AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. Contract ID Code	Page 1 Of 56
Cost Plus Incentive Fee (Cost Based)	

2. Amendment/Modification No.	3. Effective Date	4. Requisition/Purchase Req No.	5. Project No. (If applicable)
P00004	2013SEP11	SEE SCHEDULE	

6. Issued By Code W56HZV

U.S. ARMY CONTRACTING COMMAND
ANDRE SHINA
WARREN, MICHIGAN 48397-5000
HTTP://CONTRACTING.TACOM.ARMY.MIL

EMAIL: ANDRE.SHINA@US.ARMY.MIL

7. Administered By (If other than Item 6) Code S2305A

DCMA DETROIT
35803 MOUND ROAD
STERLING HEIGHTS MI 48310

8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code)

BAE SYSTEMS LAND & ARMAMENTS, L.P.
34201 VAN DYKE AVENUE
STERLING HEIGHTS, MI 48312-4648

Code 7B726 | Facility Code

☐ **9A. Amendment Of Solicitation No.**

9B. Dated (See Item 11)

☒ **10A. Modification Of Contract/Order No.**
W56HZV-12-C-0358

10B. Dated (See Item 13)
2012SEP14

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 _____ 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)

ACRN: AC NET INCREASE: $8,000,000.00

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

☐ **A. This Change Order is Issued Pursuant To: The Changes Set Forth In Item 14 Are Made In The Contract/Order No. In Item 10A.**

☐ **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).**

☒ **C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of:** FAR 43.103(a)(3)

☐ **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) DOREEN J. COSTA DOREEN.J.COSTA@US.ARMY.MIL (586)282-7076	
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 2013SEP11

SECTION A - SUPPLEMENTAL INFORMATION

Buyer Name: ANDRE SHINA
Buyer Office Symbol/Telephone Number: CCTA-AHL/(586)282-3750
Type of Contract: Cost Plus Incentive Fee (Cost Based)
Kind of Contract: Research and Development Contracts
Type of Business: Large Business Performing in U.S.
Surveillance Criticality Designator: C
Weapon System: BFVS(M2, M2A1, M2A2),BFVS(M3, M3A1,M3A2)
Contract Expiration Date: 2017SEP14

*** End of Narrative A0000 ***

Contract: W56HZV-12-C-0358
Modification: P00004
Prepared by: RMGL/ALS

1. The purpose of this bilateral Modification P00004 to Contract W56HZV-12-C-0358 is to issue an Unpriced Change Order (UCO). This Modification signifies the intent of the U.S. Army Contracting Command Warren (ACC-WRN) to execute a UCO pursuant to the authority granted by FAR 43.103(a)(3). The parties agree that the Not-to-Exceed (NTE) Total Target Cost Plus Incentive Fee (CPIF) amount for the effort as outlined within Modification P00004 is $30,745,188.

2. In accordance with Section I clause "Execution and Commencement of Work" (FAR 52.216-23), BAE Systems is authorized to commence performance as specified by this Modification P00004.

3. Section C: The following changes have been hereby incorporated to the Scope of Work (SOW) as part of this UCO:

i) C.1.4 changes M3A3 contract reference from FY08 REMAN to FY09 REMAN

ii) C.2.1 adds "The contractor shall include the USG and the USG Representatives at all formal Software/Systems Peer reviews of documents being developed."

iii) C.2.4.1 adds "Delta Preliminary Design Review (D-PDR)."

iv) C.5.1.1.3 is hereby added in its entirety.

v) C.5.2 replaces subcontractor with contractor in the first sentence.

vi) C.5.2.1.1 adds a Physical Architecture IPT and updates the following sentence:

FROM: These sub-IPTs shall schedule regular standing meetings at a frequency commensurate with the technical scope, meeting weekly unless otherwise specified in this contract approved by the SEIT.

TO: These sub-IPTs shall schedule regular standing meetings at a frequency commensurate with the technical scope, meeting weekly unless approved by the SEIT.

vii) C.5.3.1.2.1.2 is hereby changed

FROM: The contractor shall replace the existing fuel filter with a single FS1007 element with JIC connections for size 12 hose.

TO: The contractor shall replace the existing fuel filter with the latest fuel filter/water separator arrangement as recommended by the engine manufacturer and vehicle OEM, as defined at CDR.

viii) C.5.3.1.2.1.3 is hereby changed

FROM: The contractor shall replace the existing lube oil filter with a dual LF9001 combination elements with JIC connections for size 20 hose.

TO: The contractor shall replace the existing lube oil filter with the latest lube filter arrangement as recommended by the engine manufacturer and the vehicle OEM, as defined at CDR.

ix) C.5.3.1.2.6 and C.5.3.1.2.7 changes "1000 Amps" to "990 Amps".

x) C.5.3.1.2.9 adds the following sentence: "If the PIM transmission oil cooler does not fit with the other upgrades or meet the requirements derived under this contract, the contractor shall redesign the transmission oil cooler after obtaining SEIT approval."

xi) C.5.3.1.2.10 adds "The contractor shall implement and integrate the SEIT approved agent distribution changes."

xii) C.5.3.1.2.10.1-3 are hereby added in its entirety.

xiii) C.5.3.1.2.20 changes "integration" to "interactivity" and updates the last sentence to read

FROM: The contractor shall reuse the existing VHMS test bed with as required modifications to support this effort.

TO: The contractor shall reuse the existing VHMS test bed functionality as demonstrated as a baseline and add required modifications to support this effort.

xiv) C.5.3.1.2.20.1 changes "integration" to "interactivity".

xv) C.5.3.1.2.25 adds "NETT Warrior" and deletes "Government Furnished DDU with Display or RHTU-E (TBD) to host Forward Observer System (FOS) software. This is for BFIST only." in its entirety.

xvi) C.5.3.1.2.25.1 adds "NETT Warrior: GPS Repeater ICD #029-FAR-AAR-AAS-KBZ and Battery Charger ICD# TBD" and deletes "Government Furnished DDU with Display or RHTU-E (TBD) to host Forward Observer System (FOS) software. This is for BFIST only." in its entirety.

xvii) C.5.3.1.2.25.3 is hereby changed

FROM: The contractor shall maintain space, weight, and power allocations for the Gunshot Detection System for future integration.

TO: The contractor shall maintain space, weight, and power allocations for the Hostile Fire Detection System for future integration using the BOOMERANG ICD; however, for power allocation, the contractor shall use 50 amps, unless otherwise approved by the SEIT.

xviii) C.5.3.1.2.27 adds "The display in the turret shall have the same functionality as the SLD in the hull and have the capability of viewing the same sensors."

xvix) C.5.1.2.30 revises the stowage plan for the "vehicle" to "vehicles" and also adds a separate stowage plan for the M2A4 Commanders configuration, and a separate M3A4 Commanders configuration. Finally, "and Commanders stowage" shall be demonstrated during the contractor test phase Logistics Demonstration effort IAW paragraph C.8.2.4.2.3 and C.8.2.5.1.

xx) C.5.3.1.2.32 and C.5.3.1.2.33 is hereby added in its entirety.

xxi) C.5.3.1.3 and its subparagraphs C.5.3.1.3.1 and C.5.3.1.3.2 are hereby added in their entirety.

xxii) C.5.5.2.1 adds the following sentence: "The contractor shall update the performance specification by modifying all effected requirements and adding new requirements resulting from the incorporation of the technologies identified in paragraph C.5.3."

xxiii) C.5.6.4 adds "/component".

xxiv) C.5.11.1.7 is hereby added in its entirety.

xxv) C.5.13.8.1 hereby deletes the following sentence: "Legacy software PCRs corrective actions and fixes are not included in ECP2 scope.

xxvi) C.5.13.10 is hereby deleted in its entirety and identified as RESERVED.

xxvii) C.5.16.1 is hereby replaced in its entirety and C.5.16.1.1 is added.

FROM: Nuclear Survivability: Any new LRUs added by this contract which affect Mission Essential Functions (MEF) of the vehicle shall be hardened to withstand the effects of initial nuclear radiation. The nuclear survivability hardening criteria for the

new mission essential equipment mounted on the inside and outside of the vehicle shall be as specified in Environmental Conditions for the Heavy Combat Team Tracked Vehicle Systems, Attachment 0012. The MEF pertaining to a battlefield nuclear event are outlined in Attachment 0013.

TO: CBRN Survivability. The vehicle shall meet the CBRN Survivability requirements of NBC Contamination Survivability Criteria for Army Materiel, 30 May 2005 (Attachment 0034) for new and modified LRUs/LRMs created under this contract with the following differences:

*Decontamination Criteria: Contaminants: Decontamination begins one hour after contamination using standard field decontaminants or stimulants, equipment and procedures; and the decontamination process, excluding monitoring, lasts no longer than 150 total minutes with a maximum of two passes through a thorough decontamination site with Personnel and Equipment Requirements for the Optimum DED Layout of an M12A1 PDDA-Equipped Unit as described in FM 3-11.5.

*Decontamination Criteria: Induced Activity: The vehicle shall be designed such that the sum of neutron induced activity in unchanged components when exposed to a neutron fluence from a nuclear detonation that results in a total dose of 2,600 cGy (rad) to the crew of the equipment, plus the sum of neutron induced activity in ECP2 components when exposed to a neutron fluence from a nuclear detonation that results in a total dose of 3,000 cGy (rad) to the crew of the equipment results in no more than a negligible risk (as defined within the CBRN Survivability requirements of ATPD 2404) to unprotected personnel arriving at H+2 and remaining inside, on, or one meter from the item for a period of time based on the mission profile, not to exceed 12 hours.

The contractor shall conduct a vehicle level CBRN contamination/decontamination analysis against the criteria listed above and provide the results of this analysis to PM ABCT in the monthly dedicated Electromagnetic Environmental Effects (E3) and Nuclear Survivability working meetings.

C.5.16.1.1 is added with the following: "Nuclear Survivability: Any new LRUs added by this contract which affect the Nuclear Hardness Mission Essential Minimum Capabilities, as outlined in Attachment 0013 shall be hardened to withstand initial nuclear weapons effects. The contractor shall identify which inbound subsystems are needed to support the Nuclear Hardness Mission Essential Preferred Capabilities, as outlined in Attachment 0013, and provide a cost estimate to PM ABCT to harden these subsystems. This cost estimate, and a vehicle level analysis that maps each Nuclear Hardness Mission Essential Minimum and Preferred Capability to the specific subsystems that are determined necessary to support each of these functions, shall be provided to PM ABCT in the monthly dedicated Electromagnetic Environmental Effects (E3) and Nuclear Survivability working meetings.. The nuclear survivability hardening criteria for the new mission essential equipment mounted on the inside and outside of the vehicle shall be as specified in Environmental Conditions for the Heavy Combat Team Tracked Vehicle Systems, Attachment 0012."

xxviii) C.5.16.2.1 is hereby changed:

FROM: Newly designed equipment shall be developed in accordance MIL-STD-464C, and tailored for Government tracked vehicle systems as outlined in Attachment 0014.

TO: Newly designed equipment shall be developed in accordance with ATPD 2407 "Electromagnetic Environmental Effects (E3) for U.S. Army Tank and Automotive Vehicle Systems Tailored from MIL-STD-464C" as outlined in Attachment 0014.

xxix) C.5.16.2.3 is hereby Changed:

FROM: The contractor shall prepare and deliver in accordance with CDRL A062 the design and test support analysis defined in MIL-STD-464C, tailored for Government vehicle systems.

TO: The contractor shall document and deliver in accordance with CDRL A062 the analyses, inspections, tests and/or demonstrations as outlined in the verification requirements of ATPD 2407, "Electromagnetic Environmental Effects (E3) for U.S. Army Tank and Automotive Vehicle Systems tailored from MIL-STD-464C".

xxx) C.5.21 and all of its subparagraphs are hereby added in their entirety

xxxi) C.7.3.1.2 deletes "Turret Processor Unit (TPU) III" and adds: 1)Central Processing Unit (CPU) and 2)DVE Wide in the list of LRUs.

xxxii) C.13.5 adds "The DVDB upgrade shall incorporate interfacing software to support DVE Wide LRU. This software shall continue to support current DVE as a rear vehicle viewing system."

4. The following updated Attachments and Exhibit have updated as part of this UCO; the updated version dates are reflected in Section J of this Modification P00004:

Attachment 0004 - Program Schedule
Attachment 0006 - ECPs
Attachment 0009 - TDP Option Sheet
Attachment 0033 - Cyclic Maintenance Worksheet *new in its entirety
Attachment 0034 - NBC Contamination Survivability Criteria *new in its entirety

Exhibit A - CONTRACT DATA REQUIREMENT LISTS (CDRLs):

A030 - Technical Data Package:

Block 10, 11, 12, and 13 of Section 16 of A030 changed as follows:

FROM: Block 10, 11, 12, and 13: Contractor shall submit and deliver TDP updates consisting of engineering changes at PDR. The Government shall review and comment on each increment no later than 30 calendar days after acknolwedgement of receipt. The contractor shall have 15 calendar days to address all comments and incorporate changes. Final delivery of the TDP shall be no later than 60 calendar days prior to the Engineering Release Record(ERR) in accordance with the IMS.

TO: Block 10, 11, 12, and 13: The Contractor shall submit TDP updates consisting of engineering changes at CDR. The Government shall review and comment on each increment no later than 60 calendar days after acknowledgement of receipt. The Contractor shall have 15 calendar days to address all comments and incorporate changes. Final delivery of the TDP shall be no later than 60 calendar days prior to the Engineering Release Record(ERR) in accordance with the IMS.

A070 - Qualification Matrix

Block 10, 11, 12, and 13 of Section 16 of A070 changed as follows:

FROM: Blocks 10, 12 and 13: The Qualification Matrix shall be submitted to the Government within one hundred and twenty (120) calendar days after execution of the contract. The Government shall provide rejection or approval of the delivered Qualification Matrix within thirty (30) calendar days after delivery of the matrix. If rejected, the Contractor shall have ten (10) calendar days to respond with a resubmission of the Qualification Matrix with all Government comments having been addressed. Any modification to the Qualification Matrix after initial approved delivery shall be made jointly with concurrence from the Government and the Contractor.

TO: Blocks 10, 12 and 13: The initial Qualification Matrix shall be submitted to the Government at PDR IAW the IMS. The Government will provide rejection or approval of the delivered Qualification Matrix within thirty (30) calendar days after delivery of the matrix. If rejected, the Contractor shall have ten (10) calendar days to respond with a re-submission of the Qualification Matrix with all Government comments having been addressed. Any modification to the Qualification Matrix after initial approved delivery shall be made jointly with concurrence from the Government and the Contractor. Final delivery shall be at ERR IAW the IMS.

A112 - Soldier Workspace Analysis

Block 12 of Section 16 of A112 changed as follows:

FROM: Block 12: The initial Soldier Workspace Analysis is due at PDR.

TO: Block 12: The initial Soldier Workspace Analysis is due 30 days prior to PDR.

A116 - CANbus Message Matrix

Block 10, 11, 12, and 13 of Section 16 of A116 changed as follows:

FROM: Blocks 10, 12 and 13: The Contractor shall deliver at all major technical reviews beginning at PDR, in accordance with the IMS.

TO: Blocks 10, 12 and 13: The Contractor shall deliver in accordance with entry and exit criteria for all major technical reviews in accordance with the IMS.

A118 - Program Protection Implementation Plan *new in its entirety

5. The contractor agrees to establish $30,745,188 as the Not-to-Exceed (NTE) Total Target Cost Plus Incentive Fee (CPIF) for the difference between the contractual requirements currently on contract and the requirement changes set forth in this UCO and assumes the same CPIF arrangement as the base contract. Prior to the receipt of a qualifying proposal, determined as such by the Contracting Officer, no more than 26% of the ceiling price of the $30,745,188 will be obligated. Pursuant to FAR clause 52.216-24, Limitation of Government Liability, BAE Systems is not authorized to make expenditures or incur obligations more than $8,000,000. The maximum amount

for which the Government will be liable, for the change implemented by this UCO and funded under CLIN 0001AC, if the work under this Modification P00004 is terminated, is $8,000,000.00. Upon execution of Modification P00004, $8,000,000 will be obligated.

6. Pursant to FAR 15.804-4, BAE Systems shall submit a Certificate of Current Cost and Pricing Data and Revised Subcontracting Plan upon agreement of definitization to the Contracting Officer. The definitive action for this effort is contemplated to be awarded on an Cost Plus Incentive Fee (CPIF) basis with the following definitization schedule:

Projected Award Date of UCO: 30 Aug 2013
Projected Date to Receive Qualifying Proposal: 09 Aug 2013
Projected Date of Completion of Negotiations: 01 Dec 2013
Estimated Date of Contract Definitization: 10 Jan 2014

7. FAR clause 52.243-6 Change Order Accounting is hereby invoked by the Contracting Officer. The costs incurred as a result of this UCO shall be segregated on contractor payment requests, invoices and supporting documentation. Upon definitization of this UCO, segregation of UCO cost will no longer be required. Additionaly, the following clauses are incorporated into the contract which specifically apply to this UCO:

FAR 52.216-23 Execution and Commencement of Work
FAR 52.216-24 Limitation of Government Liability
FAR 52.216-26 Payments of Allowable Costs before Defitization
DFARS 252.217-7027, Contract Definitization

8. In accordance with DFARS clause 252.217-7027, if agreement on a definitive contract to supersede this UCO is not reached by the target date in paragraph 5 above, or within any extension of the definitization date granted by the Contracting Officer, the Contracting Officer may, with the approval of the Head of the Contracting Activity (HCA), determine a reasonable price or fee in accordance with Subpart 15.4 and FAR Part 31, subject to Contractor appeal as provided in the Disputes Clause. In any event, the Contractor shall proceed with the completion of the contract, subject only to the Limitation of Government Liability clause FAR 52.216-24. After the Contracting Officers determination of price or fee, the contract shall be governed by:

(1) all clauses required by the FAR on the date of execution of this UCO for fixed price contracts, as determined by the Contracting Officer under paragraph 10.
(2) all clauses required by law as of the date of the Contracting Officers determination; and
(3) any other clauses, terms, and conditions mutually agreed upon.

9. All other terms and conditions, except those addressed in this modification, remain unchanged and in full force and effect.

*** END OF NARRATIVE A0005 ***

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 FUNDING

B.1.1 The Government will provide funds under this Contract covering the estimated cost on an incremental basis as provided for in the following funding schedule and pursuant to the contract clause entitled "Limitation of Funds". It is estimated that the incremental amounts are sufficient for the performance of work in each of the cited periods. The Government may, at its discretion, allot such funds on an incremental basis within each fiscal year. The contractor shall so plan and execute the work required by this contract as to expend and/or commit funds compatible with the schedule set forth below. Whenever the contractor has reason to believe that the funds allotted to this contract for any cited period are either insufficient or excessive for the performance of work required in that cited period, the Government shall be notified. An estimated allotment schedule is set forth below.

B.1.2 FUNDING SCHEDULE

CPIF Target Incremental Funding Schedule

Initial Award	$	55,899,804.00
Increment 1 (Aug 2013) P00003	$	47,730,606.00
Increment 2 (Aug 2014)	$	43,200,000.00
Increment 3 (May 2015)	$	45,200,000.00
Increment 4 (Jan 2016)	$	31,300,000.00
Increment 5 (Jan 2017)	$	11,000,000.00
Total Incremental Funding Value	$	234,330,410.00

*B.1.2.1 UNPRICED CHANGE ORDER (UCO)FUNDING

The Government shall provide funds under this UCO covering 26% of the NTE/ceiling amount on SubCLIN 0001AC and FAR clauses 52.243-6, 52.216-24, and 52.216-26 apply to these CLINS until definitization.

Not to Exceed (NTE) Ceiling $ 30,745,188.00 P00004 Obligation $ 8,000,000.00

B.2 PAYMENT

B.2.1 The contractor may submit public vouchers for payment under this contract in accordance with FAR 52.216-7, Allowable Cost and Payment. Pursuant to 52.216-10 (c), the Government will allow interim incentive fee payments, at the time of reimbursement of cost, as outlined in the Allowable Interim Incentive Fee Rate Schedule in Section G.1 of the contract, subject to any withholding pursuant to this contract. A semi-annual fee review between the Government and the contractor will be conducted to assess cost performance. The Contracting Officer has the unilateral right to establish and modify the Allowable Interim Incentive Fee Rate Schedule, upward or downward, as appropriate. Allowable interim fee payments do not constitute the Governments determination of actual earned or final incentive fee. The Government will determine the final incentive fee earned in accordance with 52.216-10.

B.2.2 The performance incentive fee will be payable no later than 60 days after the testing event specified in Paragraph H.1.3.1.

B.3 AUDIT OF RECORDS

B.3.1 The Administrative Contracting Officer or his/her authorized representative will perform an accounting system review upon submission of first billing and will also, in accordance with Section I, FAR 52.215-2, Audit of Records-Negotiations, perform an audit of, at a minimum, the contractor's final cost voucher.

* Updated per Modification P00004

*** END OF NARRATIVE B0001 ***

Name of Offeror or Contractor: BAE SYSTEMS LAND & ARMAMENTS, L.P.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	BRADLEY ECP2 ACCELER				
0001AC	BRADLEY ECP TECHNOLOGY DEVELOPMENT	1	LO		$ 8,000,000.00

GENERIC NAME DESCRIPTION: BRADLEY ECP2 ACCELER
CLIN CONTRACT TYPE:
Cost Plus Incentive Fee (Cost Based)
PRON: 723223RD72 PRON AMD: 03 ACRN: AC
PSC: 2350

The amount obligated under SubCLIN 0001AC represents the $8M limit on contractor expenditures and obligations and the limit on the Government's liability for work performed under the Unpriced Change Order (UCO) on Modification P00004. The Contracting Officer has invoked the Change Order Accounting FAR clause 52.243-6 for the UCO on Modification P00004, funded by this SubCLIN.

(End of narrative B001)

Inspection and Acceptance
INSPECTION: Origin ACCEPTANCE: Origin

Deliveries or Performance

DLVR SCH REL CD	QUANTITY	PERF COMPL DATE
001	1	14-SEP-2017

$ 8,000,000.00

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1. General:

C.1.1 The M2/M3A3 Bradley Fighting Vehicle is at or exceeds Size, Weight, and Power-Cooling (SWaP-C) limitations. To host new platform capability, the Bradley Fighting Vehicle program shall execute a series of Engineering Release Records (ERR) to facilitate integration of technologies currently in development under other existing Army Programs of Record (PORs) and will be referred to as the Bradley Engineering Change Proposal (ECP) program. The ERRs are not intended to exceed the operational capability outlined in current system requirements documents, but rather to ensure that the existing system performance is not further degraded due to additional Army directed mission equipment packages that will be integrated into the Bradley platforms.

C.1.2 The contractor shall furnish all supplies and services that are necessary to accomplish this contract.

C.1.3 Contract Type: This contract is Cost Plus Incentive Fee, performance based. The contractor shall deliver a performing system complying with the following Bradley Performance Specifications and approved Major Requests for Deviation (RFD) and Major Requests for Waiver (RFW) listed in Attachment 0024. The proposed RFDs/RFWs will be submitted for Government approval, in accordance with the contractors Configuration Management (CM) plan prior to the System Requirements Review.

IFV/CFV: M2A3/M3A3 P-Spec = 19207-12465518, Rev J.

A3 BFIST w/FS3: A3 BFIST w/FS3 P-Spec = 19207-12517567, Rev. A

These specifications and approved RFD/RFWs represent what are referred to throughout this Section C as Bradley variant baseline vehicles. To reduce risk in delivering the desired performance, and to provide a common understanding of the requirements and subsystem interactions, the Government will participate in all Integrated Product Teams (IPTs) which the contractor is obligated to establish by this scope of work.

*C.1.4 The following vehicles will be provided to the contractor in accordance with the delivery schedule in Attachment 0026. All vehicles will be installed with full BUSK I, II, and III and all will be equipped with ECP 1 components:

Quantity	Configuration	Contract
6	M2A3	FY09 REMAN
3	M3A3	FY09 REMAN
4	BFIST w/FS3	FY12 RESET

C.1.5 The scope of work defined hereafter is for the development and delivery of the set of Engineering Release Records (ERRs) through the completion of system testing (CDRL A031).

C.1.6 The contractor shall deliver to the Government Bradley ECP vehicles that are the result of developing, integrating, building, and installing (13) Integration Hardware/Kits on the following vehicles:, (6) M2A3, (3) M3A3, and (4) A3 BFIST-FS3. The Government shall provide as GFM 13 Bradley variants in the above configurations in accordance with Section F of this contract. For each variant, the contractor shall deliver a complete Technical Data Package (TDP) and a Modification Kit Drawing in accordance with the requirements of this contract and as required by paragraph C.5.10. The complete TDP shall be comprised of new and/or modified drawings and models created under this contract. The contractor shall also deliver (6) Vehicle Sets of the unique hardware designed under this contract to use as spares. The M2/M3 A3 vehicle shall become M2/M3 A4 vehicle, and the A3 BFIST w/FS3 shall become the M7A4.

C.1.7 The Government will provide disposition instructions upon request from the contractor no later than 30 days after receipt of request. Shipment of excess GFM will be by GBL.

C.1.8 The contractor shall submit, for Government approval, an ERR for each of the Bradley Variants identified in C.1.3 and in accordance with the requirements of this contract and CDRL A031.

C.1.9 If acceptable GFI/GFE/GFM is not available in time to facilitate the completion of deliverables in accordance with the contractual schedule, including baseline zero mile remanufactured M2A3 and M3A3 vehicles and RESET A3 BFIST w/FS3, the Government will provide cost and schedule relief and conditionally accept deliverables with GFM shortages. An updated GFI/GFE/GFM listing has been provided as Attachment 0032.

C.2 Meetings/Conference

*C.2.1 The contractor shall participate in the required meetings, conferences, and reviews listed in this contract. Whenever possible, meetings shall be conducted virtually using Government agreed-upon technology. All program and technical meetings, conferences, and reviews shall be hosted by the contractor. The contractor shall include the USG and the USG Representatives at all formal Software/Systems Peer reviews of documents being developed.

C.2.2 The contractor shall prepare a meeting agenda and a read-ahead package (presentation material) prior to each of the review meetings (CDRL A001). The contractor shall distribute to all attending organizations meeting minutes (CDRL A002), including action items, no later than five business days following monthly meetings, and ten business days following a quarterly or semi-annual meetings.

C.2.3 IMP/IMS Schedule Reviews. The contractor shall attend and participate in monthly Government-contractor teleconferences that will be conducted to analyze the contractors progress to date. Monthly schedule review dates and times shall be determined and agreed to by the Government and the contractor.

C.2.4 Significant Program Reviews

*C.2.4.1 The contractor shall conduct a Systems Requirements Review (SRR), Systems Functional Review (SFR), Preliminary Design Review (PDR), Critical Design Review (CDR), Delta Preliminary Design Review (D-PDR), and a System Verification Review (SVR). The Government-prepared Systems Engineering Plan (SEP), provided as Attachment 0001, provides a high level entrance/exit criteria for each technical review. The contractor shall reference the detailed Department of Defense (DoD) Checklists (Attachment 0002) in its approach to developing the review materials. The contractor shall describe, in its proposal, its internal processes that will be used to conduct the technical reviews. The contractor and the Government shall agree to entrance and exit criteria no later than 30 days after contract award for the SRR/SFR, and 60 days after the previous technical review for the PDR, CDR, and SVR/PRR. The Government will have the right to accept or reject the contractors compliance with the entrance/exit criteria of the reviews and provide authorization to proceed.

C.2.4.2 Test Readiness Review (TRR): The contractor shall conduct a TRR prior to the start of contractor testing (C.7.1.1.1.1). Upon successful completion of the TRR, the Government shall provide concurrence for the contractor to start testing. The contractor shall also attend and participate in two Government TRRs to be held at test sites prior to Production Verification Testing (PVT) (C.7.1.1.1.2).

C.2.4.3 Program Management Review (PMR). The contractor shall conduct and support a PMR at the contractors facility on a semi-annual basis. The date for the first PMR will be established at the start of work meeting. The contractor shall ensure attendance of its vendors at the PMR. The contractor, and GFM contractors at the direction of the Government, shall present cost, schedule, performance, and risk status at each PMR and be prepared for detailed discussion with the Government.

C.2.4.4 Integrated Baseline Review (IBR). The contractor and the Government shall conduct a joint assessment of the Performance Measurement Baseline to verify the baselines realism, accuracy, and technical content. The IBR shall take place at the contractors facility within 180 days of contract award. Subsequent IBRs shall be conducted as agreed to by the parties throughout the life of the contract for initiation of all major changes to the baseline. The contractor shall provide access to all pertinent records and data requested by the Contracting Officer or duly authorized representative to adequately prepare for the IBR (including, but not limited to the detailed time-phased Performance Management Baseline (PMB), Responsibility Assignment Matrix, Control Account Authorizations, and Work Package Authorizations) and permit Government surveillance to ensure Earned Value Management System EVMS compliance. The PMB shall be detail-planned to MIL-STD-881c WBS Level III. Two weeks prior to the IBR, the contractor shall provide the Government Control Account Managers (CAM) with a read-ahead copy of the IBR topics to be covered at the IBR, focusing on its assigned Work Breakdown Structure WBS elements.

C.2.4.4.1 A 12-month rolling wave detailed IMS plan should be presented at the initial IBR. The Government has the right to accept or reject the detailed IMS plan. After the initial IBR, the contractor shall continue to provide a detailed IMS plan at a minimum of every 6 months in a Detail Plan Baseline Review.

C.2.4.5 Integrated Baseline Review Training. The contractor shall provide IBR training at the contractors facility. The training should take place at least two weeks before the initial IBR.

C.2.4.6 Technical Manual Guidance Conference. The contractor shall conduct a Technical Manual Guidance Conference at its facility to discuss with the Government any issues the contractor is facing with Technical Manual regulatory compliance. The conference shall be held on a date to be agreed upon by the parties.

C.2.4.7 Government Furnished Material (GFM) contractors. The contractor shall participate in SRRs, SFRs, PDRs, and CDRs to be conducted at GFM contractors facilities in accordance with the Bradley ECP IMS by providing design review assessments relative to the Bradley ECP program requirements.

C.2.5 Systems Engineering Meetings

C.2.5.1 The contractor shall host a Start of Work meeting at its facility after contract award. The parties shall agree to the scheduled dates of the meeting within five days of contract award.

C.2.5.2. The contractor shall host monthly Program Technical Reviews (PTR) at its facility. The meeting shall include representatives from the Government, contractor, contractor subcontractors, and other Government Furnished Material (GFM) contractors. The contractor and GFM contractors shall present the program technical status, development schedule, and other items as identified on the Government

approved meeting agenda.

C.2.5.3 The contractor shall administer, support, and conduct weekly System Engineering Integrated Team (SEIT) meetings to enhance communication between the contractor and the Government, as well as document decisions made that affect the technical baseline.

C.2.5.4 Software Reviews: The contractor shall conduct periodic software reviews (software requirement review, software preliminary design review, critical design review, software test readiness review). For each review, a proposed agenda and briefing materials shall be submitted to the Government No Later Than (NLT) fifteen (15) working days prior to the review (CDRL A001). Both parties shall agree to entrance and exit criteria for each review. All entrance and exit criteria shall be met before entry to the next systems level event.

C.2.5.5 Technical Interchange Meetings/Teleconferences. The contractor shall conduct Technical Interchange Meetings/Teleconferences (TIM) semi-annually to fully consider and resolve program technical issues. Unless otherwise agreed to by the parties, these conferences shall be held by the most expedient media. The contractor shall identify all Integrated Product Teams (IPTs) or functional organizations responsible for each action item within the minutes. The parties shall agree to suspense dates for action items, and the contractor shall track the progress of action items until they are completed and closed out.

C.3 Program Management:

C.3.1 Overarching Integrated Project Team (OIPT). The contractor shall participate in a weekly ECP OIPT in accordance with the Charter (Attachment 0003) for the purpose of providing the integrated management, support, and functional area leadership for all ECP efforts.

C.3.1.1 Decision Tracking. The contractor shall actively track and manage decisions affecting the Bradley ECP effort and technical baselines through the use of a Program Decision Tracking Matrix (CDRL A003). The contractors matrix shall thoroughly document all program decisions and any relevant written material bearing on the decisions reached. This list shall be reviewed during OIPT meetings.

C.3.2 Program Monitoring and Control:

C.3.2.1 Program Monitoring and Control (PMC). The contractor shall provide the Government data concerning the cost, schedule, performance, and supportability aspects of the program, and all work packages and products. The primary method for providing this type of information shall be delivery at OIPT meetings.

C.3.2.2 Program Performance Management. The contractor shall meet all program cost, schedule, supportability, and technical objectives set forth in the contract and its related documents. The contractor shall monitor: (a) the attributes of the work products and tasks required under this contract (i.e., measure the actual attributes of the work products and tasks, such as size and complexity, in the context of changes to contract or schedule requirements, comparing these changes to the baseline in order to identify significant deviations); (b) the resources used to perform the contract (resources include, but are not limited to, physical facilities, computers, peripherals, software used in design, manufacturing, testing and operation, networks, security environment, project staff, processes); and (c) the knowledge and skills of program personnel (critical skills acquisition, actual training versus projected, and deviations from plan). The contractor shall prepare and deliver to the Government a contractor Performance Report in accordance with CDRL A004.

C.3.2.2.1 The contractor shall identify, with supporting rationale, any deviations or changes to the program baseline, and review all program plans, activities, and work products for consistency with the baseline requirements and any approved changes made to them. The contractor shall document all changes, including those to be made to the plans and work products resulting from changes to the requirements baseline. The contractor shall initiate and complete corrective action for all inconsistencies reported (CDRL A004).

C.3.2.2.2 Timely incorporation of baseline changes. Upon Contracting Officer approval, new work must be included in the contractors distributed budget with appropriate performance measurement techniques included in the work package.

C.3.2.2.3 Current period and retroactive changes. The contractor shall use ANSI 748 and the approved System Description in complying with changes. Current period or retroactive changes must be approved by the Procuring Contracting Officer.

C.3.2.3 Integrated Master Plan (IMP)/Integrated Master Schedule (IMS) The IMP and IMS (CDRL A005) shall be submitted for Government approval, and it shall be prepared in accordance with the DOD IMP and IMS Preparation and Use Guide. The contractor shall develop and maintain an IMP in accordance with Government program schedule (Attachment 0004). The IMP is an event-based plan consisting of a hierarchy of program events, with each event being supported by specific accomplishments and each accomplishment associated with specific criteria to be satisfied for its completion. Each IMS element shall trace directly to the IMP and corresponding IMP events and criteria. The contractor shall develop and maintain a resource-loaded IMS by logically networking detailed program activities. The schedule shall be consistent with the Contract Work Breakdown Structure (CWBS) and contain the planned events, milestones, accomplishments, exit criteria, and activities from contract award to the completion of the contract. The IMS and time-phasing of the PMB shall be consistent with EVMS. The IMS shall clearly identify critical path activities and reflect those risks identified and documented in the contractors risk management plan. All IMS/IMP monthly submissions shall include a written schedule analysis. Integrated Performance Management shall be priced out separately from all other EVM components.

C.3.2.4.1 The contractor shall include issues identified by its subcontractors in the identification, tracking and management listing

identified in the paragraph above.

C.3.3 Cost/Schedule Control

C.3.3.1 Program Performance Management

C.3.3.1.1 Earned Value Management System (EVMS): In the performance of this contract, the contractor shall use an EVMS that complies with the EVMS guidelines in DoD 5000.02, Defense Acquisition Guidebook, the American National Standards Institute/Electronic Industries Alliance Standard 748 (ANSI/EIA-748), DFARs clause 252.234-7001, DFARs Clause 252.234-7002, and the contractors own documented System Description. The contractor shall use an EVMS that has been formally reviewed and determined by the Defense Contract Management Agency (DCMA) to be in compliance with the EVMS guidelines in ANSI/EIA-748. EVM shall be used as a tool to identify and track program risks, manage cost, schedule, and technical performance.
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C.3.3.1.2 Contract Work Breakdown Structure (CWBS): The contractor shall develop and maintain the CWBS and CWBS Dictionary in accordance with CDRL A006. Upon award of Modification P00002, the contractor will submit a revised CWBS and CWBS Dictionary in accordance with CDRL A006. The contractor shall use the CWBS as the primary framework for contract planning, budgeting, and reporting of the cost, schedule, and technical performance status to the Government. The CWBS shall be product-oriented. The contractor shall extend the CWBS down to the appropriate level required to provide adequate internal management, surveillance, and performance measurement. The contractor shall update both the CWBS and the dictionary during the life of the contract. Changes to the CWBS or associated definitions, at any reporting level, require approval of the Government prior to implementation.

C.3.3.1.2.1 The contractor shall submit a CWBS Dictionary in accordance with CDRL A006 no later than 30 days after contract award. The contractor shall update the CWBS Dictionary throughout the life of the contract, but no more often than CPR report submission per CDRL A004. The CWBS definitions provided by the contractor for each level three WBS element must be traceable to the contract scope of work. Changes to the CWBS or associated definitions, at any reporting level, require approval of the Government prior to submission.

C.3.3.1.3 Contractor Performance Report (CPR): The CPR shall be developed and submitted at Level 3 of the CWBS, in accordance with CDRL A004. Reporting at lower levels may be specified for high-cost, high risk and/or high variance items and may be required until the problem is resolved. The Government and the contractor shall periodically review and adjust the CWBS reporting levels and threshold levels for reporting Format 5 Variance Analysis.

C.3.3.1.4 Contractor Funds Status Report (CFSR): The contractor shall submit the CFSR in accordance with CDRL A007. The contractor shall reconcile reporting elements in the Contract Funds Status Report (CFSR) with the CPR when these documents are submitted in the same month. The contractor shall provide a reconciliation of the CFSR with the CPR as an addendum to the CPR.

C.3.3.1.5 Over-Target Baseline (OTB) or Over-Target Schedule (OTS). In exceptional circumstances indicated by contract performance (per the contractors EVMS Description), the contractor shall submit a request for Government approval to initiate an over-target baseline or over-target schedule to the Contracting Officer. The request shall include a top-level projection of cost or schedule growth, a recommendation of whether or not performance variances should be retained on record, and a schedule for implementing a new baseline. The contractor shall not implement the OTB/OTS restructuring prior to receiving written approval from the Contracting Officer.

C.3.3.1.6 Application to subcontractors: The contractor shall flow-down EVM requirements to subcontractors meeting the applicable thresholds (per DFARS 252.234-7001 and 252.234-7002). The performance information reported by the subcontractors shall be incorporated and integrated into the contractor's management system. The contractor shall be responsible for reviewing and assuring the validity of all subcontractor reporting through surveillance and other means.

C.3.3.2 Program Management Cost Reporting (PMCR)

C.3.3.2.1 The contractor shall systematically collect and report to the Government actual contract costs in the following reports:

Title	CDRL
Program Management Cost Summary Report	A008
Functional Cost-Hour Report	A009
Progress Curve Report	A010
Contractor Business Data Report	A011
Software Resources Data Report: Initial Developer Report and Data Dictionary	A012
Software Resources Data Report: Final Developer Report and Data Dictionary	A013

The contractor reports shall be prepared in accordance with the instructions contained the above CDRLs and the Program Management Cost Reporting (PMCR) Plan (Attachment 0005).

C.3.4 Design to Unit Cost:

C.3.4.1 Unit Manufacturing Cost (UMC): The contractor shall submit a Design to Unit Cost Report in accordance with CDRL A014. The Government has determined that the Unit Manufacturing Cost (UMC) objective for Bradley ECP is $850,000 (expressed in Government fiscal year 2012 constant dollars) for 1,860 vehicles (total quantity). The contractor shall assume a production quantity of 232 vehicles per year beginning in 2017. The contractor shall design the Bradley ECP program with a goal of achieving the objective. The contractors affordability management process shall include a mechanism for reporting status against this goal/requirement during the Affordability Assessment, PDR, and CDR. Key ground rules and assumptions related to the UMC are as follows:

C.3.4.1.1 The manufacturing cost includes the costs of material, labor, and other expenses incurred in the fabrication, checkout, and processing of parts, subassemblies, and major assemblies/subsystems needed for the final IFV, CFV, and BFIST w/FS3 systems without costs of B kits as defined by paragraph C.5.3.1.2.25. The manufacturing cost also includes costs of subcontractors and purchased parts/equipment, costs of the efforts to integrate and assemble the various subassemblies into a working system, costs to install special and general equipment, and costs to paint and package the system for shipment to its acceptance destination. It also includes all transportation in order to assemble into a final system.

