program Management Review (PMR), explain all program slippages, and provide get-well plans within 30 days of discovery (CDRL A004). The Governments initial schedule is provided in Attachment 0005.

C.4.4 Agendas

The contractor shall submit an agenda and read-ahead package/briefing charts in contractor format for all meetings and reviews (CDRL A005).

C.4.5 Meetings

The contractor shall prepare and submit meeting minutes for all meetings and reviews. Minutes shall include all issues, actions, CDRL progress, entrance and exit criteria accomplishments per Attachment 0006, program decisions, and intention of the next PMR or technical review (CDRL A006). The following meetings are a part of this effort:

- a. Start of Work Meeting
- b. Program Management Reviews
- c. Critical Design Review
- d. Pre-Test Readiness Review (TRR) and TRR
- e. Initial Maintenance Analysis
- f. Provisioning Meeting
- g. Publications In-Process Reviews
- h. CARB Meeting

C.4.6 Start of Work Meeting (SOWM)

Within thirty (30) Days After Contract Award (DACA), a SOWM shall be held at the contractors production facility. Contractor attendees shall include contract administration personnel, management, engineers, and logistics personnel. The agenda for the SOWM shall be delivered in accordance with CDRL A005.

C.4.7 Program Management Reviews (PMR)

The contractor shall conduct quarterly PMRs with the Government through the completion of PQT. The first PMR shall be concurrent with the SOWM. The contractor shall present the schedule, performance, supportability status and risk mitigation initiatives.

C.4.8 Critical Design Review (CDR)

The contractor shall conduct a CDR at the contractors production facility with Government attendance no later than 60 DACA. The Government prefers that the CDR be held concurrently with the SOWM. The purpose of the CDR is to conduct a technical review of the design to ensure the system can meet stated performance requirements before finalizing design (CDRL A007).

C.4.9 Pre-Test Readiness Review (TRR) and TRR

The contractor shall conduct a Pre-TRR 30 days before delivery of the first PQT BEB. The purpose of the Pre-TRR is to provide the Government with assurances that the test requirements can be performed within the stated schedule. The contractor shall participate and attend the Government conducted TRR at Aberdeen Proving Grounds, MD, no more than 15 days after delivery of the test asset(s).

C.4.10 System Requirements Compliance Matrix

The contractor shall develop a requirements compliance matrix that tracks the current compliance with all ATPD 2393 requirements. This matrix shall be developed as estimates and shall be updated to reflect actual performance as development and test progress. The matrix shall follow the sequence and format of ATPD 2393, Table 1 and clearly depict if the data is an estimate or actual performance. The supporting documentation used to populate the requirements compliance matrix shall be available to the Government and discussed at PMRs as well as technical reviews (CDRL A008).

C.4.11 Risk Management

The Contractor shall identify, monitor, and mitigate all program risks, and track risk elements to completion/closure in a Risk Management Status Report. Resolved risks shall be archived on the report after Government approval (CDRL A009).

C.5 ENVIRONMENT, SAFETY ENGINEERING AND HEALTH HAZARDS

C.5.1 Environmental Compliance

The contractor shall ensure that all aspects of contract execution, including all BEB hardware, are in compliance with United States

Name of Offeror or Contractor:

Federal, State, and Local environmental regulations and requirements; including activities associated with design, build, test, storage and disposal. Hazardous materials usage shall be in accordance with ATPD 2393, 3.6.1. Hazardous materials restrictions shall apply to all components, parts, and materials provided under this contract, including items purchased through a subcontractor or supplier, Commercial Off-The-Shelf (COTS) components, OEM parts, and manufactured parts.

C.5.2 Safety Assessment Report (SAR) (MIL-STD 882, Task 301)

The contractor shall prepare a SAR in accordance with CDRL A010. The SAR is a comprehensive evaluation of the status of safety hazards and their associated risks. The contractor shall prepare and submit to the Government an initial SAR for the system as a result of system safety analyses, hazard evaluations, and any contractor independent testing.

C.5.3 BEB System Safety Working Group (SSWG)

The contractor shall provide representation at the BEB SSWG meetings. The BEB SSWG is a PM Chartered advisory group that addresses safety issues and supports the Program Manager in implementing the System Safety Program. During SSWG meetings, the contractor shall present Safety and Hazardous Materials Management program status and updates, Hazard Tracking System (HTS) status and updates, Hazardous Materials usage status and updates, and other Environmental, Safety, and Occupational Health (ESOH) data.

C.5.4 Hazard Tracking System (HTS) (MIL-STD-882, Task 106)

The contractor shall establish and maintain an HTS in accordance with CDRL A011. The HTS supports risk management by providing the Government a database to capture identified hazards and lessons learned, track status of the hazard corrective action or acceptance, and provide a communication forum. The contractor shall develop and maintain a method or procedure to document and track hazards for identification until the hazard is eliminated or the associated risk is reduced to a level acceptable to the Government.

C.5.5 Health Hazards Analysis (HHA) (MIL-STD-882, Task 207)

As an addendum of the SAR (CDRL A010), the contractor shall identify health hazards associated with the system and incorporate as part of the SAR. In preparing the Health Hazard Analysis 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 relative to the Health Hazard Assessment requirements of AR 40-10.

C.5.6 Hazardous Materials Management Program (HMMP) Report

The contractor shall prepare a HMMP Report which shall identify all hazardous materials required for system manufacture, assembly, operation and sustainment, including the parts/process that requires them. Hazardous waste produced as a result of demilitarization, disposal and emergency situations shall also be identified. The report shall include a listing of hazardous materials prioritized for minimization or elimination (CDRL A012).

C.5.7 Hazardous Materials Exceptions

The contractor shall submit formal waiver requests from the requirements of ATPD 2393, section 3.6.1, using the Request for Use of BEB Prohibited Material (Attachment 0013), no later than 60 days after contract award and include detailed technical justification for the use of the prohibited hazardous materials. The contractor shall not use or deliver any prohibited hazardous materials without prior written PCO approval.

The following materials can be used without a written approval:

Cadmium on electrical connectors and back shells used to mate with cadmium electrical connectors on Government Furnished Equipment (GFE)

Chemical Agent Resistant Coating (CARC) primers and topcoats

Lead-acid batteries

Lead solder

Lead in engine bearings

Steel containing up to 0.35 % lead by weight

Aluminum containing up to 0.4 % lead by weight

Copper and Brass alloys containing up to 4 % lead by weight

Beryllium and Beryllium alloys used in electrical components

Nickel and Nickel alloys

Mercury containing components compliant with European Union (EU) Directive 2002/95/EC (RoHS)

C.6 CONFIGURATION MANAGEMENT (CM) AND TECHNICAL DATA PACKAGE (TDP)

C.6.1 Configuration Management (CM) Program

The contractor shall establish a CM program for Configuration identification, control, status accounting, audit, and data management of

Name of Offeror or Contractor:

the BEB. To maximize return on investment and reduce life cycle costs, the contractor shall use best practices to implement the technical and program management principles fundamental to CM. The contractor is encouraged to use Government Electronics and Information Technology Association (GEIA) EIA-649-A, National Consensus Standard for Configuration Management; GEIA-859, Data Management (DM); and DoD MIL-HDBK-61, Configuration Management Guidance, as references for CM and DM. The contractor shall deliver a CM Plan (CDRL A013).

C.6.2 Configuration Baseline

The contractor shall be responsible for maintaining configuration control of the BEB. The contractor shall establish an initial production configuration baseline for the BEB at completion of CDR. This initial baseline shall identify and document the functional and physical characteristics of the BEB. The final production configuration (i.e., product) baseline will be established at the completion of Physical Configuration Audit (PCA).

C.6.3 Data Accession List (DAL)

All contractor technical data or computer software generated in the performance of this contract or any subcontract hereunder shall be indexed on the DAL (CDRL A014). Data or computer software shall be delivered, if ordered under DFARS 252.227-7027 Deferred Ordering of Technical Data or Computer Software, when not already otherwise ordered. The Government's rights in this technical data or computer software shall be as specified in DFARS 252.227-7013, 7014 and 7015.

C.6.4 Configuration Status Accounting Information (CSAI)

The contractor shall submit a CSAI report and this information shall be recorded and maintained by the contractor for the term of this contract. CSAI reports shall include status of changes, status of resulting action items, effectivity, and incorporation status of approved changes, and completion status of the Technical Data Package (TDP). After the PCA is complete, approved changes shall not be recorded or reported as completed or closed until the new or revised documentation (incorporating the approved change) has been delivered to the Government (CDRL A015).

C.6.5 Change Management**C.6.5.1 Configuration Control Authority**

The Government assumes configuration control at completion of the PCA.

C.6.5.2 Engineering Change Proposals (ECPs) and Value Engineering Change Proposals (VECP)

After the completion of the PCA, the contractor shall prepare all Class I and Class II ECPs-Notice of Revisions (NORs) in accordance with CDRL A016 and the Data Delivery Description (DDD) for ECPs and VECPs in Attachment 0007. Proposed changes to specifications and engineering documents will be described using NORs prepared in accordance with CDRL A017 and the DDD for NORs in Attachment 0007. See MIL-HDBK-61 for additional guidance. NORs are not required if data is electronically marked-up to clearly show proposed changes or if CAD files are furnished to include the current version as well as a preliminary new version showing the revisions incorporated. Impact statements and supporting data sufficient to evaluate the change shall accompany each request (e.g., engineering, safety, quality, cost, schedule, MANPRINT, packaging, provisioning, maintenance, TM, training).

C.6.5.2.1 Value Engineering Change Proposals (VECPs)

The contractor shall prepare VECPs in the same manner as Class I ECPs.

C.6.5.2.2 ECP Numbers

The contractor shall request ECP numbers via e-mail to the Configuration Data Management (CDM) representative (See BEB IPT list, Attachment 0004). The contractor shall utilize these numbers on an individual basis as a control identifier for ECPs and related Engineering Release Records (ERRs). Once an ECP number is assigned to the first submission of a change proposal, that number shall be retained for all subsequent submissions of that change proposal. The contractor shall maintain records of where and when each ECP number was used. The ECP and ERR number shall consist of the Government-assigned contractor three character alpha prefix (xxx), followed by the TACOM five-digit alpha/numeric number.

C.6.5.3 Variance Requests for Deviation (RFD)

Contractor requests to temporarily deviate from requirements of the BEB during production shall be submitted as RFDs, prepared in accordance with CDRL A018 and the DDD-RFD, Attachment 0008. RFDs shall be properly classified in accordance with the classification requirements in the DDD-RFD. The Government will not approve Critical RFDs, as they have a profound impact on safety. Recurring deviations or deviations effecting a change to the product baseline documentation may be rejected by the Government and returned for resubmission as a formal Class I ECP.

Name of Offeror or Contractor:

C.6.5.4 Effectivity Certification

The contractor shall maintain the original effectivity point information on file for all approved ECPs and RFDs. This information shall be reported to the PCO and shall be incorporated in the CSAI Reports (CDRL A015).

C.6.6 Engineering Release

C.6.6.1 Engineering Release Record (ERR)

An ERR is an action that formally approves configuration documentation and makes configuration documentation available for its intended use. The ERR is the vehicle by which the contractor initially delivers new product data to establish the product baseline (i.e., "initial release"), and delivers revised product data implementing approved changes to the existing Product Baseline (i.e., "change release"), subsequent to a Government-approved ECP. The contractor shall create, maintain, and revise product data and submit ERR packages to reflect the current configuration for the complete BEB TDP for the entire contract performance period. The ERR Package is defined as the ERR form submitted concurrently with the new and revised product data for Product Baseline initial release and change release. The contractor shall prevent premature release of product data related to an ECP until the Government has approved the ECP and subsequent ERR. Multiple ECPs on one ERR is not allowed (CDRLs A019 and A020).