C.3.4.2 Affordability Assessment. In addition to the ongoing affordability management process, the contractor shall conduct a one-time manufacturing cost-focused Affordability Assessment meeting six (6) months after contract award. At this session, the contractor shall provide a detailed review (to at least the 4th level of the WBS) of the contractors current manufacturing cost estimate. The contractor shall be prepared to provide documentation as to the basis for this production cost estimate. The contractor shall identify cost drivers from both a hardware perspective and a requirements perspective. The contractor shall provide an assessment of the likelihood of meeting the objective unit cost and shall describe risks that may affect the ability to meet the target. The contractor shall identify cost reduction opportunities that would result in incremental overall UMC reductions of 5%, 10% and 15%. These opportunities may be a combination of technical requirement adjustments, programmatic adjustments, technology investments, or other contractor-identified initiatives. The contractor shall brief the Design to Cost (DTC) effort at PDR, CDR, and after first prototype delivery, and shall provide a briefing that identifies and updates the prototype Bill of Materials for the program. The report shall include the projected material and labor cost data for the ECP configuration. Finally, the contractor shall perform a production rate analysis whereby the relationship between UMC and alternative production rates are defined, specifically assessing production durations from 5 to 10 years in length. As part of this analysis, the contractor shall recommend the optimal economic order quantity rate of production and shall identify facility and/or tooling costs required to achieve this rate. Documentation shall be made available no later than ten (10) days after the Affordability Assessment meeting.

C.4 Risk Management.

C.4.1 The contractor shall develop, implement, and deliver a Risk/Opportunity Management Plan in accordance with CDRL A015 following the concepts in the Risk Management Guide for DOD Acquisition, Sixth Edition (Version 1.0) dated August 2006. The contractors Risk Management Plan shall include all program and system level efforts to identify, mitigate, assess, and monitor program risks in the areas of cost, schedule, and performance. The contractors Risk Management Plan shall address:

- Risk Management Strategy and Process
- Responsible/Executing Organization
- Risk Management Process and Procedures, to include subcontractor Risks
- Risk Identification
- Risk Analysis, Assessment and Monitoring (Likelihood and Consequence Criteria)
- Risk Mitigation Planning/Opportunity Handling Plans
- Risk Mitigation Plan Implementation
- Risk Tracking
- Risk as a Quantitative Affect on EVM

C.4.2 The contractor shall manage risks to the program and technical baselines through examination of each element in the CWBS. The contractor shall produce a list of risks that shall be evaluated, categorized, and prioritized. The contractor shall maintain a database of all risks and its status. The contractor shall conduct risk assessments and systematically identify, analyze, and report risk mitigation activities for all moderate and high-risk areas during the Risk Review Board. The contractor shall quantify the potential affect of risks to the program and any associated mitigation strategy for the allocation of resources to support the management of the risk. The contractor shall develop and maintain a closure strategy for these risks. The contractor shall deliver a Risk Status Report CDRL A016 which will be reviewed and coordinated with the Government during the monthly Risk Review Boards. The contractor shall include risks identified by its subcontractors in the risk identification, tracking, and management listing identified above.

C.5 Engineering

C.5.1 Systems Engineering. The contractor shall establish a systems engineering approach that provides systems engineering planning, systems engineering management, systems analysis and overarching systems integration of the design and development effort.

C.5.1.1 System Engineering Management Planning. The contractor shall provide overall systems planning of the design and development

effort. Plans will include the following:

C.5.1.1.1 System Engineering Management Plan. The contractor shall prepare a Systems Engineering Management Plan (SEMP) detailing the systems engineering development and support processes and integration of these processes to ensure effective development of the Bradley ECP vehicles. The SEMP shall be prepared in accordance with CDRL A017.

C.5.1.1.2 Design for Six Sigma (DFSS). The contractor shall utilize Design for Six Sigma (DFSS) tools and techniques for work under this contract in a manner that is integral with the systems engineering processes that are defined by the SEMP. DFSS applications will be prioritized for effective cost/schedule implementation. DFSS shall be integrated into the SEMP. Design for Six Sigma shall be an institutionalized documented process, and the tools selected for each Six Sigmas project shall be documented.

*C.5.1.1.3 Facility Vehicles. The Government will provide facility vehicles to the contractor to use for engineering support and laboratory purposes. The contractor shall maintain these facility vehicles in accordance with the worksheet at Attachment 0033.

*C.5.2. Systems Engineering and Integration Team (SEIT). The contractor shall establish a SEIT team responsible for providing overarching systems integration across the Integrated Product Teams. The SEIT shall be chaired by the Government Lead Engineer for the Bradley ECP program. The SEIT shall be comprised of appropriate Government and contractor participants to address technical development issues. The contractor shall establish a clear decision process to address and document decisions related to the development of the Bradley ECP baseline. The contractor shall ensure that all tradeoffs are documented against the baseline, and receive Government concurrence through the SEIT prior to implementation.

C.5.2.1 Engineering Integrated Product Teams

*C.5.2.1.1 Systems Engineering sub-IPTs shall be created to address issues, tradeoffs, design, requirements, risks, disclosure of DFSS tools, etc., specific to its functional area, and shall include, as a minimum, Systems Engineering, Specialty Engineering, Weight Management, Data Management, Survivability, Lethality, Mobility, Power and Vetronics, Auxiliary Systems, and Software. The Sub-IPTs shall be aligned to be consistent with the CWBS identified in MIL-STD-881c, Appendix G Surface Vehicle Systems WBS Definitions. These sub-IPTs shall schedule regular standing meetings at a frequency commensurate with the technical scope, meeting weekly unless approved by the SEIT. Furthermore, Working IPTs may be created to address lower level technical assignments within the Sub-IPTs and shall include as a minimum, Armor and Structures, Fire Suppression, CREW/Shot Detection, Suspension, Engine, Transmission, Engine Cooling, Communications, Vetronics, Power Generation, Physical Architecture, and Cooling Systems. These organizations may be ad hoc or may have standing relationships depending on its long-term involvement with the ECP technical scope.

C.5.2.1.2 Other Engineering IPTs. The contractor shall participate in any IPT whose charter includes GFM contractors or BAE subcontractors, and addresses systems and subsystem capabilities that will be introduced with Bradley ECP program.

C.5.3 <u>Technologies</u>

C.5.3.1 M2A3, M3A3, and A3 BFIST w/FS3 Hardware/Software Requirements

C.5.3.1.1 Baseline Description: For the purposes of this contract, the baseline configuration of the Bradley Vehicles will be the following, plus the Bradley Suspension Improvement (Work Directive MCA-222-000) ECP being developed under contract W56HZV-07-C-0096. The contractor shall use T-161 Track (Double Pin Track) on all vehicle configurations. Any deviation from the current systems shall be approved by the SEIT.

C.5.3.1.1.1 The M2A3 baseline shall be represented by the latest revision, as of Contract award, of drawing 87T0010, and TDP down drawings plus all ECPs listed in Attachment 0006.

C.5.3.1.1.2 The M3A3 baseline shall be represented by the latest revision, as of Contract award, of drawing 87T0011, and TDP down drawings plus all ECPs listed in Attachment 0006.

C.5.3.1.1.3 The A3 BFIST w/FS3 baseline shall be represented by the latest revision, as of Contract award, of drawing 87T0182, and TDP down drawings plus all ECPs listed in Attachment 0006.

C.5.3.1.1.4 The contractor shall deliver a stowage plan drawing for inclusion of the Engineers equipment and use of the Engineer Strap Kit (P/N: 57K1600) (CDRLs A030 and A031).

C.5.3.1.1.5 The Government will furnish the M2A3, M3A3, and A3 BFIST w/FS3IAW the baseline configuration described herein inclusive of the ECPs and EOs listed in Attachment 0006. The contractor shall install ECPs and EOs that are not included with the shipment of the Government furnished vehicles identified above. More information regarding the Government furnished vehicles is shown in Attachment 0031. All materials required to update seed vehicles to baseline configuration shall be purchased by the contractor, (as outlined in Attachment 0031) are procurable, and meet ECP2 program schedule.

C.5.3.1.2 The Baseline Vehicles shall be modified/upgraded by integrating the following hardware components. The contractor shall develop modification kit documentation, including A-Kits where appropriate, to define the designated design enhancements. Following

modifications/upgrade vehicle shall meet the requirements of the corresponding Performance Specification unless a deviation/waiver is approved by the SEIT and then the Government Configuration Control Board (CCB).

C.5.3.1.2.1 675 Horsepower (HP) Engine: The contractor shall integrate, into the Baseline Vehicles, the 675 HP Engine with Engine Control Module (ECM) and Electronic Fuel Shut-off, being developed by Cummins Inc. under Contract W56HZV-08-C-0285 and Contract W56HZV-09-C-0550, Part Number VTA903E-T675. As part of integrating the engine, the contractor shall integrate the following new hardware:

C.5.3.1.2.1.1 ECM Controlled Cold Start: The contractor shall integrate the ECM controlled cold start capability and if required, eliminate the legacy vehicle cold start box.

*C.5.3.1.2.1.2 Fuel Filter/Water Separator: The contractor shall replace the existing fuel filter with the latest fuel filter/water separator arrangement as recommended by the engine manufacturer and vehicle OEM, as defined at CDR.

*C.5.3.1.2.1.3 Lube Oil Filter: The contractor shall replace the existing lube oil filter with the latest lube filter arrangement as recommended by the engine manufacturer and the vehicle OEM, as defined at CDR.

C.5.3.1.2.2 Hydro Mechanically Propelled Transmission (HMPT) 800 Transmission: The contractor shall integrate, into the Baseline Vehicles, the HMPT 800 Transmission (Part Number (PN) 12558400), Transmission Control Module (TCM) (PN 12446650), and Wiring Harness (P/N TBD) being developed by L3 Combat Propulsion Systems under Contract Number W56HZV-09-C-0098 (P00050), Work Directive T-4.21 and 4.23 Transmission Performance and Efficiency Improvements and Heavy Duty (HD) and EA Software.

C.5.3.1.2.3 Spring Coupler/Torsional Damper: The contractor shall integrate, into the Baseline Vehicles, the new Spring Coupler between the engine and transmission which is being designed under BAE Systems PIM Contract W56HZV-09-C-0550 to accommodate the increased vehicle weight and engine power being added to the vehicle.

C.5.3.1.2.4 Engine Air Filter: The contractor shall design and integrate, into the Baseline Vehicles, a new Engine Air Filter which shall be designed to fit into the existing Air Filter Housing and meets the requirements for air quality of the new engine integrated as part of C.5.3.1.2.1.

C.5.3.1.2.5 Final Drives and Propshafts: The contractor shall integrate, into the Baseline Vehicles, the Final Drive and Propshaft Improvements being developed by L3 Combat Propulsion Systems under Contract Number W56HZV-09-C-0098 (P00051), Work Directive T-4.25 or under the PIM Contract W56HZV-09-C-0550. The contractor shall perform a trade study through the Mobility IPT between the two efforts and recommend a choice of one of them for approval through the SEIT. Any deviation from improvements being developed shall be approved by the SEIT. The contractor shall also prepare and deliver an ECP (CDRL A018) and ERR (CDRL A031) for the Final Drive Improvements which will be applied to the Bradley FoV.

*C.5.3.1.2.6 Power Take Off (PTO) Assembly: The contractor shall design and integrate, into the Baseline Vehicles, a new PTO Assembly. The PTO shall allow for intelligent cooling fan control utilizing a J1939 CAN Bus Interface. It shall also be capable of driving generator(s) to produce 990 Amps 28 VDC. The Cooling Fan shall be mechanically driven off the PTO utilizing as much of the current system as possible. Any deviation from the current system shall be approved by the SEIT. While designing the PTO the contractor shall consider efforts being performed by the Tank Automotive Research, Development, and Engineering Center (TARDEC) on its Efficient PTO Development Program. The TARDEC component designs shall be included in all trade studies Attachment 0007.

*C.5.3.1.2.7 Generators: The contractor shall design and integrate, into the Baseline Vehicles, a generator source(s) that provides a minimum of 990 Amps 28Vdc when the engine is at wide open throttle. The contractor shall perform a trade analysis and recommend the best solution to the SEIT for approval. The generated power shall be isolated at the source(s) and shall be CANbus capable and J1939 compliable. The best generator solution from the trade analysis shall be driven off the PTO and/or Engine crankshaft as determined by a trade study and approved by the SEIT. The generator shall comply with the Generator, Engine Accessory, performance specification 19207-12386539, Rev. D and provide a minimum of 500 Amps when the engine is at idle.

C.5.3.1.2.8 Digital Vehicle Distribution Box (DVDB) and Driver Switch Indicator Panel (DSIP): The contractor shall integrate, into the Baseline Vehicles, DVDB and a DSIP being developed by DRS/TEM Contract W56HZV-11-C-0364. This includes latest Digital Vehicle Distribution Box (DVDB)(P/N: 12484070-1) which will establish the J1939 CANbus architecture, Driver Switch Input Panel (DSIP)(P/N: 12512261) modifications, and Driver Vision Enhancer (DVE)(P/N: 1000613-101).

*C.5.3.1.2.9 Cooling System: The contractor shall optimize the current Baseline Vehicles Cooling Systems. The contractor shall utilize the existing Radiator (aluminum or copper and brass design). The radiator spring mount shall be redesigned and optimized for an aluminum radiator and a copper and brass radiator mounting design. The contractor shall also prepare and deliver an ECP (CDRL A018) and ERR (CDRL A031) for the Radiator Spring Mount which will be applied to the Bradley FoV. The baseline vehicle cooling systems hose plumbing shall be redesigned to ensure sealing. The Cooling Fan shall still be mechanically driven off the PTO utilizing as much of the current system design as possible within the goal of cooling system optimization. Any deviation from the current system shall be approved by the SEIT. The Cooling Fan speed shall be optimized and controlled utilizing a J1939 CAN Bus Architecture and by optimizing the fan drive gear ratio. The contractor shall design and integrate a new fan speed control valve to replace the current valve enabling optimization of the cooling fan. The contractor shall integrate a new transmission oil cooler being developed under the PIM Contract W56HZV-09-C-0550 to improve overall vehicle automotive performance. Any deviation from using the PIM transmission oil cooler solution

shall be approved by the SEIT. If the PIM transmission oil cooler does not fit with the other upgrades or meet the requirements derived under this contract, the contractor shall redesign the transmission oil cooler after obtaining SEIT approval. While designing the fan drive system, the contractor shall consider the effort being performed by TARDEC on its Efficient PTO Development Program. The TARDEC component designs shall be included in all trade studies Attachment 0007.

*C.5.3.1.2.10 Automatic Fire Extinguishing System (AFES): The contractor shall determine affects of distribution and placement of AFES components (detection sensors, tubing and nozzles) within the engine compartment as a result of the new power pack configuration being developed under this contract. The contractor shall determine affects of distribution and placement of AFES components (detection sensors, tubing and nozzles) within the squad compartment as a result of new hardware being integrated and resulting stowage changes. Findings shall be reported during IPT meetings, and design changes will be made by the contractor as agreed upon by the SEIT. The contractor shall implement and integrate the SEIT approved agent distribution changes. The contractor shall evaluate the AFES requirements and ICD and integrate AFES Control Electronics Panel with J1939 CAN Bus interface to provide function of the AFES to request engine cooling fan speed reduction for an engine compartment fire. The contractor shall evaluate and discuss the efforts being done for the control panel by TARDEC (Attachment 0007) on the AFES Fire Suppression Modernization.

*C.5.3.1.2.10.1 The contractor shall integrate an AFES backup power supply to provide fire suppression capability in the event of vehicle battery and power failure to the AFES. Backup power supply shall allow the AFES to operate for a threshold of 20 minutes and objective of 30 minutes after power failure of current vehicle power sources. The contractor shall leverage TARDEC Modernization effort for AFES.

*C.5.3.1.2.10.2 The contractor shall implement a single fire suppression agent type in the engine compartment. The engine compartment AFES system shall be activated by means currently employed on the vehicle.

*C.5.3.1.2.10.3 The contractor shall analyze and report the findings to the SEIT, using a mesh turret basket and shield in place of the current solid design for better distribution of AFES agent and increased fire suppression system performance. The solution shall be proposed to the SEIT for approval. Upon approval, the contractor shall implement and integrate the change.

C.5.3.1.2.11 High Speed Slip Ring: The contractor shall develop a new Slip Ring (High Speed Slip Ring) and integrate it into the Baseline Vehicles. The form and fit shall be constrained to the existing/baseline dimensions. Functionalities shall include all legacy functions under the legacy design with the following added capabilities:

a. High data rate with a minimum of 1Gigabit threshold transfer rates and 10G transfer rates as an objective, multiple channels are required, minimum of two.
b. Isolation for security: adherence to TEMPEST specification (MIL 19200-12956546), and 85 dB isolation minimum is required
c. Modular approach is required
d. Common Modules with other PM ABCT platforms slip ring is required
e. Radio Frequency (RF) capability is required
f. CANbus J1939 compliance is required.

A waiver for TEMPEST specification (MIL19200-12956546) will remain valid and applicable until there are major changes to the system's equipment configuration or additional transmitters are installed in the system. Once the vehicle changes, the USG will request a new TEMPEST Waiver for TEMPEST specification (MIL19200-12956546). If a new waiver is not approved for TEMPEST specification MIL19200-12956546, and the requirement is incorporated into the contract, adherence to these requirements will constitute a constructive change and the Contractor shall be authorized to seek an equitable adjustment.

C.5.3.1.2.12 1Gb Ethernet Switch: The contractor shall down select and integrate 1Gb Ethernet Switch Unit (ESU) into the Baseline Vehicles as a replacement to the legacy switch. The contractor shall perform necessary trade studies and recommend a solution to the SEIT. The trade study may have multiple options to evaluate; however, the following options should be considered as part of this trade:

a. Common ESU with Abrams in accordance with a common spec (Specification SB-SA 19800, Sep 14, 2010).
b. Data Distribution Unit (DDU).
c. Embedded E-switch into the CPU as per C.5.3.1.2.28.

The contractor shall not consider downward compatibility to legacy vehicles as trade criteria. The contractor shall assess the need for multiple switches (Hull and Turret) in support of technologies integration and provide a recommendation to the Power and Vetronics IPT.

C.5.3.1.2.13 Battery Monitoring System (BMS): The contractor shall integrate BMS into the baseline vehicles as an additional LRU and it shall be compliant with BMS common specification ATPD-2406 The displayed functions from BMS should be displayed on the drivers and commanders displays; functions shall include but not limited to the following:

a. State of Charge (charge, discharge, and partial cycles)
b. State of health (Reserve and Cranking)
c. Time to empty
d. Current measurement, Voltage measurement, temperature measurement.

The contractor shall use the BMS supplier selected by GDLS as part of the Commonality IPT for the Bradley BMS. The contractor shall perform the required engineering analysis to integrate, validate, and monitor the 8-battery set which is a baseline to the ECP vehicle.

C.5.3.1.2.14 Power Management Software: The Contactor shall support development of requirements and lead integration of power management software (SW) into the Baseline Vehicles to manage loads, power distribution and power generation. The power management software package shall reside in the DVDB or on a computational device, or distributed between the two, as agreed upon by the

Government. Power management software will be provided by DRS-TEM in support of the integration along with the required technical expertise to facilitate and expedite integration. Power management shall be active in all modes of operation including silent watch; and shall perform the following:

a. Manage loads, distribution, and generation
b. Prioritize loads according to power generation and modes of operations
c. Shed loads during vehicle acceleration to prioritize HP to mobility

C.5.3.1.2.14.1 The contractor shall support development and lead integration of a Solid State Power Controller (S2PC) as a replacement to the Power Control modules (PCMs) and Turret Power Box (TPB) for clean and dirty power distribution, respectively. There shall be no affect to legacy cabling and SWaP unless cables/connectors adapters are required. Required legacy LRU/Loads shall be programmed accordingly. S2PC shall be capable of communicating over CANbus J1939 and Ethernet.

C.5.3.1.2.14.2 The contractor shall support development and lead integration of the Power Allocation Transfer Hub (PATH). PATH is a new LRU to the vehicle with a capability of accepting two isolated outputs from dual generators in the form of 28VDC; it should physically reside within the proximity of the batteries and provides a power transparency to the rest of the vehicle. PATH shall absorb the functionality of the Hull Power Box (HPB), Relay Isolation Box, and 2nd Generation Power Module (PCM3). The PATH shall be capable of communicating over CANbus J1939, and Ethernet. Any deviation from the PATH solution must be approved by the SEIT.

C.5.3.1.2.15 Embedded Training: The contractor shall integrate the Common Training Software (CTS), baselined in the prototype Common Embedded Training System

C.5.3.1.2.15.1 The contractor shall implement vehicle infrastructure hardware and software modifications to support the integration of CETS product. This includes video generation and distribution, sound generation and distribution, data storage, high speed slip ring, and connectivity to enable embedded training execution on the vehicle.

C.5.3.1.2.15.2 The contractor shall integrate the Bradley unique software modules and modifications of the CTS components.

C.5.3.1.2.15.3 The contractor shall limit gunnery embedded training to the Gunner Improved Bradley Acquisition System (IBAS) display and Commanders Independent Viewer (CIV). The limited Instructor Operator Station (IOS) functionality shall be displayed and controlled via components within the Commanders Station (display and keyboard) and the full IOS functionality shall be displayed and controlled from an appended computer or native components within the Squad Leaders station (troop compartment display and keyboard).

C.5.3.1.2.15.4 The contractor shall provide a means for soldiers to download student records to external media.

C.5.3.1.2.16 J1939 CANbus Architecture: The contractor shall integrate, J1939 vehicle system CANbus architecture to synchronize communication between LRUs supporting the Powerpack. The contractor shall leverage the efforts being done by TARDEC on its Throttle Position and Cooling Fan, the Powerpack Performance Recovery (PPR) effort (Contract W56HZV-07-C-0096, Work Directive MAA-221) for CANbus messaging, and L-3 CPS Mini CAN effort (STS Contract L3) W56HZV-09-C-0098. The contractor shall determine cable requirements and routings per the system CANbus architecture.

The contractor shall adhere to the following:
- J1939 Controller Area Network (CAN) Format SAE J1939
- SAE J1939/21 Data Link Layer 29-Bit message identifier
- SAEJ1939/11 Physical Layer 250k bits/s , Twisted Shield Pair
- SAEJ1939/71 Vehicle Application Layer Parameter Group and Suspect Parameter Numbers (PGN) and (SPN)
- SAEJ1939/81 Network Management
- If message is not an existing standard J1939 message, the proprietary communication shall be utilized. Termination resistors shall not be used within LRUs unless approved by the Government.

C.5.3.1.2.16.1 The contractor shall use Attachment 0008 as a baseline for the CAN Bus architecture for interfacing and integration at the vehicle level. The contractor shall determine wire routings to support CAN Bus network.
C.5.3.1.2.17 Electronic Cooling due to Inbound Technologies: The contractor shall design and integrate, into the Baseline Vehicles, a means to allow all integrated electronic subsystems to operate effectively under the required operating climatic conditions in accordance with the Bradley A3 Performance Spec.

C.5.3.1.2.18 Muffler: The contractor shall optimize the Muffler and Exhaust System to provide the best automotive performance of the 675 HP Engine possible, without making any vehicle structural changes.

C.5.3.1.2.19 Power Pack Lifting Eyes: The contractor shall analyze and redesign the power pack lifting eyes to accommodate the 675 HP Power Pack.

*C.5.3.1.2.20 Vehicle Health Management System (VHMS): The contractor shall apply, to any LRU/LRM created as part of this contract, VHMS requirements of the VHMS specification (Bradley VHMS System Segment Spec (SSS)) for on-board diagnostics, fault isolation, interactivity with IETM, PMCS assistance, graphical user interface (GUI) and Direct Support TMDE Reduction Application (DSTRA)

requirements Interface Control Document (ICD), This ICD defines the Line Replaceable Unit (LRU) configuration and Built-In-Test (BIT) results data to be placed in a diagnostic nonvolatile memory at run time. It also defines the required physical and functional interface between the LRU and the device(s) that provide maintenance support and software/firmware updates. The contractor shall conduct a system/subsystem assessment to determine integration affects. Lower level requirements shall be derived as necessary to ensure compliance. Each LRU shall be connected to Gigabit Ethernet and provide health information for VHMS software data services in accordance with the VHMS requirements specification. The contractor shall utilize unused Single Replaceable Unit (SRU) level fault reporting capabilities of the IBAS and CIV LRUs as part of VHMS functionality. The contractor shall reuse the existing VHMS test bed functionality as demonstrated as a baseline and add required modifications to support this effort.

*C.5.3.1.2.20.1 The contractor shall prepare for any LRU/LRM partially redesigned as part of this contract, an evaluation of the hardware, firmware and software for compliance with the VHMS requirements specification (Bradley VHMS System Segment Specification (SSS) for on-board diagnostics, fault isolation, interactivity with IETM, PMCS assistance, graphical user interface (GUI), DSTRA requirements specification, and Direct Support TMDE Reduction Application (DSTRA) requirements ICD). This ICD defines the Line Replaceable Unit (LRU) configuration and Built-In-Test (BIT) results data to be placed in a diagnostic nonvolatile memory at run time. It also defines the required physical and functional interface between the LRU and the device(s) that provide maintenance support and software/firmware updates. Lower level requirements shall be derived as necessary to ensure compliance with VHMS specifications. A requirements and functional gap report shall be submitted to the OIPT for review and direction prior to any corrective action being implemented.

C.5.3.1.2.21 Testability: The contractor shall use MIL-HDBK-2165 as a guide to implement the necessary testability tasks and activities called out in the handbook, to achieve Fault Detection/Isolation, Built in Test (BIT), and Built in Test Equipment (BITE) requirements.

C.5.3.1.2.22 Testability tasks: The contractor shall update and implement the necessary testability tasks and activities as defined in the Bradley System Performance Specification to minimize system downtime required for diagnostics and troubleshooting. The contractor shall develop diagnostic modeling to ensure comprehensive fault coverage is provided by the Testability tasks. The contractor shall do so by ensuring adequate test points are integrated into the system, minimizing Test Program Sets (TPS) test and fault detection time, and overall fault isolation performance. The contractor shall develop Bradley System diagnostic products including but not limited to Embedded Diagnostics, Vehicle Health Management System, At-System Diagnostics, Software Downloader, and TPS. The contractor shall develop a Testability Analysis Report (CDRL A114) for the Bradley vehicle as per MIL-HDBK-2165. The contractor shall execute the testability program in accordance with the Testability Program Plan (CDRL A115).

C.5.3.1.2.23 RESERVED

C.5.3.1.2.24 The contractor shall ensure that supportability requirements defined in system and component specifications for any new LRU/LRM created as part of this contract are achieved in the vehicle design by demonstrating them during development and verification testing.

*C.5.3.1.2.25 Command, Control, Communications, Computing, Intelligence, Surveillance, and Reconnaissance (C4ISR). The contractor shall integrate and develop platform (vehicle) Interface Control Documents (ICD) (CDRL A020) in order to integrate the following Government Furnished Systems into the baseline vehicles.

- Handheld, Manpack, Small-form-factor, Manpack Radio (HMS-MP) and vehicle mount
- JTRS Wideband Networking Radio System
- CREW DUKE V3
- FBCB2 Data Distribution Unit (DDU) with KGV-72 Type 1 Encryption Unit, Blue Force Tracker 2 (BFT 2), and FBCB2 JCR and/or JBC-P Software
- NETT Warrior

*C.5.3.1.2.25.1 The following systems, along with the associated radio cables, antennas, power amplifiers, waveform specific accessories, and radio mount (docking station), will be referred to as the B-kit, and will be provided as GFM. The Government shall provide pertinent equipment specifications and data and Interface Control Documents (ICD) as Government Furnished Information (GFI)

- JTRS HMS-MP ICD: 15 March 2010 Development and Demo Phase Doc. No. 69-P40157K
- JTRS Wideband Networking Radio: TBD
- CREW DUKE V3: TM 11-5865-1037-10
- FBCB2 Data Distribution Unit (DDU) with KGV-72 Type 1 Encryption Unit, Blue Force Tracker 2 (BFT 2), and FBCB2 JCR and/or JBCP
Software (as defined in paragraph C.5.3.1.2.28 and C.5.3.2.2.6).
- NETT Warrior: GPS Repeater ICD#029-FAR-AAR-AAS-KBZ and Battery Charger ICD#TBD

The following components are not considered part of the B-kits:

- Power Cable
- Mounting mechanism for Radios
- Antenna riser

- Antenna tie down
- Connectors and cable protection shroud (to facilitate egress and ingress and prevent cables/connectors from being a step to exit the vehicle)
- Accessories required to support the above bullets

C.5.3.1.2.25.2 The contractor shall conduct a vehicle level antenna analysis (CDRL A019), and participate in Government Co-site Interference Studies and antenna pattern analysis in order to determine the optimal location for the antennas on the vehicle turret and hull. The contractor shall deliver updated vehicle CAD Models in PRO-E format for the Government-conducted efforts concerning CERDEC Radio Frequency (RF) Antenna and jamming analysis; ARDEC Electromagnetic Environment Effects (E3); Hazards of Electromagnetic Radiation to Ordnance (HERO); Hazards of Electromagnetic Radiation to Fuel (HERF); and, Hazards of Electromagnetic Radiation to Personnel (HERP). Data shall be prepared and delivered to the Government in accordance with the TDP CDRL (A030).

*C.5.3.1.2.25.3 The contractor shall maintain space, weight, and power allocations for the Hostile Fire Detection System for future integration using the BOOMERANG ICD; however, for power allocation, the contractor shall use 50 amps, unless otherwise approved by the SEIT.

C.5.3.1.2.26 A-Kits and B-Kits for the Army In-Bound Technologies.

C.5.3.1.2.26.1 The contractor shall develop the A-Kit for each LRU/subsystem B-Kit defined in this scope of work, and install the A-Kit on baseline vehicles to be tested. An A-Kit is generally defined as mounting provisions, components, and software, not included with a B-Kit, necessary to integrate a B-kit into a vehicle

C.5.3.1.2.26.2 The contractor shall integrate the B-kit for each system defined in C.5.3.1.2.25. The B-kit is generally defined as any component of the government-furnished systems to be integrated, and associated cables, antennas, amplifiers, controllers, etc., that interconnect between those components.

C.5.3.1.2.26.3 Specific A-kit and B-kit Bills of Material (BOM) shall be agreed upon by the parties at the start of work for each LRU/subsystem.

*C.5.3.1.2.27 Common Intelligent Display (CID): The contractor shall down select and integrate a Common Intelligence Display (CID) to replace the existing Color Flat Panel Displays (CFPD) in the turret as well as the Squad Leader Display (SLD) in the Hull. The CID shall be capable of hosting Vehicle Verification Identification (VVID) SW independently or in conjunction with Central Processing Unit (CPU). The CID shall also be capable of hosting Power Management SW independently or in conjunction with Digital Vehicle Distribution Box (DVDB) and shall meet the performance Specification 13024885, Interface Control Document 13024886, and Common Hard Drive 13024887. Furthermore, the CID processor shall support Intel Virtualization Technology, Trusted Execution Technology, Hyper-Threading Technology and Hard Drive and Resident Memory storage upgrade without component redesign. The contractor shall perform necessary trade studies and recommend a solution to the SEIT. The display in the turret shall have the same functionality as the SLD in the hull and have the capability of viewing the same sensors.

C.5.3.1.2.28 Central Processing Unit (CPU). The contractor shall develop and integrate a Central Processing Unit (CPU) to host the existing Bradley Ballistic Software (SW). To avoid SW recertification, the contractor shall not alter the Ballistic software. The CPU shall host the Vehicle Verification Identification (VVID) SW independently or in conjunction with the Common Intelligent Display (CID). The CPU shall not exceed the legacy TPU2 SWaP. It shall have no impact to legacy cablings unless approval is obtained from the SEIT, and shall be combat ready within 60 seconds. The CPU shall comply with the environmental requirement of Critical Item Development Spec 19207-12479366 and shall adhere to the applicable interfaces of Turret and Hull Processing Units (TPU2) ICD 19207-12479365.

C.5.3.1.2.28.1 The contractor shall perform the necessary trade and propose a CPU solution capable of hosting the existing ballistic SW and meeting the above requirements and include the following technologies:

a. ESU compliant with a minimum of 12 ports and Gigabit bandwidth with embedded RED/Black separation.
b. CANbus, J1939 compliant
c. Ethernet compliant

C.5.3.1.2.28.2 The contractor shall recommend the preferable solution to the SEIT for approval before proceeding into the design.

C.5.3.1.2.28.3 The contractor shall leverage the development of the TPU 3 Single Board Design (Curtis-Wright).

C.5.3.1.2.29 Joint Battle Command Platform (JBC-P). The contractor shall integrate the JBC-P software into the Force XXI Battle Command Brigade and Below (FBCB2) DDU B-kit hardware to be installed into the Baseline Vehicles. The contractor shall develop a Platform Interface Control Document (ICD) (CDRL A020) that captures and details all of the JBC-P-to-vehicle interfaces. The contractor shall verify proper operation of the JBC-P software and platform interfaces when installed into the Baseline Vehicles.

*C.5.3.1.2.30 Stowage. Due to the additional hardware being integrated into the vehicles, the contractor shall develop a revised stowage plan for the vehicles. During this effort, ammunition and munitions shall not be relocated unless approved by the OIPT. The contractor shall develop a stowage plan for the M2A4, M3A4, M7A4, and a separate M2A4 Engineer configuration that includes the use of the Strap Kit

(PN 57K1600) a separate M2A4 Commanders configuration, and a separate M3A4 Commanders configuration. The Engineer and Commanders stowage shall be demonstrated during the contractor test phase Logistics Demonstration effort IAW paragraph C.8.2.4.2.3 and C.8.2.5.1.

C.5.3.1.2.31 Throttle Position Sensor (TPS): The contractor shall determine hardware for the throttle position sensor (pedal) for the vehicle. The contractor shall leverage recommendations from TARDEC under the Throttle Position and Fan Control as an option for selection of hardware and correlate to the efforts of the CANbus Architecture to meet the needs of the throttle methodology.

*C.5.3.1.2.32 Third Scout Seat for Cavalry Fighting Vehicle (CFV) Variant. The contractor shall replace the current 2-man seat in the CFV or M3 variant with the M2 IFV common seat in the squad seating area of the vehicle. The contractor shall assess integration issues related to safety, vehicle functionality and egress and ingress prior to implementation. The contractor shall use CAD Modeling to optimize a three-man seating configuration in the M3A3 using the M2 IFV BASS Squad Seats. The contractor shall implement safety provisions consistent with vehicle requirements for a Third scout to occupy the seat to include as a minimum, safety restraints and an additional Gas Particulate Filter Unit (GPFU) connection for the sixth man.

*C.5.3.1.2.33 Drivers Vision Enhanced Wide Field of View (DVE Wide): The contractor shall analyze and compare requirements of the trade study that was completed by the contractor for the PIM program. The contractor shall provide an assessment of the study against Bradley requirements and present the finding at the OIPT. The contractor shall integrate the decision of the selection system onto each of the vehicle configurations under this contract. The contractor shall perform a trade study analyzing rear facing sensors to allow for rear viewing by the driver, crew and the squad leader. Results of the trade study shall be presented to the OIPT NLT the Delta PDR in accordance with the IMS.

*C.5.3.1.3 M7A4 BFIST Unique Hardware/Software Requirements

*C.5.3.1.3.1 Forward Observer Software (FOS) Host Integration. The contractor shall integrate a dedicated DDU hosting FOS into the vehicle architecture. The contractor shall ensure that FOS screen is the default screen at vehicle start-up and reboot. This DDU will have a common Part Number and common functionality with Turret DDU, and will be provided as Government Furnished Equipment for prototype vehicle builds.

*C.5.3.1.3.2 Fire Support Station. The contractor shall select, integrate, and validate a keyboard to operate the FOS at the Fire Support Station. The contractor shall design a keyboard mount while considering commonality for the mount between A4 platform within the turret and hull. The contractor shall integrate the swing arm design (Mod Kit 57K6754) to replace the current Fire Support Station table. The contractor shall use the M7A4 SLD as the FOS display by adding the FOS display functionality to the display. All SLD capabilities inherent to the base architecture shall remain functional within the display with the additional requirement that the SLD on the M7A4 will display the FOS screen at vehicle start-up and reboot IAW paragraph C.5.3.1.3.1.

C.5.3.2 RESERVED

C.5.4. IPT Working Groups/Teams

C.5.4.1 Interface Control Working Group (ICWG). An ICWG comprised of the contractor, its subcontractors, ECP GFM contractors, and Government representatives shall be held as agreed to by the parties, to coordinate changes to the technical baseline and its interfaces. The purpose of the ICWG is to identify, manage, and control interface to the design. The ICWG shall report directly to the SEIT all affects of changes to the interface baseline.

C.5.4.2 System Safety Working Group/MANPRINT Working Group (SSWG/MWG). The contractor shall participate as an advisor to the Governments SSWG on a monthly basis. The contractor shall present and discuss issues affecting safety program implementation. Any issues identified shall be resolved by the contractor.

C.5.4.3 Software Integrated Process Team (SWIPT). The contractor and the Government shall establish a SWIPT. This team shall consist of contractor and Government representatives, and be chaired by the Government Lead Software Engineer. The SWIPT, at a minimum, should contain the Government, contractor, and subcontractor Chief Software Engineers. The SWIPT shall define, document, monitor, and improve the software development approach for the software effort.

C.5.4.4 ILS Supportability Integrated Product Team (SIPT). The SIPT shall meet as agreed to by the parties, to jointly manage the ILS program and to review progress.

C.5.4.5 Test and Evaluation Working-level Integrated Product Team (T&E WIPT): The Monthly Test and Evaluation Working-level Integrated Product Team (T&E WIPT) is the instrument that will tailor the T&E tools and strategy to maximize effectiveness and efficiency of the test procedures, while determining which specific tests are required to support the system assessment for ERR approval and systems safety certification.

C.5.4.6 The contractor shall administer, support and conduct monthly dedicated Electromagnetic Environmental Effects (E3) and Nuclear Survivability working meetings through CDR and quarterly meetings thereafter with the Government to establish the nuclear survivability and E3 requirements. The contractor shall address, document, and resolve all issues related to the E3 and nuclear survivability

discussions.

C.5.5 Requirements Engineering

C.5.5.1 System Requirements Analysis. The contractor shall conduct requirements analysis and allocation in accordance with the processes and tools/techniques established in the SEMP described in section C.5.1.1.1. The contractor shall include rationale for combining into one, two, or more requirements that do not have matching performance or functionality. The contractor shall trace the combined Bradley performance specification from the individual M2A3/M3A3 and BFIST w/FS3 specifications. The contractor will flow-down new system performance specification requirements into subsystem specifications. The contractor shall establish the technical feasibility of each new or modified requirement prior to creating systems architectures. The contractor shall reuse existing specifications for subsystems and components remaining unchanged under this contract. The contractor shall present progress of the analysis to the Government at individual IPT and SEIT meetings. The contractor shall deliver the Requirements Analysis to the Government for review in accordance with CDRL A025.

C.5.5.2 Requirements Update

*C.5.5.2.1 Update M2A3/M3A3 Specification with BFIST w/FS3 Appendix. The contractor shall combine the current Bradley Performance Specifications (M2A3/M3A3: 19207-12465518, Rev. J, and BFIST w/FS3 : 19207-12517567, Rev. A) into a single Bradley performance specification with an appendix for the BFIST w/FS3 variant. The contractor shall list only unique requirements in the appendices for the variants. When combining the M2A3/M3A3 and BFIST w/FS3 specification, if there are any discrepancies between the performances or functions, the contractor will default to the M2A3/M3A3 system specification and present the discrepancy to the OIPT for final resolution. The contractor shall not change any existing requirements in the specification without OIPT approval. The contractor shall update the performance specification by modifying all effected requirements and adding new requirements resulting from the incorporation of the technologies identified in paragraph C.5.3. The contractor will reflect the updates resulting from the incorporation of the technologies identified in paragraph C.5.3 into the M2A3/M3A3 updated performance specification with BFISTw/FS3 Appendix. The contractor shall provide the Requirements Specification to the Government for review in accordance with CDRL A021.

C.5.5.2.2 RESERVED

C.5.5.2.3 Update Classified Specification. The contractor shall update the classified appendix to the M2A3/M3A3 specification, including the Bradley Urban Survival Kit (BUSK) I, II, and III, Bradley Reactive Armor Tiles I and II (BRAT I and II), and Add on Armor (AOA) performance requirements. The contractor shall not change any existing requirements in the specification without OIPT approval. The contractor will include the updates resulting from the incorporation of technologies identified in paragraph C.5.3 for the CREW V3 in the updated classified appendix. The contractor shall provide to the Government the Classified Requirements Appendix for review in accordance with CDRL A023.

C.5.5.3 The contractor shall prepare and provide a Specification Tree (CDRL A024) that identifies the M2A3/A3 BFIST w/FS3 Functional, Allocated, and Product Baseline documentation. It shall include generic specification blocks for LRU ICDs, Technotes, CIDS, LVDDs, LRU Performance Specs, Drawing Packages, and other baseline documentation, so as to fit onto one page. It shall contain the detailed Baseline list of LRU ICDs, Technotes, CIDS, LVDDs, LRU Performance Specs, Drawing Packages, and other baseline documentation that relate to the generic blocks on the first page. Each detailed Baseline list shall include the document or drawing title, number, revision letter, date, and previous ECP/ERR number. Each detailed Baseline list shall map to a generic block on the first page.

C.5.5.4 Subsystem Specification. The contractor shall utilize systems engineering processes to flow-down the requirements in the top level combined Bradley performance specification to the subsystem level, and develop subsystem development and performance specifications for the new subsystems designed, integrated, and developed by the contractor. The contractor shall furnish allocated requirements to ECP GFM contractors as directed by the Government and review all GFM contractor specifications developed for ECP for compliance to the allocated requirements. Development and performance specifications shall be prepared to the component level. The contractor shall present progress to the Government at the individual IPT and SEIT meetings.

C.5.5.5 Requirements Traceability Matrix. The contractor shall develop an internal Requirements Traceability Matrix that encompasses the Bradley user requirements (MNS, ORD, ONS), system level requirements, subsystem requirements, and component requirements. This document shall demonstrate the flow down and linkage of system requirements to hardware or software configuration items. Requirements associated with new or modified capabilities shall be easily identifiable. This matrix shall be used to establish risk ratings on meeting requirements based on initial predicted values. The contractor shall provide the Requirements Traceability Matrix to the Government for review and approval in accordance with CDRL A026.

C.5.5.6 System Requirements Verification Matrix. The contractor shall track verification of requirements and specifications throughout development and operational testing based on the Requirements Traceability Matrix. The contractor shall develop and deliver a Systems Requirements Verification Matrix (CDRL A026) that encompasses the Bradley system level requirements, subsystem requirements, and component requirements and its verification strategies. Requirements verification tracking is limited to developmental and operational testing only, and does not include functional test and evaluation.

C.5.6 Vehicle System Architecture. The contractor shall develop vehicle architecture requirements addressing critical product qualities and performance necessary for product architecture design, and prepare and deliver to the Government an architecture diagram

in accordance with CDRL A027. At the first TIM, the contractor shall provide conceptual design architecture (i.e., an abstract or high level design which includes only the most important components and entities). In addition, to the architecture diagram, the contractor shall develop and deliver a written description of the architecture components and interfaces. Components may include major technology systems, external systems that are required for integration or overall system functionality, and high level data flow.

C.5.6.1 The contractor shall prepare and deliver vehicle system architectures that fully support all system requirements for the Bradley vehicles. Additional update(s) and submission(s) shall be required if any system changes are made that affect the vehicle system architectures. Vehicle system architectures shall identify and depict all hardware and software subsystems/components (including GFM and CFE) and its respective interfaces. The contractor shall deliver these vehicle system architectures as part of the System/Subsystem Design Document (SSDD) (CDRL A027).

C.5.6.2 The contractor shall develop vehicle architecture with a detailed written description of component interfaces. Interfaces should be detailed enough without going to lower level LRU Interface Control Documents (ICD), and should include Mobility, Electrical Power, Survivability, Environmental Cooling System, Vetronics, and Vetronics Power Distribution. Architecture shall include all communication buses to include the following:

a. 1553
b. Serial
c. Power
d. Ethernet
e. Discrete
f. Video
g. CANBUS

C.5.6.2.1 Vehicle Network Infrastructure (Gigabit Ethernet): The vehicle network shall use an Ethernet databus, Transmission Control Protocol (TCP), and Internet Protocol (IP) for data transfer between computing architecture.

C.5.6.3 Software Architecture: The contractor shall develop a software architecture in conjunction with the development of system and system architecture. The contractor shall develop software architecture with a Modular Open Systems Approach (MOSA). Results of the engineering efforts during the development of the software architecture shall support the architecture evaluation method and the tracking of changes to the baselined architecture. Specific information shall include module structure, component interfaces, process structure, and data-flow structure. The software architecture shall describe the software items used to implement software requirements, define internal and external interfaces of each software item, and establish consistency and traceability between system requirements, software requirements and software design. The software architecture shall provide a basis for verifying the software items, integration of software items with each other, and integration of software items with the system hardware.

*C.5.6.4 System/Subsystem Design Document (SSDD). The contractor shall develop and deliver a SSDD that encompasses the Bradley ECP top level design and subsystem/component design (CDRL A027). This document shall demonstrate the flow down of system requirements to hardware or software configuration items. New or modified subsystems and components shall be easily identifiable within the SSDD.

C.5.7 <u>Interface Control</u>

C.5.7.1 Interface Control Documents. For all new or modified configuration items including training devices, the contractor shall develop and deliver ICDs that describe the inputs and outputs of a single subsystem, the interfaces between two subsystems, and the complete interface protocol, from the lowest physical elements to the highest logical levels (CDRL A020). The purpose of the ICD is to communicate to the user of the subsystem all possible inputs to, and all potential outputs from, a subsystem. Internal interfaces of the vehicle shall be documented in the SSDD. The contractor shall obtain interface document acceptance by all product sources involved in the interface.

C.5.8 Trade Studies and Analysis: The contractor shall prepare and deliver a design trade study report that describes the contractors trade study approach to applying the templates and criteria for evaluation of trades, metrics, and functional performance described in section C.5.2.3 The study approach shall systematically compare and contrast alternative design approaches, as approved by the SEIT, and make a recommendation to the SEIT on how best to meet system requirements. The contractor shall leverage previously completed trade studies, analyses, and past reports in conducting the analyses. The results of previous trade studies shall be provided to the contractor as Government Furnished Information (Contract W56HZV-07-C-0096, Work Directive MX2-000-000), and used as the baseline for that work to be performed. The contractor shall present key design trade studies and scoring criteria to the SEIT for approval. The design trade study information shall be documented in the Trade Study report in accordance with CDRL A028. After the Trade Study Analysis has been performed, the contractor shall submit a Competition Plan in accordance with CDRL A113.

C.5.8.1 Mounted Soldier System (MSS).

C.5.8.1.1 Crew Cooling. The contractor shall deliver to the Government a trade study to identify the best approach for integrating a crew cooling system, in accordance with CDRL A028.

C.5.8.1.2 Heads-Up Display. The contractor shall deliver to the Government a trade study to identify the best approach for integrating

a heads-up display, in accordance with CDRL A028.

C.5.8.2 Metrics and Analysis

C.5.8.2.1 Technical Performance Measures. The contractor shall recommend to the SEIT for approval, the technical performance parameters and the mechanism for verifying projected versus actual achievement of technical performance, in accordance with the approach provided in the SEP (Attachment 0001).

C.5.8.2.2 Space, Weight, and Power Cooling (SWaP-C) and Cost Metrics. The contractor shall prepare and deliver to the Government SwaP-C and Cost metrics in the contractors format in accordance with CDRL A028 to include: product size, product overall weight and weight distributions, product power distributions, cooling and product Average Unit Procurement Costs (AUPC), and life cycle costs. These metrics shall be reported at the PMRs at least once annually.

C.5.8.2.3 The contractor shall provide at preliminary and critical design reviews the results of electrical load analyses for all electrical systems that have been modified. The contractor shall update the baseline vehicle electrical power load architecture for any changes as a result of obsolescence or new capabilities, and shall ensure the resulting electrical systems and power distribution are adequate to support vehicle power loads.

C.5.8.2.4 Capacity and Margins. The contractor shall monitor and track end-item capacities and margins to reflect any changes as a result of obsolescence or new capabilities. The contractor shall identify any unacceptable capacity and margin projections, and recommend a resolution plan to the Systems Engineering Integration Team (SEIT).

C.5.8.2.5 Weight and Balance. The contractor shall track the weight and the Center of Gravity (CG) of the entire system, as well as the hull and turret independently, including a detailed breakdown of each component. The contractor shall submit and update this information in the form of a weight table in accordance with CDRL A029. The contractor shall work to decrease the weight of the vehicle without affecting overall the safety, mobility, or survivability of the vehicle. Any weight change initiatives shall be approved by the SEIT prior to being implemented. The contractor shall provide updates to the Government whenever modifications to new and existing systems/subsystems affect the vehicles weight and center of gravity.

C.5.9 Modeling and Simulation (M&S).

C.5.9.1 The contractor shall plan and execute iterative Modeling and Simulation (M&S) in order to develop and optimize a design concept, and to assess feasibility. The M&S shall identify risks and effects of design concepts on system performance in key attributes, including mobility, thermal, structure, signature management, lethality, survivability (vulnerability and criticality), transportability, reliability, availability and maintainability (RAM), testability, and soldier-machine interface. The contractor shall allow Government subject matter experts access to observe and discuss the M&S process for the duration of the contract in order to ensure the Government understands the tools, processes, constraints, and assumptions used during contractor and any subcontracted M&S efforts. All M&S outputs, interim and final analysis results, and input data used to create the models shall be accessible to the Government and presented to Government at designated IPT meetings, technical reviews and PMRs.

C.5.9.2 Combat System Integration Lab (CSIL)/Vehicle Test Integration Lab (VTIL) Support (Engineering Facility Vehicle). The contractor shall develop and implement a plan for testing vehicle subsystems and components through the use of existing CSIL/VTIL, or other equivalent simulation labs. The plan shall identify the compatibility, bandwidth, and complexity of risks associated with adding and removing vehicle network hardware and software integration. The contractor shall procure material to maintain the existing CSIL/VTIL or equivalent simulation lab, including the management of required GFM hardware and software assets. The contractor shall procure the required Data Distribution Units (DDU) and Low Voltage Differential Signal (LVDS adapters) for the CSIL/VTIL through DRS-TM. The Government reserves the right to review CSIL/VTIL documentation prepared under this contract.

C.5.10 Technical Data Package (TDP). The contractor shall prepare and deliver a Production Level TDP for all items created or modified under this contract, for each vehicle configuration being upgraded, in accordance with MIL-DTL-31000C. Technical Data which has not changed and has been delivered to the Government previously shall not have to be delivered under this contract. The contractor shall prepare and deliver reports, models, drawings, specifications, technical manuals, ECPs, software documentation, and other technical data related to the Bradley vehicles in accordance with CDRL A030 and TDP Option Selection Worksheet (Attachment 0009).

C.5.10.1 TDP Reviews. The contractor shall conduct In Process Reviews (IPRs) of the TDP at its facility, via telecom, or net-meeting, as changes are made during development, testing, and evaluation, and shall host the IPRs. The IPRs shall be held in conjunction with other IPT or working group meetings, to the maximum extent possible.

C.5.10.2 Changes to any Government controlled data shall be accomplished through a formal ECP process reflected in the Government-approved, contractors Configuration Management Plan. To do so, the contractor shall use ANSI/EIA-649-A and MIL-HDBK-61A as guidance. The contractor shall deliver electronic ECPs, including Notices of Revision (NORs), in accordance with CDRL A018. The contractor shall deliver an ERR in accordance with CDRL A031 for every ECP. ECPs and ERRs must be approved by the Government using the Government Configuration Control Board (CCB). All ERR deliverable data must include the appropriate metadata attributes.

C.5.10.3 RESERVED

C.5.10.4 ECP Co-User Requirements. The contractor shall coordinate all Engineering Changes developed or modified under this contract with the Design Authority of that technical data and all Government agencies which utilize that technical data.

C.5.10.5 Drawing Number Assignment Report. The contractor shall maintain an internal Configuration Status Accounting (CSA) system that reflects all changes and its status, and tracking of those changes for planned, authorized and as-built configuration. The contractor shall prepare and deliver to the Government a drawing number assignment report when requested by the Government. The contractor shall use Government issued drawing numbers and cage codes as part of any vehicle or component configuration. Government-furnished drawing numbers shall be reported in accordance with CDRL A032.

C.5.10.6 Drawing and Technical Data Custodianship. The contractor shall be responsible for all original documents in its possession. As custodian, the contractor shall not make any changes to technical data delivered under this contract without proper Government authorization.

C.5.10.7 Drawing Custodianship List. The contractor shall create and maintain a drawing custodianship list. This list shall differentiate between chassis and turret drawings.

C.5.10.8 Engineering Drawings and Specifications. For any drawings affected by this ECP effort, the contractor shall prepare the drawings in accordance with MIL-STD-31000C and the TDP Option Selection Worksheet (Attachment 0009). All drawings shall be delivered to the Government in accordance with CDRL A030. The drawings shall provide the information necessary to enable the Government to competitively procure, provision, and catalog items essentially identical to the original, without any need for additional engineering effort. The drawings shall be prepared in a Government approved format (in accordance with Attachment 0009), using third-angle projection, decimal-inch, in the English language, and meet the requirements of ASME Y14.100-2004, Engineering Drawing Practices, ASME Y14.24-1999, Types and Applications of Engineering Drawings, and ASME Y14.5M-1994, Dimensioning, and Tolerancing. The contractor shall select the drawing types, subject to Government approval, needed to define an item. The contractor shall revise existing drawings in accordance with the drawing preparation standards to which the drawings were originally prepared. When existing drawings are to be redrawn they will, at a minimum, be prepared as 3D CAD, in accordance with the TDP Option Selection Worksheet. When applicable, the contractor shall prepare specifications in accordance with MIL-STD-961E-2008, Defense and Program Unique Specifications Format and Content. When models are requested by the Government, they shall be prepared in accordance with the TDP Option Selection Worksheet. All new data must be submitted to the Government for review and approval before an ERR is accepted.

C.5.10.9 Initial Data Submission for Format Compliancy Evaluation. The contractor shall deliver the TDP for a review of the new data prior to ERR. The contractor shall coordinate the delivery to allow ample time, but not less than 30 days, for a complete format and engineering evaluation prior to ECP and ERR submittal.

C.5.11 Baseline Control/Configuration Management

C.5.11.1 Configuration Management

C.5.11.1.1 The contractor shall manage the configuration of the baseline vehicles identified in C.5.3.1.1 in accordance with the Government-approved, contractors Configuration Management Plan, using ANSI/EIA-649-A and MIL-HDBK-61A as guidance. The Government reserves the right to review the contents of, and verify the accuracy of, the contractors configuration control system at any time during performance of the contract.

C.5.11.1.2 Product Configuration Identification. All performance/product specifications, product drawings, CAD drawings, models, approved changes, remanufacture documents, RESET documents, software documentation, and computer software used for design, production, and test/validation of a vehicle, shall constitute the PCI for that system.

C.5.11.1.3 The contractor shall maintain all technical data delivered under this contract, including maintenance of changes to the baseline, and the Engineering Release of changes, drawing revisions, and new drawings. Engineering changes to legacy data shall be in accordance with the datas original standards.

C.5.11.1.4 Technical data delivered to the Government shall be adequate for competitive acquisitions of items identical to its originals, without additional engineering effort.

C.5.11.1.5 The contractor shall not prepare duplicate data for components or items of GFM.

C.5.11.1.6 The contractor shall include the Government Chief Engineer or his delegate in all contractor Configuration Control Boards which address changes to PCI data created under this contract.

*C.5.11.1.7 The contractor shall coordinate and incorporate baseline changes (hardware and software) from other Bradley and BFIST vehicle programs into the A4 Technical Data package delivered at ERR.

C.5.12 Life Cycle Data Management

C.5.12.1 The contractor shall prepare and deliver a Data Management Plan (DMP) in accordance with CDRL A033. The DMP shall contain a master list of managed data, data content, data format descriptions, data requirements lists for all suppliers, privacy requirements, security requirements, and procedures. The contractor shall also provide the location or mechanism of data retrieval, reproduction, and distribution, as well as a listing of program data to be collected, and schedule for its collection.

C.5.12.2 Data Management Strategy/Technical Data Rights Strategy. DoD Instruction 5230.24 shall be used as a guide for distribution statements. The contractor shall specify those items to be delivered to the Government with less than unlimited rights in accordance with DFARS 252.227-7017 and subsection (e) of both DFARS 252.227-7013 and 252.227-7014. Except for the items specified in the contractors assertion of restrictions, technical data as defined in DFARS 252.227-7013, and delivered under this contract shall contain no contractor or vendor proprietary markings. The contractor shall not mark any briefings created under this contract as Proprietary. If technical data is developed by the contractor using private funds and included in a briefing, those proprietary charts shall be presented as a separate attachment to the briefing.

C.5.12.3 Engineering Data, Models, and Drawings

C.5.12.3.1 All technical data delivered under this contract shall be adequate for the Government to conduct competitive acquisitions. The contractor shall prepare and deliver engineering data, models and drawings necessary to analyze, fabricate, test and support new or modified hardware and software products. This data shall include special tooling and software (firmware programming files and Gerber data), interface data and special test equipment data. The final drawing package shall contain no attaching engineering orders and shall account for all fit, form, fit, and function requirements. Any changes developed under this contract shall be incorporated into the drawing package. The contractor shall ensure that applicable requirements for engineering data are flowed down to the subcontractors.

C.5.12.3.2 No drawing, model, or other TDP documentation will be for procurement or fabrication unless it is under formal configuration management control, per the Government-approved configuration management plan.

C.5.12.4 The contractor shall coordinate with the Government Data Manager within 60 days of contract award to identify the documents required to be placed in the Integrated Data Environment (IDE), and the primary Point of Contact (POC) for each document. The contractor shall obtain access to the identified Government IDE. The IDE shall consist of Government and contractor storage locations.

C.5.13 Software

C.5.13.1 Software Development, Integration and Test. The contractor shall perform the detailed planning necessary for requirement analysis, design, code development, integration, test, documentation, and delivery of a system and subsystem software and component firmware for any new or modified systems. All of the above details shall be documented in the Software Development Plan (SDP) (CDRL A034).

C.5.13.1.1 The contractors assessment of the software performance requirements shall ensure compliance in the following areas for all LRUs under BAE control (Attachment 0010):

1. CPU Utilization (not more than 50%)
2. Memory Utilization (not more than 50%)
3. Solid State Hard Disk Utilization (not more than 50%):

C.5.13.1.1.1 Completeness: Collectively, the software requirements shall specify the total system software and provide full implementation of all required functions.

C.5.13.1.1.2 Traceability: The software requirements shall be derived directly from higher level requirements contained in or traceable to system specifications. A cross reference matrix shall be developed indicating where each of the high level requirements are implemented in the detailed requirements. All higher level requirements shall be completely satisfied but shall not exceed those requirements unless approved by the Government.

C.5.13.1.1.3 Realism: Each detailed requirement shall be reviewed to ensure that it can be achieved.
Testability: The contractor shall ensure that the software performance requirements are expressed in quantitative terms that can be directly translated into acceptance criteria.

C.5.13.2 The contractor shall conduct assessments of the software design during its development to ensure that all software requirements, as approved by the Government, are being satisfied and that the design is being documented in software design description. (CDRL A036)

C.5.13.3 The contractor shall provide schedule to be included in the IMS for all software milestones (requirement, design, development, integration, testing activities).

C.5.13.4 The contractor shall prepare and deliver detailed, complete, Software Development Files (SDF) for all software developed and

integrated under this contract (CDRL A034).

C.5.13.5 The contractor shall deliver any new or modified software executables and source code, including subcontractors software executables and source code under this contract,. Executable and source codes for any models, functional test environment (with documentation), and verification test procedures developed for system validation shall also be delivered to the Government (CDRL A035).

C.5.13.6 Software Quality Assurance Program (SQAP). The contractor shall prepare and deliver a SQAP to ensure its software quality. The contractors SQAP shall have sufficient, well-defined lines of responsibility, accountability, and authority, and it shall provide for the evaluation of quality problems, and for resolving them (CDRL A037).

C.5.13.6.1 The contractor shall regularly review the status and adequacy of the program Results of all software quality assurance activities shall be documented in an established format and delivered to the Government in accordance with CDRL A037. The contractor shall also report to the Government any discovered discrepancies. Program reporting shall be part of the management reporting system during all phases of software development.

C.5.13.7. Organizational Accreditation Requirements. The contractor shall be certified to be CMMI Maturity Level 3 or higher through an independent software engineering institute standard Capability Maturity Model Integration (CMMI) Appraisal Method for Process Improvement (SCAMPI). The Government shall have the right to periodically audit the contractors process.

C.5.13.8 Software Configuration and Data Management. The contractor shall prepare and deliver to the Government a Software Configuration Management Plan (SCMP) (CDRL A039).

*C.5.13.8.1 Configuration Management Audit. The contractor shall manage configuration of the development baseline throughout performance of the contract. The Contractor shall also ensure that its status accounting system is independently audited to ensure the effectiveness of tracking Problem Change Reports (PCR) (CDRL A040). The contractor shall integrate these procedures with total system configuration management procedures The contractor shall conduct formal audits of the configuration management function, as provided for in the Software Quality Assurance (Plan (SQAP), to ensure strict compliance with the approved SDP, and the approved SCMP.

C.5.13.9 Corrective Action System. The contractor shall maintain a correction action system to completely resolve discrepancies documented during testing under this contract. The system shall address status tracking, failure analysis, corrective action, verification of implementation, and verification of corrective action. The contractor shall prepare and deliver and Integration Problem Report (IPR) during initial testing, and a PCR for each problem detected in the software product (CDRL A040). Each problem shall be classified by appropriate and approved categories and priorities. In addition to the PCRs, the contractor shall deliver a report analyzing the following:

a. Detected trends in the problems reported.
b. Whether problems have been resolved.

*C.5.13.10 RESERVED

C.5.13.11 Software Metrics The contractor shall prepare and deliver to the Government metrics in accordance with CDRL A043 that clearly portray variances between actual and planned performance, and that provide early detection or prediction of situations that require management attention (CDRL A043). The contractor shall also deliver to the Government metrics that assess the effect to the program of proposed software changes. The following indicators shall be implemented consistent with internal software development systems.

Software Size
Effort
Requirements Definition and Stability
Software Progress (Design, Coding, and Testing)
Software Development Staffing
Earned Value Management (Cost / Schedule Variance)
Quality (Discrepancy Reports or Defect Density)
Development Tools and Laboratories Status
Computer Resources Utilization / Reserve Capacity

C.5.13.12 The contractor shall deliver the following:

Title	CDRL
Computer Software Product End Item (CSPEI) VVID Tacfile & Info Paper	A044
Interface Design Description	A045
Interface Requirement Specification (IRS)	A046
Software Requirement Specification (SRS)	A047
Software Test Description (STD)	A048

Software Test Plan (STP)	A049
Software Test Report (STR)	A050
Software Version Description (SVD)	A051
Database Design Description (DBDD)	A052
Software Architecture	A053
Software Reliability Program Plan	A054
Software Transition Plan (STrP)	A056
Software User Manual (SUM)	A057
Firmware Support Manual (FSM)	A058

C.5.13.13 Software Drop: The contractor shall develop, test and deliver a single software product for A3 and A3 BFIST w/FS3. The single vehicle software product shall be able to detect vehicle type A3 or A3 BFIST w/FS3 at run time, and perform self-configuration dynamically and execute according to the detected vehicle type. The configuration management of the single software product shall be consistent with the existing Vehicle Version Identification (VVID) process. The vehicle software product shall be upgraded through the embedded vehicle reprogramming (EVR) application running in the Common Intelligent Display (CID). The EVR shall be able to load appropriate LRU load modules as defined by the VVID configuration. The contractor shall decouple the FBCB2 System from the VVID only when there are no ICD changes to the LRU and platform interfaces. Decouple means that there is no update/recompilation of the vehicle software. The vehicle VVID configuration table will list only the FBCB2 version number (i.e., FBCB2 v6.5, JCR). The contractor shall not retain the FBCB2 patch revision on the VVID configuration table.

C.5.13.14 Common Operating Environment (COE). The contractor shall integrate into the baseline vehicles the latest FBCB2 software available (e.g., JBC-P with KGV-72 BFT-2).

C.5.13.15 Vehicle Version Identification (VVID) Information Paper and Software Tacfile Requirements. The contractor shall develop a VVID information paper using VVID 8.03 Information Paper as the baseline format. The contractor shall deliver to the Government the software tacfile in accordance with CDRL A044.

C.5.14 Information Assurance (IA). The contractor shall protect all data delivered to the Government in accordance with applicable laws and regulations. As a baseline, the contractor shall use the Bradley Information Assurance safeguards and security controls. The contractor shall support IA certification and accreditation of the system by providing the IA artifacts, analyses, test, evaluation, and assessments.

C.5.14.1 Security requirements shall be met which are identified in AR 39-80-5, AR 381-14, CNSSI Policy No. 22, CNSSI 1253, DoDI 8500.2, DoD 8500.01E, NISP SP 800-18, NISP SP 800-53, SSE-100-1, DoD 8570.01-M, appropriate Best Business Practices, Security Technical Implementation Guides and NSA Information Assurance Technical Framework.

C.5.14.2 The contractor shall comply with AR 25-2 IA requirements, shall provide new IA documentation as it is needed during the DoD IA Certification and Accreditation Process (DIACAP), as outlined in DODI 8510.01. The CIAPP will meet or exceed the guidelines outlined in NIST 800-12, be reviewed annually and include the following:

a. Systems Security Plan (SSP)
b. Testing and evaluation policies, procedures, controls and schedule.
c. Cross Domain Appendix (CDA)
d. Cross Domain Validation and Approval Request (CDV AR)
e. Unit SOPs and technical bulletin(s) (Security procedures)
f. Continuity of Operations Plan (COOP)
g. SW Development Plan (reference Software section of the SOW)
h. Configuration Management Plan (CMP)
i. Configuration Control Board Charter
j. Backup Strategy
k. Disaster Recovery Plan (DRP)
l. Incidence Response Plan
m. Evidence of Applied BBP and STIG
n. Concept of Operations (CONOPS)
o. Data Flow Diagram
p. Detailed Architecture Diagram
q. Hardware and Software List (included vendors, versions)
r. Ports Protocols and Services List
s. Risk assessment to identify the threats and vulnerabilities, and the impact if exploited
t. Policies, procedures and controls in place to mitigate the risk throughout the developmental lifecycle.
u. Security awareness training program guidelines
v. Procedures to document remediation strategies and actions to correct vulnerabilities.
w. Procedures to monitor detect report and respond to security incidents.
x. Identify a primary and alternate Information Systems Security Officer to serve as the central POC for all information security issues.

C.5.14.3 The contractor shall ensure that all IA and IA enabled products are National Security Telecommunications and Information Systems Security Policy Number 11 (NSTISSP-11) compliant, and that the products are validated by accredited labs under National Security Agency (NSA), the National IA Partnership (NIAP) Common Criteria Evaluation and Validation Scheme or National Institute of Standards and Technology (NIST) Federal Information Processing Standards (FIPS) Cryptographic Module Validation Program (CMVP) to include FIPS Pub 197, Advanced Encryption Standard, FIPs; FIPS Pub 140-2, Security Requirements for Cryptographic Modules and FIPS Pub 198-1, the Keyed-Hash Message Authentication Code (HMAC); IETF RFC 2560, X.509 Internet Public Key Infrastructure; DoDI 8580.1, Information Assurance in the Defense Acquisition system.

C.5.14.4 The contractor shall develop an IA awareness training program in accordance with NIST 800-16, 800-50, and AR 25-2 and ensure that IA awareness refresher training is provided annually for all contractors working on this program. Contractor personnel with IA duties shall be trained to a level commensurate with the highest level and complexity of facilities and systems. The contractor shall assure all contractor personnel who access Government Databases have successfully passed a security investigation.

C.5.14.15 The contractor shall evaluate (at a minimum) annually the security, both physical and logical, identifying exposures, and providing protective options for reducing security risk. This assessment shall be conducted and reported in accordance with the NIST 800-30 framework using the Common Vulnerabilities and Exposures (CVE) dictionary identifiers and identify assets that need additional security protection have vulnerabilities, and develop a set of recommendations to eliminate or migrate those threats within 30 days of discovery and submit it to the Government.

C.5.15 Commonality. The contractor shall participate in Government commonality meetings every other week. The contractor shall participate in activities that are a direct result of actions identified during the Commonality Meeting.

C.5.15.1 The contractor shall work with General Dynamics Land Systems (GDLS) in the following areas for commonality for the Bradley A4 and the Abrams A3 platforms:

1. Battery Monitoring System (BMS)
2. Data Distribution Unit (DDU)
3. Embedded Training
4. Vehicle Health Maintenance System (VHMS)

The contractor shall get approval through the SEIT and OIPT for Government decisions to go forward with the creation of common specifications and Interface Control Documents (ICDs) pertaining to the four areas listed above.

C.5.15.2 Throughout this development effort, the contractor shall prioritize the selection of components with respect to commonality (hardware and software) in accordance with the following hierarchy:

1. Bradley Family of Vehicles Inventory
2. Heavy Brigade Combat Teams Inventory
3. Program Executive Office Ground Combat Systems Inventory
4. United States Army Inventory
5. DOD Inventory

C.5.15.3 The contractor shall address commonality as part of any trade studies it conducts in performing the contract.

C.5.15.4 Vehicle Integration for C4ISR Interoperability (VICTORY):

C.5.15.4.1 VICTORY Implementation. The contractor shall apply the portions of VICTORY 1.4 specification as defined below to any LRU/LRM created under this contract. LRU/LRMs not planned for redesign as part of the Bradley ECP program shall bridge pertinent data in accordance with the VICTORY specification to the gigabit Ethernet databus. The Vetronics Systems shall provide a single GbE interface point (a.k.a. bridge) from the platform system enclave to a C4ISR/EW enclave that can provide data services in accordance with the VICTORY specification. The VICTORY Application Interfaces that will be implemented and tested are:

Time Synchronization Service	VT50000-V1.4
Time Synchronization Service Interface	VT50001-V1.4
Position Service	VT50100-V1.4
Position Data Interface	VT50101-V1.4
Orientation Service	VT50200-V1.4
Orientation Data Interface	VT50201-V1.4
Direction of Travel Service	VT50300-V1.4
Direction of Travel Data Interface	VT50301-V1.4

C.5.15.4.2 As necessary, the contractor shall provide the Government with evidence of compliance at the SEIT meeting.

C.5.15.4.3 The contractor shall participate in bi-weekly teleconferences covering each of the three VICTORY working groups and the

quarterly face-to-face meetings. The contractor shall support the VICTORY standards development process by attending these meetings and providing comments to the VICTORY standards development process.

C.5.16 Environmental Design Requirements

*C.5.16.1 CBRN Survivability. The vehicle shall meet the CBRN Survivability requirements of NBC Contamination Survivability Criteria for Army Materiel, 30 May 2005 (Attachment 0034) for new and modified LRUs/LRMs created under this contract with the following differences:

Decontamination Criteria: Contaminants: Decontamination begins one hour after contamination using standard field decontaminants or stimulants, equipment and procedures; and the decontamination process, excluding monitoring, lasts no longer than 150 total minutes with a maximum of two passes through a thorough decontamination site with Personnel and Equipment Requirements for the Optimum DED Layout of an M12A1 PDDA-Equipped Unit as described in FM 3-11.5.

Decontamination Criteria: Induced Activity: The vehicle shall be designed such that the sum of neutron induced activity in unchanged components when exposed to a neutron fluence from a nuclear detonation that results in a total dose of 2,600 cGy (rad) to the crew of the equipment, plus the sum of neutron induced activity in ECP2 components when exposed to a neutron fluence from a nuclear detonation that results in a total dose of 3,000 cGy (rad) to the crew of the equipment results in no more than a negligible risk (as defined within the CBRN Survivability requirements of ATPD 2404) to unprotected personnel arriving at H+2 and remaining inside, on, or one meter from the item for a period of time based on the mission profile, not to exceed 12 hours.

The contractor shall conduct a vehicle level CBRN contamination/decontamination analysis against the criteria listed above and provide the results of this analysis to PM ABCT in the monthly dedicated Electromagnetic Environmental Effects (E3) and Nuclear Survivability working meetings.

*C.5.16.1.1 Nuclear Survivability: Any new LRUs added by this contract which affect the Nuclear Hardness Mission Essential Minimum Capabilities, as outlined in Attachment 0013 shall be hardened to withstand initial nuclear weapons effects. The contractor shall identify which inbound subsystems are needed to support the Nuclear Hardness Mission Essential Preferred Capabilities, as outlined in Attachment 0013, and provide a cost estimate to PM ABCT to harden these subsystems. This cost estimate, and a vehicle level analysis that maps each Nuclear Hardness Mission Essential Minimum and Preferred Capability to the specific subsystems that are determined necessary to support each of these functions, shall be provided to PM ABCT in the monthly dedicated Electromagnetic Environmental Effects (E3) and Nuclear Survivability working meetings.. The nuclear survivability hardening criteria for the new mission essential equipment mounted on the inside and outside of the vehicle shall be as specified in Environmental Conditions for the Heavy Combat Team Tracked Vehicle Systems, Attachment 0012.

C.5.16.2 Electromagnetic Environmental Effects (E3)

*C.5.16.2.1 Newly designed equipment shall be developed in accordance with ATPD 2407 Electromagnetic Environmental Effects (E3) for U.S. Army Tank and Automotive Vehicle Systems Tailored from MIL-STD-464C as outlined in Attachment 0014.

C.5.16.2.2 All newly designed electrical and electronic subsystems developed or modified for the Bradley ECP program by the contractor, including Commercial off the Shelf (COTS) items and Non-Developmental Items (NDI), shall comply with MIL-STD-461F. The contractor shall develop and deliver in accordance with CDRLs A060 and A061 an Electromagnetic Interference Test Procedures (EMITP) and Electromagnetic Interference Test Report (EMITR) for each electrical and electronic subsystem or component developed, selected, or revised.

*C.5.16.2.3 The contractor shall document and deliver in accordance with CDRL A062 the analyses, inspections, tests and/or demonstrations as outlined in the verification requirements of ATPD 2407, Electromagnetic Environmental Effects (E3) for U.S. Army Tank and Automotive Vehicle Systems tailored from MIL-STD-464C.

C.5.16.2.4 The contractor shall evaluate the GFI electromagnetic test procedures and results of all GFM that are available at the time of development to ensure that when GFM is integrated into the Bradley ECP vehicles, electromagnetic requirements are not affected at the system level. The results of this evaluation shall be documented in accordance with CDRL A062.

C.5.16.2.5 A system level bonds and grounds inspection procedure shall be developed and documented in accordance with CDRL A062. The bonds and grounds inspection procedure shall be used by the contractor to verify that a system is compliant with the zero hours and zero miles bonds and grounds requirements.

C.5.16.2.6 Grounding, Bonding, and Shielding. Newly design electrical and electronic components shall be electrically isolated from the case ground, incorporate bonding straps, utilize a two-wire design. The electrical and electronic components shall support the guidelines published in TARDEC Vehicle Electronics Power and Ground Design Guidelines (registration number 16074) (Attachment 0027), and shall comply with MIL-STD-704F, paragraph 5.4.1, and MIL-STD-464C, tailored (Attachment 0014), electrical bonding paragraph 5.11. The contractor shall capitalize on previous grounding, bonding and shielding studies (Contract W56HZV-07-C-0096, Work Directive M01-411-154). The contractor shall correct deficiencies in the grounding and bonding scheme that have a known safety issue.

C.5.17 Obsolescence

C.5.17.1 The contractor shall establish and present a plan to forecast and track components and LRUs new or modified by the requirements herein for obsolescence as part of technical interchange meeting presentation packages. Delivery of the plan shall be included as part of the TIM presentation materials. The contractor shall execute the plan for any newly designed components as part of this contract so the contractor shall not design obsolete material solutions. This does not include design reviews for GFM/GFE subsystems. The contractor is not required to track and report Obsolescence isssues regarding Government Furnished Material (GFM).

C.5.18 The contractor shall design all items and systems to be producible. Producibility is the relative ease of producing an item or system using a design that enables economical fabrication, assembly, inspection, and testing with available production technology. Some Producibility characteristic examples are: Specified materials, simplicity of design, commonality, flexibility in production alternatives, tolerance requirements, clarity and simplicity of Technical Data Package, design stability and process controls.

C.5.19 The contractor shall conduct an engineering feasibility-impact study to integrate Common Intelligence Display (CID) as a replacement of the Bradley Drivers Color Flat Panel Display (CFPD). The study shall include, but not be limited to: preferred architectural concept, tasks and materials required to integrate, SWAP assessment, Bill of Material (BOM) with estimated costs, proposed schedule to integrate into A4 effort with impacts to current A4 schedule, human factors engineering evaluation to drivers tasks, safety analysis assessment, and conceptual list of software applications that could run on the CID at Drivers station. The study shall be presented as an agenda item during an OIPT meeting on a date mutually agreed to by both parties.

C.5.20 The contractor shall outline a process and scope for managing and tracking CID for each Bradley A4 configuration.

*C.5.21 Program Protection

*C.5.21.1 Criticality Levels: The contractor shall define, IAW the MIL-STD-882 System Safety Program definitions of criticality to mission criticality, the following criticality levels for assessment of mission-critical component functionality:

Level I (Catastrophic) Protection failure of a failure that results in total compromise of mission capability.
Level II (Critical) Protection failure is a failure that results in unacceptable compromise of mission capability or significant mission degradation.
Level III (Marginal) Protection failure is a failure that results in partial compromise of mission capability or partial mission.
Level IV (Negligible) Protection failure is a failure that results in little or no compromise of mission capability.

*C.5.21.2 Criticality Analysis. The contractor shall participate in aGovernment criticality analysis, vulnerability assessment, and risk evaluation meeting to identify countermeasure implementations for the mission-critical functions identified as Level I or Level II mission criticality. These activities will occur quarterly at the contractors facility throughout the period of performance of this contract.

*C.5.21.3 Critical Components. For each Level I and Level II mission-critical function identified in the criticality analysis, the contractor shall identify the associated logic-bearing system components that implement or introduce vulnerability to these functions (hereafter referred to collectively as the critical components.).

*C.5.21.4 Critical Component Risk Management. The contractor shall document the visibility into its supply chain for vulnerability of critical components, identify risks to that supply chain, and develop mitigation plans to counter these risks as part of its Program Protection Implementation Plan (PPIP) that shall be delivered to the Government in accordance with CDRL A118.

*C.5.21.5 Countermeasures. The contractor shall plan for and implement countermeasures in accordance with the Government Program Protection Plan (PPP) which will be developed and provided to the contractor by CDR, and will be the primary Government plan to mitigate foreign intelligence, technology exploitation, supply chain and battlefield threats and system vulnerabilities that result in the catastrophic (Level I) and critical (Level II) protection failures including:

*C.5.21.5.1 The application of Supply Chain Management (SCRM) best practices, applied as appropriate to the development and production of the system. SCRM key practices are located in the National Institute of Standards and Technology (NIST) Interagency Report (IR) 7622, DRAFT Notional Supply Chain Risk Management Practices for Federal Information Systems, and the National Defense Industrial Association (NDIA) System Assurance Committee Guidebook, Engineering for System Assurance, which are both publicly available.