C.6.6.2 ERR Number

The contractor shall request an ERR number from the Governments CDM representative (See BEB IPT list, Attachment 0004) prior to completion of drawings, models and associated lists and submission of any new or revised product data. The contractor shall add their Government-assigned 3-character prefix to the 5-character alpha-numeric ERR number furnished by the Government. The resulting 8-character ERR number shall be the engineering release authority number reflected on models and in the revision block of drawings/associated lists. The ERR number used for change release shall be the same as the ECP number (CDRLs A019 and A020).

C.6.6.3 ERR Submittal/Approval

The ERR package shall contain product data reflecting the complete, Government approved product baseline configuration (incorporating all approved changes) of the BEB TDP; there shall be no missing down parts, interface data, or other deficiencies. The ERR will be approved only after all required product data has been delivered as part of the ERR package and the data is accurate, complete, and approved for release by the Government (CDRLs A019 and A020).

C.6.6.4 Government Format TDP Option

Upon execution of the Government format TDP Option, ERR packages shall comply with the Engineering Release requirements and include the Government-formatted data, converted to Army Ordnance Part Numbers (AOPNs), which shall replace the contractor format and become the master data using the revision scheme required by this contract. All subsequent revisions shall be to the Government formatted master data and shall be in sequence, utilizing only the allowable alphabetical letters in accordance with contract requirements, including part 5 of ASME Y14.35M (CDRL A020).

C.6.7 Configuration Baselines and Audits

C.6.7.1 Physical Configuration Audit (PCA)

The Government will conduct a PCA at the contractors facility/site 60 days after PQT approval to verify that the BEB hardware matches the design documentation. The PCA will not exceed 14 days.

The Government will provide the contractor with an outline of the requirements for the PCA. The contractor shall submit a PCA Plan prior to the PCA (CDRL A021). Any findings that require corrective actions, resulting from the PCA, shall be the responsibility of the contractor.

C.6.7.2 As-Built Configuration List (ABCL)

The contractor shall submit an ABCL in accordance with CDRL A022. After receipt of the updated ABCL, the Government will advise the contractor which items it intends to audit during the PCA. Additional fields are acceptable in the ABCL if they are thoroughly explained by the contractor. The ABCL shall be prepared in indenture level sequence down to the lowest component piece part level and include quantities for each. The contractor shall utilize the OEM part number and CAGE to identify parts. The contractor shall not re-identify or re-mark supplier or purchased parts or related product data with his own number and CAGE.

C.6.7.3 Configuration Audit Summary Report

The contractor shall submit a PCA Summary Report after the Physical Configuration Audit (PCA) to identify discrepancies found between hardware and contract requirements. The contractor shall identify action items and address each issue to include resulting close-out action (CDRL A023).

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 11 of 31
	PIIN/SIIN W56HZV-12-R-0445	MOD/AMD 0006
Name of Offeror or Contractor:		

C.6.7.4 Product Data Management

The contractor shall possess an authoritative product data, engineering or configuration management system and the processes to effectively manage, securely store, release, validate, and track multiple versions and iterations of the as-designed, as-integrated, as-built, and as-delivered configuration baselines; this includes management of product structures, product definition documents/data, contractor test and analysis data, Government-Furnished Information (GFI) and other related technical data.

The contractor shall develop, manage and maintain the product data throughout the contract performance period. The product data shall consist of product data that is fully defined and sufficient for competitive re-procurement. The product data shall include all product data, indentured product-structure (part-relationship / parent to child), associated lists, specifications, standards, product related documents (e.g. engineering bill of material, special tools and materials, and test and calibration requirements), and all approved and implemented engineering changes.

Product Data shall be prepared to provide accurate design, engineering, manufacturing, and quality assurance requirements. Any 3D Computer Aided Design (CAD) models shall reflect the as built or assembled and tested baseline configuration. The models shall be used for the manufacture, assembly and configuration management of the materials, parts, subassemblies and assemblies of the equipment covered under this contract.

C.6.8 Technical Data Package (TDP) Requirements

C.6.8.1 TDP Delivery in Contractor Format

The contractor shall prepare and deliver product data in contractor format in accordance with Attachment 0009 and CDRL A024.

C.6.8.2 TDP Delivery in Government Format (OPTION)

The contractor shall prepare and deliver product data in Government format in accordance with Attachment 0010 and CDRL A025.

C.7 RELIABILITY, AVAILABILITY, MAINTAINABILITY (RAM) PROGRAM

C.7.1 Reliability & Maintainability (R&M) Program Management

An R&M management program shall be established and maintained throughout the contract (CDRL A027). The program shall require analysis and predictions that assess and improve the BEB design's ability to achieve the R&M requirements of ATPD 2393 and develop essential information for the development of the BEB logistics support package.

C.7.2 R&M Predictions

The contractor shall perform R&M predictions and compare results with R&M requirements in ATPD 2393 (CDRL A027).

C.8 WARRANTY

C.8.1 Commercial Warranty

The contractor shall over pack (with the Technical manuals) a report of any commercial warranty, with all applicable pass through warranties, inside each BEB delivered to the Government in accordance with CDRL A029.

C.8.1.1 Warranty Performance Report

The contractor shall submit a report reflecting all the warranty claims processed on each BEB within the appropriate reporting period in accordance with CDRL A030. In addition, the report shall include the number of operational hours of each engine on the BEB at the time of fault.

C.9 TRANSPORTABILITY REPORT

The contractor shall conduct transportability analysis to ensure the transportability requirements of ATPD 2393 are satisfied. The contractor shall document the results of the analysis in a Transportability Report in accordance with CDRL A031.

If, after Government acceptance, configuration changes are made which impact the data contained in this report, the contractor shall provide updated revision sheets for insertion in the report.

C.10 CONTRACTOR SERVICE REPRESENTATIVE (CSR)

C.10.1 The contractor shall provide a CSR who will provide on-site technical support, if required. The CSR shall be experienced

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 12 of 31
	PIIN/SIIN W56HZV-12-R-0445	MOD/AMD 0006

Name of Offeror or Contractor:

personnel and qualified to advise, make recommendations, and instruct key Government personnel with respect to operation, maintenance, and repair of the BEB and its components during each fielding. The effort consists of troubleshooting and diagnosis of problems or issues in the field related to system performance and maintenance. The contract modification(s) shall designate the times and locations of the service to be performed. Instructions and established itineraries will be provided in the modification(s).

C.10.2 Man-Days of Service. Man-Day(s) of service includes travel time for initial travel from the contractor's facility to the fielding site of work. The Government is not responsible for vacation and other holidays and sick leave pay. The Government is not responsible for any emergency leave that the contractor may grant to the CSR while performing work under this contract.

C.10.3 Travel Cost. The travel costs, if necessary, will be negotiated at the time the modification is issued, on a firm-fixed price basis, and not to exceed Government Joint Travel Regulations.

C.10.3.1 The negotiated price for travel costs will include only one complete round-trip transportation and travel costs between the contractors site and the fielding site. Travel will be funded on a separate CLIN, and is not included in the composite labor skill set or rate. Contractor travel will be all inclusive, with proposal to reflect air travel, ground travel, lodging, per diem, etc.

C.11 INTEGRATED LOGISTICS SUPPORT

C.11.1 Logistics Management

The contractor shall plan and manage an Integrated Logistics Support (ILS) program to ensure supportability of the BEB through testing and fielding.

C.11.2 ILS Development

The contractor shall conduct Supportability Analyses to develop logistics products described in this contract. The contractor shall use GEIA-STD-0007 in identifying content, format, delivery and related guidance for logistics data except as otherwise identified in this contract. The contractor shall validate all documentation prior to submittal to the Government. Government receipt of data deliverables does not constitute acceptance. Government acceptance of data deliverables hinges on the completeness, accuracy, compatibility of submitted documentation, and the applicable military standards and specifications.

C.11.2.1 Maintenance Planning

The contractor shall conduct Maintenance Planning to determine the maintainability characteristics of the BEB. The BEB will use the 2-level maintenance concept in accordance with AR 750-1, Army Material Maintenance Policy. The contractor shall analyze the operational, maintenance and support functions of the system.

C.11.2.1.1 Maintenance Analysis

The supportability analysis shall be documented in the contractors format as a Logistics Maintenance Information (LMI) summary entitled Maintenance Analysis, and will identify the maintenance functions, level of maintenance, manpower, spare and repair parts and support equipment required for each replaceable and repairable item. The maintenance analysis shall include a maintenance task file documented in Powerlog software and will serve as source data for development of the Maintenance Allocation Chart (MAC), Provisioning Technical Documentation (PTD), technical manuals and Army Manpower and Requirements Criteria (MARC). The maintenance analysis will be documented in end item hardware breakdown sequence, using Functional Group Codes. Instructions are contained in Attachment 0012 (LMI Maintenance Analysis). The Maintenance Analysis shall be delivered in accordance with CDRL A032.

C.11.2.1.1.1 Draft Maintenance Allocation Chart (MAC)

A preliminary report formatted and containing all the elements of a MAC shall be prepared in accordance with MIL-STD-40051 and included as part of the draft Maintenance Analysis review (CDRL A033). The MAC forms the basis for technical manual development. The contractor shall update the MAC with any hardware changes. The MAC shall identify the repair functions that must be performed, the active repair time as defined in AMC-P-700-25, tools and test equipment necessary to perform the function and task for each repairable assembly, subassembly, and component in Functional Group Code sequence.

C.11.2.1.1.2 National Maintenance Work Requirements (NMWR) Candidate List

The NMWR candidate list will be a product of the Maintenance Analysis (CDRL A032). Any component coded for repair at the sustainment level of maintenance with a repair cost as defined as the maintenance expenditure limit specified in AR 750-1 Paragraph 4.6 will be a NMWR candidate. The contractor will annotate these components on the Maintenance Analysis and provide them as a separate list at the first Maintenance Analysis review. The Government will review and approve the final list of NMWR candidates at the final Maintenance Analysis review. The NMWR Candidate List shall be delivered in accordance with CDRL A034.

C.11.2.1.1.2.1 NMWR Data Summary

Name of Offeror or Contractor:

The contractor shall perform a supportability analysis called a NMWR data summary for each component on the list. The LMI summary may be in the contractor's format, and shall be documented in accordance with Attachment 0014 (LMI NMWR Data Summary). The contractor shall also indicate for each NMWR candidate whether the item is currently available as a remanufactured, rebuilt or otherwise refurbished component. The NMWR Data Summary shall be delivered in accordance with CDRL A034.

C.11.2.1.1.3 Special Tools and Test Equipment (STTE)

The contractor shall deliver a list of Special Tools and Test Equipment for the BEB. The source data for this list will be the Maintenance Analysis. The list shall be in tabular form and shall identify special tools not contained in U.S. Army Supply Catalogs. In addition, the list shall also contain all Test Measurement and Diagnostic Equipment (TMDE) including items contained in common tool sets. Supply Catalogs (SCs) contain common tool sets and are listed at US Army LOGSA web site at <https://weblog.logsa.army.mil/sko/index.cfm>. Maximum use of common tools, support equipment, and TMDE normally organic to the user is preferred. The list shall provide Nomenclature, Cage Code (CAGE), National Stock Number (NSN), if assigned, Part Number (PN), level of maintenance, and price of each item on the list. The STTE list shall be delivered in accordance with CDRL A035.

C.11.2.1.1.4 New TMDE items those not identified in U.S. Army Supply Catalogs may require special source and calibration documentation in order to update/provide data for possible inclusion to the TMDE register (DA Pam 700-21-1). The contractor shall provide all required data for all new TMDE.

C.11.2.1.1.5 The following paragraphs are included to clarify special tools for Army use. Special tools are not identified as components in a Sets, Kits, and Outfits (SKO). Special tools are:

- a. Fabricated tools that are made from stocked items of bulk material, such as metal bars, sheets, rods, rope, lengths of chain, hasps, fasteners, and so forth. Fabricated tools are drawing number controlled and documented by LCNs in Repair Parts and Special Tools Lists (RPSTLs) and located in Technical Manuals (TMs) as appendices. Fabricated tools are used on a single end item.
- b. Tools that are supplied for military applications only (e.g., a cannon tube artillery bore brush) or tools having great military use, but having little commercial application.
- c. Tools designed to perform a specific task for use on a specific end item or on a specific component of an end item and not available in the common tool load that supports the end item/unit (e.g., a spanner wrench used on a specific Ford engine model and on another engine in the Army inventory).

C.11.2.1.1.6 Authorized Stockage List (ASL)

The contractor shall deliver a ASL list for the BEB concurrent with the Maintenance Analysis. The items on the ASL are directly related to the provisioning effort required per this contract in that all procurable parts are required to be provisioned and are required to be on the priced parts list required in CDRL A037. The Government intends to procure these parts to support initial fieldings of the BEB. The ASL shall be prepared and submitted in accordance with CDRL A036.

C.11.2.1.1.6.1 The contractor shall conduct a meeting at the Governments facility to review the initial maintenance analysis 90 DACA.

C.12 PROVISIONING PROGRAM

The contractor shall develop a provisioning program for the BEB using GEIA-STD-0007, data worksheets found in Attachment 0015 (Provisioning Requirements Worksheet), and guidelines found in MIL-HDBK-502, Logistics Management Information (LMI), for use in identifying content, delivery and related guidance for logistics data. The Government will use the guidance contained in the Quality Assurance Provisioning Guidance Book (QAPG) and AMC PAM 700-25 for acceptance criteria of provisioning data delivered under the provisions of contract. The contractor shall identify all parts and components of the BEB and input the data into the Provisioning Bill of Material (PBOM) accordingly (CDRL A037). The contractor will be provided the PBOM database at the Start of Work and Initial IPT meeting. Data shall be loaded into the database provided, using Provisioning Contract Control Number (PCCN) for the system and Usable On Code (UOC): BEB. A new Provisioning Line Item Sequence Number (PLISN) will be assigned and provided at the SOWM. The PBOM/LMI will contain all data for the assemblies, sub assemblies, spare parts, Basic Issue Items (BII), Expendable Durables, Long Lead Time Items, and kits, to include Components of the End Item (COEI), Additional Authorized Items List (AAL), and Special Tools required to support BEB. The final PBOM must reflect all components, to ensure all parts in the PBOM reflect the total top-down breakdown structure, including all parent/child relationships.

C.12.1 Provisioning Performance Schedule

The contractor shall provide a provisioning performance schedule at the SOWM (CDRL A038). This schedule shall provide an estimated number of lines, changes, and additions along with the number of meetings required.

C.12.2 Provisioning Parts List (PPL) Delivery

The contractor shall submit LMI/PPL in accordance with GEIA-STD-0007 (CDRL A039). The Government will discuss each method at the

Name of Offeror or Contractor:

Provisioning Guidance Meeting as part of the SOWM. All submissions of the LMI/PPL data must be compatible with TACOM Logistics Modernization Program (LMP) and must pass all LMP edits. Each incremental submission shall have no more than 1,500 lines, unless approved in advance by the Government. Each incremental submission shall include at least one major assembly.

C.12.3 Engineering Data for Provisioning (EDFP)

The contractor shall prepare one hard copy of EDFP including the top assembly illustration. These illustrations may include parts lists, detail and assembly illustrations, interface control illustrations, performance characteristics, company illustrations, or commercial parts book pages that clearly identify each new item and its part number. Submissions shall be for each P source-coded part number being provisioned, not having a valid NSN. Illustrations shall be annotated with the PLISN and PCCN for the system. EDFP shall be submitted in accordance with CDRL A040.

C.12.4 Provisioning Screening

The contractor shall conduct provisioning screening on each item on the PPL for standardization or NSN identification for all P source-coded items. This screening will be used to select valid part numbers, NSNs, and current unit of measure/issue prices for provisioning purposes. The contractor shall also screen by technical characteristics. The screening results must be available to review at each meeting. The contractor shall conduct provisioning screening using Federal Logistics Information System (FLIS), WEBFLIS, or by batch submittal part numbers submitted to Defense Logistics Information Service (DLIS). EDFP is not required for items accompanied by a copy of pre-procurement screening per CDRL A041, which indicate the item has a valid National Stock Number (NSN). Additional information provided below.

C.12.4.1 Federal Logistics Information System (FLIS)

For additional information on requesting software and passwords, refer to the Provisioning Screening User Guide (AMC-P 700-25 Appendix D).

C.12.4.2 WEBFLIS

For additional information on WEBFLIS, go to www.dlis.dla.mil/webflis. There are two versions of WEBFLIS: Public Query and Restricted/Sign-on. Anyone with access to the Internet may access the Public Query version. The Restricted/Sign-on version requires a valid User ID/password to access the system. User IDs may be obtained by filling out a registration form. The registration forms are found on the DLIS web site. After accessing the Home Page, go into the Forms and Publications section and select the registration form for WEBFLIS. There are two forms available - one for Government workers and one for Government sponsored contractors.

C.12.4.3 Batch submittals to DLIS

For additional information on how to submit batch requests to DLIS, refer to the Provisioning Screening User Guide.

C.12.5 Provisioning Meetings

The contractor shall identify all items having Essentiality Codes of 1, 5, and 6 (as defined in AMC-P 700-25 Appendix D), Mandatory Replacement Items, Special Tools, Long Lead Time Items (LLTI) & Test Equipment at the first Provisioning Meeting Review. The contractor shall host a provisioning meeting (unless otherwise directed by the PCO) not to exceed 5 working days for each incremental review. If the submittal does not meet stated requirements, the Government will provide specific comments on the areas to be corrected. The Government will make the determination of whether the meeting should be postponed. The contractor will have 7 days to fix all errors and resubmit their data. At that time, the next provisioning meeting will be scheduled via mutual agreed dates between both parties. The contractor will make available the following to support the provisioning meeting effort:

- a. Two hard copies of the Provisioning Parts List (PPL) in a format acceptable to TACOM LMP (LSA-036 format).
- b. Each line/PLISN on the PPL will have an accompanying hardcopy EDFP illustration.
- c. For the PLISNs with National Stock Numbers (NSNs) hard copy Pre-Procurement Screening (PPS) will be submitted.
- d. Facilities and office space to include copying and data processing access.
- e. Internet access.

C.13 TECHNICAL PUBLICATIONS

C.13.1 The contractor shall develop equipment technical manuals (TM) to support the BEB. If a modification kit for the IBC or BAP is required to accommodate the BEB, the resultant data (installation instructions, maintenance, and parts information) shall be incorporated into the TMs. The following manuals shall be developed:

TM 5-1940-XXX-10	Operator Manual
TM 5-1940-XXX-23	Field Maintenance Manual
TM 5-1940-XXX-23P	Field Maintenance Repair Parts and Special Tools List (RPSTL) Manual
LO 5-1940-XXX-13	Lubrication Order Manual

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

Page 15 of 31

PIIN/SIIN W56HZV-12-R-0445

MOD/AMD 0006

Name of Offeror or Contractor:

NMWR 5-1940-XXX National Maintenance Work Requirements (NMWR) with RPSTL Manual
TM 5-1940-XXX-13&P Crew Protection Kit (CPK) with RPSTL Manual

C.13.1.1 Operator Manual

The operator manual shall be prepared and delivered in accordance with MIL-STD-40051, CDRL A042, and Attachments 0016, 0017, and 0018 (General Publications Requirements, Equipment Publications Defects List (EPDL), and DE Style Guide).

C.13.1.2 Field Maintenance Manual

The field maintenance manual shall be prepared and delivered in accordance with MIL-STD-40051, CDRL A043, and Attachments 0016, 0017, and 0018.

C.13.1.3 Field Maintenance Repair Parts and Special Tools List (RPSTL) Manual

The Field Maintenance RPSTL manual shall be prepared and delivered in accordance with MIL-STD-40051, CDRL A044, and Attachments 0016, 0017, and 0018.

C.13.1.4 Lubrication Order Manual

The Lubrication Order shall be prepared and delivered in accordance with MIL-STD-40051, CDRL A045, and Attachments 0016, 0017, and 0018.

C.13.1.5 National Maintenance Work Requirements (NMWR) with RPSTL Manual

Based on the maintenance analysis, if any items are sustainment level and above a NMWR manual shall be prepared and delivered in accordance with MIL-STD-40051, CDRL A046, and Attachments 0016, 0017, and 0018. NMWRs cover sustainment maintenance for those components determined to require repair for return to supply system. This determination is made by the Government based on information from the maintenance analysis and NMWR candidate list information within this contract.

C.13.1.6 Crew Protection Kit (CPK) with RPSTL Manual

The contractor shall prepare, validate and deliver a separate CPK with RPSTL manual to support the use, operation, maintenance, preparation for shipment or storage instructions, parts and installation and removal of the unique CPK as applied to the BEB. The CPK with RPSTL manual shall be prepared and delivered in accordance with MIL-STD-40051 and the applicable requirements matrices stated therein, CDRL A047, and Attachments 0016, 0017, and 0018.

C.13.1.6.1 The CPK with RPSTL manual shall include an Operator and a separate Field Maintenance Preventive Maintenance Checks and Services (PMCS) and a two level Maintenance Allocation Chart (MAC) supporting the CPK. The Operator and Field PMCS and the MAC and all related data shall be tailored and confined to the CPK as applied to the BEB identified in this contract and resulting BEB configuration changes. All other (non-CPK) operator and maintenance instructions and RPSTL data shall be supported by references to the non-CPK BEB TM series. The contractor shall be responsible for all changes to the CPK with RPSTL manual and as applied to the BEB configuration resulting changes from testing and reviews.

C.13.1.6.2 All CPK instructions in the manual shall be in the form of fully illustrated, detailed start step to end step instructions written in installation order. The tasks, RPSTL, and MAC shall follow this same general order. The CPK installation instructions shall be written to maximize the efficiency of the installation process. The detailed removal instructions shall be in the same form as the installation instructions. Simply stating reverse the installation instructions or similar is not acceptable. The step by step installation and removal instructions shall be included in the back of the CPK with RPSTL manual as part of the Supporting Information Chapter.

C.13.1.6.3 All instructions shall contain clear illustration of each step. Instructions shall include required modification dimensions or templates as needed to install the CPK on the BEB. Hardware and armor items which could be installed backwards shall be clearly shown and described in the proper orientation. The use of digital photos and line art is acceptable; the use of color is not acceptable.

C.13.1.6.4 The CPK with RPSTL manual shall be subject to validation and verification in accordance with procedures in paragraphs C.13.6 and C.13.7 below.

C.13.1.6.5 The TM Distribution Restriction Statement for the front cover and Title Block Page shall be: Distribution Statement C: Distribution authorized to U.S. Government agencies and their contractors only per the PEO CS&CSS Armoring Systems Security Classification Guide effective 6 April 2007. This determination was made on July 24, 2012. Other requests for this document must be referred to PM Bridging Attn: SFAE-CSS-FP-H, (M/S 401) 6501 East 11 Mile Road, Warren, MI 48397-5000.