*C.5.21.5.2 The enumeration of potential suppliers of critical components, as they are identified, including cost, schedule, and performance information relevant for choice among alternates and planned selection for the purpose of engaging with the Government to develop mutually agreeable risk management plans for the suppliers to be solicited.

*C.5.21.5.3 The processes to control access by foreign nationals to program information, including for instance, system design information. Department of Defense (DoD)-unique technology and software or hardware used to integrate commercial technology.

*C.5.21.5.4 The processes and practices that the contractor will employ to ensure that it uses Information and Communications Technology (ICT) in the solution and that it levies processes and requirements for genuine ICT upon subcontractors.

*C.5.21.5.5 The process used to protect unclassified DoD information in the development environment.

*C.5.21.6 Updates to Criticality Analysis. The contractor shall ensure that updated criticality analysis assumptions, rationale, results, and supply chain risk information and mitigations are available for Government review as part of the annual criticality analysis meeting that will occur after CDR.

*C.5.21.7 Threat Information. The contractor shall use the knowledge gained from Government-provided foreign intelligence and technology exploitation threat information, along with the traditional battlefield threat information in making procurement decisions.

*C.5.21.8 Secure Coding and Secure Design. The contractor shall develop a set of secure coding standards and secure design features drawing upon the Software Engineering Institutes (SEI) Top 10 Secure Coding Practices. (https://www.securecoding.cert.org/confluence/display/seccode/Top+10+ Secure+Coding+Practices) and the CWE/SANS Top 25 Most Dangerous Software Errors (http://cwe.mitre.org/top25/index.html) to use with all Level I critical components.

C.6 Product Assurance

C.6.1 Reliability, Availability and Maintainability System (RAM) Assessments.

C.6.1.1 The contractor shall implement and execute each of the reliability activities described below to ensure that it achieves the reliability requirements established in the appropriate vehicle system specification. The contractor shall maintain a RAM program in accordance with GEIA-STD-0009 (Reliability Program Standard for Systems Design, Development and Manufacturing) to assure required vehicle reliability and maintainability performance is achieved throughout the vehicle's lifecycle. This will cover Failure Modes Effects and Criticality Analysis (FMECA), Fault Tree Analysis (FTA), and Failure Reporting, Analysis, and Corrective Action System (FRACAS), allocations, predictions, critical items lists and other tasks listed below.

C.6.1.2 RAM Program Plan. The contractor shall prepare and deliver a comprehensive RAM Program Plan in accordance with CDRL A063. The plan shall establish a process to satisfy the Bradley ECP program supportability and sustainment standards set forth in the Bradley Performance Specifications listed in paragraph C.1.3. The contractor shall monitor system design to identify, assess, and implement failure analyses and corrective actions and to ensure compliance with RAM requirements. The contractor shall deliver to the Government all RAM data on any vendor supplied item, and shall inform the Government of any vendor issue affecting the Contractors compliance with system RAM requirements. The RAM program plan shall include the tasks outlined in paragraphs C.6.1.3-C.6.1.7

C.6.1.3 RAM Reports. The contractor shall prepare and deliver RAM Reports in accordance with CDRL A063. The report shall provide data to support the contractors claim that it meets or exceeds the RAM requirements listed in all three Bradley Performance Specifications (paragraph C.1.3). The contractor shall also identify how engineering best practices and Design for Six Sigma (DFSS) approaches are being incorporated early in the system design process to achieve the requirements.

C.6.1.4 Procedures and Controls. The contractor shall ensure products obtained from vendors meet RAM requirements. The contractor shall ensure that subcontractors do not use substandard or counterfeit parts, and that vendors flow-down this requirement to their subcontractors. In addition, the contractor shall notify the Government of any special RAM review meetings scheduled with subcontractors so that Government representatives can attend at its discretion. (CDRL A063)

C.6.1.5 RAM Program Review. The contractor shall conduct RAM reviews with the Government at design reviews and program management reviews.

C.6.1.6 Reliability and Maintainability Predictions. The contractor shall prepare and deliver a reliability and maintainability prediction report in accordance with CDRL A063. The report shall provide detailed reliability and maintainability predictions based on a defined configuration and associated models. The predictions shall be allocated from the system level down to the lowest indenture level, and shall be updated each time significant design or mission profile changes significantly affect the Bradley ECP effort or any of its subsystems.

C.6.1.7 RAM Modeling and Analysis. The contractor shall identify all mission critical components. Mission critical components are those items whose failures: (1) can cause a Critical Mission Failure (CMF) in accordance with the Failure Definition and Scoring Criteria (FD/SC), (2) can cause a System Failure (SF), (3) affect the operational availability of the Bradley ECP vehicles, or (4) cause high repair or replacement costs. The contractor shall provide the following information (CDRL A063):

C.6.1.7.1 Whether the component failure would result in a CMF or a SF, per CMF/SF Classification in approved FD/SC.

C.6.1.7.2 A characterization of the operational environment of the component (local loads, stresses, vibration, shock, thermal, displacement, or electrical) that affect the reliability of the component.

C.6.1.7.3 Analysis results of the mission critical component.

C.6.1.7.4 If testing is the method selected for component reliability optimization, component test plans and analyses of test results.

C.6.1.7.5 Predictions for time, cycles, or hours-to-failure for each item based on engineering analyses.

C.6.1.7.6 Design improvement recommendations, and subsequently, the status of approved design recommendations.

C.6.1.7.7 Performance changes over time, and recommended approaches for replacing items before they fail. Approaches shall include a method of detection to monitor component wear or life span.

C.6.1.8 Software Reliability. The contractor shall prepare and deliver in accordance with CDRL A054 a Software Reliability Program Plan in accordance with SAE - JA1002 (Software Reliability Program Standard) and SAE - JA1003 (Software Reliability Program Implementation Guide). The contractor shall provide access to all pertinent records and data requested by the Contracting Officer to permit Government surveillance to ensure that the Software Reliability Plan metrics accurately measure and describe the software reliability and processes. Software Reliability plan outputs, interim and final analysis results shall be presented to the Government at quarterly technical interchange meetings. Software Reliability outputs are defined as Expected reliability of predicted field defect density and probability of late delivery, Probability of Failure on Demand (POFOD), Rate of Reliability, root cause analysis of the associated development process where introduced, identified improvements that increase Availability and Reliability, evaluate the effectiveness of implemented improvements.

C.6.2. Test Incident Reports (TIR)

C.6.2.1 The contractor shall establish and maintain a system for analysis of TIRs generated during Government tests. The contractor shall access all TIRs directly through the Vision Digital Library System (VDLS). The system shall be capable of tracking the status of TIRs, to include necessary distribution, failure analyses, corrective action, and management reports. The contractor shall also distribute TIRs to suppliers to ensure failure analyses and corrective action reports include vendor input.

C.6.2.2 TIR Scoring and Assessment Conferences. Formal scoring and assessment conferences will be conducted by the Government, at times to be agreed to by the parties. Scoring conferences will be conducted during and immediately after Government testing to assure that test incidents are properly and consistently categorized against RAM requirements, in accordance with the Failure Definition/Scoring Criteria (FD/SC). Conferences may alternate between test sites. During scoring conferences, each TIR shall be scored, and each TIRs incident classification (critical, major, minor, information) shall be revised. At least 72 hours prior to each conference, the contractor shall present its TIR scoring recommendation(s) to the Government. Further discussions with the contractor may be required to ensure full technical understanding by both parties of test incidents. All discussions with the contractor will be held separately from scoring and assessment activities. The contractor shall not witness the actual scoring of the TIRs. The Government will notify the contractor of the scoring conference results within 20 calendar days of each meeting.

C.6.3 Failure Analysis and Corrective Action Report (FACAR)

C.6.3.1 The contractor shall prepare and deliver FACARs in its own format in accordance with CDRL A064 in response to TIRs. FACARs shall document a comprehensive corrective action system which requires the contractor to collect, quantify, perform root cause analyses, and to identify, verify and validate corrective actions. Only FACARs approved by the contractor-chaired Failure Review Board (FRB) shall be submitted to the Government.

C.6.3.2 Corrective Action Review Board (CARB). During and after Government testing, the contractor shall hold CARB meetings to review FACARs (per CDRL A064) for acceptance or rejection by the Government. CARB reviews shall be hosted by the contractor at locations agreed to by the parties. The contractor shall prepare and deliver for Government review in accordance with CDRL A064 CARB packages, including copies of all applicable FACARS, and meeting minutes. Upon completion of TIR evaluations, failure analyses, and corrective actions, the contractor shall prepare an incident close-out sheet. TIR responses from subcontractors shall be coordinated through the contractor. The contractor shall prepare and deliver in accordance with CDRL A064 closeout information, including finalized FACARs and supporting test data.

C.6.3.3 If the contractor's FACAR responses are rejected, the Government will notify the contractor within 30 calendar days of the CARB meeting. The contractor shall then be required to resubmit a response to the Government within 30 calendar days of that notification.

C.7 Test and Evaluation/Quality

C.7.1 Test and Evaluation

C.7.1.1 Testing Overview. The system test strategy and key decisions will be captured in the Test and Evaluation Master Plan (TEMP) as they pertain to both the contractor and Government test phases of the program. The data assessment for all testing will support issuing safety confirmations required for the fielding of the Bradley ECP vehicles. The contractor shall follow the TEMP for the activities described, but execute within the limits of the period of performance of this contract.

C.7.1.1.1 The contractor shall conduct contractor testing, as well as discrete tasks supporting Production Verification Testing (PVT) detailed below. The contractor shall establish a test and evaluation team, and designate a single T&E authority who will be responsible

for the T&E teams roles, assignments, practices, processes, and seamless effort across all the programs functional groups (e.g., engineering, logistics, safety, quality, human factors engineering). The contractor shall participate in Government testing, and perform risk and configuration management.

C.7.1.1.1.1 Contractor Test. The contractor shall perform component qualification in accordance with paragraph C.7.3.1.2 and vehicle level system integration testing in accordance with Government approved test plan (C.7.3.1.2.1) prior to the start of Government PVT. The vehicle testing shall be conducted in accordance with the TEMP at the contractor test facilities to verify that the vehicle systems and subsystems meet critical performance specification technical parameters (Attachment 0015). The contractor shall use five Bradley ECP vehicles to conduct contractor testing. The five vehicles will include M2A3 (3), M3A3, and A3 BFIST w/FS3. The contractor shall test two vehicles to run 3,000 durability miles in accordance with Government approved test plan. One of these two vehicles shall undergo full load cooling tests (tractive effort tests in accordance with Government approved test plan) and a fully upweighted, three-axis Center of Gravity evaluation in accordance with the Government approved test plan. The remaining vehicles will support requirements validation, integration, software qualification, logistics verification, Central Technical Support Facility (CTSF) evaluation in Ft. Hood, TX, failure analysis, MANPRINT, tie down/lifting analysis/test (support to transportability certification) and safety evaluation tests in accordance with the IMP/IMS. The contractor shall hold a TRR within 15 days from the start of testing. The contractor shall prepare and deliver a test plan (CDRL A065) for Government approval 30 days prior to the start of test. The contractor shall also prepare and deliver daily status reports (CDRL A066) for the duration of contractor test, as well as a contractor T&E authority approved test report (CDRL A067) 30 days following test completion. The contractor shall ship one M2A3 and one M3A3 to Yuma Test Center (YTC) to support Government test.

C.7.1.1.1.2 Production Verification Test Overview. The contractor shall deliver to the Government designated test sites below eight Bradley ECP vehicles. The contractor shall ship and deliver the following variants to each site:

- Aberdeen Test Center (ATC); (2) M2A3, (1) M3A3, (1) BFIST w/FS3

- Yuma Test Center (YTC): (1) M2A3, (1) M3A3, (1) BFIST w/FS3

- White Sands Missile Range (WSMR): (1) BFIST w/FS3 for E3 testing

C.7.1.1.1.3 PVT Parameters. To verify performance specification compliance, PVT will consist of Automotive Performance, RAM/Durability Testing, firing performance/accuracy testing, Environmental testing, Electromagnetic Interference (EMI), Electromagnetic Compatibility (EMC), Bonds and Grounds (B&G), High Altitude Electromagnetic Pulse (HEMP), Near Strike Lightening (NSL) testing, High Power Microwave, and Nuclear Weapons Effects (NWE) testing. The majority of the effort for this test phase will be conducted at ATC and YTC and will consist of RAM/durability (2 vehicles each accumulating 6,000 miles, and 2 vehicles accumulating 3,000 miles). The remaining three vehicles will be a shared usage between the following test activities: safety assessment, performance characteristics, and environmental evaluation. At least two vehicles (1 M2/M3 and 1 BFISTw/FS3) will be used to validate the Electromagnetic Environments Effects (E3) and Nuclear Weapons Effects (NWE) requirements. It is assumed the exterior structure of the systems will remain unchanged and any additional system-level live fire testing (except the conducting of analyses) will not be required. Government safety testing will be performed to obtain a safety release in support of any informal user/logistic demonstration. The completion of all PVT testing will be sufficient to issue a safety confirmation for the hardware covered under this contract..

C.7.1.1.1.4 Contractor Services for Government PVT: The contractor shall conduct powerpack and ground hop for all powerpacks prior to assembly and a vehicle system prove-out (shakedown test) prior to the start of Government PVT for each of the eight test vehicles. The contractor shall provide a test plan (CDRL A065) that details the testing that will be conducted during the contractor vehicle prove-out prior to PVT. The Government shall have the final approval of the contractor test plan.

C.7.1.1.1.4.1 The contractor shall make available verification data such as test results, demonstration documents, videos or pictures, analyses, reports and inspection results to the Government (CDRL A067).

C.7.1.1.1.4.2 The contractor shall provide on call Field Service Representatives (FSRs) or Subject Matter Experts (SME) to perform services for Government personnel in maintenance and repairs at White Sands Missile Range (WSMR) while the vehicles are under test, as well as during pre- and post-test vehicle inspections. The WSMR FSR is expected to cover eight months. For the ATC and YTC testing, the FSRs shall be available during the entire test schedule. The FSRs shall coordinate with test site personnel to assist and conduct repairs. The contractor shall provide FSRs to support two, daily 10-hour shifts at YTC and ATC.

C.7.1.1.1.4.3 The contractor shall send SMEs to any of the test sites to perform troubleshooting or failure analysis for any of the vehicles under Government testing.

C.7.1.1.1.4.4 The contractor shall staff the Test and Evaluation Master Plan (TEMP). The contractor shall attend and support two TRRs to be held at the Government test sites in accordance with the IMP/IMS.

C.7.1.1.1.4.5 The contractor shall provide parts, TMs and training for the PVT in accordance with paragraphs C.8.2 (ILS Program Objectives) through C.8.2.3.10 (Supportability, Test, and Evaluation).

C.7.1.1.1.4.6 Six (6) prototype Common Ethernet Switch units at Santa Clara will be utilized on the ECP program to perform integration

and test on test beds and vehicles.

C.7.2 Quality Engineering (QE)

C.7.2.1 The contractors Quality Engineers shall be involved in all design reviews, specification reviews, DFSS reviews, verification planning, conducting verification, and technical data finalization to ensure the objectives of the overall production Quality programs are achieved and continuously improved upon. The Quality Engineers shall participate in determining the type and amount of verification necessary to ensure all contract requirements are satisfied. QE shall ensure DFSS tools are utilized in the design and/or integration process.

C.7.2.2 The contractor shall perform quality engineering reviews of all TDP documentation affected by the contract. These reviews are to decide the type and amount of process and product controls and tests necessary to achieve a quality product. The contractor shall define these required process and product controls and tests on engineering drawings. If a document separate from the engineering drawings is required for the quality requirements due to complexity or criticality, it shall be prepared in the same format as existing Quality Assurance Provisions (QAP) per DRSTA-P-702-155, and called out on the Technical Data.

C.7.2.3 Quality Assurance. The contractor shall develop, implement, and maintain a Quality Management System (QMS) acceptable to the Government for all supplies and services to be provided under this contract. The quality system shall, as a minimum, meet the requirements of ANSI/ISO/ASQ Q9001-2008 or an equivalent standard. Government approval of the Quality System is not required, if at the time this contract is awarded, the contractor is a Registrar Accreditation Board (RAB) certified/registered ANSI/ISO/ASQ Q9001-2008, QS 9000/TS 16949, or AS 9100 supplier. The contractor shall make all QMS documents/procedures available for review upon request.

C.7.2.4 Final Inspection Record (FIR). The contractor shall prepare FIRs for each of the following Bradley ECP variants: M2A3/M3A3, and A3 BFIST w/FS3. All FIR modifications shall require Government approval.

M2A3/M3A3	QF87T0010
A3 BFIST with FS3	QF87T0182

C.7.2.4.1 The results of the bonds and ground inspection, as carried out in accordance with the procedure developed via paragraph C.5.16.2.5, shall be included in the Final Inspection Report (FIR) for each of the vehicle variants under this contract. The contractor shall document all findings supported by photographs.

C.7.3 Hardware/Software Validation and Testing

C.7.3.1 The contractor shall provide a system validation function that determines the overall validation needs for both the overall system and its components, plans and schedules, validation activities. The function shall monitor and coordinate the actual testing or analysis used to validate designs, and shall accomplish any and all other tasks needed to ensure that Contractor design and integration efforts are fully validated. The contractor shall track and record progress of designs and components undergoing validation testing, at Government and contractor test sites.

C.7.3.1.1 Preliminary Software Qualification Test/Software Qualification Test (PSQT/SQT). The contractor shall invite Government Representatives to witness its PSQT/SQTs. The contractor shall provide test plans to the Government in accordance with CDRLA049, Software Test Plans. The contractor shall prepare and deliver to the Government qualification test reports to the Government for approval or rejection after completion of test in accordance with CDRL A050, Software Test Reports.

C.7.3.1.1.1 The contractor shall deliver any hardware developed for system validation to the Government once all validation/qualification tests have been completed.

*C.7.3.1.2 Qualification. The contractor shall conduct qualification testing on LRUs and hardware as specified below. The quantity of units to be tested, as well as the specific qualification tests to be performed, shall be determined jointly with the Government. The contractor shall plan, coordinate, and control lab verification/qualification testing for LRUs and hardware. Acceptance tests will not be accepted as a substitute for qualification testing. The contractor shall re-qualify any items for which there are design changes after the initial qualification, to include full re-qualification or delta-qualification, as is appropriate for the change being made. The contractor shall perform system validation, including any source code and documentation. The contractor shall continually prepare and deliver a document specifying the quantities of units that shall be tested along with the specific tests that are required for each qualification in accordance with CDRL A070, Qualification Matrix.

Bradley Hardware/LRUs for Qualification:

Battery Monitoring System (BMS)
Common Embedded Training System (CETS)
Common Intelligence Display (CID)*
Cooling System Radiator Mount
Electronic Cooling System
Fan Speed Control Valve (FSCV)

Generator
Power Pack Lifting Eyes
Power Take Off (PTO)
Slip Ring
Throttle Position Sensor
Transmission Oil Cooler
Central Processing Unit (CPU)
Wiring Harnesses**
DVE Wide

* No Qualification Testing required if CID (P/N 12540726) selected as design solution.
** No Qualification Testing required if harnesses supplied by a BAE approved source.

C.7.3.1.2.1 Qualification Test Plans. The contractor shall prepare and deliver to the Government qualification test plans for LRUs and hardware specified in the above paragraph, and shall provide final versions of the aforementioned test plans to the Government in accordance with CDRL A068, Qualification Test Plans. The qualification test plans shall consist of: test methodology; test scope; test judgment criteria; and test sequence/duration. The contractor shall conduct qualification tests in accordance with test plans as approved by the Government.

C.7.3.1.2.1.1 The contractor shall conduct a Physical Configuration Audit (PCA) prior to qualification test. The PCA shall be part of the test plan.

C.7.3.1.2.1.2 Qualification Test Reports. The contractor shall prepare and deliver qualification test reports for LRUs and hardware as specified in paragraph C.7.3.1.2 to the Government for approval or rejection after completion of test in accordance with CDRL A069, Qualification Test Reports.

C.7.3.1.3 Acceptance Tests. The contractor shall develop or update, conduct, validate and verify the acceptance tests of Automated Test Equipment (ATE) for LRUs and hardware as specified in the lists above (Bradley LRUs for Qualification and Bradley Hardware for Qualification). The contractor shall inform the Government of any failed acceptance test(s) within five calendar days.

C.7.4 Environmental Stress Screening (ESS).

C.7.4.1 The contractor shall establish and implement ESS programs in conjunction with Government approval on all contractor-developed electronic hardware, including SRUs, LRUs and spares. The objective of the ESS effort shall be to improve design, product quality and product reliability, increase production yields, and reduce ownership costs. Using limitations and parameters defined in HALT and POS, the contractor shall develop/update ESS profiles to determine optimum screens.

C.7.4.2 Highly Accelerated Life Tests (HALT). The contractor shall conduct HALT on all electronic hardware developed under this effort, including SRUs, LRUs, and spares, in conjunction with Government approval, using production intent design(s), materials, and manufacturing processes where possible. All failures and functional anomalies will be resolved, in an effort to improve design, product quality, product reliability, and increase production yields to reduce ownership costs. Operational parameters and limitations will be used to define test profiles in the ESS programs.

C.7.4.3 ESS Proof of Screen. The contractor shall utilize POS techniques based on HALT results to establish an ESS program for 100% of all contractor developed electronic hardware, including SRUs, LRUs, and spares listed in paragraph C.7.3 in conjunction with the Government. The objective of POS is to determine that the most applicable ESS parameters are being used to precipitate and detect relevant defects while not overstressing hardware.

C.7.4.4 HALT Coordination. The contractor shall develop and implement HALT planning, coordination, and control of lab HALT testing.

C.7.4.5 HALT Test Plans. The contractor shall develop HALT test plans for all applicable electronic hardware and shall deliver final versions of the aforementioned test plans to the Government in accordance with CDRL A071, HALT Plans.

C.7.4.6 Electronic HALT Reports. The contractor shall submit HALT test reports to the Government for review and approval or rejection after completion of the final HALT test for all applicable electronic hardware tested in accordance with CDRL A072, HALT Reports.

C.8 Integrated Logistic Support (ILS)

C.8.1 Integrated Logistic Support Program: The contractor shall plan, manage and execute an ILS Program for the Bradley ECP program.

C.8.2 ILS Program Objectives: (1) The ILS Program shall contract W56HZV-07-C-0096 as a baseline to satisfy the contractual requirements and deliverable items described below. (2) The ILS program objective will be focused on integration of the Logistics Elements as defined in AR 700-127 into the Bradley ECP platform. (3) The contractor shall provide test support by developing a system support packages for Developmental Testing (DT) and Logistics Demonstrations (Log Demo) as required further below under this contract. (4) The contractor shall maintain facility vehicles to ensure they are available and in the proper configuration and condition to support the

activities required for the Engineering, Test, and Logistics development efforts described under this contract. (5) The contractor shall develop and prepare and deliver to the Government Draft Equipment publications (DEP) in support of technical manual verification efforts (CDRL A073). A Technical Manual schedule will follow that initial DEP.

C.8.2.1 ILS Program Management: A joint Government/contractor Supportability IPT (SIPT) shall be established to oversee the ILS program. The contractor shall serve as vice chair of the IPT with the Government ILS Manager.

C.8.2.2 ILS Management Planning: The contractor shall present at a SIPT meeting within thirty (30) calendar days of contract award its plan for managing and executing the ILS program. The plan shall describe the contractors organization, lines of communication, schedule of activities, with associated resources, and management controls. This planning information shall be presented for SIPT approval. Required adjustments shall be documented in the SIPT meeting minutes.

C.8.2.2.1 ILS Master Schedule: The contractor shall develop and maintain an ILS Master Schedule to manage the Bradley ECP ILS program. The ILS master schedule shall reflect the details of all ILS taskings under this scope of work and incorporate the ILS Master Schedule into the Bradley Integrated Master Schedule (IMS) (CDRL A005). The contractor shall present the ILS Master Schedule at each SIPT meeting and incorporate any SIPT approved changes to the schedule into the Bradley IMS.

C.8.2.2.2 Supportability IPT (SIPT): A joint Government/contractor Supportability IPT shall continue to monitor the status, provide guidance and manage the overall ILS program. The Government ILS manager will chair the SIPT and the SIPT meetings. The contractor's ILS manager shall serve as vice chairman of the SIPT. For planning purposes the SIPT meetings will be conducted four times each year, in conjunction with key ILS/Program events, rather than on a calendar basis. Specific ILS program functions, activities, and elements will be managed by SIPT. The parties shall discuss: 1) functional and programmatic issues; and 2) action items to execute/resolve. The SIPT team meetings shall include MANPRINT IPT meetings.

C.8.2.2.3 Supportability IPT Support: The contractor shall host SIPT meetings at its facilities. The contractor vice chairman shall coordinate SIPT meeting agenda issues, topics and schedules. The Government will publish a coordinated agenda for SIPT meetings. The contractor shall prepare and deliver minutes of the SIPT meetings in accordance with CDRL A002. The minutes including action items will be agreed upon jointly and approved by the Government ILS Manager. The action items shall be approved prior to the close of the meeting. The SIPT meeting minutes will become an informal update to the Government Life Cycle Sustainment Plan LCSP. The minutes will contain as a minimum, schedules, results and proceedings to include discussions, assessments, guidance, and action items.

C.8.2.2.4 Life Cycle Sustainment Plan (LCSP): The contractor shall execute the ILS program in accordance with the Bradley LCSP (Attachment 0016). The contractor shall provide updates to the LCSP via delivery of SIPT meeting minutes.

C.8.2.3 Logistic Support Analysis (LSA)/logistics management information objectives: (1) The contractor shall conduct LSA to sustain and update the existing Bradley LMI which will reflect the authorized Bradley Drawing Technical Data package for production. (2) The contractor shall ensure LSA/LMI data is available with sufficient lead time to verify and field a logistics support package in support of production vehicles at the time of its scheduled delivery and fielding. (3) The contractor shall perform the following LSA activities to sustain and update the logistic support package:

a. Evaluation of how configuration changes proposed as part of this contract and associated documentation impact ILS..
b. Documentation of approved configuration changes and waivers and deviations that affect the logistic support package.
c. Evaluation and incorporation of new vendor data and documentation of vendor changes,
d. Evaluation of test and field data,
e. Documentation of changes related to test/field data evaluation,
f. Corrections to the LMI as required for acceptance into the government LMI database.

C.8.2.3.1 LSA Tasks: The contractor shall perform the following Logistics Support Analysis efforts, tailored as stated:

C.8.2.3.2 Supportability and Supportability Related Design Factors: The contractor shall update the following design related supportability parameter functions of the US Army maintenance and support infrastructure. Overall support related facilities, test equipment, common and special tools, and skills must be addressed.

C.8.2.3.2.1 System Specification Parameters: The Contractor shall ensure that supportability requirements defined in system and component specifications are achieved in the vehicle design by demonstrating them during testing or Log Demonstrations.

C.8.2.3.2.2 RAM Logistical Analysis: The contractor shall leverage the results of the Reliability and Maintainability (RAM) Analysis, to include the Failure Modes, Effect and Criticality Analysis (FMECA), to initially develop or update maintenance task frequencies, parts replacement rates, troubleshooting and diagnostic symptoms and procedures, maintenance times, reliability centered maintenance based scheduled and unscheduled maintenance task determination, and essentiality determinations. The aforementioned items will be documented in LMI parts and task files.

C.8.2.3.2.2.1 Allocations and Predictions: The contractor shall utilize the initial RAM allocations and predictions to develop the quantitative elements of the LMI data (failure factors). The contractor shall develop reliability allocations to primary systems and subsystems to meeting system level diagnostics requirements in conjunction with VHMS development.

C.8.2.3.2.2.2 Failure Modes, Effect and Criticality Analysis (FMECA): The contractor shall conduct a FMECA to reflect all designs down to the component level (except for COTS items for which the FMECA will be performed to the lowest level possible). Potential failure modes shall be identified and evaluated to determine their effect on mission success. The Failure Modes and Effects Analysis shall be performed as a combination of a hardware analysis with functional analysis as required for Commercial Off the Shelf (COTS). The criticality analysis shall be quantitative, incorporating the failure rates calculated in the reliability predictions and rank failure modes according to failure severity classification and its probability of occurrence. The FMECA data will be made available upon request in contractor format (CDRL A074).

C.8.2.3.2.3 Engineering Change Evaluation and Documentation: The contractor shall evaluate each proposed configuration change for ILS impact, assessing and documenting the impact to each of the following ILS elements: maintenance planning; manpower and personnel, supply support; support equipment; test measurement support equipment; technical data; training and training support; computer resources support; facilities; and packaging, handling, storage and transportation. The contractor shall make recommendations on changes to LMI that result from this analysis. Changes will be presented at the scheduled SIPT meetings.

C.8.2.3.2.4 LSA Supportability Products and Deliverables: The contractor shall present the results of supportability and supportability related design factor efforts at SIPT meetings with results documented in SIPT meeting minutes in accordance with CDRL A002. Results of configuration change evaluations shall be provided with the appropriate LMI configuration change documentation.

C.8.2.3.3 Functional Requirements Identification: The contractor shall maintain and update the existing Bradley LSA Operator/Maintenance Task List and perform the Functional Requirements Identification efforts below in accordance with the approved ILS Master Schedule. The task list will contain: LMI designation; task title; task time; task frequency; MOS required; and special tools to complete the task.

C.8.2.3.3.1 Supportability Considerations: The contractor shall maintain and update its assessment of the Bradley design for supportability. Supportability requirements shall be updated based on proposed design changes and new information (vendor information and field reports). The contractor shall document updates to its assessment in its LMI data base and present updates at LMI reviews and SIPTs. The contractor shall provide recommendations and corrective action plans for those areas judged inadequate to meet support requirements (CDRL A075).

C.8.2.3.3.2 Army Oil Analysis Program (AOAP): The contractor shall analyze any configuration changes to the engine and transmission delivered under previous contracts to determine the effect on Bradley AOAP information. Changes to the current AOAP information required to support Bradley shall be prepared and delivered to the Government in accordance with CDRL A076.

C.8.2.3.4 RESERVED

C.8.2.3.5 Task Analysis Performance Objective: For this contract, the contractor shall update and maintain the task analysis developed for Bradley vehicles under Contract W56HZV-07-C-0096 to mirror the approved authorized Bradley production configuration logistic support package. Updates shall be based on approved/authorized configuration changes, new information, test data, vendor changes, changes in Bradley support planning, error correction, and tailored Bradley depot requirements.

C.8.2.3.5.1 Maintenance Task Analysis: The contractor shall conduct Maintenance Planning and Supportability Analyses, in order to develop logistics products based on the Armys two- level maintenance policies in accordance with AR 750-1 (Chapter 3 Section 2) and AR 700-127 (Chapter 5). The contractor shall use GEIA-STD-0007 in identifying content, format, delivery, and related guidance for logistics data (Attachment 0017).

C.8.2.3.5.1.1 Maintenance Task Analysis Baselines: The contractor shall use existing Bradley maintenance information from LSA Task File Reports (Attachment 0018) to develop a complete LMI baseline for the Bradley systems based upon a maintenance task analysis. The maintenance task analysis shall initially reflect the design (as-built) baseline of the Bradley that will enter Developmental Testing (DT). The Bradley baselines shall reflect the results of the latest RAM, safety, health hazards, and human factors engineering analysis. The contractor shall tailor the task analysis to meet the requirements of LMI and the resulting logistic support package. The contractor shall update the maintenance task analysis to reflect the results of testing, training, quality, manufacturing, the Log Demo and other Bradley prototype events and evaluations. In performance of maintenance task analysis, the contractor shall:

a. Provide sequential narrative instructions or procedures for all tasks below depot level maintenance including: (1) maintenance source data for Technical Manuals (TMs), (2) Interactive Electronic Technical Manuals (IETMs), and (3) and as necessary to support the update of the Combat Arms Battalion (CAB) that will for use in full-rate production.

b. Identify all support requirements for performing each task. These shall include, Military Occupational Specialty (MOS), skill levels, tools, support equipment, Automatic Test Equipment (ATE), Test Program Sets (TPS's), and repair parts. As a result of the maintenance analysis, recommend revisions in repair parts and special tool requirements, technical manuals, kits, tools or other equipment.

c. Develop the quantitative assessment of each maintenance task, RAM analysis and testing, to develop task frequencies, quantities of support items required for each task, and maintenance times for each duty position and the overall task. Based

upon the examination of each repairable assembly, use maintainability Design Criteria information in MIL-HDBK-470 to assess the supportability of the design.

C.8.2.3.5.1.2 Level of Repair Analysis (LORA): The contractor shall perform Level of Repair Analysis for new items based on the Army two-level maintenance policies in accordance with AR 750-1. The contractor shall refer to current TACOM LMI documentation. New items will be presented at LMI Supportability reviews. The LSAR output reports will serve as an equivalent of a LORA report.

C.8.2.3.5.1.2.1 Core Depot Assessment (CDA)/Source of Repair Analysis (SORA). The contractor shall identify the components that are targeted to be repaired at depot level that are new or unique to the system (CDRL A079). As part of the Joint Government Contractor Depot Maintenance Team, the contractor shall determine whether depot level overhaul or repair can be achieved by current organic depot capabilities.

C.8.2.3.5.1.3 Software Downloading Capability Maintenance: The contractor shall develop and maintain a software downloading capability for the A3 Bradley system. The procedure for updating software on the system shall be documented in LMI and serve as the basis for the published procedures in the appropriate TM/IETM. The process for maintaining software for deployed systems shall be documented in the software maintenance portion of the Bradley system maintenance Plan and delivered as a part of SIPT meeting minutes. The method for maintaining the proper software configuration of spare LRUs shall also be presented for approval at a SIPT meeting and included in the software maintenance plan.

C.8.2.3.5.2 Operator/Crew/Maintainer Task Analysis: The contractor shall use Human Factors Engineering (HFE) to update the operator and maintenance task lists for each Bradley system in sufficient detail to enable the development of the outlines for operator technical manual information, both embedded and standalone. The task inventory for each crew position will include the identification of which tasks and predecessor skills are required to be trained at the institution, during transition training and/or as a part of maintenance sustainment training.

C.8.2.3.5.3 Task Analysis Delivery Requirements: The contractor shall identify as a part of maintenance task analysis all support items required to maintain the system. For peculiar support items not available through the DoD supply system, the contractor shall provide the analysis and provisioning documentation requirements in accordance with DA PAM 700-56 and LMI provisioning documentation (CDRL A081). For those support items currently available through the DoD supply system, the contractor shall develop information that identifies the application and anticipated usage of the item as a part of the LMI provisioning documentation.

C.8.2.3.6 Support Item Sourcing Analysis: The contractor shall identify any new Bradley unique items recommended for stockage or initial issue (items with a source code of "P) resulting from approved configuration or support structure changes. The contractor shall certify a subset of these items as being available as repair parts. The subset shall include components as repair parts that are not procured as higher-level production assemblies. Documentation of the supplier of parts identifying the availability of these items as repair parts shall suffice as certification. The certification shall be made available at LMI reviews upon request.

C.8.2.3.7 Packaging Item Classification: For each Bradley support item (items with a source code of "P"), the contractor shall classify the item as selective or special based upon its packaging requirements and document them in LMI so that all new packaging development efforts (special packaging instructions, reusable containers requiring design, development, and validation) can be properly planned for. As a part of the contractors analysis of the design to classify each support item, the contractor shall identify those aspects of the system's design that should be improved to reduce the burden on the field and reduce O&S costs by eliminating or reducing the degree special packaging or containers are required to protect the design. This assessment and recommendations for improvements shall be addressed as a part of Supportability Considerations.

C.8.2.3.8 Facilities Analysis: As a part of the operator and maintenance task analysis, and the resulting training analysis, the contractor shall identify any new or unique facilities essential to the maintenance or training of the Bradley system.

C.8.2.3.8.1 Facilities Plan: The contractor shall prepare and deliver to the Government a facilities analysis (CDRL A080) at an SIPT meeting no later than ninety (90) calendar days after contract award. The contractor shall annex the facilities analysis to the Bradley LCSP.

C.8.2.3.9 Transportability Analysis\Validation\Verification: The contractor shall update the existing Bradley transportability report to reflect the Bradley system product baseline in adequate time to develop loading plans for all modes of transportation required to transport vehicles and to conduct transportability related Government test events. The Bradley transportability report shall be updated whenever design changes affect the Bradley system's envelope, weight, center of gravity or other transportability characteristics (CDRL A082). The contractor shall validate/verify changes to the Bradley systems transportability report in conjunction with validation of any new transportability guidance for the Bradley that is currently provided in the Transportation Engineering Agency (TEA) pamphlets (PAM) (TEA PM 55-19 for Rail, 55-20 for Highway, 55-21 and 55-22 for Marine Lifting and Lashing and 55-24 for Air). The contractor shall assist the Government activity responsible for developing and releasing the TEA PAMs by providing this transportability design data and other source information to include -10 and -23 TM information for reuse in the TEA PAMs.

C.8.2.3.9.1 Transportability Report: The contractor shall update and deliver a Transportability report, transportability plans, load plans, and shipping and clearance diagrams in accordance with CDRL A082, Transportability Report. The contractor shall review the plans and outputs for these transportability related activities with the SIPT team prior to development and delivery.

C.8.2.3.10 Supportability, Test and Evaluation: The contractor shall update the LMI to reflect the results of testing, evaluations, and demonstrations.

C.8.2.3.10.1 Logistic Review Process: The contractor shall analyze, review, and evaluate solutions to logistics problems and concerns identified via Government and contractor test feedback, logistics demonstrations, training, quality and other program events that identify the performance of the Bradley system and its supportability. The process shall define impact and solutions in all ILS elements and the logistic support package. The contractor shall insure proper interface with other the system contractors, subcontractors and vendors as well as other functional departments within the contractors organization. The results of the logistics review process shall be contained in a documented audit trail. The audit trail shall contain all actions processed, monitor action items, and document corrective action plans that ensure that LMI and the resulting logistic support package changes are completed in time to support each major Bradley system program event (e.g. DT, Logistics Demonstration).

C.8.2.3.11 Logistics Management Information (LMI): Data and information generated by the LSA process shall be documented in the LMI in accordance with DI-ALSS-81530 ANSI GEIA-STD-0007. The LMI shall be delivered in accordance with CDRL A075, and the approved ILS Master Schedule. The LMI milestones and activities shall be key information provided by the Bradley ILS Master schedule. LMI shall be developed, reviewed and delivered incrementally (as defined by the CDRL) based upon the need for the information to meet other system program requirements. The contractor shall identify configuration baselines for LMI updates that reflect the configuration of the vehicles for which the LMI must have information in time for the logistic support package that is required to support that configuration. The LMI shall be maintained as a central file of integrated, design related logistic data for the Bradley support items. The LMI data base shall be used to satisfy requirements for automated logistics support products, system logistic support, and be capable of producing LMI output summaries. The LMI shall include:

C.8.2.3.11.1 Manpower Personnel Training Requirements: Task lists by Military Occupation Specialty (MOS) to include the identification of those tasks that need to be trained at the institution, for transition, and sustainment. Task lists shall include frequency, times, skills and other key information to support:

C.8.2.3.11.1.1 Quantitative Qualitative Personnel Requirements Information (QQ PRI)/Manpower Requirements Criteria (MARC)/Manpower Estimate Report (MER) Input: The determination of the numbers and skill levels of personnel (per AR 71-32) within each Table of Organization and Equipment (TOE) and/or Table of Distribution and Allowances (TDA), required to support each Bradley system and any Bradley COEI and AAL. Data quality within LMI shall be associated with the identification of MOS's, task frequencies and task times for each duty position to develop Direct Productive Annual Man-hour requirements. The contractor shall utilize AR 611-1 and 611-201, and current MTOE provided as GFI to support the assessment of skills for each operator and maintenance task. Any MOS's or new skills required to operate or maintain the Bradley shall be identified to the SIPT at the next scheduled SIPT meeting following identification.

C.8.2.3.11.2 Basis of Issue Plan (BOIP) Feeder Data: The contractor shall support the requirement for the PM to submit BOIP Feeder Data by documenting and identifying TOE and TDA personnel and equipment requirements to operate, maintain, and transport the Bradley. Changes (additions or deletions) in requirements of this kind to the Bradley system shall be presented to the SIPT at least one month prior to the conduct of the Type Classification and Materiel Release.

C.8.2.3.11.3 Supply Support Lists: The contractor shall establish and maintain support item lists that identify the specific support item, at what level it is utilized or authorized for use. The contractor shall maintain the statistics from these lists (e.g. number of repair parts, number of repairables, number of peculiar tools, number of special tools, number of repair parts without NSNs, number of first echelon maintenance tasks,) and present the statistics at SIPT meetings. These lists and statistics shall include:

C.8.2.3.11.3.1 Authorized Stockage List (ASL): The contractor shall provide an initial recommended ASL for the Bradley at least 12 months prior to First Unit Equipped (FUE). The lists shall contain the range and density of changes from current Bradley and shall be identified at least six months prior to ERR approval in conjunction with presentation of the proposed SAIP List.

C.8.2.3.11.3.2 Basic Issue items(BII)/Components of the End Item (COEI)/)Additional Authorized items List (AAL): The contractor shall identify the current BII, AAL and COEI required for the Bradley as a baseline. As a part of the operator, task analysis the contractor shall identify which items can be deleted and which items need to be added to reflect the requirements to operate and maintain the Bradley ECP system. The contractor shall establish the system baseline at least six months prior to the Logistics Demonstration and maintain it so that BOIP Feeder data submitted by the PM is accurate and the appropriate items are planned for each Bradley calendar event.

C.8.2.3.11.3.3 Repair Parts Special Tool Lists (RPSTL): The contractor shall ensure LMI is available as a draft RPSTL used in identifying peculiar parts for events such as Log Demo and DT and tracking the completion of art and NSNs for -P manual completions.

C.8.2.3.11.3.4 Spares Acquisition Integrated with Production (SAIP) List: The contractor shall develop a recommended list of support items for consideration and procurement during any subsequent production program. This list shall include prices and quantities for the support items that the parties agree will be acquired with any production. The initial recommendation shall be provided with the first complete LMI baseline. The initial approved list shall be delivered at least six months prior to ECP approval in accordance with CDRL A083.

C.8.2.3.11.4 System Support Package (SSP) Lists: The contractor shall prepare the SSPLs in accordance with CDRL A084 for DT/ Log demo based upon LMI documentation. The contractor shall compare the initial SSPLs delivered for DT/ Log Demo with LMI and reconcile the differences prior to the initial delivery of Bradley provisioning data.

C.8.2.3.11.5 Maintenance Allocation Chart (MAC): The contractor shall develop an LMI task list resulting in outlines of a Maintenance Allocation Chart. A draft MAC shall be validated and delivered as part of the Draft Electronic Publication (DEP) in the IETM deliveries.

C.8.2.3.12 LMI Deliveries: The contractor shall deliver necessary source data, automated LMI file data, troubleshooting logic trees, diagrams, vendor data and other information supporting the analysis and conclusions documented in the LMI or proposed as change to the Logistic Support Package. This data shall be delivered (CDRL A075) as agreed to by the parties at the Provisioning Guidance Conference.

C.8.2.3.13 LMI Reviews: The Government reserves the right to accept or reject contractor produced LMI data. The contractor shall ensure that the LMI data including LMI inputs, LMI file data, drawings, mock-ups, hardware, TMs, specifications, electronic records, photographic reproductions, ECPs, ERRs and other configuration change documentation are available for review. The reviews will be conducted on a regular basis, (approximately quarterly) based on the volume of data completed, corrected, or updated. Provisioning data will be reviewed as part of LMI reviews. Separate (apart from LMI reviews) provisioning reviews will not be held. The contractor shall provide LMI file data in advance to facilitate the review process. The contractor shall prepare and publish minutes from each review in accordance with CDRL A002. SIPT LMI team meetings will be held on an as required basis to assess the overall LMI process, progress, and performance.

C.8.2.4 Logistics Support Package Objectives: 1) The ILS program shall ensure that the Bradley logistic support package developed under Contract W56HZV-07-C-0096 is updated to reflect the current system. Unvalidated operator level information shall be available at the start of DT. Unvalidated TM information for -20 level TMs and RPSTLs shall be available to support the Log Demo and the system prototypes after they have been refurbished mid way through DT, as described in the IMS. Validated operator instructions and -P manuals shall be available to support operator and data collector training. SAIP Lists, provisioning data shall be available to support any subsequent production program. Manpower and BOIP Feeder information shall be available to support events required for a successful program, also as described in the IMS. 2) Updates to the system baseline include incorporation of approved engineering changes, new information (e.g. test data, vendor data, log demo results, changes in the Bradley system support structure) and error correction. The contractor shall update, maintain, and validate the Logistic Support Analysis (LSA) and resulting Logistic Support package consisting of Technical Manuals (TMs), provisioning documentation, packaging, training, peculiar support equipment/Test Measurement/Diagnostic Equipment (TMDE) and Test Program sets (TPS). 3) Updates to the logistic support package shall be made based on LMI changes. 4) Updates to the Logistic Support Package shall be made in a timely manner to support the system tests, and demonstrations required to support utilization of Bradleys procured under this contract.

C.8.2.4.1 Logistics Management Information Products: The contractor shall utilize the Bradley LMI in developing logistics products.

C.8.2.4.1.1 TM Data: The contractor shall use LSA and the resulting LMI to develop all technical manuals. LMI shall be tailored to meet the technical manual information requirements (TM Attachment 0019). The maintenance technical manuals order and treatment shall be in top down generation breakdown sequence as prescribed in LMI deliverables.

C.8.2.4.1.2 BII/COEI/AAL: A joint Government / contractor team shall develop a recommended Basic Issue Item, Components of End Item and Additional Authorized Items list in accordance with MIL-STD-40051 CDRL A085.

C.8.2.4.2 Technical Publications Management. The SIPT Team will oversee the technical publications program. The contractor shall execute the technical publications program based on the TM Guidance provided in Attachment 0019, the start of work meeting, in-process reviews, and SIPT meetings. The contractor shall maintain a current documented set of tailoring instructions approved by the TM team. These tailored instructions shall be an annex to the program LCSP. All key TM milestones, deliveries, IPRs, validations and verifications shall be identified on the Bradley ILS Master schedule.

C.8.2.4.2.1 Technical Publications Objectives: The objectives of the Bradley technical publications program are to develop and validate/verify publications for the vehicles using Bradley LMI information derived from the TMs for Bradley, as well as the Bradley maintenance and operator task analysis. The contractor shall ensure that all TMs delivered match the configuration of the vehicles they are provided to support. The contractor shall deliver the following in accordance with CDRL A073:

C.8.2.4.2.2 Technical Publications Development/updates: The contractor shall prepare and deliver validated TMs. The contractor shall validate, update, support verification, and deliver IETMs. IETMs shall be Extensible Markup Language (XML) tagged, and meet the requirements of MIL-STD-40051-1/2 Chg 3 (as tailored by Attachment 0019) and MIL-PRF-87268. The contractor shall deliver CD ROMs containing the source files, presentation applications, and hard copy instructions as an insert to the jewel box in accordance with the CDRL A073.

C.8.2.4.2.3 Technical Publications Validations / Verifications: All technical and equipment publications shall be validated for completeness, accuracy, usability, and adequacy of content against the related system or equipment. These validations shall be part of Log Demonstrations conducted under this contract. Validations shall address tasks which are non-destructive in nature (replacement of seals and routine consumable items does not constitute a destructive task). The contractor shall identify the plan for any validations

that take place outside of the Logistics demonstrations to the SIPT TM team. The Government reserves the right to observe the contractors validation efforts. The contractor shall maintain a detailed record of the conduct and results of all TM validations. The contractor shall ensure completeness, clarity, and usability of digital products before delivery to the Government. Tasks must be re-validated when changes occur resulting from testing and approved ERRs.

C.8.2.4.2.4 Intelligent Sampling: The Bradley system Technical Manuals shall be reviewed during the Logistics Demonstration using an Intelligent Sampling technique. The SIPT shall select a sample of each technical manual to jointly validate. The sample will be selected from materials (1) which changed significantly from baseline Bradley variants, (2) with known risks and anticipated short comings and deficiencies and (3) that define high frequency tasks in the field.

C.8.2.4.2.5 Technical Publication Deliveries: The contractor shall deliver the following packages.

C.8.2.4.2.5.1 Unvalidated Draft Change Packages: The contractor shall provide the latest baseline Bradley TMs to support any LMI review, Logistics Demonstration, TM validations and vehicle test events. (CDRL A073).

C.8.2.4.2.5.2 Validated Draft Change Packages: The contractor shall deliver validated draft publications change packages in support of vehicle test events. These validated draft publications shall be planned for and delivered in accordance with the ILS Master schedule (CDRL A073).

C.8.2.4.2.5.3 Verified Draft Packages: The contractor shall deliver verified TMs (operators manuals, Lubrication Order, Field Maintenance Manuals, RPSTLs and BDARs) to support (I) I&KP Training and (2) initial fielding (CDRL A073).

C.8.2.4.2.6 Operators TMs. The contractor shall prepare and deliver in accordance with CDRL A073 Operator TMs for the Bradley. Red lined TM change drafts shall be delivered to support operator and data collector training and testing for DT at each test site as a part of the System Support Package (SSP).The contractor shall deliver the most effective media (paper, laminated, embedded, and/or external electronic) for each operator task with approval by the SIPT. Embedded tasks shall be reviewed for usability during the logistics demonstration. The contractor shall conduct a dynamic validation of all Operator tasks on vehicle. This validation can be accomplished using target audience troops whenever possible (e.g., log demo, testing, training, user jury). Two user juries shall be conducted to establish final locations of stowage, and document requests for user-defined stowage. Validated operator tasks shall be delivered with the SSP and shall be utilized for the conduct of training and testing events.

C.8.2.4.2.6.1 Outline: The contractor shall deliver Operator TM outlines for the Bradley per CDRL A073. The outline shall specify common and unique tasks.

C.8.2.4.2.6.2 Validated Draft Packages: The contractor shall deliver validated draft change packages and WBS with Logistics Control Number (LCN) to support DT events in accordance with the IMS (CDRL A073).

C.8.2.4.2.6.3 Validate for Development Testing: The contractor shall validate, per its internal processes, the operator tasks to support DT vehicles. Validated operator tasks shall be delivered as part of the SSP to support operator training and testing.

C.8.2.4.2.7 Maintenance TMs. The contractor shall prepare and deliver maintenance in accordance with CDRL A073 TMs and associated RPSTLs/-P manuals for the Bradley as documented in LMI. The contractor shall recommend the most effective diagnostic strategy (e.g., symptom based, system base, BIT/FIT based, logistic trees, and fault tables) to the SIPT for fault isolating to as single component. Embedded diagnostics are subject to software development and subsequent testing shall not be placed in the Technical Manuals. However, diagnostics, including those embedded in the vehicle, shall be reviewed for effectiveness as described in the software taskings in this scope of work, during the Log Demo. The diagnostic strategy accepted by the Government shall be the focused method of troubleshooting. The contractor must validate all non-destructive maintenance tasks on a vehicle. Those maintenance tasks that can cause damage shall be included as a part of any repairs performed for production, quality or vehicle testing. This validation can be accomplished using target audience troops whenever possible (e.g., log demo, testing, training, user jury).

C.8.2.4.2.7.1 Outline. The contractor shall prepare and deliver in accordance with CDRL A073 Technical Manual outlines as identified in Attachment 0019 from the maintenance task list in LMI. The order and treatment of the maintenance TMs shall align with the top down breakdown structure utilized in LMI. The final Maintenance TM outlines will be provided with the final Log Demo report.

C.8.2.4.2.7.2 Validated Draft Packages: The contractor shall deliver validated draft change packages to support any LMI review, Log Demo and associated manual validations.

C.8.2.4.2.7.3 Validated Draft Maintenance TMs. The contractor shall validate per its internal processes, the Repair Parts manuals and provide them to support training and testing as part of the SSP. The contractor shall develop validated draft maintenance TMs prior to testing that reflect the configuration of the Bradley ECP vehicle and the results of DT testing and training and the Logistics Demonstration and other feedback that was subject to the Logistics Review process.

C.8.2.4.3 RESERVED

C.8.2.4.4 Training: The contractor shall execute the Bradley system training program that ensures that: 1) training materials reflect

the appropriate vehicle configuration; 2) the needs of the individuals required to operate, maintain, train or provide technical support to the production-representative Bradley vehicles are fulfilled. The primary objectives shall be to ensure the training conducted for DT players and evaluators provides for a complete understanding of each Bradley system and how to operate it safely and accurately; and 3) training materials are incrementally developed to consistently meet the needs for this phase while establishing the foundation for the POIs. The contractor shall develop and document training and training materials in accordance with AR 350-1 and TRADOC Reg 350-70. The contractor shall furnish qualified and experienced personnel, supplies, and services necessary to provide and conduct hands-on only training conducted at the test sites for government personnel operating and maintaining vehicles during test events.

C.8.2.4.4.1 Training Management: The contractor shall participate in the planning and management of the overall the system training program by representation on the Bradley system SIPT Training Management Team. The contractor shall develop operator and maintenance training and training materials, including the POI for the Bradley based upon the existing training materials for the Bradley. The contractor shall provide equipment, tools and other materials for individual training events. For the Contractor-conducted training, the contractor shall provide a completion report in accordance with CDRL A086.

C.8.2.4.4.1.1 System Training Requirements Plan (STRAP) : The contractor shall provide services to the Bradley system SIPT Training Management Team by reviewing and recommending changes to the existing Bradley STRAP (which will be used initially as a guideline for planning the overall the system training program) based upon the training analysis and development and conduct of the system training during this phase.

C.8.2.4.4.1.2 Integrated Training Strategy: The contractor shall support the Bradley system SIPT Training Management Team by participating in the development of the Bradley system Integrated Training Strategy. The Training Management Team will address how training limited to changes to the Bradley vehicles, how identification of the appropriate individuals to be trained , and how the development of training for sustainment-level maintenance capability that includes the use of embedded training, training devices, ranges and facilities will be achieved. The strategy will include a master schedule, resources, and a narrative that addresses how the training capability is developed and established as an integrated program. The Integrated Training Strategy will become an annex to the Bradley system LCSP and included in the SIPT meeting minutes

C.8.2.4.4.2 Training Analysis: Training shall be a key element of the Logistic Support Analysis and the Logistics Review Board efforts ensuring configuration changes and other Logistic support package changes are considered.

C.8.2.4.4.3 Training Package Updates: The contractor shall prepare and deliver to the Government validated training materials in accordance with CDRL A087 for PVT training, reflect the PVT vehicle configuration. The contractor shall conduct maintenance Instructor and Key Personnel (I &KP) training utilizing verified TM and Training materials reflecting the latest Bradley ECP vehicle configuration. I & KP Training materials shall include both materials for instructors as well as the student. The contractor shall provide the NET team with technical updates as the I & KP training materials are finalized. The contractor shall finalize the NET package to be utilized by the contractor in conducting NET for Bradley system fielding subsequent to this Bradley ECP contract.

C.8.2.4.4.3.1 Training Evaluation: The contractor shall host two training evaluation events at its facility to allow the Government to review the contents of the training material, and to conduct simulated training sessions. The first event will be conducted no later than 12 months after contract award and the second event will be conducted no less than 90 days prior to Developmental Test (DT). The Government will provide the contractor with comments regarding the content of the training as part of these evaluation events.

C.8.2.4.5 New Equipment Training Materials:

C.8.2.4.5.1 NET Plan: The contractor shall design and develop in accordance with Department of the Army Pamphlet (DA PAM) 350-40 training courses and curriculum outlines, student training course guides, instruction and lesson guides, audio visual aids, master base documents, and classroom spares (hereinafter, Training Materials). The contractor shall provide the Government NET manager with the recommended job or tasks for training. The Government, then, will select the specific jobs or tasks which it decides to use for the training course.

C.8.2.4.5.2 Program of Instruction (POI) Outlines for Developmental Test (DT):
C.8.2.4.5.2.1 DT training package: The contractor shall conduct Player Verification Training (PVT) using Bradley ECP vehicles at the PVT test site for PVT players. The contractor shall train PVT players to perform their respective roles as data collectors, test directors, operators, and maintainers of the Bradley for PVT, and as trainers for OPNET (operator I&KP training).

C.8.2.4.5.2.2 I&KP Training: The contractor shall conduct I&KP Training for the Operator NET Team using Bradley ECP vehicles upon their receipt at the PVT test site. The training shall ensure OPNET personnel have been trained to perform its representative roles as trainers for OPNET (operator I&KP Training).

C.8.2.4.5.3 Course Material Deliveries: The contractor shall deliver Lesson Guides, Training Aids, Materials and other training media to include classroom spares required for the conduct of training IAW CDRL A087. The contractor shall make available all training materials as they are revised to the SIPT Training Management Team for review and approval. This shall be accomplished via final draft material deliveries to the Training Management Team. Final draft material deliveries shall be in accordance with the Training Materials CDRL A087 which shall be delivered at least 120 days prior to the conduct of I&KP training. Final Government comments will be provided NLT 90 days prior to the conduct of training for contractor incorporation into the final material. Final Material deliveries for each

course shall be delivered to instructors at least 15 days prior to the start of any training activity and include CDRL A087 (electronic media and A/V Materials). Final NET materials shall be delivered NLT 30 days prior to the start of conduct of NET. The contractor shall provide instructors and student material for I & KP Training and the PVT course per CDRL A087. The contractor shall deliver two sets of training aids as well as one set of classroom spares each I & KP course taught to the NET to finalize the training material.

C.8.2.4.6 Provisioning Technical Documentation Objectives: (1) The contractor shall maintain and update Provisioning Technical Documentation (PTD) developed for the Bradley baseline vehicles. The contractor shall update the PTD based on LMI changes, engineering changes, screening results, and provisioning Bill of Material feedback. (2) The contractor shall maintain the PTD and update with NSN assignments for SAIP parts prior to Bradley scheduled fieldings. The contractor shall prepare and deliver to the Government: a. Provisioning Parts List (PPL) in accordance with CDRL A088 and DD Form 1949-2 (Provisioning Requirements statement). The PPL shall contain the elements identified on DD Form 1949-1. b. Supplemental Provisioning Technical Documentation (SPTD). The contractor shall prepare drawings to enable updates to the PPL. The contractor shall complete all updates to PTD (CDRL A089), and deliver all Supplementary Provisioning documentation in time to allow completion of requirements computation, assignment of NSNs, and delivery of SAIP items. This shall be accomplished prior to delivery of the Bradley ECP vehicles.

C.8.2.4.6.1 Support Item Sourcing Certification : The contractor shall identify any new Bradley ECP unique support items recommended for stockage or initial issue (items with a source code of "p") that are a part of the product baseline. The contractor shall verify these items as being available as repair parts. Documentation from the supplier for these parts identifying their availability for purchase by either the US Government or the contractor for each of these items as repair parts shall suffice as certification. The certification shall be made available at LMI reviews upon request.

C.8.2.4.6.2 Logistics Modernization Program (LMP) Input: The contractor shall develop and deliver LMI provisioning data for input to the Governments LMP (for all support items (e.g. parts, special tools, BII, and COEI) identified as a part of LSA as required to support the Bradley.

C.8.2.4.6.2.1 Provisioning Parts List (PPL): The contractor shall submit a PPL formatted in the same sequence as the approved Maintenance Allocation Chart (MAC), which is prepared in top down breakdown sequence. This list, structured at the end item level, shall include all parts and materials required for the maintenance and operation of the Bradley. The PPL shall contain all tools, test equipment, repair kits and repair parts sets required to maintain the Bradley systems. The contractor shall maintain and continuously update his provisioning file with the LMP and other feedback data provided by the Government (i.e., changes, additions, or deletions to part numbers, source, maintenance and recoverability codes, and failure factors) for the Bradley ECP vehicles. The contractor shall correct all errors in LMI and submit changes reflecting the corrections for LMP input within thirty (30) working days of notification of the errors from the Government. Prime part numbers and Commercial and Government Entity (CAGE) Codes will reflect the original equipment manufacturers information unless that part is modified, changing form, fit, and function or has been previously been cataloged using another prime part number and have an active NSN assigned. PPL shall be prepared and submitted in accordance with CDRL A088. Each incremental submission called for by the CDRL shall include at least one major assembly.

C.8.2.4.6.3 Supplementary Provisioning Technical Documentation (SPTD): The contractor shall maintain electronic access to Military and Federal Specifications and Standards. SPTD, to include the top assembly drawing, shall be submitted in accordance with CDRL A089. All approved vendors Commercial and Government Entity (CAGE) codes are to be cited by the contractor (typed, stamped, or in legible writing with authorized signature and date) on drawings when furnished with each submitted increment of provisioning documentation for each "P" coded item. For commercial or other items which the Government is not acquiring product drawings, the contractor shall provide company drawings or commercial parts book pages that clearly identify each new item, its part number, physical characteristics, and function of the item. For each P coded item being provisioned, the SPTD shall be annotated with the affected LSA Control Number (LCN) and Provisioning Line Item Sequence Number (PLISN) for each the Bradley ECP systems . Provisioning screening data shall constitute as SPTD for items that have previously been assigned a valid national stock number. If the contractor has developed RPSTL illustrations and listings, the contractor shall make them available to support LMI reviews.

C.8.2.4.6.3.1 Cataloging Input: The contractor shall update the LMI to reflect the results of cataloging actions to include changes to support item nomenclature. Nomenclature changes that differ from the drawings and draft TMs must be made consistent in LMI and the TMs prior to final draft TM deliveries.

C.8.2.4.6.4 Provisioning Screening Data: The contractor shall conduct pre-procurement screening for all items selected as repair parts. The contractor shall standardize commercial items selected as repair parts. The contractor shall use Government or industry association, specifications, drawings, or standards numbers as the preferred reference number (e.g., Federal (FED), Military (MIL), Joint Army/Navy (JAN), Air Force/Navy (AN), National Electrical Manufacturers Association (NEMA), Society of Automotive Engineers (SAE)). The contractor shall perform this screening to select valid part numbers for the Provisioning Bill of Material. All vendor source information identified on the drawing will be screened. Results of pre-procurement screening for standardization and component selection will be used to update the contractors provisioning file. The screening results must accompany the provisioning documentation for each new or revised commercial item selected as a repair part. The contractor shall deliver this documentation in accordance with CDRL A090. The contractors submittals shall be updated to reflect the current part numbers that have a National Stock Number (NSN) resulting from the screening process.

C.8.2.4.6.5 LMP Feedback: The contractor shall maintain and continuously update the Bradley system LMI using the formal feedback from the Government after each Provisioning Technical Documentation (PTD) submission. The Government will notify the contractor of the

acceptance and/or corrections required based upon loading the LMI data into LMP within fifteen days of each submission. The contractor shall submit corrections within ten working days of notifications. Details of how and when the contractor shall submit the LMI corrections for LMP shall be addressed at an LMI review team meeting at least ninety days prior to the first submission of LMI provisioning data. LMI corrections shall be resubmitted until the Government provides final approval of all LMI data submissions.

C.8.2.4.6.6 Provisioning Quality Acceptance Standards: The quality standards outlined in MIL-PRF-49506 apply to all phases of the provisioning effort. The Government will notify the contractor of these provisioning changes.

C.8.2.4.6.7 PTD Updates: The contractor shall notify the Government of those design or part changes which modify, add, delete or supersede any of the operating, maintenance or repair parts information that was previously provided. This notification shall be as a part of the agendas for regularly scheduled LMI reviews. LMI data shall be updated, reviewed at an LMI, and submitted as a PTD update to LMP.

C.8.2.4.6.8 PTD Guidance: The following guidance shall be adhered to in the development, review, submission, update and correction of the Bradley system PTD:

C.8.2.4.6.8.1 Maintenance Replacement Rates (MRR): Results from the reliability, availability and maintainability (RAM) program shall be used to determine the Maintenance Replacement Rates I and II (or Failure Factors) for all provisioned parts. These rates may vary by model and configuration of the end item. The Maintenance Replacement Rate (MRR) will be a consolidation of all known RAM information. The contractor shall develop rationale and methodology for determining MRRs, in accordance with MIL-PRF-49506 using the following data:

a. Engineering Data
b. Warranty Data
c. Testing and Developmental Documentation
d. Historical Data on an analogous piece of equipment. When using historical data, the MRR II will be, at a minimum, 2.5 times greater than that of MRR I.

C.8.2.4.6.8.2 Next Higher Assembly Provisioning Line Item Sequence Numbers (PLISNs): Next Higher Assembly (NHA) PLISNs and Overhaul Quantities (OVHL QTYs) are used to identify and forecast repair parts requirements for all assemblies or subassemblies or components. The contractor shall enter overhaul quantities for each item, in accordance with MIL-PRF-49506:

a. Identify the immediate NHA PLISN. Enter an overhaul quantity.
b. Identify all subsequent assemblies, using the Logistic Support Analysis (LSA) Control Number (LCN) structure, the down part. Enter NHA PLISN and OVHL QTY.
c. Identify the model record PLISN(s) as a NHA PLISN and enter an OVHL QTY, if called for by the Government.

C.8.2.4.6.8.3 Documentation of Parts Pricing: The contractor shall screen the Government databases for data on all parts of the Contract Item and shall use the price(s) cited there whenever available. In the event the price is not contained in the Government databases, the contractor shall develop a Logistic Support Analysis Record (LSAR) Unit of Measure Price. The contractor shall enter the most economical price in the LSAR data base as the unit of measure price.

C.8.2.4.7 Packaging, Handling, Transportation: The contractor shall provide packaging instructions for provisioned items. The contractor shall assess engineering and logistic changes for packaging effect and provide packaging effect statements with ERRs. Packaging data entries, Special Packaging Instructions (SPI) images in accordance with CDRL A091, and configuration data shall be electronically delivered to the Government. Packaging design validation shall be done in accordance with ASTM D4169, Distribution Cycle 18. The contractor shall forward packaging data entries to the TACOM Packaging File (PACQ) in ASCII text format in accordance with CDRL A092.

C.8.2.4.7.1 Packaging Engineering Management Objectives: The contractor shall maintain and update preservation, packaging and processing documentation for Bradley vehicles and its associated support items. All such documentation shall reflect the Bradley ECP vehicle configuration. The contractor shall prepare, deliver, and update packaging data for all new Bradley-unique provisioned items. For each change, the contractor shall determine if additional items require packaging data and if existing packaging data should be revised. The contractor shall provide information concurrently with each packaging data submittal, so that the Government can determine the adequacy of the contractor-prepared packaging analysis and data submittal. This information includes item drawings and data such as: Source, Maintenance, and Recoverability (SMR) codes, Unit of Issue codes, Unit of Measure and Measurement Quantity, and copies of any applicable Material Safety Data Sheets.

C.8.2.4.7.1.1 Status Reports: The contractor shall prepare and maintain the Bradley packaging data status reporting system. The contractor shall use packaging data files and current LMI data to establish the status of packaging data. The contractor shall prepare and deliver packaging status reports in accordance with CDRL A093 and brief these reports at SIPT Meetings. Packaging status reports shall be appended to SIPT meeting Minutes.

C.8.2.4.7.1.2 Packaging/Logistics Data Entry: The contractor shall develop, maintain and update packaging data in accordance with CDRL A092 and shall provide for the entry of this information into the computer data base known as the TACOM Packaging Data File. The TACOM-approved packaging data shall be electronically submitted to AMSTA-LC-LEAP in an ASCII delimited text format, using commas as

delimiters. Quotation marks may be used as text qualifiers but are not required. The contractor shall describe, within the packaging data submittals, the packaging requirements for each Bradley-unique item. The packaging information shall be adequate to satisfy a requirement for shipping the item from its manufacturing source to a Government supply depot.

C.8.2.4.7.2 Shipment and Storage (S&S) Instructions: The contractor shall prepare, deliver to the Government, update and maintain instructions for preserving the Bradley vehicle (CDRL A094). The contractor shall maintain and update disassembly procedures to meet clearance requirements for land, air, and sea shipment, and to ensure economical transportation. Packaging requirements for BII and COEI shall be updated and maintained by the contractor. The contractor shall maintain and update stowage locations and attachment provisions. Stowage requirements for BII and COEI shall be designed to deter pilferage, and to enable transportation clearance requirements. The BII and COEI packaging instructions shall be included in the S&S specification. Stowage provisions shall not interfere with lifting, tie down or other transportation handling requirements.

C.8.2.4.7.3 Long Life Reusable Containers (LLRC): The contractor shall maintain and update the existing technical data package (TDP) for Bradley shipping containers, and shall determine when the use of LLRCs is appropriate. The contractor shall use the Governments Container Design Retrieval System (CDRS) when making search requests for any reusable container designs or data.

C.8.2.4.7.3.1 LLRC Guidelines: Guidelines for determining when reusable containers are desirable includes, but is not limited to the following:

a. The container can serve two purposes; either as a shipping and storage container or as a case while the item is in use.

b. The cost of a reusable container is offset through multiple usages, as compared to the cost of a single-shipment disposable container. The item may be recovered, repaired, or returned.

c. The need for periodic inspection, the need to exercise the contained item, item fragility, or package and shipping costs versus damage costs, justifies a reusable container.

C.8.2.4.7.3.2 LLRC Candidates: The contractor shall identify and document repairable items requiring special handling or condemnation procedures, where retrograde shipment of vehicles is required in accordance with CDRL A095. For those containerized items identified to, and approved by, the Government (or identified to the contractor by the Government) as LLRC candidates, the contractor shall conduct Search Requests in CDRS, and deliver the results of those inquiries to the Government, in accordance with CDRL A096.

C.8.2.4.7.3.3 LLRC Requirements Definition: The contractor shall prepare and deliver, to the Government, assessment data that determines whether existing container designs are suitable (CDRL A096). The contractor shall assess the fit and function of existing containers, and compare the costs of modifying existing containers to the expense of developing new designs. The contractor shall include an analysis justifying the need for any new or modified container in accordance with CDRL A096.

C.8.2.4.7.4 Methods/Procedures For all Modes: The contractor shall provide vehicle configuration procedures for air transportation and information necessary for the US Army to obtain an Air Transportability Certificate. This report shall be delivered in accordance with CDRL A097.

C.8.2.4.7.5 Item Unique Identification (IUID) Markings: The Contractor shall plan for and implement IUID markings on the Bradley ECP vehicle systems.

C.8.2.4.7.5.1 IUID Implementation Plan: The contractor shall prepare and deliver an IUID Implementation Plan in accordance with CDRL A098. The Plan shall include a list of all Bradley unique components or spares for which an IUID is required by the DOD guide to uniquely identifying items, Assuring Valuation, Accountability and Control of Government Property (version 2.0 dated 01 Oct 08), and MIL-STD-130N (dated 15 Jun 07). The Plan shall include a recommended prioritization of IUID marking on components or spares, based on Government input, and a recommended list of components on which to affix an IUID marking.

C.8.2.4.7.5.2 IUID Review Session: The contractor shall conduct an IUID review session with the Government no later than 45 calendar days after submission of the proposed Implementation Plan. The purpose of the review session is to finalize the plan, and to approve a list of components that must include IUID markings.

C.8.2.4.7.5.3 Component Assessment: The contractor shall assess approved IUID Implementation Plan components to determine:

a. The location for the marking on the component or part.
b. The means for marking the IUID.
c. Any possible effects of the IUID marking on the function of the item (e.g., does not interfere with component operation).

C.8.2.4.7.5.4 Technical Data: The contractor shall identify technical data revisions, such as drawings, technical manuals, etc., that must be reviewed to enable the application of the IUID markings on approved components. The contractor shall revise technical data for the approved components.

C.8.2.4.8 Support Equipment: The contractor shall identify all equipment required to support Bradley ECP and Bradley ECP components for

field and sustainment levels of maintenance.

C.8.2.4.8.1 Peculiar Tools and Test Equipment/Development /Validation/Documentation: The contractor shall maintain and update Peculiar Tool and Test Equipment technical documentation previously developed for the Bradley. The contractor shall provide justification for any added peculiar tools required for equipment maintainability. Those tools shall be demonstrated during Production Verification Testing, Logistics Demonstrations, and Technical Manual Verifications.

C.8.2.4.8.2 Common Support Equipment: The contractor shall identify all equipment required to support the Bradley to include common support equipment. The contractor shall identify any Sets, Kits, or Outfits with required maintenance tools that are not available to currently fielded Bradley units.

C.8.2.4.8.2.1 Special Tools/Test Equipment: The contractor shall provide and deliver Special Tools and Test Equipment identified in the technical publications for the Bradley systems for testing, training and other events per the approved System Support Package List. The source data for this list will be the Maintenance Task Analysis. The list shall be in tabular form and shall identify special tools and test equipment that are not available through U.S Army Supply Catalogs for Set Kits and Outfits. Maximum use of common tools, support equipment, and TMDE organic to the user is preferred. Any specific part of the Bradley design that is driving the need for special tools shall be a candidate for re-design for use of common tools and equipment.

C.8.2.4.8.2.2 Automated Test Equipment (ATE): The contractor shall maximize the use of embedded diagnostics for on-system Bradley troubleshooting. To perform troubleshooting that cannot be addressed through embedded diagnostics, the contractor shall maximize the use of IETMs operated on the standard Maintenance Support Device (MSD) (e.g. no power for displays for Built-in Test (BIT), Fault Isolation and Test (FIT) or embedded diagnostic routines).
C.8.2.4.8.2.3 Sets/Kits/Outfits/Tools: The contractor shall identify the specific tools within the sets, kits and outfits as a part of the maintenance task analysis.

C.8.2.5 Logistic Support Package Validation/Verification Objectives: The contractor shall jointly with the Government validate and verify the Bradley logistics support package. The logistics support package shall be verified via static (joint Government/contractor) Log Demos, TM validations/verifications and dynamic (Government testing) validation/verification efforts. The validations/verifications shall be held in a timely manner to permit Logistic Support Package deployment and fielding.

C.8.2.5.1 Log Demo/Validations/Verifications: The contractor shall provide facilities, parts, tools and other support items necessary to conduct a Log Demo and series of technical manual validations and verifications. The objective of the Log Demo shall be to validate supportability characteristics of the Bradley ECP vehicles. The Log Demo shall validate and verify logistics data developed under this contract through depot level data and existing data changed as a result of engineering revisions, new information, and error corrections. The Log Demo shall verify the content of all Bradley technical publications. The Log Demo shall be performed in accordance with the Log Demo Plan (CDRL A099). The Log Demo will commence per the ILS Master Schedule with the results reflected in I&KP maintenance training. A second demonstration will be scheduled to validate configuration changes as a result of PVT, in accordance with the ILS Master Schedule.

C.8.2.5.1.1 <u>Validate Supportability</u>:

C.8.2.5.1.2 Log Demo Results: The contractor shall prepare and deliver a report that records the results of each Log Demo (to include evaluation of operations and maintenance procedures, support items, manpower and skill requirements, maintenance allocation, and maintenance times) in accordance with CDRL A100. The contractor shall update all logistics products deliverable under this contract (LMI, provisioning documentation, technical manuals, training documentation), based on the results of the Log Demo and technical manual validations and verifications. Log Demo updates shall be incorporated into the respective deliverables prior to each next scheduled delivery, all in accordance with CDRL A075.
C.8.2.5.2 RESERVED

C.8.2.5.3 RESERVED

C.8.2.6 Training Devices and Trainers: The contractor shall submit an impact statement (CDRL A102) in conjunction with ERRs when there is an effect on Training Device programs.

C.8.2.7 FSR Support: The contractor shall provide technical representative support on-site for the duration of the Development Test. The test facility (Government) will provide to the contractor all Operator tasks to include daily preventative maintenance tasks. The contractor shall perform all required maintenance for vehicles under test.

C.9 <u>Safety</u>

C.9.1 The contractors system safety program shall focus on the identification, assessment, mitigation, and continuous tracking, control, and documentation of environmental, safety and health mishap risks encountered in the development, test, acquisition, use and disposal of the Bradley Fighting Vehicle systems and subsystems. The system safety program is responsible for the implementation and monitoring of engineering and management principles, criteria, and techniques to achieve acceptable mishap risk, within the constraints of operational effectiveness, time, and cost, throughout all phases of the system life cycle. A safe design is a prerequisite for safe

operations, with the goal being to produce an inherently safe product that will have the minimum safety-imposed operational restrictions in accordance with MIL-STD-882E. The contractor shall prepare a System Safety Program Plan (SSPP) that describes the planned safety tasks and activities necessary to execute a comprehensive and effective System Safety Program, in accordance with CDRL A103.

C.9.2 Hazard Notification. The contractor shall establish an incident alerting/notification, investigation, and reporting process, to include notification to the Government of all incidents involving hazards presented by the vehicles design.

C.9.3 Hazard Tracking System.

C.9.3.1 The contractor shall prepare a Hazard Tracking System (HTS) IAW MIL-STD-882E. The HTS shall include the findings from a System Hazard Analysis Task 205) and an Environmental Hazard Analysis (Task 210). The contractor shall document and track all hazards from their identification until the hazard is eliminated, or the associated risk is reduced to a level acceptable to the Government. The HTS shall include all hazards identified through testing and other analyses in accordance with severity categories and probability provided in Section 4.3 of MIL-STD-882E. The HTS shall be reported to the Government IAW CDRL A104.

C.9.3.2 Disposition and Closeout. The contractor shall notify the Government of the final disposition of all hazards. All hazards closed out in the log shall identify the Government official who authorized the closeout. Closed-out hazards shall remain in the Hazard Log.

C.9.4 Health Hazard Assessment Report (HHAR). The contractor shall perform and document an HHAR to identify health hazards and recommend engineering controls, equipment, and protective procedures, to reduce the associated acceptable risk. The contractor shall provide an HHAR for each vehicle system and design modification prior to test activities. The HHAR shall be delivered to the Government in accordance with CDRL A105.

C.9.4.1 Issues to be addressed within the report shall include:

Noise
Toxic gases
Carbon Monoxide
Ammonia
Oxides of nitrogen and sulfur
Toxic chemicals
Ionizing and non0ionizing radiation
Heat and cold (to include heat stress)
Shock and Whole Body Vibration to crew members
Address the chemicals identified in the Material Safety Data Sheets to be provided in accordance with SAE-AMS2825

C.9.5 Safety Engineering. The contractor shall identify and evaluate functional hazards associated with applicable changes and the system and subsystem level to determine the criticality of hardware, firmware, and software component failures. The safety assessment process shall include appropriate system and subsystem level assessment tools such as Functional Hazard Assessments (FHA), Hazard Causal Factor Analysis (HCFA), Fault Tree Analyses (FTA), and FMECA to support the system safety assessments and the Failure Reporting, analysis, and Corrective Action System (FRACAS) requirements. The safety analyses and assessments of changes and change impacts shall identify new potential hazards and their effect on the system integrity throughout the development and qualification of hardware, firmware, and software. The contractor shall utilize the FHAs, HCFAs, FTAs, and FMECAs or other assessment tools as applicable when preparing the preliminary system Safety Assessment Report (SAR) and updates to the SAR. The contractor shall assign risk assessment codes and criticality levels to each hazard, based on the effect of those hazards to the total system. The contractor shall perform thesystem safety assessment efforts as an integration effort encompassing all disciplines. This effort shall include integration of new system components and their interfaces with the Bradley ECP vehicle. The contractor shall present all identified functional subsystem hazards through the regularly scheduled System Safety Working Group (SSWG) meetings. The contractor shall provide to the Government access to supporting documentation through the SSWG process for FHAs, FTAs, FMECAs, or other applicable assessment tools for hazard tracking reports that identify hazard severity levels and their probable frequency of occurrence. The contractor shall ensure that the operation and maintenance instructions and training are generated with appropriate safety procedures and precautionary information.

C.9.6 RESERVED

C.9.7 Critical Safety Program (CSP). The CSP described herein is applicable to any items for which drawings will be delivered to the Government.

C.9.7.1 CSP Definitions. The following definitions apply:

C.9.7.1.1 Critical Safety Items (CSI): A part, assembly, installation, or production system with one or more critical characteristics that, if not conforming to the design data or quality requirements, would likely result in an unsafe condition. Unsafe conditions include conditions which would cause loss or damage to the end item or major component, or loss of control of the vehicle, or serious injury to personnel. Unsafe conditions are those in hazard severity categories IA-D, II A-C, and III A-B of the risk acceptance level definitions, in accordance with MIL-STD-882E.