C.13.1.6.6 The contractor shall destroy all paper copies and electronic files related to the CPK with RPSTL manual upon Government acceptance of final publication deliverables.

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 16 of 31
	PIIN/SIIN W56HZV-12-R-0445	MOD/AMD 0006

Name of Offeror or Contractor:

C.13.2 Technical Manual Deliverables

C.13.2.1 A Draft Equipment Publication (DEP) of each manual shall be delivered as required in CDRLs A042, A043, A044, A045, A046, and A047. This publications deliverable is also referred to as a Preliminary Technical Manual (PTM). The DEP must be a complete publication in the same format as the final publication. The DEP shall include all required content per the CDRLs and Attachments 0016, 0017, and 0018.

C.13.2.2 Final Draft Equipment Publication (FDEP) of each manual shall be delivered as required in CDRLs A042, A043, A044, A045, A046, and A047. The FDEP shall incorporate all DEP review, validation and verification corrections, changes, and additions.

C.13.2.3 Final Reproducible Copy (FRC) of each manual shall be delivered as required in CDRLs A042, A043, A044, A045, A046, and A047.

C.13.2.4 The contractor shall deliver all source material, defined as operating plans, standard procedures, computer programs, and residual material to include computer disks, and other media containing digital files developed to fulfill the requirements of this contract. The contractor shall furnish copyright releases for all copyrighted data used to develop the technical manuals in accordance with DFARS 227.7103-9.

C.13.2.5 An Extensible Markup Language (XML)-tagged instance is not a required deliverable for equipment publications developed under this contract. The contractor may choose to develop the XML-tagged instances for publications developed under this contract if it meets its requirements. No costs for XML tagging shall be accrued to the Government.

C.13.3 A publication start of work meeting shall be held in conjunction with the SOWM within 30 days after contract award. This meeting may be a sub-meeting of an overall contract start-of-work meeting or a standalone meeting. The purpose of this meeting is to review publications contract requirements, establish lines of communications, answer contractor questions, and develop a publications schedule based on the requirements of the program and the contract.

C.13.4 Publications In-Process Reviews

The contractor shall support Government In-Process Reviews by presenting samples of work accomplished to date, answering questions about publications work processes, providing records of QA reviews, and responding to Government comments regarding publications processes or work samples.

C.13.5 Publications Validation

The contractor shall validate the technical accuracy and adequacy of all operating and maintenance procedures and other required TM content in the PTM prior to delivery to the Government. The contractor shall maintain records of validation reviews that show the dates of when the material validation was performed and reviewed, what the findings were, and all corrective actions taken. Validation records shall be included as part of the Validation Report, CDRL A048. Validation personnel must include personnel that did not author the procedure. All validation records must be signed and certified by two separate contractor representatives. Government representatives have the right to examine these records upon request and to witness validation work.

C.13.5.1 All operation, PMCS, troubleshooting, and maintenance procedures shall be 100 percent performance validated. Troubleshooting procedures shall be validated to the extent possible without damaging equipment. All performance validation shall be done using tools available to the Soldier at the designated level of maintenance. Other content, such as Controls and Indicators, front matter, rear matter, torque tables, lists, theory of operation, glossary, and index information shall be validated by review against engineering data, TM data, and/or production-representative BEB.

C.13.5.2 The contractor is required to have and use a validation plan to validate TM content. The validation plan shall specify TM content to be validated and when and where that content is to be validated. The validation plan shall describe the validation method(s) used for each type of TM content. The validation plan shall be made available to the Government for review and approval 30 days prior to the start of the validation in accordance with CDRL A049. If the Government determines the validation plan will not ensure technical accuracy and adequacy of all TM deliverables, the contractor shall revise the plan. A validation report shall be delivered after validation completion in accordance with CDRL A048. The validation report shall certify that validation has been completed, and that the TM deliverables have applied quality assurance with use of the EPDL (Attachment 0017).

C.13.5.3 The contractor shall review the summary EPDL. The Government uses the EPDL to review and evaluate the publications deliverables. Publications deliverables developed under this contract shall not contain any defects listed on the EPDL. This summary of EPDL is provided in Attachment 0017 to each TM deliverable CDRLs A042, A043, A044, A045, A046, and A047 for use by contractor publications authoring and QA personnel.

C.13.5.4 TM Crosswalk

The Maintenance Allocation Chart (MAC), repair parts and special tools list (RPSTL), and maintenance instructions shall be complete and consistent with the Logistics Management Information (LMI) process. The MAC is the framework for development of both the RPSTL and the

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 17 of 31
	PIIN/SIIN W56HZV-12-R-0445	MOD/AMD 0006

Name of Offeror or Contractor:

maintenance instructions, and all three shall be consistent. All maintenance functions listed in the MAC for a component shall have an associated maintenance work package(s), at the appropriate level of maintenance, containing tasks supporting the maintenance functions. A listing of spare parts supporting the required maintenance functions shall also be listed in the RPSTL work package. The sequence of the maintenance work packages and the RPSTL work packages shall follow the functional group code (FGC) or logistics support analysis control number (LCN) sequence in the MAC.

C.13.5.5 Technical Manual (TM) DEP Review Acceptance Criteria

C.13.5.5.1 The Governments goal is to ensure the contractor performed sufficient quality reviews to eliminate all defects as defined in the EPDL (Attachment 0017) from the TM. The DEP must meet acceptable review criteria, before the Government will accept the DEP and move forward to plan Government Log Demo and Verification. This criterion is defined as follows:

- (1) For the given sample size*, the DEP must not contain Critical errors in 10 percent or more of the work packages.
- (2) For the given sample size*, the DEP must not contain Major errors in 25 percent or more of the work packages.

* For TMs consisting of less than 50 total work packages, the Government will review 100 percent of the TM. For TMs consisting of more than 50 total work packages, the Government will review a random sample of 25 percent of the total number of work packages. The random sample selection will be the responsibility of AMSTA-LCC-JL.

C.13.5.5.2 Critical and Major Errors are defined in the EPDL (Attachment 0017). The Government plans to review 100 percent of the DEP manual, but if the DEP submission fails to meet either acceptance criterion, the DEP will be rejected through official notice to the PCO. If the DEP meets the acceptance guidelines defined in this contract, the Government will continue with a 100 percent DEP review.

C.13.6 TM Verification

The Government is responsible for verification of the manuals to assure accuracy and usability by US Army soldiers. Government representatives will review the DEP to determine that proper QA has been used during preparation, that the manuals are complete, and that the DEP manuals are adequate for verification. Verification may consist of actual performance of up to 100 percent of operator and maintenance procedures. The Government has the right to choose to verify manuals by desk-top review, review on equipment, or actual performance, or any combination of these methods. The Government intends to verify by performance to the extent required to assure that the contractor has properly prepared and validated TM content that is usable.

C.13.6.1 The contractor shall provide support to the Government verification process. This support shall consist of facilities, tables, chairs, and contractor personnel to assist with record keeping, equipment preparation, and equipment maintenance, mandatory replacement parts supply, consumables (rags, fluids, lubricants, sealants, etc.) supply, Government-issued tools, and special tools.

C.13.6.2 The contractor shall also provide contractor TM personnel to take notes of all corrections required and to maintain the master markup, to answer questions, to review Verification issues, and to advise the Government regarding erroneous changes or recommendations that arise during Verification. The contractor shall also arrange for the services of a photographer in order to assist in documenting problem areas and changes required to correct errors or omissions in the draft technical manual procedures being verified.

C.13.6.3 The contractor shall correct all errors found during Government reviews and verification in all publications deliverables.

C.14 TRAINING

C.14.1 General Training Requirements

The contractor shall provide technically qualified/certified instructors to support all required training events and instructional materials related to the PQT Program of Instruction (POI) for the BEB. Instructor certification shall be established by: Army Certification (Instructor's Training Course), or by a civilian certification program through public or private certification process, or by a documented contractor certification program that will be verified by the Government. The Government will provide training assets, general tools, common tests sets, fully equipped classroom(s), training areas, range requirements and clearance to support training events.

C.14.1.1 Work Hours

All contractor employees must be authorized and available to work a flexible 40-hour workweek, and be available to start any time of day, seven days a week, to accommodate Government schedules

C.14.1.2 Ratio

The instructor to student ratio for BEB hands-on training shall not be greater than 1:4. For classroom instruction, the ratio can be as great as 1:30.

C.14.2 Training for Production Qualification Test (PQT)

Name of Offeror or Contractor:

The contractor shall provide 40 hours of Operator and 40 hours of Field Level Maintenance training to support PQT at Aberdeen Proving Grounds (APG), MD. The classes may be comprised of military personnel, government employees, contractors, or civilians. Training shall consist of proper operating procedures, safety precautions, operator and maintainer Preventative Maintenance Checks and Services (PMCS), maintenance tasks, and all necessary training materials and equipment required to support testing of the BEB.

C.14.2.1 PQT Training Task Lists

The contractor shall create a training task list for Operator and Field Level Maintenance to support PQT (CDRL A050) to include the break out of hours by task. The task lists shall be approved by the Government. The PQT Operator Training Task List shall cover complete operation and safety of the system, loading and unloading for transport, proper use of tools, equipment, BII, Operator Preventative Maintenance Checks and Services (PMCS) and troubleshooting. The PQT Field Level Maintenance Training Task List shall cover operation characteristics, complete field level maintenance PMCS, troubleshooting, diagnosis and repair of equipment components to include system unique control systems, and ancillary systems. Training Task Lists shall be consistent with procedures established in the appropriate technical manuals (e.g., COTS manuals or OEM instructions).

C.14.2.2 PQT Programs of Instruction (POI)

The contractor shall develop POIs to include items in the following sections: PQT Training Task Lists, Training Schedules, Lesson Plans, Instructors Guides, Student Guides, Operator Practical Exercises (PEs), and Course Critiques for PQT Operator and Field Level Maintenance Training.

C.14.2.2.1 PQT Training Schedules

The contractor shall develop a training schedule for each PQT Operator and Field Level Maintenance training course Operator and Field Level Maintenance (CDRL A050). The schedule shall be in accordance with the hours required for each class and it shall be based on contents of approved training task list.

C.14.2.2.2 PQT Lesson Plans

The contractor shall develop Lesson Plans (with required visual aids) (CDRL A050) for the PQT Operator and Field Level Maintenance courses. Lesson plans shall consist of a structured outline of technical information, procedures, policies, notes, warnings and cautions required to present a completed and comprehensive block of instruction for each task listed on the course task listing.

C.14.2.2.3 PQT Instructors Guides (IGs)

The contractor shall prepare and deliver an Instructor Guide for the PQT Operator course and an IG for the PQT Field Level Maintenance course (CDRL A050). The IGs shall include all the individual lesson plans in the POI. They shall also contain instructions for the instructor to follow which are tailored for each lesson.

C.14.2.2.4 PQT Student Guides (SGs)

The contractor shall prepare and deliver SGs for the PQT Operator and Field Level Maintenance courses (CDRL A050). The SGs shall include all the information located in the lesson plans, plus the information in the visual aids. It shall have space for the students to take notes. One set of materials shall be provided for each student attending training, plus four (4) additional guides. Any ancillary training material used (e.g.: charts, diagrams, schematics, worksheets) shall be included as part of the SGs.

C.14.2.2.5 PQT Operator Practical Exercises (PEs)

Students participating in the PQT Operator training will be required to participate in PEs. The contractor shall develop an Operator PE checklist (Go/No Go) which shall cover all major areas of the Operator POI (CDRL A050). The PE checklists shall list all the steps necessary for the student to properly perform the task that it is associated with.

C.14.2.2.6 PQT Course Critiques

The contractor shall develop course critiques and administer to each student upon completion of the training event. At a minimum, this course critique shall contain student feedback, any problems or difficulties experienced during the training and any recommendations for course improvements (CDRL A050).

C.14.3 Training for Logistics Demonstration (LOG DEMO)

The contractor shall provide 40 hours of Operator and 40 hours of Field Level Maintenance training to support LOG DEMO at the prime or logistics subcontractor location, as applicable. The classes may be comprised of military personnel, government employees, contractors, or civilians. Training shall consist of proper operating procedures, equipment and familiarization, safety precautions, operator and maintainer Preventative Maintenance Checks and Services (PMCS), maintenance tasks, and all necessary training materials and equipment

Name of Offeror or Contractor:

required to support testing of the BEB system. The draft Operator and Field Level Maintenance Technical Manuals shall be provided to supplement development and training.

C.14.3.1 Logistics Demonstration (LOG DEMO) Training Task Lists

The contractor shall update the PQT Training Task List to reflect Government approved updates and changes to Operator and Field Level Maintenance Tasks. This updated Task List will support LOG DEMO (CDRL A051) to include the break out of hours by task. The LOG DEMO Operator Training Task List shall cover complete operation and safety of the system, loading and unloading for transport, proper use of tools, equipment, BII, Operator Preventative Maintenance Checks and Services (PMCS) and troubleshooting. The LOG DEMO Field Level Maintenance Training Task List shall cover operation characteristics, complete field level maintenance PMCS, troubleshooting, diagnosis and repair of equipment components to include system unique control systems, and ancillary systems. The Training Task Lists shall be consistent with procedures established in the Draft Technical Manuals.

C.14.3.2 Logistics Demonstration (LOG DEMO) Programs of Instruction (POI)

The contractor shall develop POIs to include items in the following sections: Logistics Demonstration (LOG DEMO) Training Task Lists, Training Schedules, Lesson Plans, Instructors Guides, Student Guides, Operator Practical Exercises (PEs), and Course Critiques for LOG DEMO Operator and Field Level Maintenance Training. The Government will provide the contractor with access to BEB systems and any Government owned source data available in order to develop and check materials needed to complete the mentioned documents.

C.14.3.2.1 Logistics Demonstration (LOG DEMO) Training Schedules

The contractor shall update the PQT Training Schedules to reflect Government approved updates and changes to Operator and Field Level Maintenance Training Schedules (CDRL A051). The schedule shall be in accordance with the hours required for each class and shall be based on contents of approved training task list.

C.14.3.2.2 Logistics Demonstration (LOG DEMO) Lesson Plans

The contractor shall update the PQT Lesson Plans (with required visual aids) to reflect Government approved updates and changes to Operator and Field Level Maintenance Training Schedules (CDRL A051). The updated Lesson Plans shall consist of an updated structured outline of technical information, procedures, polices, notes, warnings and cautions required to present a completed and comprehensive block of instruction for each task listed on the course task listing.

C.14.3.2.3 Logistics Demonstration (LOG DEMO) Instructors Guides (IGs)

The contractor shall update the PQT IGs to reflect Government approved updates and changes to Operator and Field Level Maintenance IGs (CDRL A051). The IGs shall include all the individual lesson plans in the POI. They shall also contain instructions for the instructor to follow which are tailored for each lesson.

C.14.3.2.4 Logistics Demonstration (LOG DEMO) Student Guides (SGs)

The contractor shall update the PQT SGs to reflect Government approved updates and changes to Operator and Field Level Maintenance SGs (CDRL A051). The SGs shall include all the information located in the updated lesson plans, plus the information in the visual aids. It shall have space for the students to take notes. One set of materials shall be provided for each student attending training, plus four (4) additional guides. Any ancillary training material used (e.g.: charts, diagrams, schematics, worksheets) shall be included as part of the SGs.

C.14.3.2.5 Logistics Demonstration (LOG DEMO) Operator Practical Exercises (PEs)

Students participating in the LOG DEMO Operator training will be required to participate in PEs. The contractor shall update the FAT Operator PE checklist to reflect Government approved updates and changes. The PEs shall cover all major areas of the LOG DEMO Operator POI (CDRL A051). The PE checklists shall list all the steps necessary for the student to properly perform the task that it is associated with.

C.14.3.2.6 Logistics Demonstration (LOG DEMO) Course Critiques

The contractor shall update the PQT Course Critiques to reflect updates and changes. The contractor shall provide course critiques and administer to each student upon completion of the training event. At a minimum, this course critique shall contain student feedback, any problems or difficulties experienced during the training and any recommendations for course improvements (CDRL A051).

C.14.4 Training for Limited User Test (LUT) (OPTION)

The contractor shall provide 40 hours of Operator and 40 hours of Field Level Maintenance training to support LUT which will take place at Camp Ripley, WI; Fort Hood, TX; Fort Leonard Wood, MO; Fort Knox/Shepardsville, KY or Columbia Falls, MT. The classes may be comprised of military personnel, government employees, contractors, or civilians. Training shall consist of proper operating procedures,

Name of Offeror or Contractor:

equipment and familiarization, safety precautions, operator and maintainer Preventative Maintenance Checks and Services (PMCS), maintenance tasks, and all necessary training materials and equipment required to support testing of the BEB system. The draft Operator and Field Level Maintenance Technical Manuals shall be provided to supplement development and training.

C.14.4.1 Limited User Test (LUT) Training Task Lists

The contractor shall update the LOG DEMO Training Task List to reflect Government approved updates and changes to Operator and Field Level Maintenance Tasks. This updated Task List will support LUT (CDRL A052) to include the break out of hours by task. The LUT Operator Training Task List shall cover complete operation and safety of the system, loading and unloading for transport, proper use of tools, equipment, BII, Operator Preventative Maintenance Checks and Services (PMCS) and troubleshooting. The LUT Field Level Maintenance Training Task List shall cover operation characteristics, complete field level maintenance PMCS, troubleshooting, diagnosis and repair of equipment components to include system unique control systems, and ancillary systems. The Training Task Lists shall be consistent with procedures established in the Draft Technical Manuals.

C.14.4.2 Limited User Test (LUT) Programs of Instruction (POI)

The contractor shall develop POIs to include items in the following sections: Limited User Test (LUT) Training Task Lists, Training Schedules, Lesson Plans, Instructors Guides, Student Guides, Operator Practical Exercises (PEs), and Course Critiques for LUT Operator and Field Level Maintenance Training. The Government will provide the contractor with access to BEB systems and any Government owned source data available in order to develop and check materials needed to complete the mentioned documents.

C.14.4.2.1 Limited User Test (LUT) Training Schedules

The contractor shall update the LOG DEMO Training Schedules to reflect Government approved updates and changes to Operator and Field Level Maintenance Training Schedules (CDRL A052). The schedule shall be in accordance with the hours for each class and it shall be based on the contents of approved training task list.

C.14.4.2.2 Limited User Test (LUT) Lesson Plans

The contractor shall update the LOG DEMO Lesson Plans (with required visual aids) to reflect Government approved updates and changes to Operator and Field Level Maintenance Training Schedules (CDRL A052). The updated Lesson Plans shall consist of an updated structured outline of technical information, procedures, policies, notes, warnings and cautions required to present a completed and comprehensive block of instruction for each task listed on the course task listing.

C.14.4.2.3 Limited User Test (LUT) Instructors Guides (IGs)

The contractor shall update the LOG DEMO IGs to reflect Government approved updates and changes to Operator and Field Level Maintenance IGs (CDRL A052). The IGs shall include all the individual lesson plans in the POI. They shall also contain instructions for the instructor to follow which are tailored for each lesson.

C.14.4.2.4 Limited User Test (LUT) Student Guides (SGs)

The contractor shall update the LOG DEMO SGs to reflect Government approved updates and changes to Operator and Field Level Maintenance SGs (CDRL A052). The SGs shall include all the information located in the updated lesson plans, plus the information in the visual aids. It shall have space for the students to take notes. One set of materials shall be provided for each student attending training, plus four (4) additional. Any ancillary training material used (e.g.: charts, diagrams, schematics, worksheets) shall be included as part of the SG.

C.14.4.2.5 Limited User Test (LUT) Operator Practical Exercises (PEs)

Students participating in the LUT Operator training will be required to participate in PEs. The contractor shall update the LOG DEMO Operator PE checklist to reflect Government approved updates and changes. The PEs shall cover all major areas of the LUT Operator POI (CDRL A052). The PE checklists shall list all the steps necessary for the student to properly perform the task that it is associated with.

C.14.4.2.6 Limited User Test (LUT) Course Critiques

The contractor shall update the LOG DEMO Course Critiques to reflect Government NET Manager approved updates and changes. The contractor shall provide course critiques and administer to each student upon completion of the training event. At a minimum, this course critique shall contain student feedback, any problems or difficulties experienced during the training and any recommendations for course improvements (CDRL A052).

*** C.14.5 Operator New Equipment Training (OPNET) (OPTION)**

The contractor shall provide Operator NET to support fielding. The training locations will include, but not be limited to, the

Name of Offeror or Contractor:

locations listed in Section H.4*. The classes may be comprised of military personnel, government employees, contractors, or civilians. OPNET shall consist of proper operating procedures, equipment and familiarization, safety precautions, operator Preventative Maintenance Checks and Services (PMCS), Operator maintenance tasks, and all necessary training materials and equipment required to support training of the BEB system. OPNET and Field Level Maintenance training events may require concurrent support and execution. The contractor shall be required to provide four (4) OPNET instructors per one week OPNET event. Each fielding will require OPNET. The price of the OPNET classes shall be inclusive of travel costs (airfare, local car rental, lodging, meals, and incidental expenses) associated with the contractor personnel performing the services. The travel costs shall be based on a per person 9-day trip. The Final Operator Technical Manual shall be provided to supplement development and training.

C.14.5.1 Operator New Equipment Training (OPNET) Training Task Lists

The contractor shall update the LUT Training Task List to reflect Government approved updates and changes to Operator Tasks. This updated Task List will support OPNET (CDRL A053) to include the break out of hours by task. The OPNET Training Task List shall cover complete operation and safety of the system, loading and unloading for transport, proper use of tools, equipment, BII, Operator Preventative Maintenance Checks and Services (PMCS) and operator troubleshooting. The OPNET Training Task Lists shall be consistent with procedures established in the Final Operator Technical Manuals.

C.14.5.2 Operator New Equipment Training (OPNET) Programs of Instruction (POI)

The contractor shall develop OPNET POIs to include items in the following sections: Operator New Equipment Training (OPNET) Training Task Lists, Training Schedules, Sign-in Rosters, Lesson Plans, Instructors Guides, Student Guides, Operator Practical Exercises (PEs), Certificates of Training and Course Critiques for OPNET Training. The Government will provide the contractor with access to BEB systems and any Government owned source data available in order to develop and check materials needed to complete the mentioned documents.

C.14.5.2.1 Operator New Equipment Training (OPNET) Training Schedules

The contractor shall update the LUT Training Schedules to reflect Government approved updates and changes to OPNET Training Schedules (CDRL A053). The schedule shall be in accordance with the hours required for each class and it shall be based on contents of approved OPNET training task list.

C.14.5.2.2 Operator New Equipment Training (OPNET) Sign-in Rosters

The contractor shall develop and provide the Government with a class sign-in roster for each OPNET training event (CDRL A053).