C.9.7.1.2 Critical Safety Characteristics (CSC): A CSC is any feature (i.e. tolerance, finish, material composition, manufacturing, assembly, or inspection process) of a product, material, or process, which, if nonconforming or missing, would cause the failure or malfunction of the critical safety item.

C.9.7.2 Identification of CSIs. The contractor shall clearly identify each CSI and assembly process as such on the engineering top drawing, part drawing, or assembly drawing. The contractor shall clearly identify the CSCs for each CSI on the engineering parts, engineering top drawings, part drawings, assembly drawings, and process documentation. The contractor shall ensure that all designated or identified CSCs shall have an associated control method. The control method, as a minimum, shall be either a Statistical Process Control (SPC) at a process capability index greater than or equal to 1.66, or a 100% inspection. The contractor shall annotate the control method in the drawing notes for all designated or identified CSCs. The specific method for marking drawings shall be as delineated in MIL-STD-31000 and ASME Y14.100.

C.9.7.3 Data Sources. Identification of CSIs shall be based on the following data sources:

Engineering analysis
Failure modes and effects, criticality analysis (MIL-STD-1629)
Safety assessment / safety hazard analysis (MIL-STD-882E)
Development testing / operational testing results
RAM engineering assessments
Previous experience using like items or designs
LSA data
Component qualification test results

C.9.7.4 The contractor shall validate the CSI requirements expressed herein to ensure that all critical safety aspects of the design are accurately depicted on deliverable drawings, and parts or materials operate well below fatigue limits or stress levels. The contractor shall ensure that the Government can verify these requirements without the use of destructive inspection equipment. The contractors validation shall be based on engineering analyses of the CSI characteristics, and the validation shall consider design changes, and deterioration through time from use, fatigue life, and operating conditions.

C.9.7.5 CSI Master List. The contractor shall prepare and deliver a master list of CSIs and associated critical characteristics, including nomenclatures and Part Numbers in accordance with Critical Safety Item(s)/Characteristics Report (CDRL A106). The contractor shall maintain and update the CSI list throughout the life of the contract. The contractor shall also reference the CSIs on vehicle class and division drawings. This list shall be dynamic in nature, with changes taking place as experience and knowledge are obtained, and as design changes are incorporated into the system.

C.9.7.6 Safety Control Board. The contractor shall establish a safety control board consisting of representatives from the contractors design, quality, manufacturing, field service, engineering, safety, and other appropriate departments for the purpose of reviewing and formalizing all CSIs delivered to the Government in accordance with CDRL A106.

C.9.7.7 System Safety Working Group (SSWG). The contractor shall participate on a semi-annual basis in the Governments SSWGs as an advisor. The contractor shall present and discuss issues affecting environmental, safety, and occupational health (ESOH) program implementation. During SSWG meetings, the contractor shall present ESOH program status and updates, HTS status and updates, Hazardous Materials usage and updates, and other ESOH data. The contractor shall pursue through completion and close out any action items that are assigned.

C.9.7.8 Safety Review Board (SRB). The contractor shall participate in the Governments SRBs as an advisor on a monthly basis. The contractor shall present and discuss issues affecting environmental, safety, and occupational health (ESOH) program implementation. The contractor shall pursue through completion and close out any action items that are assigned.

C.9.7.9 Safety Assessment Report (SAR). The contractor shall prepare a SAR that identifies all potential and actual Safety and Health Hazards associated with the Bradley ECP vehicle systems and subsystems. The SAR shall include a description and evaluation of each hazard and the actions identified for mitigation of the associated risks. Hazard risks shall be evaluated by severity and probability of occurrence before and after mitigation in accordance with MIL-STD-882E. The contractor shall provide a draft Safety Assessment Report (SAR) (CDRL A107) 60 days prior to the start of Government PVT with the then-most current SAR delivered 10 days prior to the start of PVT. The SAR shall be updated when hardware and software configuration changes occur. An updated SAR shall be required prior to testing any HW/SW changes/updates during Government testing.

C.10 Environmental Compliance and Hazardous Substances

C.10.1 Environmental Compliance. The contractor shall comply with all Federal, State, and local environmental laws, regulations, and policies.

C.10.2 Environmental Management Team (EMT). The EMT is a multidisciplinary group chartered by the Government that is dedicated to addressing environmental issues and supporting the Governments environmental program. This team will include subject matter experts

from Government and industry. The Contractor shall provide services to the EMT, to include attending meetings and completing assigned action items. The contractor shall provide access to all pertinent records and data requested by the Contracting Officer or duly authorized representative as necessary to adequately prepare program environmental documentation. The EMT meets on an annual basis (CONUS travel required).

C.10.3 Hazardous Substances.

C.10.3.1 Hazardous Material Usage

C.10.3.1.1 Prohibited Materials. Asbestos, beryllium, beryllium alloys, cadmium, cadmium alloys, Class I and Class II Ozone Depleting Substances, hexavalent chromium, lead, leaded alloys, mercury, and radioactive materials, shall not be present in or on any ECP delivered materials, required for the operation and sustainment of the ECP unique items, or used in final system manufacture and assembly processes for the integration efforts.

C.10.3.1.2 Restricted Materials. If not listed above as a prohibited material, Group 1 Agents classified ad carcinogenic to humans by the International Agency for Research on Cancer (IARC) Monographs shall be classified at Restricted Materials. Per MIL-STD-882E, restricted HAZMAT are those materials that the contractor will target for elimination or minimization. The Contractor shall submit a hazard tracking sheet to the Government SRB for the use of each restricted material. The SRB will make the determination of whether the particular use of a restricted material is acceptable. If deemed acceptable, the material shall be documented and managed through Hazard Tracking and Hazard Log as described in section C.9.3.1 (CDRL A104).

C.10.3.2 Exceptions to the Hazardous Materials Requirement.

C.10.3.2.1 Waivers from the hazardous materials requirements shall not be permissible except where the SSWG assesses that a suitable alternative does not exist. When adequate non-hazardous substitutes are not available, the contractor shall notify the Govenrment, by delivery of a Hazardous Substance Waiver Request (CDRL A109). The contractor shall obtain Government approval via a waiver request prior to delivering any ECP unique item. Waiver requests shall include detailed technical justification for the use of the prohibited hazardous material. The Government will make the final determination on whether sufficient justification has been provided to support approval of any waiver requests. The Government will consider waivers in these situations on a case by case basis. If a waiver is requested for radioactive material, the following information shall be included in the waiver request:

Listing of the radioactive material and their quantities
Subsystem location of the radioactive material
Purpose of the radioactive material
Provide the Nuclear Regulatory License, if required.

C.10.3.2.2 No waiver request is required for the following:

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
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 used in electrical components
Mercury containing components compliant with European Union (EU) Directive 2002/95/EC (RoHS)
GFE
Lead in engine bearings

C.10.3.3 Lead (Pb) Free Requirement. The contractor shall update and deliver a Lead-Free Control Plan (LFCP) for approval by the Government that describes policies, procedures, manufacturing processes, and monitoring in regards to all lead free electronic components that are, or have the potential to be utilized. The plan shall address all solders and lead-free finishes including COTS (commercial off-the-shelf) items, as well as the practices used to maintain tin-lead alloys in delivered products. GEIA-STD-0005-1, Performance Standard for Aerospace and High Performance Electronic Systems Containing Lead-Free Solder and GEIA-STD-0005-2, Standard for Mitigating the Effects of Tin Whiskers in Aerospace and High Performance Electronic Systems or equivalents shall be used as a basis for preparation of an LFCP to assure product performance, reliability, and safety. The LFCP shall be submitted in accordance with CDRL A110.

C.10.3.4 Hazardous Materials Management Report (HMMR). The contractor shall prepare and deliver to the Government a Hazardous Material Management Report (HMMR) in accordance with CDRL A108. The HMMR shall identify all hazardous materials delivered on the vehicle or required for operation and sustainment, specifying the part(s) containing the hazardous material. The HMMR shall also identify all hazardous materials used in the final system manufacture and assembly, specifying the process(es) utilizing the hazardous material. The

report shall be prepared in accordance with National Aerospace Standard 411, section 4.4 (Exception to NAS 411) Section 4.4.1: Hazardous materials used in system manufacture and assembly shall be identified in the report in addition to those hazardous materials delivered and required for operation and support). The report shall include a listing of prioritized hazardous materials for miminization/elimination and identify those hazardous materials/processes for which non-hazardous substitute materials/technologies may be available for implementation. The HMMR shall specify which phase (manufacture, operation, and/or sustainment) that each material is required for. Status, changes, or issues with the HMMR shall be discussed as part of each technical review and program management review.

C.10.4 Corrosion Prevention and Control

C.10.4.1 Corrosion Prevention Advisory Team (CPAT). The contractor shall participate in the Governments Corrosion Prevention Advisory Team (CPAT). The contractor shall provide support to the CPAT to include attending meetings, completing assigned action items, informing the CPAT of new corrosion issues, and reviewing Engineering Change Proposals (ECP) and their impact on the corrosion prevention and control of the system. CPAT meetings will be held on an annual basis in conjunction with the EMT meetings (CONUS travel required).

C.10.4.2 Contractor Corrosion Team. The contractor shall establish a Corrosion Control Team (CCT) to manage and integrate corrosion prevention and control throughout the program. The CCT shall be responsible for the following: ensure implementation of Corrosion Prevention and Control (CPAC) requirements in accordance with the project contract, plans, and specifications; ensure implementation of CPAC documentation and submission of documents in accordance with the required schedule; establish periodic meetings and convene impromptu meetings when a critical or major problem arises which requires action by the CCT or Government Corrosion Prevention Advisory Team (CPAT); and maintain a continuing record of all action items and their resolutions.

C.10.4.3 Corrosion Prevention and Control Plan (CPCP). The contractor shall develop and maintain a CPCP in accordance with CDRL A117.

C.11 Human System Integration (HIS)/Manpower and Personnel Integration (MANPRINT):

C.11.1 The contractor shall conduct a MANPRINT program in the areas of manpower, personnel, training, human factors engineering, health hazards, system safety and soldier survivability in accordance with AR 602-2. The contractor shall participate in the joint SSWG/MJWG meetings to provide MANPRINT integration system status, MANPRINT event finds, issues database and updates, recommendations and design data.

C.11.1.2 MANPRINT Issues and Concerns Database. The contractor shall prepare and deliver a single database in MS Excel format for unclassified MANPRINT issues and concerns, and a separate database for classified MANPRINT issues and concerns. MANPRINT issues and concerns databases shall be made available on the Government IDE for tracking by the MANPRINT Working Group. Critical issues shall be raised to the Government, in writing, if not resolved within 30 days after delivery of the issues into the database. Major issues shall be raised to the Government, in writing, if not resolved within 60 days after delivery of issues into the database. Concerns will be resolved at the Working Group level. All critical and major issues and concerns (as defined in AR 602-2, Appendix C) shall be addressed by mitigation plans that identify which organization and person is responsible for resolution of issues, including resources schedules for resolving issues (CDRL A111).

C.11.1.3 MANPRINT Events (User Juries, Demonstrations, Assessment and Testing). The contractor shall conduct MANPRINT events to validate the systems Warfighter-centric design and provide assessments and reports for these events. The Contractor shall allow the Government access to MANPRINT events, contractor data collection, and shall also allow the Government to collect its own data at these events.

C.11.1.4 Human Factors Engineering Analysis (HFEA). The contractor shall follow best human factors engineering practices during the design or modification of the system or its components, including the application of established design standards contained in MIL-STD-1472F and MIL-STD-1474.

C.11.1.5 Soldier Workspace Analysis. The contractor shall conduct Soldier workspace analyses, and shall provide documentation of the analyses, to include diagrams, illustrations, and drawings with measurements (CDRL A112).

* Updated per Modification P00004

*** END OF NARRATIVE C0001 ***

C.12 Option for Additional Services Assumption of Design and Fabrication of Cummins 675 HP Engine and Upgrades : In coordination with the contractors PIM Contract (W56HZV-09-C-0550), the contractor shall complete the Governments Cummins forthcoming Contract W56HZV-12-C-0374, 675 HP engine/ECM design effort from CDR and Bradley unique design elements. The contractor shall qualify and integrate the 675 HP Engine being developed under the PIM Contract (W56HZV-09-C-0550), Cummins Contract W56HZV-08-C-0285, and forthcoming Cummins Contract W56HZV-12-C-0374, into the vehicles covered under this contract._

C.12.1 The contractor shall complete the engineering design activities necessary to allow the Electronic Control Module (ECM) to control the engine cranking and cold start system. The contractor shall complete the modification of the ECM to accept the throttle position signal from the DVDB via CANbus. The ECM shall complete the incorporation of the electrical harness mounted nuclear event detector that will have a power removal circuit capable of turning off power within 400 micro seconds and respond to a gamma dose rate of 3 e8 rads silicon/second.

C.12.2 The contractor shall complete the engineering design activities necessary to incorporate an engine mounted belt driven 400 amp generator. The generator shall be driven off the 8 groove poly-V belt system currently used on the 675 hp engine and mounted on the front left side of the engine. The contractor shall complete the redesign of the lube oil cooler to allow clearance for the generator. New components that shall be designed for this effort include: front crank adapter; drive pulley; torsional vibration damper; and engine cover.

C.12.3 The contractor shall complete the redesign of the Bradley unique parts of the 675 hp engine to be completely interchangeable with the PIM engine. New components that shall be designed for this effort include the following: coolant header & radiator support, oil pan and torsional damper.

C.12.4 The contractor shall add the engine to the list of LRUs for qualification per paragraph C.7.3.1.2.

C.12.5 The contractor shall assume the responsibility for upgrading the 675 HP engine as part of the overall performance of this contract. Assets developed from performance of Cummins Contract W56HZV-08-C-0285 and forthcoming Contract W56HZV-12-C-0374, shall be delivered to the contractor within 30 days of the exercise of this option. A description of the assets will be incorporated into the contract as an attachment at the time this option is exercised.

C.13 Option for Additional Services - Assumption of Upgrade Chassis Modernization/Embedded Diagnostics (CM/ED) with Power Management (PM). The contractor shall complete the design, qualify, and integrate the CM/ED with PM being developed under the DRS/TEM Contract W56HZV-11-C-0364, forthcoming DRS/TEM Contract W56HZV-12-C-0405,and the L3 COM Contract W56HZV-09-C-0098 into the vehicles covered under this contract._

C.13.1 The below systems will be compliant with the following: environmental requirements MIL-STD-202 and MIL-STD-810, Nuclear Weapons Effect requirements MIL-STD-461 and MIL-STD-464, CAN Bus Society of Automotive Engineers J1939, MIL-STD-1275 (Fault Free condition only), and MIL-STD-704.

C.13.2 Power Allocation Transfer Hub (PATH). The contractor shall develop a PATH that is a new component to the Bradley Fighting Vehicle (BFV) system to be integrated as part of the Bradley ECP program. The PATH shall be capable of accepting two independent inputs from two on-board alternators with each input capable of handling up to 1000A of 28 VDC power. The Government will provide space claim requirements for this component within 6 months after contract award. The PATH shall replace the current Hull Power Box (HPB), relay isolation box, and 2nd generation Power Control Module (PCM3) components. The PATH shall be capable of communications over J1939 CANbus and Ethernet compatible

C.13.3 Solid State Power Controllers (S2PC). The contractor shall develop S2PC to replace the legacy Power Control modules (PCMs) and turret Power Box (TPB). The S2PCs shall beinterchangeable with no impact to legacy cabling and Size, Weight, and Power (SWaP). If cable and connector adopters are required, the decision shall be submitted to the SEIT for approval. The S2PCs shall be capable of communicating over J1939 CANbus, 1 Gigabit Ethernet, and MIL-STD-1553. The S2PCs shall be capable of accepting power management control messages and managing power for loads. Each S2PC shall provide minimum 350 A of 28 VDC power over a minimum of 32 channels.

C.13.4 Power Management Software. The contractor shall develop Power Management Software to manage vehicle power loads, electrical power distribution, power generation, and mechanical power generation and distribution. The power management software package shall reside in the Digital Vehicle Distribution Box (DVDB) or Common Intelligent Display (CID) or combination of both as approved by the SEIT. The power management software shall communicate messages over J1939 CANbus to the Engine Control Module (ECM), Transmission Control Module- Electronic Assembly (TCM-EA), fan controller, Automated Fire Extinguishing System (AFES) controller, all electrical power generators, PATH, throttle sensors, S2PCs, and the Battery Monitoring System (BMS). Power management shall be active in all modes of operation. The power management software shall prioritize loads according to power generation and modes of operations and shed loads during takeoff to prioritize HP to mobility.

*C.13.5 DVDB Upgrade. The contractor shall perform engineering analysis to the SEIT for approval to develop an upgraded DVDB to host and execute power Management software and functionality required by paragraph C.13.4. The DVDB upgrade shall consist of existing hardware to support the Bradley ECP program. The DVDB upgrade shall incorporate interfacing software to support DVE Wide LRU. This software shall continue to support current DVE as a rear vehicle viewing system.

C.13.6 CANbus Architecture. The contractor shall utilize the following standards for the CANbus Architecture:

- J1939 Controller Area Network (CAN) Format SAE J1939
- SAE J1939/21 Data Link Layer 29-Bit message identifier

- SAEJ1939/11 Physical Layer 250k bits/s, Twisted Shield Pair
- SAEJ1939/71 Vehicle Application Layer Parameter Group Number (PGN) and Suspect Parameter Numbers (SPN)
- SAEJ1939/81 Network Management

The contractor shall not utilize termination resistors in the CANbus architecture. The DVDB shall host the CANbus network and provide Bus arbitration. The contractor shall leverage developments by TARDEC for throttle position and fan control. The contractor shall leverage efforts from Powerpack Performance Recovery and Mini-CAN under L-3 COM and DRS-TEM effort. The contractor shall work with Engine, Transmission, AFES, and other LRU OEMs to support the CANbus for Powerpack synchronization and power management. The contractor shall comply with Vehicle Health Management System (VHMS) and Vehicular Integration for C4ISR/EW Interoperability (VICTORY) standards for the CANbus. The contractor shall document and track all message traffic associated with the CANbus system for development of the CANbus Message Matrix (CDRL A116).

C.13.7 Driver Switch Indicator Panel (DSIP) Modifications. The contractor shall develop DSIP based on changes required to integrate modifications as a result of the Powerpack and driver interface requirement to the CANbus and visual displays.

C.13.8 The contractor shall add the DVDB, S2PC, and PATH to the list of LRUs for qualification per paragraph C.7.3.1.2.

C.13.9 The contractor shall assume the responsibility for upgrading the CM/ED w/PM as part of the overall performance of this Contract. Assets developed from performance of DRS contract W56HZV-11-C-0364 and forthcoming Contract W56HZV-12-C-0405 shall be delivered to the contractor within 30 days of the exercise of this option. A description of the aforementioned assets will be incorporated into the Contract as an attachment at the time this option is exercised.

* Updated per Modification P00004

*** END OF NARRATIVE C0002 ***

Name of Offeror or Contractor: BAE SYSTEMS LAND & ARMAMENTS, L.P.

SECTION G - CONTRACT ADMINISTRATION DATA

LINE ITEM	PRON/ AMS CD/ MIPR/ GFEBS ATA	OBLG STAT	JO NO/ ACCT ASSIGN	ACRN	PRIOR AMOUNT	INCREASE/ DECREASE	CUMULATIVE AMOUNT
0001AC	723223RD72	2	A.0009261.2.2.2.3	AC	$ 0.00	$ 8,000,000.00	$ 8,000,000.00
					NET CHANGE	$ 8,000,000.00	

ACRN	ACCOUNTING CLASSIFICATION	INCREASE/ DECREASE
AC	021 201320142040 A5XGJ 273735371RU08 2550 L034227411 A.0009261.2.2.2.3 021001	$ 8,000,000.00
	NET CHANGE	$ 8,000,000.00

	PRIOR AMOUNT OF AWARD	INCREASE/DECREASE AMOUNT	CUMULATIVE OBLIG AMT
NET CHANGE FOR AWARD:	$ 103,630,410.00	$ 8,000,000.00	$ 111,630,410.00

LINE ITEM	ACRN	EDI/SFIS ACCOUNTING CLASSIFICATION
0001AC	AC	021 201320142040 A5XGJ 273735371RU08 2550 L034227411 A.0009261.2.2.2.3 021001

SECTION I - CONTRACT CLAUSES

	Status	Regulatory Cite	Title	Date
I-1	ADDED	52.216-26	PAYMENTS OF ALLOWABLE COSTS BEFORE DEFINITIZATION	DEC/2002
I-2	CHANGED	52.216-23	EXECUTION AND COMMENCEMENT OF WORK	APR/1984

The Contractor shall indicate acceptance of the Unpriced Change Order (UCO) as setforth in Modification P00004 by signing a copy of the contract Modification P00004 and returning it to the Contracting Officer not later than 13 September 2013. Upon acceptance by both parties, the Contractor shall proceed with performance of the work, including purchase of necessary materials.

(End of Clause)

I-3 CHANGED 52.216-24 LIMITATION OF GOVERNMENT LIABILITY APR/1984

FOR CLIN 0001AC:

(a) In performing this Unpriced Change Order (UCO) as established under Modification P00004 of this contract, the contractor is not authorized to make expenditures or incur obligations exceeding $8,000,000.00 dollars.

(b) The maximum amount for which the Government shall be liable if this UCO is terminated is $8,000,000.00 dollars.

(End of Clause)

I-4 CHANGED 252.217-7027 CONTRACT DEFINITIZATION DEC/2012

(a) A Unpriced Change Order (UCO) is contemplated. The Contractor agrees to begin promptly negotiating with the Contracting Officer the terms of a definitive contract that will include (1) all clauses required by the Federal Acquisition Regulation (FAR) on the date of execution of the undefinitized contract action, (2) all clauses required by law on the date of execution of the definitive contract action, and (3) any other mutually agreeable clauses, terms, and conditions. The Contractor agrees to submit a Cost Plus Incentive Fee proposal and certified cost or pricing data supporting its proposal.

(b) The schedule for definitizing this contract action is as follows:

Projected Award Date of UCO: 30 Aug 2013
Projected Date to Receive Qualifying Proposal: 09 Aug 2013
Projected Date of Completion of Negotiations: 01 Dec 2013
Estimated Date of Contract Definitization: 10 Jan 2014

(c) If agreement on a definitive contract action to supersede this undefinitized contract action is not reached by the target date in paragraph (b) of this clause, or within any extension of it granted by the Contracting Officer, the Contracting Officer may, with the approval of the head of the contracting activity, determine a reasonable price or fee in accordance with Subpart 15.4 and Part 31 of the FAR, subject to Contractor appeal as provided in the Disputes clause. In any event, the Contractor shall proceed with completion of the contract, subject only to the Limitation of Government Liability clause.

(1) After the Contracting Officers determination of price or fee, the contract shall be governed by

(i) All clauses required by the FAR on the date of execution of this undefinitized contract action for either fixed-price or cost-reimbursement contracts, as determined by the Contracting Officer under this paragraph (c);

(ii) All clauses required by law as of the date of the Contracting Officers determination; and

(iii) Any other clauses, terms, and conditions mutually agreed upon.

(2) To the extent consistent with paragraph (c)(1) of this clause, all clauses, terms, and conditions included in this undefinitized contract action shall continue in effect, except those that by their nature apply only to an undefinitized contract action.

(d) The definitive contract resulting from this undefinitized contract action will include a negotiated cost/price ceiling in no event to exceed $30,745,188.

(End of clause)

SECTION J - LIST OF ATTACHMENTS

List of Addenda	Title	Date	Number of Pages	Transmitted By
Exhibit A	CONTRACT DATA REQUIREMENT LISTS (CDRL)	20-AUG-2013		
Attachment 0004	GOVERNMENT PROGRAM SCHEDULE	20-AUG-2013		
Attachment 0006	ECPS & ENGINEERING ORDERS (M2A3)	20-AUG-2013		
Attachment 0009	TDP OPTION SELECTION WORKSHEET	20-AUG-2013		
Attachment 0033	CYCLIC MAINTENANCE CHECKES AND SERVICES	20-AUG-2013		
Attachment 0034	NBC CONTAMINATION SURVIVABILITY CRITERIA	20-AUG-2013		

CONTRACT DATA REQUIREMENTS LIST
Form Approval OMB No. 0704-0188
Public reporting burden for this collection of information is estimated to average 440 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.: A001
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO. A001
2. TITLE OF DATA ITEM: Meeting Agenda and Read-Ahead Package
3. SUBTITLE:
4. AUTHORITY: DI-ADMN-81249A
5. CONTRACT REFERENCE: C.2.2, C.2.5.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		3	
15. TOTAL:	0	3	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12, and 13: For Significant Program Reviews (paragraph C.2.4), Draft agenda shall be provided thirty (30) days prior to meeting for Government review and approval. The Government will provide comments within fifteen (15) calendar days of receipt. Final agenda and read-ahead package to be provided seven (7) calendar days prior to meeting. Contractor format authorized. Should this data deliverable require revision after initial delivery, the Contractor shall deliver the data on a date mutually agreed to by the parties. For Program Technical Reviews: An agenda and read-ahead package shall be provided to the Government one week before the review.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A002
B. EXHIBIT: A
C. CATEGORY: Other

D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A002
2. TITLE OF DATA ITEM: Meeting Minutes
3. SUBTITLE:
4. AUTHORITY: DI-MGMT-81250A
5. CONTRACT REFERENCE: C.2.2, C.8.2.2.3, C.8.2.3.2.4, C.8.2.3.13, C.8.2.3.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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16. REMARKS: Contractor format is acceptable.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall prepare written minutes including actions following each of the meetings and deliver to all attending organizations no later than five (5) business days following a monthly meeting, and ten (10) business days following a quarterly or semi-annual meeting or significant program reviews. Should this data deliverable require revision after initial delivery, the Contractor shall redeliver the data on a date mutually agreed to by the parties.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A003
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A003
2. TITLE OF DATA ITEM: Program Decision Tracking Matrix
3. SUBTITLE:
4. AUTHORITY: DI-MISC-80711A
5. CONTRACT REFERENCE: C.3.1.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:

9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 12: The Contractor shall submit a Program Decision Tracking Matrix within 30 days of contract award, and update monthly. Monthly deliveries are due by the 30th of each month. The Matrix shall contain a list of identified program decisions, who made the decision, date the decision was made, and any material associated with that decision (i.e., Decision Brief, Army guidance memo, PM direction, or technical data).

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A004
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A004
2. TITLE OF DATA ITEM: Contractor Performance Report (CPR)
3. SUBTITLE:
4. AUTHORITY: DI-MGMT-81466A and MIL-STD-881C except where modified by this CDRL
5. CONTRACT REFERENCE: C.3.2.2, C.3.2.2.1, C.3.3.1.3.
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE: No
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY: Monthly
11. AS OF DATE: The CPR (Formats 1, 2, 3, 4, and 5) shall be prepared on a monthly basis as of the end of the Contractors monthly accounting period.
12. DATE OF FIRST SUB: The first CPR is due on the 17th of the month following the end of the first full accounting month after contract award.
13. DATE OF SUBS: Subsequent monthly submissions are due on the 17th of each month.

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DCMA Detroit	0	1	0
DCARC	0	1	0
15. TOTAL:	0	3	0

16. REMARKS:

Format 1: Report data at Level 3 for Format 1. Additional reporting levels may be required for high-risk or high-dollar elements (final reporting levels to be discussed and agreed upon).

Format 2: Report data at Level 3 for Format 2. Additional reporting levels may be required for high-risk, high-dollar, or high variance elements (final reporting levels to be discussed and agreed upon).

Format 3: The PMB and supporting WBS detail shall be included in the monthly CPR submission (e.g. Insight file).

Format 4: Report staffing data to the level specified for Format 2.

Format 5: Variance Analysis is required for the following Format 1 variances; current period cost or schedule variances exceeding +/- $25k and 10%, cumulative cost or schedule variances exceeding +/- $50k and 10%, and variances at completion exceeding +/-$100k and 10%. Explanations of schedule variances and the impact to the contract shall be performed in parallel with the monthly schedule analysis called out by the IMS/IMP CDRL. In addition, the monthly Budget Change Request Log shall be included as an attachment to Format 5.

The contractor shall use COBRA as a reporting tool. Backup files shall be submitted in the native Deltek COBRA format including all auxiliary files (e.g., breakdown structures, code files, calendars, etc.).

Block 14: Distribution and addresses: All CPR-related forms must be electronically forwarded to the central repository at the DCARC Web site: ://ders.dcarc.pae.osd.mil/DCARCPortal/

Contractor shall submit Formats 1-4 in an electronically readable form (ANSI X-12 or XML equivalent). TRN and Insight XML files are also acceptable. In addition, the submission shall include one human readable backup (XLS, PDF, DOC, etc.) of Formats 1-4. Format 5 shall be submitted in a human readable form factor. Submissions shall not include macros, program executables, embedded objects or external links. All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A005
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A005
2. TITLE OF DATA ITEM: Integrated Master Plan (IMP)/Integrated Master Schedule (IMS)
3. SUBTITLE:
4. AUTHORITY: DI-MGMT-81650
5. CONTRACT REFERENCE: C.3.2.3, C.8.2.2.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY: Monthly
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
Bradley ECP Lead Sys Eng.	0	1	0
Bradley ECP PI	0	1	0
Bradley ECP APM	0	1	0
15. TOTAL:	0	3	0

16. REMARKS:

Block 4: The Contractor shall prepare the IMP and IMS in accordance with this CDRL, the DoD Integrated Master Plan and Integrated Master Schedule Preparation and Use Guide. The Integrated Master Schedule shall be structured in accordance with MIL-HDBK-881C.

All monthly submissions will include a written schedule analysis to identify, document, and communicate changes of one (1) working day or greater to: the Project Critical Path, the next major milestone, and/or the Near Critical Path task/activity actual start and/or actual finish date variances from submission to submission. Work around and/or recovery schedules/plans, and associated impacts due to program changes shall also be provided. The schedule narrative shall address progress to date and discuss any significant schedule changes (i.e., added/deleted tasks, any significant logic revisions, and any/all programmatic schedule assumption change etc.).

Block 10: The IMS shall be prepared / updated on a monthly basis. The IMS shall be statused and submitted concurrently with the monthly Contractor Performance Report (CPR). The IMS will be consistent with and traceable to the Performance Management Baseline (PMB).

Block 12: A draft IMP/IMS is due on the 15th of the month following the end of the first full accounting month after contract award. The Government will review and comment within 15 days. The final copy shall then be submitted on the 15th of the month subsequent to the month of the draft submittal.

Block 13: Subsequent monthly submissions are due on the 15th of each month. The final submission is due when the last agreement/acknowledgement or significant milestone has been achieved and the remaining risk areas have been mitigated with Government concurrence.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Data will be provided in a format that is compatible with the Governments scheduling system software (i.e. Microsoft Project).

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A006
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A006
2. TITLE OF DATA ITEM: Contract Work Breakdown Structure (WBS)
3. SUBTITLE:
4. AUTHORITY: DI-MGMT-81334D
5. CONTRACT REFERENCE: C.3.3.1.2, C.3.3.1.2.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY: As required
11. AS OF DATE: N/A
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-PB	0	1	0
DCMA Detroit	0	1	0
15. TOTAL:	0	2	0

16. REMARKS:

Block 4: The Contractor will develop and maintain the CWBS Index and CWBS dictionary in accordance with DI-MGMT-81334C, MIL-STD-881C, and as tailored in this CDRL.

Part I CWBS Index - Provide a matrix identifying the contract line item and SOW to the WBS elements. Per DID, enter CWBS Code, Element Level and CWBS Name.

The CWBS shall be reported by the Contractor at level 3. Additional reporting levels may be required for high risk, high dollar, or high variance elements (final reporting levels to be discussed and agreed upon).

Part II CWBS Dictionary The Dictionary will provide a description of the CWBS element and contractor tasks essential to fulfill the element description (at a reporting level consistent with CPR Format 1). The task description will include summary identification of the functional/organizational resources to be applied.

Block 12: The CWBS Index and CWBS Dictionary are due on the 15th of the month following the end of the first full accounting month after contract award (in concurrence with initial CPR delivery).

Block 13: If necessary, the Contractor will update the CWBS Index and CWBS Dictionary during the execution of the contract. Subsequent submissions are due 31 Mar 2013, 31 July 2013, 31 March 2014, 31 Oct 2015, and 31 Oct 2016. An updated CWBS Dictionary shall be submitted no more frequently than CPR report submissions. Changes to the CWBS or associated definitions require approval of the Government.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

The contractor shall submit a CWBS Index and CWBS Dictionary upon award of Modification P00002 and subsequent Change Orders.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A007
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A007
2. TITLE OF DATA ITEM: Contract Funds Status Report (CFSR)
3. SUBTITLE:
4. AUTHORITY: DI-MGMT-81468
5. CONTRACT REFERENCE: C.3.3.1.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY: Quarterly
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-PB	0	1	0
DCMA Detroit	0	1	0
DCARC	0	1	0
15. TOTAL:	0	3	0

16. REMARKS:

Block 4: The Contractor shall prepare the CFSR in accordance with DI-MGMT-81468 and as tailored in this CDRL. The Contractor shall reconcile reporting elements in the Contract Funds Status Report (CFSR) with the CPR when these documents are submitted in the same month. The Contractor shall provide a reconciliation of the CFSR with CPR as an addendum to the CPR.

Block 11: The CFSR shall be prepared as of the end of the calendar quarter or Contractors accounting quarter (as mutually agreed to be Government and Contractor).

Block 12: The first CFSR is due on the 17th of the month following the end of the first calendar quarter or Contractors accounting quarter (as mutually agreed to be Government and contractor). The final submission is due when the contract has been completed.

Block 13: Subsequent quarterly submissions are due on the 17th of the month following the end of the calendar quarter or Contractors accounting quarter (as mutually agreed to be Government and contractor).

Block 14: All CFSR related forms must be electronically forwarded to the central repository at the DCARC web site at: ://ders.dcarc.pae.osd.mil/DCARCPortal/. All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A008
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A008
2. TITLE OF DATA ITEM: Program Management Cost Summary Report (DD Form 1921)
3. SUBTITLE: Program Management Cost Reporting (PMCR)
4. AUTHORITY: DI-FNCL-81565
5. CONTRACT REFERENCE: C.3.3.2.1
6. REQUIRING OFFICE: PM-ABCT Program Management Division, Business Systems Branch
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-PB		1	
15. TOTAL:	0	1	0

16. REMARKS:

Blocks 10, 11, 12 and 13: The Contractor shall submit an initial DD Form 1921 within 180 calendar days of contract award. The Contractor shall submit interim DD Form 1921 reports in accordance with the IMS. The Contractor shall submit the final DD Form 1921 report at the end of the contract period of performance. Prepare Blocks 10 through 13 of the DD Form 1921 in accordance with the PM ABCT Program Management Division Business Systems Branch approved Program Management Cost Summary Reporting (PMCR) Plan provisions, the WBS Data Dictionary, and DoD 5000.04-M-1. The DoD 5000.04-M-1 is available from the Defense Cost and Resource Center (DCARC) Web site at ://dcarc.pae.osd.mil. Prepare the PMCR data in electronic format in accordance with the detailed instructions contained in Data Item Description DI-FNCL-81565 (or most recently approved version) and DoD 5000.04-M-1.

The initial DD Form 1921 is due 31 March 2013. The second interim report is due 7 July 2013. The third interim report is due 31 March 2014. The fourth interim report is due 31 October 2015. The fifth interim report is due 31 October 2016.

Block 14: All PMCR related forms must be emailed to PM-ABCT Program Management Division Business Systems Branch. Prime contractors are responsible for flowing down PMCR requirements contained in their prime contracts to all subcontractors who meet the reporting thresholds. This includes requiring subcontractors to electronically report directly to PM-ABCT Program Management Division Business Systems Branch. All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A009
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A009
2. TITLE OF DATA ITEM: Functional Cost-Hour Report (DD Form 1921-1)
3. SUBTITLE: Program Management Cost Reporting (PMCR)
4. AUTHORITY: DI-FNCL-81566C
5. CONTRACT REFERENCE: C.3.3.2.1
6. REQUIRING OFFICE: PM-ABCT Program Management Division, Business Systems Branch
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-PB		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 11, 12, and 13: The Contractor shall submit an initial DD Form 1921-1 within 180 calendar days of contract award. The Contractor shall submit interim DD Form 1921-1 reports in accordance with the IMS. The Contractor shall submit the final DD Form 1921-1 report at the end of the contract period of performance. Prepare Blocks 10 through 13 of the DD Form 1921-1 in accordance with the PM

ABCT Program Management Division Business Systems Branch approved Program Management Cost Reporting (PMCR) Plan provisions, the WBS Data Dictionary, and DoD 5000.04-M-1. The DoD 5000.04-M-1 is available from the Defense Cost and Resource Center (DCARC) Web site at ://dcarc.pae.osd.mil. Prepare PMCR data in electronic format in accordance with the detailed instructions contained in Data Item Description DI-FNCL-81566 (most recently approved version) and DoD 5000.04-M-1.

The initial DD Form 1921 is due 31 March 2013. The second interim report is due 7 July 2013. The third interim report is due 31 March 2014. The fourth interim report is due 31 October 2015. The fifth interim report is due 31 October 2016.

Block 14: All PMCR related forms must be emailed to PM-ABCT Program Management Division Business Systems Branch. Prime contractors are responsible for flowing down PMCR requirements contained in their prime contracts to all subcontractors who meet the reporting thresholds. This includes requiring subcontractors to electronically report directly to PM-ABCT Program Management Division Business Systems Branch. All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A010
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A010
2. TITLE OF DATA ITEM: Progress Curve Report (DD Form 1921-2)
3. SUBTITLE: Program Management Cost Reporting (PMCR)
4. AUTHORITY: DI-FNCL-81567C
5. CONTRACT REFERENCE: C.3.3.2.1
6. REQUIRING OFFICE: PM-ABCT Program Management Division, Business Systems Branch
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-PB		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 11, 12, and 13: The Contractor shall submit an initial DD Form 1921-2 within 180 calendar days of contract award. The Contractor shall submit interim DD Form 1921-2 reports in accordance with the IMS. The Contractor shall submit the final DD Form 1921-2 report at the end of the contract period of performance. Prepare Blocks 10 through 13 of the DD Form 1921-2 in accordance with the PM ABCT Program Management Division Business Systems Branch approved Program Management Cost Reporting (PMCR) Plan provisions, the WBS Data Dictionary, and DoD 5000.04-M-1. The contract PMCR Reporting Plan is included as contract Attachment 0005. Manual DoD 5000.04-M-1 is available from the Defense Cost and Resource Center (DCARC) Web site at ://dcarc.pae.osd.mil. Prepare the PMCR data in electronic format in accordance with the detailed instructions contained in Data Item Description DI-FNCL-81567 (or most recently approved version) and DoD 5000.04-M-1.

The initial DD Form 1921 is due 31 March 2013. The second interim report is due 7 July 2013. The third interim report is due 31 March 2014. The fourth interim report is due 31 October 2015. The fifth interim report is due 31 October 2016.

Block 14: All PMCR related forms must be emailed to PM-ABCT Program Management Division Business Systems Branch. Prime contractors are responsible for flowing down PMCR requirements contained in their prime contracts to all subcontractors who meet the reporting thresholds. This includes requiring subcontractors to electronically report directly to PM-ABCT Program Management Division Business Systems Branch. All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A011
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A011
2. TITLE OF DATA ITEM: Contractor Business Data Report (DD Form 1921-3)
3. SUBTITLE: Program Management Cost Reporting (PMCR)
4. AUTHORITY: DI-FNCL-81765B
5. CONTRACT REFERENCE: C.3.3.2.1
6. REQUIRING OFFICE: PM-ABCT Program Management Division, Business Systems Branch
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-PB		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 11, 12 and 13: This report is required to be initially submitted within 60 days of contract award with data for the prior fiscal year (2011). Additional reports are required on an annual basis within 60 days subsequent to the end of the contractor's fiscal year for the life of the contract. Only one report is required to be completed and submitted by each FPR (Forward Pricing Rate) unit (e.g., plant, site, business unit) per year, independent of the number of contracts within the FPR unit which contain this CDRL item. In the absence of a FPR requirement, the term FPR unit should be interpreted for reporting purposes as business unit as defined in the FAR. Prepare PMCR data in electronic format in accordance with the detailed instructions contained in Data Item Description DI-FNCL-81765B (or most recently approved version).