C.14.5.2.3 Operator New Equipment Training (OPNET) Lesson Plans

The contractor shall update the LUT Lesson Plans (with required visual aids) to reflect Government approved updates and changes to Operator Training Schedules (CDRL A053). The updated OPNET Lesson Plans shall consist of an updated structured outline of technical information, procedures, polices, notes, warnings and cautions required to present a completed and comprehensive block of instruction for each task listed on the course task listing.

C.14.5.2.4 Operator New Equipment Training (OPNET) Instructors Guides (IGs)

The contractor shall update the LUT IGs to reflect Government approved updates and changes to Operator IGs (CDRL A053). The OPNET IG shall include all the individual lesson plans in the POI. They shall also contain instructions for the instructor to follow which are tailored for each lesson.

C.14.5.2.5 Operator New Equipment Training (OPNET) Student Guides (SGs)

The contractor shall update the LUT SG to reflect Government approved updates and changes to Operator SG (CDRL A053). The OPNET SG shall include all the information located in the updated lesson plans, plus the information in the visual aids. It shall have space for the students to take notes. One set of materials shall be provided for each student attending training, plus four (4) additional guides. Any ancillary training material used (e.g.: charts, diagrams, schematics, worksheets) shall be included as part of the SGs.

C.14.5.2.6 Operator New Equipment Training (OPNET) Practical Exercises (PEs)

Students participating in the OPNET training will be required to participate in PEs. The contractor shall update the LUT Operator PE checklist to reflect Government approved updates and changes. The PEs shall cover all major areas of the OPNET POI (CDRL A053). The OPNET PE checklists shall list all the steps necessary for the student to properly perform the task that it is associated with.

C.14.5.2.7 Operator New Equipment Training (OPNET) Certificates of Training

The contractor shall provide a certificate of training to each student that successfully completes all the OPNET training requirements (CDRL A053).

Name of Offeror or Contractor:

C.14.5.2.8 Operator New Equipment Training (OPNET) Course Critiques

The contractor shall update the LUT Course Critiques to reflect the Governments approved updates and changes. The contractor shall provide course critiques and administer to each student upon completion of the OPNET training event (CDRL A053).

C.14.5.3 Operator New Equipment Training (NET) Training Support Package (TSP)

The contractor shall prepare and deliver six (6) digital TSPs for each OPNET course (CDRL A053). The digital TSPs shall include: program of instruction materials, multimedia presentations, diagnostics, and other training support products used during OPNET to permit the unit to develop and conduct effective and efficient sustainment training upon completion of Operator New Equipment Training.

* C.14.6 Field Level Maintenance New Equipment Training (FLMNET) (OPTION)

The contractor shall provide Field Level Maintenance NET to support fielding. The training locations will include, but not be limited to, the locations listed in Section H.4*. The classes may be comprised of military personnel, government employees, contractors, or civilians. FLMNET shall consist of proper operating procedures, equipment and familiarization, safety precautions, operator and maintainer Preventative Maintenance Checks and Services (PMCS), maintenance tasks, and all necessary training materials and equipment required to support training of the BEB system. OPNET and Field Level Maintenance training events may require concurrent support and execution. The contractor shall be required to provide two (2) FLMNET instructors per one week FLMNET event. Each fielding will require FLMNET. The price of the FLMNET classes shall be inclusive of travel costs (airfare, local car rental, lodging, meals, and incidental expenses) associated with the contractor personnel performing the services. The travel costs shall be based on a per person 9-day trip. The Final Operator and Field Level Maintenance Technical Manuals shall be provided to supplement development and training.

C.14.6.1 Field Level Maintenance New Equipment Training (FLMNET) Training Task Lists

The contractor shall update the LUT Training Task List to reflect Government approved updates and changes to Field Level Maintenance Tasks. This updated Task List will support FLMNET (CDRL A054) to include the break out of hours by task. The FLMNET Training Task List shall cover operation characteristics, complete field level maintenance PMCS, troubleshooting, diagnosis and repair of equipment components to include system unique control systems, and ancillary systems. The FLMNET Task Lists shall be consistent with procedures established in the Final Field Level Maintenance Technical Manuals.

C.14.6.2 Field Level Maintenance New Equipment Training (FLMNET) Programs of Instruction (POI)

The contractor shall develop NET POIs to include items in the following sections: Field Level Maintenance New Equipment Training (FLMNET) Training Task List, Training Schedule, Sign-in Roster, Lesson Plan, IG, SG, Written Test (WT), Certificates of Training and Course Critiques for FLMNET Training. The Government will provide the contractor with access to BEB systems and any Government owned source data available in order to develop and check materials needed to complete the mentioned documents.

C.14.6.2.1 Field Level Maintenance New Equipment Training (FLMNET) Training Schedules

The contractor shall update the LUT Training Schedules to reflect Government approved updates and changes to FLMNET Training Schedules (CDRL A054). The schedule shall be in accordance with the hours required for each class and it shall be based on the contents of approved FLMNET training task list.

C.14.6.2.2 Field Level Maintenance New Equipment Training (FLMNET) Sign-in Rosters

The contractor shall develop and provide the Government with a class sign-in roster for each FLMNET training event (CDRL A054).

C.14.6.2.3 Field Level Maintenance New Equipment Training (FLMNET) Lesson Plans

The contractor shall update the LUT Lesson Plans (with required visual aids) to reflect Government approved updates and changes to Field Level Maintenance Training Schedules (CDRL A054). The updated Lesson Plans shall consist of an updated structured outline of technical information, procedures, polices, notes, warnings and cautions required to present a completed and comprehensive block of instruction for each task listed in the FLMNT task list.

C.14.6.2.4 Field Level Maintenance New Equipment Training (FLMNET) Instructors Guides (IGs)

The contractor shall update the LUT IGs to reflect Government approved updates and changes to Field Level Maintenance IGs (CDRL A054). The IGs shall include all the individual lesson plans in the POI. They shall also contain instructions for the instructor to follow which are tailored for each lesson.

C.14.6.2.5 Field Level Maintenance New Equipment Training (FLMNET) Student Guides (SGs)

The contractor shall update the LUT SGs to reflect Government approved updates and changes to Field Level Maintenance SGs (CDRL A054). The FLMNET SGs shall include all the information located in the updated lesson plans, plus the information in the visual aids. It shall

Name of Offeror or Contractor:

have space for the students to take notes. One set of materials shall be provided for each student attending training, plus four (4) additional guides. Any ancillary training material used (e.g.: charts, diagrams, schematics, worksheets) shall be included as part of the SG.

C.14.6.2.6 Field Level Maintenance New Equipment Training (FLMNET) Written Test (WT)

The contractor shall develop a FLMNET Written Test. These written tests shall only incorporate information that was presented during the course of instruction. Each student will be required to score at least 70% on an end of course written test. The contractor shall develop two versions of the FLMNET end of course written tests (CDRL A054). They shall consist of 25 questions each and shall cover all lessons taught. If a student should fail the first written test they shall be retrained and retested using the other version of the written test.

C.14.6.2.7 Field Level Maintenance New Equipment Training (FLMNET) Certificates of Training

The contractor shall provide a certificate of training to each student that successfully completes all the FLMNET training requirements (CDRL A054).

C.14.6.2.8 Field Level Maintenance New Equipment Training (FLMNET) Course Critiques

The contractor shall update the LUT Course Critiques to reflect Government NET Manager approved updates and changes. The contractor shall provide course critiques and administer to each student upon completion of the FLMNET training event. At a minimum, this course critique shall contain student feedback, any problems or difficulties experienced during the training and any recommendations for course improvements (CDRL A054).

C.14.6.3 Field Level Maintenance New Equipment Training (FLMNET) Training Support Package (TSP)

The contractor shall prepare and deliver six (6) digital TSPs for each FLMNET course (CDRL A054). The digital TSPs shall include: program of instruction materials, multimedia presentations, diagnostics, and other training support products used during FLMNET to permit the unit to develop and conduct effective and efficient sustainment training upon completion of Field Level Maintenance New Equipment Training.

C.15 PACKAGING DATA DEVELOPMENT

The contractor shall develop and provide packaging data for all items identified during the provisioning process with a Source, Maintenance & Recoverability (SMR) code beginning with P excluding PR and PZ. Packaging data development priority shall be given to repairable items, Line Replaceable Units, NMWR/DMWR candidate items, and any large, high cost item classified as a Special Group Item. Packaging shall be developed in accordance with MIL-STD-2073-1D and all items shall be classified as a selective group item or special group item. Contractor shall provide facilities, equipment, materials, and access to the provisioned items for packaging development. The contractor shall complete validation and provide support data with each data submittal. Validation support data shall include item drawings and copies of any applicable Material Safety Data Sheets for Hazardous Material items. Items with assigned Commercial and Government Entity (CAGE) Codes of: 1T416, 21450, 80204, 96906, 10060, 24617, 80205, 99237, 80244, 81343, 81346, 81348, 81349, 81352, 88044, 05047 are excluded from packaging data development.

C.15.1 Selective Group

Items classified as Selective group shall not have a unit pack weight exceeding 40 pounds and shall not have a dimension greater than 40 inches. In addition, the unit pack length and girth combined will not exceed 84 inches. A Selective group item must not require disassembly for packaging. Reconfiguration for packaging of Selective items is limited to folding or coiling. Items will not be classified as Selective if they are repairable, recoverable, contain hazardous material, or if assigned a shelf life.

C.15.2 Special Group

Special group items often require sketches, figures, or narrative instructions to describe packaging requirements. Items excluded from the Selective group will be classified as Special group items. This includes kits, sets and items of separate parts, items requiring disassembly, repairable items, items requiring special handling or condemnation procedures, items classified as hazardous material or hazardous goods in transport, items assigned a shelf life, electrostatic discharge sensitive items, fragile, sensitive, and critical items.

C.15.3 Logistic Management Information (LMI) Data Products - Packaging

The contractor shall develop, maintain and update LMI packaging data in accordance with MIL-STD-2073-1D and CDRL A055 including Attachments 0019 and 0020. The Government will provide a MS ACCESS application that provides data formatting and edit features for coding of packaging LMI data products.

C.15.4 Special Packaging Instructions (SPI)

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 24 of 31
	PIIN/SIIN W56HZV-12-R-0445	MOD/AMD 0006

Name of Offeror or Contractor:

The contractor shall develop a SPI for each item classified as a Special group item. Figures and narrative data shall be developed to describe the form, fit, and function of packaging in sufficient detail for production. SPI format shall be in accordance with MIL-STD-2073-1D and CDRL A056.

C.15.4.1 Validation Testing of Packaging

The contractor shall perform validation testing of special group items in accordance with ASTM D 4169 (Standard Practice for Performance Testing of Shipping Containers and Systems) Distribution Cycle 18, Assurance Level I, with Acceptance Criterion 3 (product is damage free and packaging is intact). Validation testing shall be limited to Test Schedule A and Test Schedule F of ASTM D 4169. Replicate testing and climatic conditioning are not required. Each SPI submitted shall have a validation report including photographs. Photographs shall show the product is undamaged. Validation report shall be submitted concurrently with SPI submittal and in accordance with CDRL A057.

C.15.5 Reusable Containers

C.15.5.1 Container Design Retrieval System (CDRS)

This is a management system program to provide a DoD centralized automated data base system for storing, retrieving, and analyzing existing container designs and test information concerning specialized containers. The contractor shall use this system when making search requests for DoD Long Life Reusable Container (LLRC) designs.

C.15.5.2 Reusable Container Searches

The contractor shall identify engines, transmissions and other major repairable items, including Line Replaceable Units (LRUs), and items requiring special handling or condemnation procedures as possible LLRC candidates. The contractor shall make a CDRS search request for any item that TACOM approves as a LLRC candidate. The contractor shall search for new or existing commercially available reusable container designs that are suitable for LLRC candidates. Format of CDRS search request shall be in accordance with CDRL A058.

C.15.5.3 Reusable Container Assessment

The contractor shall perform assessments to determine if existing container designs are suitable. The contractor shall assess the fit and function of existing containers and compare costs of modifications with the cost of new designs. Assessment data shall include analysis of the need for a new or modified LLRC. Assessment data shall compare costs for conventional packaging and LLRC packaging.

C.16 QUALITY ASSURANCE MANAGEMENT

* C.16.1 Quality Program Plan

The contractor shall develop, implement, and maintain* a quality program acceptable to the Government for all supplies and services to be provided under this contract. The quality program shall address software and hardware contractual requirements. The contractor at 30 DAC shall have a documented quality manual/program plan for Government review and acceptance. The quality manual/program plan shall comply with* ISO/TS 16949 or AS 9100* Quality Management System (QMS). The plan shall be updated as required (CDRL A059).

* C.16.1.1 Supplier Quality Assurance

The contractor shall have a supplier quality assurance program that follows* ISO/TS 16949:2009 or AS 9100 quality program requirements for each significant subcontractor.* The prime contractor shall verify each non-significant subcontractor has developed, has implemented, and will maintain an acceptable existing quality assurance plan that follows the guidance of a nationally recognized QMS.* The contractor's supplier quality assurance program shall assure each subcontractor* has a documented quality program that shall include, at a minimum,* quality control plans, Process Failure Mode Effects Analysis (PFMEA), conducting source inspections or receiving inspections and initiating investigations for manufacturing and test deficiencies* that will follow a standardized, systemic root cause analysis procedure. The contractor's plan shall include provisions for periodic internal audits and audits of subcontractors (CDRL A059).

C.16.1.2 The prime contractor's documentation verifying their review and acceptance of the subcontractor quality assurance plan shall be made available for review upon Government request. If determined to be acceptable, the Prime contractor will use the subcontractor's accepted system when conducting quality audits.

C.16.2 Welding

C.16.2.1 Welding Procedures

The contractor shall develop Weld Repair Procedures and Welding Procedure Specifications (WPS) (CDRL A060), Procedure Qualification

Name of Offeror or Contractor:

Records (PQRs) (CDRL A061), Welder Qualification Records (WQR) (CDRL A062) in accordance with welding standard(s) as specified in ATPD 2393 Table 1: Welding Standards. The contractor shall follow the appropriate welding standard scope to qualify the welding and weld repair procedures. The contractor shall prepare weld samples and test the weld procedure for qualification in accordance with the appropriate standard. Changes to the Weld Repair Procedures and WPS, PQR, or WQR will require requalification and shall be submitted as part of the CDRL. The use of pre-qualified weld joints as specified in American Welding Society (AWS) D1.1 does not preclude submittal of welding procedures.

C.16.2.2 Previously Qualified Procedures

If the contractor previously qualified welding procedures under another DOD contract, and wants approval to use these procedures, the contractor shall submit a written request to the Government Procuring Activity for engineering approval prior to prototyping or build. The following requirements shall be met and documentation shall be provided (CDRLs A061 and A062):

- a. The weld procedure was qualified by destructive testing and approved on a previous DOD contract and the essential variables are within the tolerance as specified in the applicable welding standard(s) for the current contract.
- b. The contractor has certified welders and equipment to the qualified procedures in accordance with the applicable welding standard(s) in ATPD 2393 Table 1: Welding Standards.
- c. A favorable quality history with regards to weld quality on the previous contract where the procedures were used.

C.16.2.3 Weld Repair Procedures

The contractor shall provide written repair procedure(s) identifying proper technique and approach to correct defective product and obtain Government approval of the procedure prior to repair of defective parts (CDRL A060).

C.16.2.4 Weld Equipment

The contractor shall ensure that all welding equipment (gauges and meters), including subcontractors' welding equipment, used in the performance of this contract have been certified and calibrated annually in accordance with the weld standards in ATPD 2393 Table 1. Upon Government request, the contractor shall make available equipment calibration documentation.

C.16.2.5 Welding Inspectors

Weld Inspector Qualification. Qualified inspectors trained to perform inspection functions shall be used for the verification of weld quality, and shall be in accordance with at least one of the following conditions.

- a) Current certification in accordance with the American Welding Society (AWS), Certified Welding Inspector (CWI/SCWI) qualified and certified in accordance with provisions of AWS QC1, Standard for AWS Certified Welding Inspector.
- b) Current certified welding inspectors qualified by the Canadian Welding Bureau (CWB) to Level II or the Level III requirements of the Canadian Standards Association Standard W 178.2 Certification of Welding Inspectors.
- c) An individual who, by experience, and/or education, in metals, fabrication and testing, is competent to perform inspection with the approval of the procuring engineering activity

C.16.2.6 Welder Welding Operators and Tack Welders

Before assigning any welder, welding operator, or tack welders to the welding work covered by the contract the contractor shall obtain certification that the welder, welding operator, or tack welder has passed qualification tests as prescribed by the standards listed in ATPD 2393 Table 1: Welding Standard for the materials joined and the type of welding operation to be performed and that such qualification is effective as defined by the particular standard referenced. The welder, welding operator, or tack welder shall be re-qualified if the welder has not performed the required type of weld for a period exceeding six months.

C.16.2.7 Welding Designs**C.16.2.7.1 Armor Welding Design**

If welding of armor is required, prior to manufacturing, the Contractor shall develop welding procedures for steel structures that utilize carbon or low alloy steels that are 1/8 inch (3mm) or thicker with a minimum specified yield strength greater than 100ksi (600MPa) in accordance with the Ground Combat Vehicle Welding Code for Steel and submit the Contractor's version to the Government for approval (CDRLs A060, A061 and A062).

C.16.2.7.2 Structural Welding Design

Name of Offeror or Contractor:

The contractor shall ensure that all steel, aluminum, titanium, and stainless steel weldments meet the design and fabrication requirements in American Welding Society (AWS) D1.1, (AWS) D1.2, (AWS) D1.9, and (AWS) D1.7 (DOD Adopted). The use of pre-qualified weld joints as specified in AWS D1.1 does not preclude submittal of welding procedures (CDRLs A060, A061 and A062).

C.16.2.8 Nondestructive Testing (NDT)

C.16.2.8.1 Visual Inspection

Visual inspection shall be conducted for all welds after welds have been completed and cooled to ambient temperature. Armor steel(s) and quenched and tempered steel(s) shall be visually inspected after the welds have been completed and cooled to ambient temperature, and also after no less than 48 hour hold period.

C.16.2.8.2 Nondestructive Critical Weld Joint Inspection

The contractor shall clearly identify all critical joints required for NDT other than visual inspection (CDRLs A060, A061 and A062). Procedures shall be made available upon request by the Government.

C.16.2.8.3 Nondestructive Inspectors

When NDT is required in accordance with the contractors control plans, the inspectors shall be qualified in accordance with the current edition of American Society for Nondestructive Testing Recommended Practice No. SNT-TC-1A. Only individuals qualified for NDT LEVEL I and working under the NDT LEVEL II or individuals qualified for NDT LEVEL II may perform nondestructive testing except visual examination. The NDT personnel need not be an AWS CWI. The contractor shall make available all NDT personnel qualification records upon request by the Government.

C.16.2.8.4 Nondestructive Testing Acceptance Criteria for Armor Material(s)

When NDT is required for armor, the procedures and acceptance criteria shall be in accordance with TACOM Ground Combat Vehicle Welding Code drawing number 19207-12479550 Steel and Ground Combat Vehicle Welding Code for Aluminum. Steel Armor materials MIL-DTL-46100, MIL-DTL-12560, or low alloy steels that are 1/8 inch (3mm) or thicker with a minimum specified yield strength greater than 100ksi (600MPa) shall be held for a 48 hour after welding is completed and has cooled to an ambient temperature.

C.16.2.8.5 Nondestructive Testing Acceptance Criteria for Non Armor and Structural Material(s)

When NDT is required for non-armor and structural material(s) in accordance with the contractors control plans, the acceptance criteria shall be as stated in the applicable standard. The acceptance criteria differ based on the design loads. The contractor shall state what joints are critical load bearing members and clearly identify these weldments for inspection purposes (CDRLs A060, A061 and A062). In the case of critical structures, the acceptance criteria for cyclic loads will be as stated in AWS D1.1 and Class II structures for Aluminum welds in accordance with AWS D1.2.

C.16.3 Corrosion Control

C.16.3.1 The contractor shall supply materials and coatings information to support development of a Corrosion Prevention and Control Plan (CPCP) (CDRL A063).

C.16.3.2 The contractor shall form a corrosion team to provide representation at the BEB Corrosion Prevention Advisory Team (CPAT) meetings when requested. The BEB CPAT is an advisory group that manages implementation of the CPCP and provides recommendations on corrosion issues or concerns that arise during the lifecycle of the BEB.

C.16.4 Product Quality Deficiency Reports (PQDRs) for Contractor Supplied Items

C.16.4.1 The contractor shall investigate, provide failure analysis and corrective action to all Product Quality Deficiency Reports (PQDRs), submitted on Standard Form (SF) 368, generated against supplies produced under this contract (CDRL A064). The contractor shall provide a report of the investigation, probable cause, and proposed corrective action, including preventative measures for future occurrences and countermeasures, to the PCO or his designated representative.

C.16.4.2 Transportation of deficient Government accepted supplies to a site designated by the contractor shall be at contractors expense. All corrective actions taken by the contractor shall be at no additional cost to the Government. Corrective action requiring configuration changes shall be approved by the Government.

C.16.4.3 The Government shall approve all contractor-generated corrective actions before the PQDR is considered closed.

C.17 GOVERNMENT TEST OVERVIEW

The Government conducted test and evaluation consists of three parts: Production Qualification Testing (PQT), Logistics Demonstration

Name of Offeror or Contractor:

(LD) and Limited User Test (LUT). The contractor shall correct all performance, manufacturing and quality defects. PQT will not exceed nine months; LD will not exceed four weeks; and LUT will not exceed five weeks.

The Government will be conducting First Article Test (FAT) of the BEB, which encompasses Production Qualification Test (PQT) and Limited User Testing (LUT). The First Article Test clauses are included and will apply.

C.17.1 Production Qualification Test (PQT)

The Government will conduct testing in accordance with ATPD 2393, Section 4.

The contractor shall deliver PQT BEBs to Aberdeen Proving Grounds (APG) after the completion of the contractors Production Unit Inspection (PUI). The BEBs shall be labeled with approximately 15-inch high white block numbers on the port and starboard side of the operators station, starting with number 11 and up, visible when the BEB is on the CBT, on the ground, and in the water.

C.17.1.1 The BEBs will be tested using the following Associated Items of Equipment (ASIOE):

- a. Improved Ribbon Bridge (IRB) Interior and Ramp Bays
- b. Common Bridge Transporter (CBT)
- c. Palletized Load System Trailer (PLST) with extended drawbar/light bar
- d. Improved Boat Cradle (IBC), if required
- e. Bridge Adapter Pallet (BAP)

C.17.1.2 CPK Test Structure

The CPK test structure shall include all components that contribute to ballistic survivability including floor plates, armor mounting provisions, and armor in accordance with ATPD 2393 Annex C. The CPK test structure does not need to include electrical components, controls or other items that do not contribute to the ballistic survivability of the cab.

C.17.1.3 Configuration Control

The Contractor shall identify in writing, any components on the PQT BEBs delivered to the Government test site which differ from that of the design at Pre-Test Readiness Review and the rationale for the change. Any components replaced during testing that are not the same form, fit, or function as the component it is replacing is to be considered a change. Changes made after testing has begun are to be coordinated with the Government prior to installation on the BEB. When directed by the Government the Contractor shall install the same change on all PQT BEBs.