Block 14: All PMCR related forms must be emailed to PM-ABCT Program Management Division Business Systems Branch. Prime contractors are responsible for flowing down PMCR requirements contained in their prime contracts to all subcontractors who meet the reporting thresholds. This includes requiring subcontractors to electronically report directly to PM-ABCT Program Management Division Business Systems Branch. All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The

Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.
DD FORM 1423

A. CONTRACT LINE ITEM NO.: A012
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A012
2. TITLE OF DATA ITEM: Software Resources Data Report (SRDR): Initial Developer and Data Dictionary
3. SUBTITLE: Program Management Cost Reporting (PMCR)
4. AUTHORITY: DI-MGMT-81739B
5. CONTRACT REFERENCE: C.3.3.2.1
6. REQUIRING OFFICE: PM-ABCT Program Management Division, Business System Branch
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY:
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-PB		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: In addition to Distribution "C" in block 9, all technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 11, 12, and 13: The Contractor shall submit the Software Resources Data Report (SRDR): Initial Developer Report and Data Dictionary within 180 calendar days of contract award. The initial SRDR report is due 31 March 2013.

Prepare Blocks 10 through 13 of the Software Resources Data Report (SRDR) Initial Developer Report and Data Dictionary in accordance with the PM ABCT Program Management Division Business Systems Branch approved Program Management Cost Reporting (PMCR) Plan provisions, and DoD 5000.04-M-1. The PM ABCT Program Management Division Business Systems Branch approved PMCR Plan is included as contract Attachment 0005. Prepare PMCR data in electronic format in accordance with the detailed instructions contained in Data Item Description DI-MGMT-81739 (or most recently approved version) and DoD 5000.04-M-1.

Block 14: All PMCR related forms must be emailed to PM-ABCT Program Management Division Business Systems Branch. Prime contractors are responsible for flowing down PMCR requirements contained in their prime contracts to all subcontractors who meet the reporting thresholds. This includes requiring subcontractors to electronically report directly to PM-ABCT Program Management Division Business Systems Branch. All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A013
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP

E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A013
2. TITLE OF DATA ITEM: Software Resources Data Report (SRDR): Final Developer Report and Data Dictionary
3. SUBTITLE: Program Management Cost Reporting
4. AUTHORITY: DI-MGMT-81740A
5. CONTRACT REFERENCE: C.3.3.2.1
6. REQUIRING OFFICE: PM-ABCT Program Management Division, Business Systems Branch
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: B
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-PB		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 11, 12 and 13: The Contractor shall submit the Software Resources Data Report (SRDR): Final Developer Report and Data Dictionary at the end of the contract period of performance.

Prepare Blocks 10 through 13 of the Software Resources Data Report (SRDR): Final Developer Report and Data Dictionary in accordance with the PM ABCT Program Management Division Business Systems Branch approved Program Management Cost Reporting (PMCR) Plan provisions, and DoD 5000.04-M-1. The PMCR Plan is included as contract Attachment 0005. Manual DoD 5000.04-M-1 is available from the Defense Cost and Resource Center (DCARC) Web site at ://dcarc.pae.osd.mil. Prepare Program Management Cost Reporting data in electronic format in accordance with the detailed instructions contained in Data Item Description DI-MGMT-81740 (or most recently approved version).

Block 14: All PMCR related forms must be emailed to PM-ABCT Program Management Division Business Systems Branch. Prime contractors are responsible for flowing down PMCR requirements contained in their prime contracts to all subcontractors who meet the reporting thresholds. This includes requiring subcontractors to electronically report directly to PM-ABCT Program Management Division Business Systems Branch. All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A014
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A014
2. TITLE OF DATA ITEM: Design to Cost (DTC)
3. SUBTITLE:

4. AUTHORITY: DI-MGMT-80711A
5. CONTRACT REFERENCE: C.3.4.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED:B
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: N/A
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-P	0	1	0
DCMA - Detroit	0	1	0
15. TOTAL:	0	2	0

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16. REMARKS:

The Contractor shall submit the Unit Manufacturing Costs of the Bradley ECP vehicle. Manufacturing costs are defined as and will be individually reported as: the costs of material, labor, and other expenses incurred in the fabrication, checkout, and processing of parts, subassemblies, and major assemblies/subsystems needed for the final system. The manufacturing cost also includes costs of subcontractors and purchased parts/equipment, costs of the efforts to integrate and assemble the various subassemblies into a working system, costs to install special and general equipment, and costs to paint and package the system for shipment to its acceptance destination. It also includes all transportation in order to assemble into a final system.

Blocks 10, 12 and 13:
DTC reports will be first submitted at the Affordability Assessment six (6) months after contract award, subsequently at PDR, CDR, and finally 45 days after the first prototypes of each variant are built in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A015
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A015
2. TITLE OF DATA ITEM: Risk Management Plan
3. SUBTITLE:
4. AUTHORITY: DI-MGMT-81808
5. CONTRACT REFERENCE: C.4.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-L
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: C
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L		3	
15. TOTAL:	0	3	0

16. REMARKS:

Block 9: In addition to distribution "C" in Block 9, all technical documents that are determined to contain export-controlled technical data shall be marked "WARNING -This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall deliver a Risk Management Plan within 60 calendar days after award of contract in Contractor format. The principles of the risk Management Plan shall outline and follow the principles in the DoD Risk Management Guide, Sixth Edition, version 1.0. Should this data deliverable require revision after initial delivery, the Contractor shall redeliver the data on a date mutually agreed to by both parties.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A016
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A016
2. TITLE OF DATA ITEM: Risk Status Report
3. SUBTITLE:
4. AUTHORITY: DI-MISC-80711A
5. CONTRACT REFERENCE: C.4.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-A
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: Monthly
11. AS OF DATE:
12. DATE OF FIRST SUB: 30 Days after Contract Award
13. DATE OF SUBS: End of Each Month

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	0	1	0
15. TOTAL:		1	

16. REMARKS:

The Contractor shall deliver a monthly summary of Risk Statuses per the contractor's Risk Management System. The status shall show current risk rating and status assessment of mitigation plan approved and in work as applicable. Delivery shall be in contractor format.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A017
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A017
2. TITLE OF DATA ITEM: Systems Engineering Management Plan (SEMP)
3. SUBTITLE:
4. AUTHORITY: DI-SESS-81785
5. CONTRACT REFERENCE: C.5.1.1.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: First submission shall be 60 days after contract award
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	0	1	0
15. TOTAL:		1	

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16. REMARKS: Contractor format using the A3 Block 2 Material Solution Analysis SEMP format.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10: Updated SEMP shall be submitted at each technical review.

Block 13: The final SEMP shall be delivered 30 days prior to the production readiness review in accordance with the IMS. The Government will provide comments within 30 days of receipt of the plan. Comments from the Government on the draft SEMP shall be addressed in a resubmission by the contractor within 14 days of receipt of comments. Comments on SEMP updates from the Government shall be addressed in resubmission by the contractor within 7 days of receipt of comments

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A018

B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A018
2. TITLE OF DATA ITEM: Engineering Change Proposal (ECP)
3. SUBTITLE:
4. AUTHORITY: DI-CMAN-80639C
5. CONTRACT REFERENCE: C.5.3.1.2.5, C.5.3.2.2.2, C.5.10.2, C.10.3.3, C.5.3.1.2.9
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
Drawing Surveillance	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12, and 13: ECPs shall be submitted in accordance with the government approved Integrated Master Schedule (IMS).

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A019
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A019
2. TITLE OF DATA ITEM: Antenna Analysis and Vehicle Models
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE: C.5.3.1.2.25.2, C.5.3.2.2.4.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D

10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-SI		1	
15. TOTAL:	0	1	0

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16. REMARKS: The Contractor shall deliver an analysis report of the placement of all vehicle mounted antennas. Contractor format is acceptable but must include recommendations for each antenna location on the external vehicle surface.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 12 and 13: The Contractor shall deliver 2 copies of external vehicle models. Acceptable format will be CAD models in .stp/.step, .sat, or .igs format, with .sat being the preferred. Models will be used to support USG CERDEC antenna modeling. Models and report shall be delivered NLT 30 Days prior to Preliminary Design Review (PDR) in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A020
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A020
2. TITLE OF DATA ITEM: Interface Control Documents (ICD)
3. SUBTITLE:
4. AUTHORITY: DI-CMAN-81248A
5. CONTRACT REFERENCE: C.5.3.1.2.25, C.5.3.1.2.29, C.5.7.1, C.5.3.2.2.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
15. TOTAL:	1	0	1

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 11, 12 and 13: Deliver in accordance with entrance/exit criteria for major program reviews as detailed in the Integrated Master Schedule (IMS).

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. The submission shall be prepared and delivered in PDF format. The submission shall also be prepared and delivered in DOORS database format Repro = Electronic Copy Deliver with ERR in PDF format.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A021
B. EXHIBIT: A
C. CATEGORY: TDP
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A021
2. TITLE OF DATA ITEM: M2A3/M3A3, BFIST Requirements Specification Update
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE: C.5.5.2.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		3	
15. TOTAL:	0	3	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10: Updated requirements specification shall be submitted at each major technical review.

Block 12: First submission shall be 15 days prior to SFR/SRR in accordance with the IMS.

Block 13: The final requirement specification shall be delivered 30 days prior to Technical Data Package (TDP) delivery.

The Contractor shall provide 3 copies of the updated requirement specification in a CD format including:

- DOORS as a Project Archive with all associated Formal and Link Modules required to produce the System-Level Performance Specification and maintain traceability to source requirements (including Previous Bradley Performance Specifications, ORDs, MNS, Block I and II, ODS) used to produce the Performance Specification and System Test Plans/Reports.
- Microsoft Word - Contractor Format
- Rationale and Date for OIPT approval of change/combining of requirements

The requirements specification should include the following elements:
- Introduction
- Scope
- Applicable Documents
- Requirements
- Verification/Validation
- BFIST Appendix
- Definitions
- Notes

(Contractor shall use MIL-STD-961E as specification writing guidance)

Blocks 12 and 13: The Government will provide comments to draft submission within thirty (30) calendar days of receipt. Comments from the Government on the draft requirements specification shall be addressed in a resubmission by the Contractor within 14 calendar days of receipt of comments. Comments on the requirements specification updates from the Government shall be addressed in resubmission by the Contractor within 7 calendar days of receipt of comments

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A022
B. EXHIBIT:
C. CATEGORY:
D. SYSTEM/ITEM:
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A022
2. TITLE OF DATA ITEM: RESERVED
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE:
6. REQUIRING OFFICE:
7. DD250 REQ:
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS: SEE BLK _____

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction

15. TOTAL:

16. REMARKS:

DD FORM 1423
A. CONTRACT LINE ITEM NO.: A023

B. EXHIBIT: A
C. CATEGORY: TDP
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A023
2. TITLE OF DATA ITEM: Classified Requirements Specification
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE: C.5.5.2.3
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10: Updated requirements specification shall be submitted at each major technical review.

Block 12: First submission shall be 60 days Post to SFR/SRR in accordance with the IMS.

Block 13: The final requirement specification shall be delivered 30 days prior to Technical Data Package (TDP) delivery in accordance with the IMS.
The Contractor shall provide updated requirement specification in an electronic format on 1 classified cd's including:

- DOORS as a Project Archive with all associated Formal and Link Modules required to produce the System-Level Performance Specification and maintain traceability to source requirements (e.g. Previous Bradley Performance Specifications, Block I & II, ODS, MNS) used to produce the Performance Specification and System Test Plans/Reports.
- Microsoft Word

The requirements specification should include the following elements:
- Rationale and Date for OIPT approval of change/combining of requirements
- Introduction
- Scope
- Applicable Documents
- Requirements
- Verification/Validation
- Definitions
- Notes

(Contractor shall use MIL-STD-961E as specification writing guidance)

The Government will provide comments to draft submission within thirty (30) calendar days of receipt. Comments from the Government on

the draft requirements specification shall be addressed in a resubmission by the Contractor within 14 calendar days of receipt of comments. Comments on the requirements specification updates from the Government shall be addressed in resubmission by the Contractor within 7 calendar days of receipt of comments.

Block 14: All data deliverables shall be submitted to the PM ABCT in accordance with Army Regulation 380-5 and the Bradley Security Classification Guide. The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A024
B. EXHIBIT: A
C. CATEGORY: TDP
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A024
2. TITLE OF DATA ITEM: Scientific and Technical Reports
3. SUBTITLE: Specification Tree (ST) and Drawing Tree
4. AUTHORITY:
5. CONTRACT REFERENCE: C.5.5.3
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BA	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

The Contractor shall prepare and provide a Specification Tree (ST) that identifies the M3A3/A3BFIST Functional, Allocated, and Product Baseline documentation. It shall include generic specification blocks for LRU ICDs, Tech notes, CIDS, LVDDs, LRU Performance Specs, Drawing Packages, and other baseline documentation so as to fit onto one page. It should be similar to what was provided for the ODS SA Program. It shall contain in subsequent pages the detailed Baseline list of LRU ICDs, Tech notes, CIDS, LVDDs, LRU Performance Specs, Drawing Packages, and other baseline documentation that relate to the generic blocks on the first page. Each detailed Baseline list shall include the document or drawing title, number, revision letter, date, and previous ECP/ERR number. Each detailed Baseline list shall map to a generic block on the first page. Contractor format is acceptable.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13: The Contractor shall submit a draft Specification Tree (ST) no later than 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall also provide a final version of the ST at least 45 days prior to the Software Critical Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated ST within 10 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated ST within 10 days of receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ (Huntsville, AL)

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A025
B. EXHIBIT: A
C. CATEGORY: TDP
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A025
2. TITLE OF DATA ITEM: System Requirements Analysis
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE: C.5.5.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		1	
15. TOTAL:	0	1	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10: Updated analysis shall be submitted at each technical review.

Block 12: First submission shall be 15 days prior to SFR/SRR in accordance with the IMS.

Block 13: The final requirement analysis shall be delivered 30 days prior to Technical Data Package (TDP) delivery.

The Contractor shall provide requirement analysis in an electronic format including one copy in CD format with the following criteria:

- DOORS as a Project Archive with all associated Formal and Link Modules required to produce the System-Level Performance Specification and maintain traceability to source requirements (e.g. Previous Bradley Performance Specifications) used to produce the Performance Specification.
- Microsoft Word - Contractor Format
- Rationale and Date for OIPT approval of change/combining of requirements

The requirement analysis should include the following elements:
- The Current Requirement
- The Parent requirement(s) from the M2A3/M3A3 specification or BFIST specification
- Rationale for change to parent requirement (if any)
- Rationale & Date for SEIT approval for change in requirement (if any)
- Rationale for new performance requirement(s)
- Verification/Validation for new requirements.

The Government will provide comments to draft submission within thirty (30) calendar days of receipt. Comments from the Government on the draft requirements specification shall be addressed in a resubmission by the Contractor within 14 calendar days of receipt of comments. Comments on the requirements specification updates from the Government shall be addressed in resubmission by the Contractor within 7 calendar days of receipt of comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A026
B. EXHIBIT: A
C. CATEGORY: TDP
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A026
2. TITLE OF DATA ITEM: Specification Requirements Verification Matrix and Requirements Traceability Matrix
3. SUBTITLE:
4. AUTHORITY: DI-MISC-81283
5. CONTRACT REFERENCE: C.5.5.5, C.5.5.6
6. REQUIRING OFFICE: SFAE-GCS-ABCT-A
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-A		1	
15. TOTAL:	0	1	0

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16. REMARKS:

The Specification Requirements Verification Matrix (SRVM) shall be in Contractor format that best conveys the traceability of requirements/specifications. The Specification Requirements Verification Matrix shall show the requirement, the verification method used to verify the requirement, and results of the verification once complete. The Specification Requirements Verification Matrix shall be used as the basis for requirements risk analysis for each technical review.

The Specification Requirements Verification Matrix shall be combined with the Requirements Traceability Matrix (RTM) into one document. The requirements traceability portion of the matrix shall show direct linkage to the parent requirement for each requirement within the specifications. Only the direct parent for the requirement needs to be shown.

The Contractor shall deliver a Requirements Traceability Matrix that shows traceability of the combined System Performance Specification

requirements to the original P spec requirement. This requirement is to ensure no duplication of requirements, removal of requirements, or addition of new requirements.

Each specification developed by the Contractor and delivered to the Government shall have its own associated SRVM and RTM to reduce complexity of the Matrix(es).

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12 and 13: First Submission shall be five (5) days after SRR/SFR in accordance with the IMS, with re-submission at any subsequent Technical Reviews (PDR, CDR, TRR, SVR). Final submission shall be at SVR in accordance with the IMS.

The Government will provide comments to draft submission within thirty (30) calendar days of receipt. Comments from the Government on the draft Specification Requirements Verification Matrix shall be addressed in a resubmission by the Contractor within 14 calendar days of receipt of comments. Comments on the Specification Requirements Verification Matrix updates from the Government shall be addressed in resubmission by the Contractor within 7 calendar days of receipt of comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A027
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A027
2. TITLE OF DATA ITEM: System/Subsystem Design Document (SSDD)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81432A
5. CONTRACT REFERENCE: C.5.6, C.5.6.1, C.5.6.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT-A
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-A		3	
15. TOTAL:	0	3	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10: Updated SSDD shall be submitted at each technical review.

Block 12: First Submission shall be 30 days prior to SFR in accordance with the IMS.

Block 13: The final SSDD shall be delivered 30 days prior to Technical Data Package (TDP) delivery.

The Contractor shall provide updated SSDD in contractor format. The SSDD should include the following elements:
- System/Subsystem Overview (to include Software)
- System/Subsystem Architecture Block Diagrams (to include Software)
- System/Subsystem requirements and validation rules (to include Software)
- Interface Control Documents (includes specifications)
- Data Dictionary
- Technical Standards
- Security and Access Control Lists
- API Standards

The Government will provide comments to draft submission within thirty (30) calendar days of receipt. Comments from the Government on the draft SSDD shall be addressed in a resubmission by the Contractor within 14 calendar days of receipt of comments. Comments on the SSDD updates from the Government shall be addressed in resubmission by the Contractor within 7 calendar days of receipt of comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A028
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A028
2. TITLE OF DATA ITEM: Trade Study Report
3. SUBTITLE:
4. AUTHORITY: DI-MISC-80048
5. CONTRACT REFERENCE: C.5.8, C.5.8.1.1, C.5.8.1.2, C.5.8.2.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-A
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-A		1	
15. TOTAL:	0	1	0

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16. REMARKS:

The Trade Study Report shall be in Contractor format using Microsoft Word that best conveys the Trade Study and its results. The Trade Study Reports shall show the alternatives being studied, the metrics used to measure the analysis, results of the analysis, sensitivity analysis, and a recommended solution set.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: Trade Study Reports shall be submitted within thirty (30) calendar days after each trade study completion.

All trade studies shall be documented and reported to the Government for its concurrence. The Government will provide comments to draft submission within thirty (30) calendar days of receipt. Comments from the Government on the draft Trade Study Reports shall be addressed in a resubmission by the Contractor within 14 calendar days of receipt of comments. Comments on the Trade Study Reports updates from the Government shall be addressed in resubmission by the Contractor within 7 calendar days of receipt of comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A029
B. EXHIBIT: A
C. CATEGORY: TM
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A029
2. TITLE OF DATA ITEM: Weight and Balance
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE: C.5.8.2.5
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: Monthly
11. AS OF DATE:
12. DATE OF FIRST SUB: 30 Days After Award
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		3	
15. TOTAL:	0	3	0

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16. REMARKS:

The Contractor shall perform a weight management analysis (leveraging existing weight management processes if they exist) to develop a "Design to Weight" as well as weight allocations to the various subsystems, and identify the vehicle center of gravity. The Contractor shall identify opportunities for weight reduction if the analysis determines that there is a weight issue and establish a weight management process for program execution.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block, 13: The contractor shall provide updates to the Govenrment electronically on a semi-annual basis through CDR, then updates shall be submitted quarterly. A final weight table is to be provided as part of the ERR.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A030
B. EXHIBIT: A
C. CATEGORY: TDP
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A030
2. TITLE OF DATA ITEM: Technical Data Package (TDP)
3. SUBTITLE: Technical Data Package
4. AUTHORITY: DI-CMAN-80776(T)
5. CONTRACT REFERENCE: C.5.10, C.5.10.8, C.5.3.2.2.4.2, and C.5.3.1.2.25.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	1	1
15. TOTAL:	1	1	1

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16. REMARKS:

Block 4: The following tailoring on the DID is applicable:
Content shall be tailored as follows:

a. System and Software architectures in accordance with ANSI/IEEE 1471 and MIL-STD-499B;

b. Computer-Aided Design and Manufacturing (CADM) compliant TDP, consisting of the following items per MIL-STD-31000 and supporting ASME commercial standards:
(1) 3D models with associated 2D drawings:

(a) Product drawings/models and associated lists;
(b) Engineering Bill of Material (GBLs/Drawing Lists/As Built Documentation)
(c) Commercial and Vendor Item drawings/models and associated lists;
(d) Special Inspection Equipment (SIE) drawings/models & associated lists
(e) Special Tooling and Test Equipment (STE) drawings/models and associated lists;
(f) Systems Requirements Verification Matrix in accordance with CDRL A026 (DI-MISC-81283/T);
(g) Critical Items List;
(h) Quality assurance provisions;
(i) Special packaging instructions (SPI) (documents, drawings/models and associated lists) in accordance with CDRL A091 (DI-PACK-80121B);
(j) Gerber files and/or Artwork Masters as needed for procurement.

(2) Specifications:
(a) Interface Control Documents (ICDs) in accordance with DI-CMAN-81248A;

(b) Component specifications for all HWCIs, including supporting tradeoff analysis and modeling data in accordance with MIL-STD-961.
(c) Vehicle/System specifications, including supporting tradeoff analysis and modeling results, in accordance with MIL-STD-961.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." Distribution Statement shall be based on Configuration Management Plan requirements for individual components of TDP.

Block 10, 11, 12, and 13: Contractor shall submit and deliver TDP updates consisting of engineering changes at CDR. The Government shall review and comment on each increment no later than 30 calendar days after acknolwedgement of receipt. The contractor shall have 15 calendar days to address all comments and incorporate changes. Final delivery of the TDP shall be no later than 60 calendar days prior to the Engineering Release Record (ERR) in accordance with the IMS.

Block 14: Electronic Submissions of data requirements shall be uploaded for the Bradley Data Manager's review within the Governments Integrated Data Environment (IDE). Contractor shall provide e-mail notification of data submissions to the PCO, Contract Specialist, COR and PM Procurement Analyst.

Block 16: Wherein Contractor format is utilized on any documents, drawings, models, or data, the Contractor shall seek format approval by the Government prior to delivery.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A031
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A031
2. TITLE OF DATA ITEM: Engineering Release Record (ERR)
3. SUBTITLE:
4. AUTHORITY: DI-CMAN-80463C
5. CONTRACT REFERENCE: C.1.4, C.1.6, C.5.10.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: As Requested
11. AS OF DATE: N/A
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: Load ERR package to TARDEC's PDMLink NLT 90 days after ECP approval for change release ERRs and 30 days after

drawing approval for initial release ERRs in accordance with the IMS. The Contractor shall send an Email notification to TARDEC's CM representative, SFAE-GCS-ABCT to include ERR number, and title indicating data has been loaded. The ERR package shall include drawings, specs, ICDs, configuration data, CAD files, models, etc.. The ERR package shall be complete, i.e. no missing down parts, references, etc. PDMLink classroom training is available at the Contractor's request. Ongoing PDMLink guidance available from TARDEC CM representative.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A032
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A032
2. TITLE OF DATA ITEM:
3. SUBTITLE: Drawing Number Assignment Report
4. AUTHORITY: DI-SESS-81011D
5. CONTRACT REFERENCE: C.5.10.5
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS:

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
Drawing Surveillance	1	0	1
15. TOTAL:	2	0	2

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 12: The Contractor shall deliver the Drawing Number Assignment Report at the end of contract performance.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A033
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358

F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A033
2. TITLE OF DATA ITEM: Data Management Strategy Plan
3. SUBTITLE:
4. AUTHORITY: SEE BLOCK 16
5. CONTRACT REFERENCE: C.5.12.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
DMS Manager	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 4: The Contractor shall prepare and deliver a Data Management Strategy in accordance with the Memorandum, SAAL-PA, 9 September 2010, subject: Data Management Strategy (DMS) Guidebook and Worksheet.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10 & 13: The Contractor shall update and submit the Data Management Strategy Plan every 120-days

Block 12: The Contractor shall submit the first Plan 60 days after contract award

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A034
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A034
2. TITLE OF DATA ITEM: Software Development Plan (SDP)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81427A
5. CONTRACT REFERENCE: C.5.13.1, C.5.13.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:

9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

Block 12: The Contractor shall submit the initial Software Development Plan (SDP) no later than 45 days prior to the System Requirements Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall make changes based on the Governments review and resubmit within 10 days.

Block 13: The Contractor shall submit an updated SDP no later than 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall make changes based on the Governments review and resubmit within 10 days. The Contractor shall also provide a final version of the SDP at least 45 days prior to the Software Critical Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated SDP within 10 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated SDP within 10 days of receipt of Government comments

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A035
B. EXHIBIT: A
C. CATEGORY: TM
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A035
2. TITLE OF DATA ITEM: Software Product Specification (SPS)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81441A
5. CONTRACT REFERENCE: C.5.13.5
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:

12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall submit the Software Product Specification to the Government within 45 days after the Formal Software Qualification Test (SQT) completion, in accordance with the IMS. Software source code shall be made available upon Government request 30 days after the Software Formal Qualification Test.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A036
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A036
2. TITLE OF DATA ITEM: Software Design Description (SDD)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81435A
5. CONTRACT REFERENCE: C.5.13.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

For Tactical Software:

Blocks 10, 12 and 13: The Contractor shall submit a draft Software Design Description (SDD) to the Government at least 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated draft SDD within 10 days of receipt of Government comments.

The Contractor shall submit a final SDD no later than 45 days prior to the Software Critical Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated SDD within 10 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated SDD within 10 days of receipt of Government comments.

For Test Software:

Blocks 10, 12 and 13: The Contractor shall submit the SDD at least 45 days prior to the start of coding of the specific Test Software. The Government will review the documents and provide comments within 15 days. The Contractor shall submit the updated documents within 10 days of receipt of the Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A037
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A037
2. TITLE OF DATA ITEM: Software Quality Assurance Plan (SQAP)
3. SUBTITLE:
4. AUTHORITY: IEEE STD 730-2002
5. CONTRACT REFERENCE: C.5.13.6, C.5.13.6.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1

15. TOTAL: 2 0 2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13:
The Contractor shall submit the draft Software Quality Assurance Plan (SQAP) no later than 45 days prior to the System Requirements Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall provide the updated document within 15 days after receipt of Government comments. Contractor format is acceptable.

The Contractor shall submit an updated SQAP no later than 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall also provide a final version of the SQAP at least 45 days prior to the Software Critical Design Review. The Government will review and provide comments within 20 days. The Contractor shall submit the updated SQAP within 15 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated SQAP within 10 days of receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ (Huntsville, AL)

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A038
B. EXHIBIT:
C. CATEGORY:
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A038
2. TITLE OF DATA ITEM: RESERVED
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE:
6. REQUIRING OFFICE:
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS:

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction

15. TOTAL:

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16. REMARKS: RESERVED

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A039
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A039
2. TITLE OF DATA ITEM: Software Configuration Management Plan (SCMP)
3. SUBTITLE:
4. AUTHORITY: DI-CMAN-80858B
5. CONTRACT REFERENCE: C.5.13.8
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: DD
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13:
The Contractor shall submit the draft Software Configuration Management Plan (SCMP) no later than 45 days prior to the System Requirements Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall provide the updated document within 15 days after receipt of Government comments.

The Contractor shall submit an updated SCMP no later than 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall also provide a final version of the SCMP at least 45 days prior to the Software Critical Design Review. The Government will review and provide comments within 20 days. The Contractor shall submit the updated SCMP within 15 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated SCMP within 10 days of receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ (Huntsville, AL)

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A040
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A040
2. TITLE OF DATA ITEM: Scientific and Technical Report
3. SUBTITLE: Problem Reports
4. AUTHORITY: DI-MISC-80711A
5. CONTRACT REFERENCE: C.5.13.8.1, C.5.13.9
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-LD		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall deliver no later than 10 days after identification of a problem detected in the software product.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A041
B. EXHIBIT:
C. CATEGORY:
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A041
2. TITLE OF DATA ITEM: RESERVED
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE:
6. REQUIRING OFFICE:

7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS:

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14. DISTRIBUTION

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A. ADDRESSEES:	B. COPIES:	Draft	Regular	Reproduction

15. TOTAL:

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16. REMARKS: RESERVED

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A042
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A042
2. TITLE OF DATA ITEM: RESERVED
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE:
6. REQUIRING OFFICE:
7. DD250 REQ:
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS:

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14. DISTRIBUTION

				FINAL
A. ADDRESSEES:	B. COPIES:	Draft	Regular	Reproduction

15. TOTAL:

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16. REMARKS:

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A043
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A043
2. TITLE OF DATA ITEM: Scientific and Technical Reports
3. SUBTITLE: Software Metrics
4. AUTHORITY: DI-MISC-80711A
5. CONTRACT REFERENCE: C.5.13.11
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
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14. DISTRIBUTION

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13: The Software Metrics shall be provided at Software PDR, Software CDR, and Software TRR milestones in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ (Huntsville, AL).

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A044
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A044
2. TITLE OF DATA ITEM: Computer Software Product End Item (CSPEI)
3. SUBTITLE:
4. AUTHORITY: DI-MCCR-80700
5. CONTRACT REFERENCE: C.5.13.12 and C.5.13.15
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12, 13, and 14:

1. For Test Software:
a. The Contractor shall submit the configuration-managed Test Software, which is free of patches and on master Solid State Hard Drives (SSHDs), to the following Government locations: Yuma Test Center (YTC): 1 SSHD, Aberdeen Test Center (ATC): 1 SSHD, Cold Region Test Center (CRTC): 1 SSHD, White Sand Missile Range (WSMR): 1 SSHD, Central Testing Support Facility (CTSF): 1 SSHD, Redstone Test Center (RTC): 1 SSHD. AMRDEC-SED: 1 SSHD.

b. The Contractor shall submit the configuration-managed Test Software, which is free of patches and on a CD, to DRS-TEM to support DSESTS reprogramming.

c. Items listed on a. and b. above shall be shipped to the designated locations immediately after the Contractor has finished their SQT and a CM built version is available for delivery.

2. For Tactical Software:
a. The Contractor shall submit the configuration-managed TACFILE Software, which is free of patches and on master SSHDs, to the following locations: PM ABCT-MFT: 1 SSHD, AMRDEC-SED: 1 SSHD

b. The Contractor shall submit the configuration-managed TACFILE Software, which is free of patches and on a CD, to DRS-TEM to support DSESTS reprogramming.

c. Items listed under a. and b. above shall be shipped to the designated locations immediately after the Contractor has finished their SQT and a CM built version is available for delivery.

Contractor format is acceptable.

The Contractor shall provide VVID Info papers (VIP) to the following locations: YTC: 1 VIP, ATC: 1 VIP, CRTC: 1 VIP, WSMR: 1 VIP, CTSF: 2 VIPs, RTC: 1 VIP, AMRDEC-SED: 1VIP, PM ABCT-MFT: 5 VIPs for each Brigade Combat Team (BCT), 2 VIPS for each division.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A045
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A045
2. TITLE OF DATA ITEM: Interface Design Description (IDD)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81436A
5. CONTRACT REFERENCE: C.5.13.12

6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
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15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: (Contractor format is acceptable)
For Tactical Software:

The Contractor shall submit a preliminary/draft Interface Design Document (IDD) to the Government at least 45 days prior to Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated preliminary/draft IDD within 10 days of receipt of Government comments.

The Contractor shall submit the final IDD to the Government at least 45 days prior to Software Critical Design Review in accordance with the IMS. The Government will review and submit comments within 20 days. The Contractor shall submit the updated final IDD within 10 days of receipt of the Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated IDD within 10 days of receipt of Government comments.

For Test Software:

The Contractor shall submit the document at least 45 days prior to the start of coding of the specific Test Software. The Government will review the documents and provide comments within 20 days. The Contractor shall submit the updated documents within 10 days of receipt of the Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A046
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A046
2. TITLE OF DATA ITEM: Interface Requirement Specifications (IRS)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81434A
5. CONTRACT REFERENCE: C.5.13.12
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Contractor format is acceptable.

Blocks 10, 12, and 12:

For Tactical Software:

The Contractor shall submit a preliminary/draft Interface Requirement Specification (IRS) to the Government at least 45 days prior to System Requirement Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated preliminary IRS within 10 days of receipt of Government comments.

The Contractor shall submit an updated IRS no later than 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall also provide a final version of the IRS at least 45 days prior to the Software Critical Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated IRS within 10 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated IRS within 10 days of receipt of Government comments.

For Test Software:

The Contractor shall submit the document at least 45 days prior to the start of coding of the specific Test Software. The Government will review the documents and provide comments within 20 days. The Contractor shall submit the updated documents within 10 days of receipt of the Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A047
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A047
2. TITLE OF DATA ITEM: Software Requirement Specification (SRS)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81433A
5. CONTRACT REFERENCE: C.5.13.12
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25. Contractor format is acceptable.

Blocks 10, 12 and 13:

For Tactical Software: The Contractor shall submit a preliminary/draft Software Requirements Specification (SRS) to the Government at least 45 days prior to the System Requirement Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated preliminary SRS within 10 days of receipt of Government comments.

The Contractor shall submit an updated SRS no later than 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall also provide a final version of the SRS at least 45 days prior to the Software Critical Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated SRS within 10 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated SRS within 10 days of receipt of Government comments.

The above time requirements apply to all software requirement-related documentation that will drive software development and subsequent software testing. This includes, but is not limited to, SRSs generated in accordance to the cited DID, Tech notes generated to Contractors format, and graphical representations, such as Harel charts.

For Test Software: The Contractor shall submit the document at least 45 days prior to the start of coding of the specific Test Software. The Government will review the documents and provide comments within 20 days. The Contractor shall submit the updated documents within 10 days of receipt of the Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A048
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A048
2. TITLE OF DATA ITEM: Software Test Description (STD)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81439A
5. CONTRACT REFERENCE: C.5.13.12
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." Contractor format is acceptable.

Blocks 10, 12 and 13: The Contractor shall submit a draft of the Software Test Description (STD), including Test Procedures, as follows:

For Tactical Software: The Contractor shall submit the draft STD and Test Procedures at least 45 days prior to Software Critical Design Review in accordance with the IMS. The Government will review and submit comments within 20 days. The Contractor shall submit the updated STD, including updated Test Procedures, within 10 days of receipt of the Government comments.

The Contractor shall submit a final STD, including Test Procedures, at least 45 days prior to the Software Test Readiness Review, and Formal Software Qualification Test in accordance with the IMS. The Government will review and submit comments within 20 days. The Contractor shall submit the final STD including updated Test Procedures, within 10 days of receipt of Government comments.

NOTE: Since the number of Test Procedures comprising the Formal Software Qualification Test will dictate the length of time actually needed to perform an adequate review, more accurate turn-around times can be made once the number of Test Procedures is known.

In all cases, complete tracing of all requirements covered by all Tests (i.e., new requirement implementation and previously covered regression tests), consisting of the trace of requirements from high level specifications, through intermediate requirement specifications (e.g., Software Requirement Specifications, Interface Requirement Specifications, Tech notes, or equivalent

documentation), and down to the specific Test Cases verifying the correct implementation of the requirement, as currently stored in DOORS or equivalent database, shall be provided as part of the STD document as called out by the referenced Data Item Description, or as a separate Appendix or document.

The STD shall cover all testing performed on testing assets (e.g., in laboratories, on vehicle) that will be used for verifying the correct implementation of the specified software requirements.

For Test Software: The Contractor shall submit the document at least 45 days prior to the start of the use of the particular test software for formal testing. The Government will review the documents and provide comments within 30 days. The Contractor shall submit the updated documents within 10 days of receipt of the Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A049
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A049
2. TITLE OF DATA ITEM: Software Test Plan (STP)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81438A
5. CONTRACT REFERENCE: C.5.13.12, C.7.3.1.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." Contractor format is acceptable.

Blocks 10, 12 and 13:

For Tactical Software: The Contractor shall submit the draft STP at least 45 days prior to Software Critical Design Review in accordance with the IMS. The Government will review and submit comments within 20 days. The Contractor shall submit the updated STP within 10 days of receipt of Government comments.

The Contractor shall submit the final STP at least 45 days prior to Software Test Readiness Review and Formal Software Qualification Testing in accordance with the IMS. The Government will review and submit comments within 20 days. The Contractor shall provide the final STP within 10 days of receipt of Government comments.

For Test Software: The Contractor shall submit the document at least 45 days prior to the start of the use of the particular test software for formal testing. The Government will review the documents and provide comments within 20 days. The Contractor shall submit the updated documents within 10 days of receipt of the Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A050
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

---

1. DATA ITEM NO.: A050
2. TITLE OF DATA ITEM: Software Test Report (STR)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81440A
5. CONTRACT REFERENCE: C.5.13.12, C.7.3.1.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Contractor format is acceptable.

Blocks 10, 12, and 13:

For Tactical Software:

The Contractor shall submit the Software Test Report (STR) to the Government within 30 days after completion of the Software Formal Qualification Test in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall update and submit the updated STR within 10 days of receipt of Government comments.

The STR shall include the test results on the testing performed on all testing assets (e.g., in laboratories, on vehicle) that were used for verifying the correct implementation of the specified software requirements.

For Test Software:

The Contractor shall submit the STR to the Government within 45 days after completion of testing. The Government will review and provide comments within 20 days. The Contractor shall update and submit the updated Software Test Report within 10 days of receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A051
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A051
2. TITLE OF DATA ITEM: Software Version Description (SVD)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81442A
5. CONTRACT REFERENCE: C.5.13.12
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

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15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." Contractor format is acceptable.

Blocks 10, 12, and 13:
For Tactical Software: The Contractor shall submit the Software Version Description (SVD) within 30 days after the conclusion of the Software Formal Qualification Test in accordance with the IMS. The Government will review and submit comments within 15 days. The Contractor shall submit the updated SVD within 10 days of receipt of the Government comments.

For Test Software: The Contractor shall submit the SVD within 30 days after the conclusion of the testing. The Government will review

and submit comments within 15 days. The Contractor shall submit the updated SVD within 10 days of receipt of the Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A052
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A052
2. TITLE OF DATA ITEM: Database Design Description (DBDD)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81437A
5. CONTRACT REFERENCE: C.5.13.12
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." Contractor format is acceptable.

Blocks 10, 12, and 13:
The Contractor shall submit the draft Database Design Description (DBDD) no later than 45 days prior to the System Requirements Review in accordance with the IMS. The Government will review and provide comments within 20 days.

The Contractor shall submit an updated DBDD no later than 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall also provide a final version of the DBDD at least 45 days prior to the Software Critical Design Review. The Government will review and provide comments within 20 days. The Contractor shall submit the updated DBDD within 10 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated DBDD within 10 days of receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is

AMSRD-RDMR-BAQ

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A053
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

---

1. DATA ITEM NO.: A053
2. TITLE OF DATA ITEM: Scientific and Technical Reports
3. SUBTITLE: Software Architecture
4. AUTHORITY: DI-MISC-80711A
5. CONTRACT REFERENCE: C.5.13.12
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13:
The Contractor shall submit a preliminary Software Architecture (SA) no later than 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall also provide an updated/final version of the SA at least 45 days prior to the Software Critical Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall submit the updated SA within 10 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated SA within 10 days of receipt of Government comments

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ (Huntsville, AL).