C.17.1.4 Contractor Support for PQT

C.17.1.4.1 The contractor shall be responsible for furnishing repair parts and technical support during testing for the BEBs at the test sites identified in this contract. The Government will provide the contractor sufficient space for two 20-foot ISO containers for spare parts and tools to support PQT. All items must be removed from the testing site within 30 days after the completion of PQT.

C.17.1.4.2 The contractor shall perform on-site de-processing of equipment at the test sites, including operator and maintainer Preventive Maintenance Checks & Services (PMCS), walk-through and demonstration of BEB prior to test. Upon completion of de-processing, the BEB shall be fully mission capable.

C.17.1.4.3 Contractor technical support shall include technical representation at the Government test site throughout the test period. All Contractor Support Representatives (CSRs) must be Subject Matter Experts (SMEs) on the BEB. The Government will provide storage facilities for contractor furnished repair parts at the test site.

C.17.1.5 Tools and Test Equipment

The contractor shall identify and utilize existing Government tools and test equipment to the maximum extent feasible.

C.17.2 Logistics Demonstration (LD)

LD will be conducted at a contractor facility located within the continental US.

C.17.2.1 The contractor shall provide support to the Government LD process. This support shall consist of facilities, desk, chairs, contractor personnel to assist with record keeping, equipment preparation, and equipment maintenance, mandatory replacement parts supply, consumables (rags, lubricants, sealants, etc.) supply, tools, and special tools.

C.17.2.2 The contractor shall also provide contractor TM personnel to answer questions, review LD issues, and advise the Government regarding changes or recommendations that arise during verification. The contractor shall provide a writer on site to make corrections in a timely manner (text within four working hours, graphics within 12 working hours).

Name of Offeror or Contractor:*** C.17.3 Limited User Testing (LUT) (Option)**

LUT will be conducted following the LD by the Operational Test Agency (OTA). Testing will be conducted at a fast water location (Camp Ripley, WI; Fort Hood, TX; Fort Leonard Wood, MO; Fort Knox/Shepardsville, KY or Columbia Falls, MT) that can support operational float bridge testing. The LUT will allow Soldiers to show proficiency of operation using production systems. The contractor shall deliver 14* LUT BEBs that will be required for this test, which are separate from the BEBs tested at APG during PQT. The duration of the LUT will not exceed five weeks (Soldier training through completion of the record test). During the LUT, Soldiers will operate the BEBs to the degree necessary to enable the evaluation of the BEBs capabilities and limitations. During LUT a Multi Role Bridge Company (MRBC), operating the BEBs will be expected to support a Tactical Float Bridge and Rafting Operations Mission. The contractor shall be responsible for conducting all maintenance beyond Operator/Crew level during the LUT.

C.17.3.1 Contractor Support for LUT

C.17.3.1.1 The contractor shall be responsible for furnishing repair parts and technical support during testing for the BEBs. The Government will provide the contractor sufficient space for two 20-foot ISO containers for spare parts and tools to support LUT. All items must be removed from the testing site within 30 days after the completion of LUT.

C.17.3.1.2 The contractor shall perform on-site de-processing of equipment at the test sites, including operator and maintainer Preventive Maintenance Checks & Services (PMCS), walk-through and demonstration of BEB prior to test. Upon completion of de-processing, the BEB shall be fully mission capable.

C.17.3.1.3 Contractor technical support shall include technical representation at the Government test site throughout the test period. All Contractor Support Representative (CSR) must be Subject Matter Experts (SMEs) on the BEB. The Government will provide storage facilities for contractor furnished repair parts at the test site.

C.17.3.2 Tools and Test Equipment

The contractor shall identify and utilize existing Government tools and test equipment to the maximum extent feasible.

C.17.4 PQT Deficiencies**C.17.4.1 Test Incident Reports**

During testing, all issues and failures will be recorded, classified (in accordance with Attachment 0021, BEB Failure Definition and Scoring Criteria) and entered into VDLS [VISION (Versatile Information Systems Integrated Online Nationwide) Digital Library System] (<https://vdls.atc.army.mil>) by the Government. The contractor shall be responsible for accessing the Army Test Incident Reporting System (ATIRS) database at Aberdeen Test Center (ATC) to obtain the Test Incident Reports (TIRs) generated on the equipment during the Government tests. The contractor will be given read and write access to the VDLS database. Receipt of a TIR is defined as the TIR release date.

C.17.4.2 Failure Analysis and Corrective Action Report (FACAR) for TIRs

The contractor shall respond to TIRs via a FACAR when directed by the Government, but may also respond to any TIR, which shall include the root cause of the incident, the technical approach to resolving the issue, course of action, as well as any additional information the contractor deems necessary to properly identify the root cause of the failure and path forward. FACARs and supporting information/documentation shall be identified with filenames matching the beginning applicable TIR filename. Filename labeling shall be, for example, AAAA-Xn-Bnnnnn-more data where AAAA is the contractor company name, Xn is the contract number, Bnnnnn is the TIR number. FACARs shall include the text FACAR at the beginning of more data.

The contractor shall input FACARs and any supporting data into VDLS. Submittal requirements are based upon the TIR release dates in accordance with CDRL A065. All demonstrated corrective actions and technology will be taken into account during the Scoring Meetings.

C.17.4.2.1 Interim FACAR Responses

Interim responses shall provide the status of the contractors investigation, and proposed date for submission of the final response. The interim status shall be updated every 30 days subsequent to the initial submission of the interim response.

C.17.4.2.2 Final FACAR Responses

Final responses are required for all TIRs which require responses within 45 calendar days after release. The contractor shall indicate the corrective action status, either "Final" or "Interim," on each FACAR.

C.17.4.3 Retest

Name of Offeror or Contractor:

In the event of boat/component system test failure, the Government reserves the right to retest the boat/system upon correction of the defect(s) by the contractor to the complete extent and duration specified in the test program, or as the PCO considers appropriate. The contractor shall be responsible for delays in the program test period resulting from boat/component defects for failure to adequately or timely furnish parts support, and the Government shall have the right to extend the specified program test period accordingly. The contractor shall continue to provide contractor support for the duration of any retesting effort.

C.17.5 PQT Scoring Meetings/Corrective Action Review Board (CARB) Meetings**C.17.5.1 Scoring and Assessment Meetings**

During and after Government testing, Scoring and Assessment Meetings will be held by the Government to review and unilaterally score/assess Test Incident Reports (TIRs). The contractor shall support Government Scoring/Assessment Meetings after the start of PQT by presenting information, evidence, or opinions that the Government will consider when scoring test incidents. The contractor shall document information, evidence, or opinions and present to the Government. The contract will not attend the actual scoring and assessing of the TIRs; the results of the scoring/assessment meetings will be provided to the contractor following the meetings.

C.17.5.2 CARB Meetings

During and after Government testing, CARB meetings will be held to review the functional/performance failure data and corrective action status of TIRs which require a contractor response. Contractor will be able to attend the meeting to present information, evidence, or opinions that the Government should consider when assessing corrective actions.

C.17.5.2.1 CARB Preparation/Notification

The contractor shall provide an electronic CARB Meeting agenda prior to all CARB meetings (CDRL A005). It shall contain the following information: TIR, Revision #, Date Occurred, Original Release Date, Release Date, Title/Maintenance Description, Incident Class, and Chargeability. Official CARB meeting minutes will be provided by the contractor (CDRL A006).

C.17.6 BEB Refurbishment

After successful PQT completion, the contractor shall transport the PQT BEBs from the test sites to its plant, at the contractor's expense. The contractor shall thoroughly inspect the BEBs and restore them to their former condition. Refurbished BEBs must meet Army 10/20 standards in accordance with the applicable technical manuals.

C.18 BEB INSPECTION OVERVIEW

Prior to delivery to the Government, the contractor shall conduct inspections and tests for all BEBs in accordance with Section 4 of ATPD 2393.

C.18.1 Production Unit Inspection (PUI)

Prior to delivery of the PQT BEBs, the contractor shall conduct PUI in accordance with ATPD 2393, Section 4.

C.18.2 Final Inspection Report (FIR)

The contractor shall prepare a FIR in contractor format to be used during Quality Conformance Inspection (QCI) in accordance with ATPD 2393, Section 4. The FIR shall list each characteristic or function inspected or tested, and the relationship to the contract requirement (CDRL A066). The contractor shall make available the FIR for the items in question. Deficiencies disclosed during inspection by the contractor or the Government shall be described in writing on the Deficiency Sheet attached to the FIR. The contractor shall perform Final Inspection of all BEBs in accordance with the requirements of ATPD 2393 utilizing the Government approved FIR.

C.18.2.1 Deficiencies discovered during inspections and corrective actions taken by the contractor shall be documented in the FIR.

C.18.3 Contractor Testing

If the contractor plans to conduct any testing before the PQT BEBs are delivered, the contractor shall provide notification in advance of all tests (CDRL A004) and provide access to the test facility during the test. The Government may reduce PQT requirements based on the tests witnessed at the contractors facility. After the completion of each test, the contractor shall provide the Government with a test report documenting the results (CDRL A067).

C.19 CERTIFICATIONS TO ATPD 2393 PERFORMANCE REQUIREMENTS

The contractor shall provide all certifications required by ATPD 2393 (CDRL A068). The certifications and testing required shall be resubmitted if changes are made to the hardware and systems subsequent to the original certification.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-12-R-0445 MOD/AMD 0006	Page 30 of 31
---------------------------	---	----------------------

Name of Offeror or Contractor:

C.20 CARE AND STORAGE OF BEBs AND CPKs

C.20.1 The contractor shall maintain the BEBs and CPKs in accordance with the appropriate Technical Manual to preclude deterioration of the BEBs and all of their components. The contractor shall submit the procedures for storage (CDRL A069) and maintain a log for all BEBs/CPKs placed in storage. The log shall include the BEB/CPK serial number, the date it was placed in storage, the dates maintenance and exercise are performed, deficiencies detected during the post-storage examination, and the date BEB is removed from storage. The contractor shall make the log available to the Government upon request.

C.20.2 BEB and CPK care and storage starts 30 days after Government unconditional acceptance. In the event that the Government does not elect to ship accepted BEBs and CPKs the Government will be responsible for the cost of the care and storage of all BEBs and CPKs. The contractor shall document and correct all deficiencies detected during the re-examination at its own prior to shipment.

C.20.3 The Government may perform a visual examination of the BEBs/CPKs for deterioration, damaged parts, and evidence of mechanical problems.

C.20.4 The contractor shall remove the BEBs/CPKs from storage and ship them in the same chronological order that they were placed in storage (i.e., first in, first out).

C.20.5 In the event the contractor must store BEBs/CPKs because on failures of meeting contract requirements (i.e., failure to provide timely and accurate logistic data and LMI requirements), or for any other reason that is not the Government's fault, the cost of storage shall be borne by the contractor.

*** END OF NARRATIVE C0001 ***

CONTINUATION SHEET**Reference No. of Document Being Continued****Page 31 of 31**

PIIN/SIIN W56HZV-12-R-0445

MOD/AMD 0006

Name of Offeror or Contractor:

SECTION J - LIST OF ATTACHMENTS

<u>List of</u> <u>Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number</u> <u>of Pages</u>	<u>Transmitted By</u>
Exhibit A	EXHIBIT A	07-MAR-2013	069	ELECTRONIC IMAGE

PIIN/SIIN W56HZV-12-R-0445
MOD/AMD 0006
ATT/EXH ID Exhibit A
PAGE 1