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A054
B. EXHIBIT: A

C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A054
2. TITLE OF DATA ITEM: Software Reliability Program Plan (SRPP)
3. SUBTITLE:
4. AUTHORITY: SAE-JA1003
5. CONTRACT REFERENCE: C.5.13.12, C.6.1.8
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." Contractor format is acceptable.

Block 10, 12, and 13:

The Contractor shall submit the draft Software Reliability Program Plan (SRPP) no later than 45 days prior to the System Requirements Review in accordance with the IMS. The Government will review and provide comments within 20 days.

The Contractor shall submit an updated SRPP no later than 45 days prior to the Software Preliminary Design Review in accordance with the IMS. The Government will review and provide comments within 20 days. The Contractor shall also provide a final version of the SRPP at least 45 days prior to the Software Critical Design Review. The Government will review and provide comments within 20 days. The Contractor shall submit the updated SRPPP within 10 days of receipt of Government comments.

Any revisions after the Software Critical Design Review will be provided to the Government 30 days prior to being released for Government review and approval. The Government will review and provide comments within 15 days. The Contractor shall submit the updated SRPP within 10 days of receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A055
B. EXHIBIT:
C. CATEGORY:
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358

F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A055
2. TITLE OF DATA ITEM: RESERVED
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE:
6. REQUIRING OFFICE:
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS:

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction

15. TOTAL:

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16. REMARKS: RESERVED

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A056
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A056
2. TITLE OF DATA ITEM: Software Transition Plan (STrP)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81429A
5. CONTRACT REFERENCE: C.5.13.12
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." Contractor format is acceptable.

Blocks 10, 12, 13, and 14:

The Contractor shall submit the software transition plan (STrP) 90 days prior to the end of the contract period of performance. The Government will review the documents and provide comments within 30 days. The Contractor shall submit the updated documents within 10 days of receipt of the Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ (Huntsville, AL).

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A057
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A057
2. TITLE OF DATA ITEM: Software User Manual (SUM)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81443A
5. CONTRACT REFERENCE: C.5.13.12
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." Contractor format is acceptable.

Blocks 10, 12, and 13:

The Contractor shall submit the software user manual (SUM) at least 45 days prior to the start of the use of the particular test software for formal testing. The Government will review the documents and provide comments within 30 days. The Contractor shall submit

the updated documents within 10 days of receipt of the Government comments.

A final SUM if different from the one provided for testing shall be submitted to the Government for each software drop.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ (Huntsville, AL).

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A058
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A058
2. TITLE OF DATA ITEM: Firmware Support Manual (FSM)
3. SUBTITLE:
4. AUTHORITY: DI-IPSC-81448A
5. CONTRACT REFERENCE: C.5.13.12
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	1	0	1
AMSRD-RDMR-BAQ	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25." Contractor format is acceptable.

Blocks 10, 12, and 13:

The Contractor shall submit the Firmware Support Manual (FSM) to the Government at least 30 days prior to Software Critical Design Review in accordance with the IMS. The Government will review and provide comments within 15 days. The Contractor shall submit the updated Firmware Support Manual within 7 days of receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. Full office symbol for AMRDEC-SED is AMSRD-RDMR-BAQ (Huntsville, AL).

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A059

B. EXHIBIT:
C. CATEGORY:
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A059
2. TITLE OF DATA ITEM: RESERVED
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE:
6. REQUIRING OFFICE:
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS:

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction

15. TOTAL:

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16. REMARKS: RESERVED

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A060
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A060
2. TITLE OF DATA ITEM: Electromagnetic Interference Test Procedures (EMITP)
3. SUBTITLE:
4. AUTHORITY: DI-EMCS-80201C
5. CONTRACT REFERENCE: C.5.16.2.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction

15. TOTAL:	0	1	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13: The Contractor shall submit two procedure documents per ERR/subsystem. The first submission shall be 60 days prior to CDR in accordance with the Integrated Master Schedule (IMS). The second submission shall be 30 days prior to ERR/subsystem test.

After Government review and comments, the Contractor shall update and resubmit the procedure document 30 days after receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A061
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A061
2. TITLE OF DATA ITEM: Electromagnetic Interference Test Report (EMITR)
3. SUBTITLE:
4. AUTHORITY: DI-EMCS-80200C
5. CONTRACT REFERENCE: C.5.16.2.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	Regular	FINAL Reproduction
SFAE-GCS-ABCT		1	
15. TOTAL:	0	1	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13: The Contractor shall submit one report for each ERR/ subsystem 30 days after ERR/subsystem test completion.

After Government review and comments, the Contractor shall update and resubmit the report 30 days after receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A062
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A062
2. TITLE OF DATA ITEM: Electromagnetic Environmental Effects Verification Procedures (E3VP)
3. SUBTITLE:
4. AUTHORITY: DI-EMCS-81541B
5. CONTRACT REFERENCE: C.5.16.2.3, C.5.16.2.4, C.5.16.2.5
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: Twice
11. AS OF DATE:
12. DATE OF FIRST SUB: 30 days prior to CDR
13. DATE OF SUBS: 30 days prior to TRR

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
System E3 Engineer		1	
QA Engineer		1	
TACOM E3RB		1	
15. TOTAL:	0	3	0

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16. REMARKS:

The Contractor shall document any analyses, tests or inspections performed that are required by the Verification sections of MIL-STD-464C Tailored for ABCT Vehicle Systems.

The Contractor shall document its evaluation of the electromagnetic test procedures and results conducted on GFE/GFM selected for this effort and include identification of potential system E3 non-compliances and/or risks.

The Contractor shall document the system level bonds and ground inspection procedures.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 12 and 13: The report shall be updated and resubmitted 30 days after receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A063
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A063
2. TITLE OF DATA ITEM: Reliability and Maintainability (RAM) Program Plan
3. SUBTITLE:
4. AUTHORITY: DI-SESS-81613
5. CONTRACT REFERENCE: C.6.1.2, C 6.1.3, C.6.1.4, C.6.1.6, C.6.1.7
6. REQUIRING OFFICE: SFAE-GCS-ABCT-Q
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: Annually
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-Q		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 12 and 13: The initial plan shall be submitted to the Government within sixty (60) calendar days of contract award. An updated plan shall be submitted to the Government on an annual basis to reflect changes that might affect or degrade system RAM requirements.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A064
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A064
2. TITLE OF DATA ITEM: Failure Analysis Corrective Action Report (FACAR)
3. SUBTITLE:
4. AUTHORITY: DI-SESS-81315A (T)
5. CONTRACT REFERENCE: C.6.3.1, C.6.3.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-Q
7. DD250 REQ: LT
8. APP CODE: A

9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	1	1	0
15. TOTAL:	1	1	0

16. REMARKS:

Each Failure Analysis Corrective Action Report (FACAR) shall have a comprehensive analysis of the test incident, the mode of failure, root cause of failure and documentation of the corrective action proposed or taken to prevent recurrence of the incident. Only FACARs approved by the BAE-chaired Failure Review Board shall be submitted to the Government.

Block 4: Tailoring of DI-SESS-81315A.
Para. 3.1 and 3.2 of the DID are revised to require the following:
Each FACAR shall include:
Vehicle Type
Vehicle S/N
Test Incident Report (TIR) Number
Corrective Action Report (CAR) Number
Incident Date
CAR Date: Incident Class
Incident Description
Related Incidents
Failure analysis
Corrective Action

Para. 4 of DI-SESS-81315A is revised to remove any reference to "Nonrelevant Failures."

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: FACARs shall be provided within the following time frames:
Critical Interim electronic response within 24 hours of Government TIR release date and final electronic response within five (5) calendar days after Government TIR release date.

Major Interim electronic response within five (5) calendar days of Government TIR release date and final electronic response within 30 calendar days after Government TIR release date.

Minor Contractor shall respond to all minor TIRs that have a repetitive or pattern failure mode that impacts operation, as determined by the Government. Individual, one-time minor TIRs, shall be handled on a case-by-case basis. Electronic responses shall be due within thirty (30) calendar days of Government TIR release date for the final minor TIR for which a pattern has been established.

Information As requested by the Government.

FACARs are to be submitted to the Government via the Asset Management System (AMS). TIR (FACAR) responses for other prime or subcontractors shall be coordinated through the prime contractor. If the contractors FACAR is rejected, the Government will notify the Contractor within thirty (30) calendar days of submission of the FACAR to AMS. The Contractor shall be required to resubmit a response with thirty (30) calendar days of that notification.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A065
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A065
2. TITLE OF DATA ITEM: System Test and Evaluation Plans
3. SUBTITLE:
4. AUTHORITY: DI-NDTI-80566A
5. CONTRACT REFERENCE: C.7.1.1.1.1 and C.7.1.1.1.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		3	
15. TOTAL:	0	3	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall deliver draft System Test and Evaluation Plans thirty (30) calendar days before the initiation, or scheduled initiation, of the test being performed, in accordance with the IMS. The Government will provide comments within 14 calendar days after submission. The Contractor shall deliver final System Test and Evaluation Plans, incorporating Government comments within ten (10) calendar days of receipt of comments.

The System Test and Evaluation Plans shall consist of the following information:

- Test methodology
- Test scope
- Test judgment criteria
- Test sequence duration

Any Contractor-approved changes, modifications and/or revisions to the System Test and Evaluation Plans shall be submitted to the Government on a date mutually agreed to by the parties.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A066

B. EXHIBIT: A
C. CATEGORY: TM
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A066
2. TITLE OF DATA ITEM: Daily Test Status Reports
3. SUBTITLE:
4. AUTHORITY: SEE BLOCK 16
5. CONTRACT REFERENCE: C.7.1.1.1.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-Q
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: Start of Contractor Test
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	Regular	FINAL Reproduction
SFAE-GCS-ABCT			

15. TOTAL: SEE BLOCK 16

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16. REMARKS:

Block 4: The daily status reports shall be in contractor format, but must include information such as:

a. Vehicle type and serial number
b. VVID
c. Major LRU configuration
d. Odometer readings at start/end of day and accumulated miles or kilometers
e. Summary of the testing done for the day
f. Any issues/problems found during the day.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10 and 13: The Contractor shall distribute via e-mail or e-mail attachment daily status reports of Contractor testing.

Block 12: The Contractor should distribute the daily status reports NLT than the following business day after the day of testing..
Block 14: Distribution of the e-mail shall be worked through the T&W WIPT process. Recipients of the e-mail include:

a. PM ABCT Test Managers, Engineers and Logistics Personnel
b. BAE Technical Personnel
c. ATC and YTC test directors
d. AEC personnel
e. BAE vendors
f. GFM vendors

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

A. CONTRACT LINE ITEM NO.: A067
B. EXHIBIT: A
C. CATEGORY: TM
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A067
2. TITLE OF DATA ITEM: Test Data, Media, Documents and Reports
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE: C.7.1.1.1.4.1 and C.7.1.1.1.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-Q
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: As Requested
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-Q		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 12 and 13: The Contractor shall provide, upon written or verbal request from SFAE-GCS-ABCT-Q personnel, copies of Contractor test data, videos, photos, analyses, inspection results used/developed during the ECP2 process.

The materials provided shall be in Contractor format and can be paper copies, computer disks or e-mail attachments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A068
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A068
2. TITLE OF DATA ITEM: Qualification Test Plans
3. SUBTITLE:
4. AUTHORITY: DI-NDTI-81307A
5. CONTRACT REFERENCE: C.7.3.1.2.1

6. REQUIRING OFFICE: SFAE-GCS-ABCT-Q
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

---

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-Q		1	
SFAE-GCS-ABCT-Eng		1	
15. TOTAL:	0	2	0

---

16. REMARKS:

The Qualification Test Plans shall consist of the following information:

- Test Methodology
- Test Scope
- Test Judgment Criteria
- Test Sequence/Duration

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Contractor format is acceptable.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13:
All Qualification Test Plans shall be provided to the Government thirty (30) calendar days before the initiation, or scheduled initiation, of the test being performed.

The Government shall provide rejection or approval of the delivered final Qualification Test Plans within fifteen (15) calendar days after delivery of the report.

If rejected, the Contractor shall have fifteen (15) calendar days to respond with a resubmission of the Qualification Test Report with all Government comments addressed.

Any Contractor approved changes, modifications, and/or revisions to the Qualification Test Plans shall be provided to the Government within fifteen (15) calendar days after the change/modification/revision.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A069
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP

E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A069
2. TITLE OF DATA ITEM: Qualification Test Reports
3. SUBTITLE:
4. AUTHORITY: DI-MISC-80711A
5. CONTRACT REFERENCE: C.7.3.1.2.1.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-Q
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-Q		1	
SFAE-GCS-ABCT-Eng		1	
15. TOTAL:	0	2	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

The Contractor shall provide Qualification Test Reports to the Government for review and approval, in Contractor format.

Blocks 10, 12 and 13: Final Qualification Test Reports shall be provided to the Government, for approval or rejection, within thirty (30) calendar days after the completion of the final Qualification Test in accordance with the IMS.

The Government shall provide rejection or approval of the delivered final Qualification Test Report within fifteen (15) calendar days after delivery of the report.

If rejected, the Contractor shall have ten (10) calendar days to respond with a resubmission of the Qualification Test Report with all Government comments having been addressed.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A070
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A070
2. TITLE OF DATA ITEM: Qualification Matrix
3. SUBTITLE:

4. AUTHORITY: DI-MISC-80711A
5. CONTRACT REFERENCE: C.7.3.1.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-Q
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

*A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-Q	1	1	
SFAE-GCS-ABCT-Eng	1	1	
15. TOTAL:	2	2	0

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16. REMARKS:

Contractor shall submit and maintain a Qualification Matrix. The Contractor shall use the format of their choosing when developing the Qualification Matrix.

The Qualification Matrix shall at a minimum, consist of the following information:

- LRUs/Components full name
- Any and all LRU acronyms
- Subsystem that the LRU is associated with
- Quantities of LRUs/Components to undergo qualification
- Associated qualification tests to be performed on specific LRUs/Components

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

*Blocks 10, 12 and 13: The initial Qualification Matrix shall be submitted to the Government at PDR IAW the IMS. The Government shall provide rejection or approval of the delivered Qualification Matrix within thirty (30) calendar days after delivery of the matrix. If rejected, the Contractor shall have ten (10) calendar days to respond with a re-submission of the Qualification Matrix with all Government comments having been addressed. Any modification to the Qualification Matrix after initial approved delivery shall be made jointly with concurrence from the Government and the Contractor. Final delivery shall be at ERR IAW the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423
A. CONTRACT LINE ITEM NO.: A071
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A071
2. TITLE OF DATA ITEM: Highly Accelerated Life Test (HALT) Plans
3. SUBTITLE:
4. AUTHORITY: DI-NDTI-81307A
5. CONTRACT REFERENCE: C.7.4.5

6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		1	
15. TOTAL:	0	1	0

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16. REMARKS:

The Contractor shall use the format of their choosing when developing the HALT Plans.

The HALT Plans shall consist of the following information:

-Test methodology
-Test scope
-Test judgment criteria
-Test sequence duration

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: All HALT Test Plans shall be submitted to the Government 15 calendar days before the initiation, or scheduled initiation, of the test being performed in accordance with the IMS.

Any contractor-approved changes, modifications, and/or revisions to the HALT Test Plans shall be submitted to the Government within 10 days of the change.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A072
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

---

1. DATA ITEM NO.: A072
2. TITLE OF DATA ITEM: Highly Accelerated Life Test (HALT) Reports
3. SUBTITLE:
4. AUTHORITY: DI-MISC-80711A
5. CONTRACT REFERENCE: C.7.4.6
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D

10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	Regular	FINAL Reproduction
SFAE-GCS-ABCT-Q		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Contractor shall use the format of their choosing when developing the HALT Reports.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: HALT Reports shall be submitted to the Government for approval or rejection within 30 calendar days after the completion of the HALT test.

The Government shall provide rejection or approval of the delivered HALT Report within 15 calendar days after delivery of the report.

The Contractor shall update and resubmit the report 10 calendar days after receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A073
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A073
2. TITLE OF DATA ITEM: Interactive Electronic Technical Manual
3. SUBTITLE:
4. AUTHORITY: MIL-STD-40051-1A w/Change 3/MIL-HDBK-2361, MIL-DTL-87268; AR25-30; AR750-1
5. CONTRACT REFERENCE: C.8.2, C.8.2.4.2.1, C.8.2.4.2.2, C.8.2.4.2.5.1, C.8.2.4.2.5.2, C.8.2.4.2.5.3, C.8.2.4.2.6, C.8.2.4.2.6.1, C.8.2.4.2.6.2, C.8.2.4.2.7, C.8.2.4.2.7.1.
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L	1	1	
Data Manager	1	1	
AMSTA-LCG-F	1	1	
15. TOTAL:	3	3	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13:
First submission shall be Red Line TM changes 30 days before DT.

The Contractor shall deliver validated/verified IETM 180 days before FUE.

The Contractor shall deliver Validated/verified FDEPs 30 days for delivered LRIP configuration vehicles.

Contractor shall provide one (1) set of hard copy draft technical manuals and one (1) set on CD ROM.

The IETM shall consist of one (1) combined Operator, Field Maintenance and Repair Parts and Special Tools List manual -13&P for the Bradley vehicles. Paper-based operators manuals for the Bradley vehicles shall be delivered 30 days prior (to support verification and time for corrections). Final Reproducible Copies (FRCs) that reflect validated content from the Final Draft Equipment Publication (FDEP) effort shall be delivered 180 days prior to first Unit Equipped. The Contractor shall deliver CD ROMs containing the uncompiled source files and CD ROMs containing the compiled version with presentation applications and hard copy instructions as an insert to the jewel box.

IETMs shall be CALS compliant; XML based, and meet the requirements of the Government standards set forth in Block 4.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead. All deliveries shall be in accordance with the IMS.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A074
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A074
2. TITLE OF DATA ITEM: Failure Mode, Effects, and Criticality Analysis (FMECA) Report
3. SUBTITLE:
4. AUTHORITY: DI-ILSS-81495
5. CONTRACT REFERENCE: C.8.2.3.2.2.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-LD		1	
PM-ABCT		1	
15. TOTAL:	0	2	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13: FMECA data will be available upon request in Contractor format and delivered electronically by E-mail

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A075
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A075
2. TITLE OF DATA ITEM: Logistics Management Information (LMI)
3. SUBTITLE:
4. AUTHORITY: DI-ALSS-81530
5. CONTRACT REFERENCE: C.8.2.3.11, C.8.2.3.12, C.8.2.5.1.2, C.8.2.3.3.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-LD		1	
Bradley Data Manager		1	
15. TOTAL:	0	2	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to

severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: Contractor shall complete delivery of LMI incrementally in accordance with ILS master schedule.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A076
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A076
2. TITLE OF DATA ITEM: Army Oil Analysis Report
3. SUBTITLE:
4. AUTHORITY: DI-MISC-80390
5. CONTRACT REFERENCE: C.8.2.3.3.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L		1	
Data Manager		1	
15. TOTAL:	0	2	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

Blocks 10, 12 and 13: Contractor shall deliver the AOAP Report 30 days after CDR in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423
A. CONTRACT LINE ITEM NO.: A077
B. EXHIBIT:
C. CATEGORY:
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A077
2. TITLE OF DATA ITEM: RESERVED
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE:
6. REQUIRING OFFICE:
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS:

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14. DISTRIBUTION

				FINAL
A. ADDRESSEES:	B. COPIES:	Draft	Regular	Reproduction

15. TOTAL:

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16. REMARKS: RESERVED

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A078
B. EXHIBIT:
C. CATEGORY:
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A078
2. TITLE OF DATA ITEM: RESERVED
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE:
6. REQUIRING OFFICE:
7. DD250 REQ:
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS:

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14. DISTRIBUTION

				FINAL
A. ADDRESSEES:	B. COPIES:	Draft	Regular	Reproduction

15. TOTAL:

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16. REMARKS: RESERVED
DD FORM 1423

A. CONTRACT LINE ITEM NO.: A079
B. EXHIBIT: A
C. CATEGORY: Other

D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A079
2. TITLE OF DATA ITEM: Depot Maintenance Core Capabilities Determination
3. SUBTITLE:
4. AUTHORITY: DoDI 4151.20
5. CONTRACT REFERENCE: C.8.2.3.5.1.2.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12, and 13: The Contractor shall deliver data to support the CDA/SORA 60 days post CDR in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A080
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A080
2. TITLE OF DATA ITEM: Facility Plan
3. SUBTITLE:
4. AUTHORITY: DI-FACR-80976
5. CONTRACT REFERENCE: C.8.2.3.8.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-LD
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16

13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-LD		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: In addition to Distribution "C", all technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 12: The Contractor shall prepare and deliver to the Government a facilities analysis no later than 90 calendar days after contract award.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A081
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A081
2. TITLE OF DATA ITEM: Maintenance Task Analysis
3. SUBTITLE:
4. AUTHORITY: DI-PRF-49506/GEIA-STD-0007
5. CONTRACT REFERENCE: C.8.2.3.5.3
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-LD		1	
Data Manager		1	
15. TOTAL:	0	2	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This

document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 13: The Contractor shall provide a task analysis in accordance with Master ILS Schedule for logistics support and MIL-HDBK-502

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A082
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A082
2. TITLE OF DATA ITEM: Transportability Report
3. SUBTITLE:
4. AUTHORITY: DI-PACK-80880D
5. CONTRACT REFERENCE: C.8.2.3.9 and C.8.2.3.9.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-L
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: N/A

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L		1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 12: The Contractor shall update and deliver the Transportability Report at ERR delivery.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A083
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A083
2. TITLE OF DATA ITEM: Spares Acquisition Integrated with Production (SAIP) List
3. SUBTITLE:
4. AUTHORITY: DI-ILSS-80134A
5. CONTRACT REFERENCE: C.8.2.3.11.3.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L		1	
Data Manager		1	
15. TOTAL:	0	2	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12, and 13: Contractor shall deliver the SAIP List nine months prior to end of the contract period of performance.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A084
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A084
2. TITLE OF DATA ITEM: System Support Package Component List
3. SUBTITLE:
4. AUTHORITY: AR 700-127
5. CONTRACT REFERENCE: C.8.2.3.11.4 and C.8.2.5.3
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		1	
Data Collector		1	
15. TOTAL:	0	2	0

16. REMARKS:

The Contractor shall prepare and update as necessary a System Support Package List (SSPL) (Contractor format is acceptable) that identifies the quantities, cost, and associated responsibilities for each item of support to be provided to each test site or retained at the contractor's depot to support testing and training in accordance with AR 700-127 .

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall deliver the list 60 days prior to the beginning of each test in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A085
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A085
2. TITLE OF DATA ITEM: Basic Issue Item (BII), Components of End Item (COEI) and Additional Authorized Items (AAL) Lists
3. SUBTITLE:
4. AUTHORITY: MIL-STD-40051
5. CONTRACT REFERENCE: C.8.2.4.1.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		1	
Data Manager		1	
15. TOTAL:	0	2	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12 and 13: The Contractor shall update and deliver the BII/COEI/AAL list 60 days post CDR in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A086
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A086
2. TITLE OF DATA ITEM: Course Conduct Information Package
3. SUBTITLE:
4. AUTHORITY: DI-SESS-81522
5. CONTRACT REFERENCE: C.8.2.4.4.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT		1	
Data Manager		1	
15. TOTAL:	0	2	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13: Contractor shall submit each Training Completion Report within 30 calendar days after Contractor conducted training.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A087
B. EXHIBIT: A

C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A087
2. TITLE OF DATA ITEM: Training Materials
3. SUBTITLE:
4. AUTHORITY: DI-ILSS-80872
5. CONTRACT REFERENCE: C.8.2.4.5.3, C.8.2.4.4.3
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	1	1	
Data Manager	1	1	
15. TOTAL:	2	2	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13:
Contractor shall deliver draft material for each course 120 calendar days prior to the conduct of training in accordance with the ILS Master Schedule.

Final Government comments will be provided no later than sixty calendar days prior to the conduct of training for Contractor revisions.

The Contractor shall deliver final training materials for each course to the training developers thirty calendar days prior to the conduct of training in accordance with the ILS Master Schedule.

The Contractor shall deliver the final I&KP Instructor and Student training materials ninety days prior to I&KP training.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A088
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A088

2. TITLE OF DATA ITEM: Provisioning Parts List
3. SUBTITLE:
4. AUTHORITY: DI-SESS-81715
5. CONTRACT REFERENCE: C.8.2.4.6.a, and C.8.2.4.6.2.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-LD	0	1	
Data Manager	0	1	
15. TOTAL:	0	2	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall provide a Provisioning Parts List in accordance with the ILS Master Schedule to support provisioning reviews and PMR build. Contractor format is acceptable.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A089
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A089
2. TITLE OF DATA ITEM: Supplemental Provisioning Technical Documentation (SPTD)
3. SUBTITLE:
4. AUTHORITY: DI-SESS-81716
5. CONTRACT REFERENCE: C.8.2.4.6.b and C.8.2.4.6.3
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-LD	0	1	
Data Collector	0	1	
15. TOTAL:	0	2	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall provide the documentation in accordance with the ILS Master Schedule. Contractor format is acceptable.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A090
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A090
2. TITLE OF DATA ITEM: Provisioning Screening Data
3. SUBTITLE:
4. AUTHORITY: DI-SESS-81714
5. CONTRACT REFERENCE: C.8.2.4.6.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
Data Manager	0	1	
15. TOTAL:	0	1	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall conduct pre-procurement screening of parts in order to update the Provisioning Master Record in accordance with the ILS Master Schedule.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A091
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A091
2. TITLE OF DATA ITEM: Special Packaging Instructions
3. SUBTITLE:
4. AUTHORITY: DI-PACK-80121
5. CONTRACT REFERENCE: C.8.2.4.7
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L	0	1	
Data Manager	0	1	
15. TOTAL:	0	2	0

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16. REMARKS:

Contractor shall provide Special Packaging Instruction content and format in accordance with Appendix E of MIL-STD-2073-1.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: Deliveries shall be in accordance with the ILS Master Schedule.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A092
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A092
2. TITLE OF DATA ITEM: Preservation and Packaging Data
3. SUBTITLE:
4. AUTHORITY: DI-PACK-80120/ASTM-D4169
5. CONTRACT REFERENCE: C.8.2.4.7.1.2 and C.8.2.4.7
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L	0	1	
Data Manager	0	1	
15. TOTAL:	0	2	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: Deliveries shall be in accordance with the ILS Master Schedule.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A093
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A093
2. TITLE OF DATA ITEM: Packaging Data Report
3. SUBTITLE:
4. AUTHORITY: DI-PACK-81582
5. CONTRACT REFERENCE: C.8.2.4.7.1.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L	0	1	
Data Manager	0	1	
15. TOTAL:	0	2	0

16. REMARKS:
Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: Deliveries shall be in accordance with the ILS Master Schedule.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423
A. CONTRACT LINE ITEM NO.: A094
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A094
2. TITLE OF DATA ITEM: Shipment and Storage Instructions
3. SUBTITLE:
4. AUTHORITY: OT-93-12265
5. CONTRACT REFERENCE: C.8.2.4.7.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L	0	1	
Data Manager	0	1	
15. TOTAL:	0	2	0

16. REMARKS:

Contractor shall submit concurrent with Transportability Analysis.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to

severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: Deliveries shall be in accordance with the ILS Master Schedule.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423
A. CONTRACT LINE ITEM NO.: A095
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

---

1. DATA ITEM NO.: A095
2. TITLE OF DATA ITEM: Repairable Items for Long Life Reusable Containers
3. SUBTITLE:
4. AUTHORITY: DI-ILSS-80870
5. CONTRACT REFERENCE: C.8.2.4.7.3.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
Data Manager	0	1	
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

BLK 12: The Contractor shall submit at first provisioning conference in accordance with the ILS Master Schedule.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A096
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A096

2. TITLE OF DATA ITEM: Container Design Retrieval System (CDRS) Search Request
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE: C.8.2.4.7.3.2, C.8.2.4.7.3.3
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	0	1	
Data Collector	0	1	
15. TOTAL:	0	2	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 12 and 13: After final approval of TDP, the Contractor shall submit Long Life Reusable Container data to the Container Design Retrieval System no later than 60 days after TDP approval.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A097
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A097
2. TITLE OF DATA ITEM: Air Transportability Report
3. SUBTITLE:
4. AUTHORITY: DI-PACK-80932
5. CONTRACT REFERENCE: C.8.2.4.7.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: Once
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: As Required

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-LD	0	1	0
Data Collector	0	1	0
AMSTA-LCL-IEP	0	1	0
15. TOTAL:	0	3	0

16. REMARKS:
Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 12: The Contractor shall provide shipment configuration procedures and air transportability report no later than 20 November 2015.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A098
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A098
2. TITLE OF DATA ITEM: IUID Implementation Plan
3. SUBTITLE:
4. AUTHORITY: DI-MGMT-81737/MIL-STD-130
5. CONTRACT REFERENCE: C.8.2.4.7.5.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L	0	1	0
Data Collector	0	1	0
15. TOTAL:	0	2	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to

severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall update, finalize and deliver a UID Implementation Plan at ERR delivery.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423
A. CONTRACT LINE ITEM NO.: A099
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A099
2. TITLE OF DATA ITEM: Logistics Demonstration Plan
3. SUBTITLE:
4. AUTHORITY: DI-MNTY-81604
5. CONTRACT REFERENCE: C.8.2.5.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-L
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L	0	1	0
Data Manager	0	1	0
15. TOTAL:	0	2	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 12: The Contractor shall submit this plan 60 calendar days prior to the start of the Bradley Logistics Demonstration in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A100
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A100
2. TITLE OF DATA ITEM: Logistics Demonstration Report
3. SUBTITLE:
4. AUTHORITY: DI-MNTY-81603
5. CONTRACT REFERENCE: C.8.2.5.1.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-L
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS:

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L	0	1	0
Data Manager	0	1	0
15. TOTAL:	0	2	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq. or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 12: The Contractor shall submit this report 30 calendar days after completion of the Bradley Logistics Demonstration in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A101
B. EXHIBIT:
C. CATEGORY:
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A101
2. TITLE OF DATA ITEM: RESERVED
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE:
6. REQUIRING OFFICE:
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY:
11. AS OF DATE:
12. DATE OF FIRST SUB:
13. DATE OF SUBS:

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction

15. TOTAL:

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16. REMARKS: RESERVED

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A102
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

---

1. DATA ITEM NO.: A102
2. TITLE OF DATA ITEM: Scientific and Technical Report
3. SUBTITLE: Impact Statement for Training Devices
4. AUTHORITY: DI-MISC-80711A
5. CONTRACT REFERENCE: C.8.2.6
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	0	1	0
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.)or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall submit a report describing any impact to Training Devices as a result of ECP implementation. The Contractor shall deliver the report in conjunction with ECPs when Training Devices are affected.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A103
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP

E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

---

1. DATA ITEM NO.: A103
2. TITLE OF DATA ITEM: System Safety Program Plan (SSPP)
3. SUBTITLE:
4. AUTHORITY: DI-SAFT-81626
5. CONTRACT REFERENCE: C.9.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: Annual
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-HBC-S	1	0	1
15. TOTAL:	1	0	1

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16. REMARKS:

Block 9: Additionally, the information should bear the following:
WARNING - This document contains technical data whose export may be restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et seq) or the Export Administration Act of 1979, as amended (Title 50, U.S.C., App. 2401 et seq). Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

Block 10: Annual Revisions

Block 12: Initial SSPP to be delivered as SFR artifact on 4 May 2013.

Block 13: Annual revisions will be submitted on the contract award dates (out years).

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A104
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

---

1. DATA ITEM NO.: A104
2. TITLE OF DATA ITEM: Hazard Tracking System (HTS)
3. SUBTITLE:
4. AUTHORITY: DI-SAFT-80101B
5. CONTRACT REFERENCE: C.9.3.1, C.10.3.1.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D

10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-HBC- S	1	0	1
15. TOTAL:	1	0	1

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 11, 12 and 13:

The initial Hazard Tracking System (HTS) shall be delivered at Critical Design Review (CDR).

The HTS shall be updated and delivered semi-annually in conjunction with the System Safety Working Group (SSWG) meetings.

The HTS shall be prepared and delivered in current Microsoft Office software suite (Microsoft Word, Excel, and/or Powerpoint).

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A105
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A105
2. TITLE OF DATA ITEM: Health Hazard Assessment Report (HHAR)
3. SUBTITLE:
4. AUTHORITY: DI-SAFT-80106B
5. CONTRACT REFERENCE: C.9.4.1.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-HBC-S	1	0	1

15. TOTAL: 1 0 1

16. REMARKS:

Block 9: Additionally, the information should bear the following:
WARNING - This document contains technical data whose export may be restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et seq) or the Export Administration Act of 1979, as amended (Title 50, U.S.C., App. 2401 et seq). Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

Blocks 10 and 12: Initial HHAR to be delivered 60 days prior to test activities in accordance with the IMS.

Block 13: HHAR shall be delivered with, or as an appendix to the Safety assessment report 60 days prior to test activities in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A106
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A106
2. TITLE OF DATA ITEM: Critical Safety Item (CSI) Characteristic & Critical Defect Report
3. SUBTITLE:
4. AUTHORITY: DI-SAFT-80970A
5. CONTRACT REFERENCE: C.9.7.5, C.9.7.6
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: A
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	Regular	FINAL Reproduction
SFAE-GCS-ABCT-S	0	1	0
15. TOTAL:	0	1	0

16. REMARKS:

Block 9: In addition to Distribution "C", all technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 10, 12, and 13: The Contractor shall submit the CSI Report within 60 calendar days after contract award. The Contractor shall maintain the CSI Report throughout the period of performance of the contract. Should this data deliverable require further re-submission, the Contractor shall redeliver the data on a date mutually agreed to by the parties

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A107
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A107
2. TITLE OF DATA ITEM: Safety Assessment Report (SAR)
3. SUBTITLE:
4. AUTHORITY: DI-SAFT-80102B
5. CONTRACT REFERENCE: C.9.7.9
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-HBC-S	1	0	1
AMSRD-RDMR-BA	1	0	1
15. TOTAL:	2	0	2

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12, and 13: The Contractor shall submit a Safety Assessment Report (SAR) to the Government at least 60 days prior to the Software Test Readiness Review in accordance with the IMS. The Government will review and provide comments within 30 days. The Contractor shall submit the updated preliminary/draft SAR within 20 days of receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.
DD FORM 1423

A. CONTRACT LINE ITEM NO.: A108
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

---

1. DATA ITEM NO.: A108

2. TITLE OF DATA ITEM: Hazardous Material Management Report (HMMR)
3. SUBTITLE:
4. AUTHORITY: DI-MISC-81397A
5. CONTRACT REFERENCE: C.10.3.1
6. REQUIRING OFFICE: SFAE-GCS-ABCT-PB
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: Semi-Annually
11. AS OF DATE: N/A
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: Semi-Annually

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	0	1	0
15. TOTAL:	0	1	0

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 12 and 13: Initial draft of HMMR shall be submitted to the Government within 90 calendar days of contract award. The Government will provide comments within 21 calendar days of receipt of the initial draft.

The Contractor shall incorporate the Government's comments and submit the final draft of the HMMR within 14 calendar days of receipt of comments.

The HMMR shall be updated semi-annually in order to report reduction in HAZMAT use. Updates shall be briefed at the Program Management Reviews as needed

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A109
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A109
2. TITLE OF DATA ITEM: Hazardous Substance Waiver Request
3. SUBTITLE:
4. AUTHORITY: DI-SESS-81732
5. CONTRACT REFERENCE: C.10.3.2
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: N/A

12. DATE OF FIRST SUB: As Required
13. DATE OF SUBS: As Required

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	0	1	0
15. TOTAL:	0	1	0

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16. REMARKS:

The following information shall be included in the waiver request submission:

a. Identification of the hazardous material being used.

b. Location and quantity of parts/components that the hazardous material is used on.

c. Detailed technical justification for use of the hazardous material and a summary of the alternatives that were considered.

d. Program risk assessment

e. Replacement plan

f. Health Hazard Assessment

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12, and 13: Request for Waivers shall be submitted, as required, by the Contractor when Government approval is being requested to waive a contract requirement. The Government will review submitted waiver requests and provide approval or disapproval within 21 calendar days of receipt of the request.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A110
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A110
2. TITLE OF DATA ITEM: Lead-Free Control Plan (LFCP)
3. SUBTITLE:
4. AUTHORITY: DI-MGMT-81772
5. CONTRACT REFERENCE: C.10.3.3
6. REQUIRING OFFICE: SFAE-GCS-ABCT-Q
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: C
10. FREQUENCY: SEE BLK 16
11. AS OF DATE: SEE BLK 16
12. DATE OF FIRST SUB: SEE BLK 16

13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-Q	1	1	0
15. TOTAL:	1	1	0

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16. REMARKS:

Block 9: In addition to Distribution "C", all technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

The Contractor shall provide a contractor-approved, final version, Lead (PB) Free Control Plan to the Government. The Contractor shall use the format of their choosing when developing the Lead (PB) Free Control Plan.

The Lead (PB) Free Control Plan must include the following information:

-Policies for the use of Lead (PB) and Lead (PB) free materials.
-Procedures for the use and mitigation of Lead (PB) materials.
-Procedures for the use and implementation of Lead (PB) free materials.
-Manufacturing processes for the use of Lead (PB) & Lead (PB free materials.
-Monitoring in regards to all Lead (PB) free electronic components that are, or have the potential to be utilized.

The Lead (PB) Free Control Plan must make extensive use of GEIA-STD-0005-1 and GEIA-STD-0005-2.

Block 12: The Lead (PB) Free Control Plan shall be provided to the Government within 60 calendar days after contract award.

The Government shall provide rejection or approval of the delivered Lead (PB) Free Control Plan within 30 calendar days after delivery of the plan.

If rejected, the Contractor shall have 10 calendar days to respond with a re-submission of the Lead (PB) Free Control Plan with all Government comments having been addressed.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423
A. CONTRACT LINE ITEM NO.: A111
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A111
2. TITLE OF DATA ITEM: MANPRINT Issue Database
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE: C.11.1.2
6. REQUIRING OFFICE: RDRL-HRM-CU
7. DD250 REQ: LT
8. APP CODE: N/A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: QTRLY
11. AS OF DATE: N/A

12. DATE OF FIRST SUB: 90 Days after Contract Award
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	Regular	FINAL Reproduction
RDRL-HRM-CU			1
15. TOTAL:			1

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16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 13: Subsequent submissions are due quarterly on the 28th day of the last month of the quarter.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423
A. CONTRACT LINE ITEM NO.: A112
B. EXHIBIT: A
C. CATEGORY: TDP
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A112
2. TITLE OF DATA ITEM: Scientific and Technical Reports
3. SUBTITLE: Soldier Workspace Analysis
4. AUTHORITY: DI-HFAC-80746
5. CONTRACT REFERENCE: C.11.1.5
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: Twice
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	Regular	FINAL Reproduction
SFAE-GCS-ABCT	1	0	1
15. TOTAL:	1	0	1

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16. REMARKS:

Block 6: SE = Government Systems Engineering Integrated Product/Process Team

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This

document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

*Block 12: The initial Soldier Workspace Analysis is due 30 days prior to PDR.

Block 13: A final Soldier Workspace Analysis is due 60 days before final Test Readiness Review in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A113
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A113
2. TITLE OF DATA ITEM: Competition Plan
3. SUBTITLE:
4. AUTHORITY:
5. CONTRACT REFERENCE: C.5.8
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: Once
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	1	1	1
15. TOTAL:	1	1	1

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16. REMARKS:

The Competition Plan shall include the Contractor's strategy for competition in the following areas:

1. Market Surveys
2. Trade Studies
3. Protocols used to determine level of technical data development required.
4. Prototype Component Vendor Selection: Contractor approach to conducting and documenting source selection of prototype component vendors to include Prime Contractor as a potential supplier.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Block 12: The Contractor shall submit the competition plan 30 days after Trade Studies are completed for Government approval. After Government review, if changes are required, the Contractor shall update and resubmit the competition plan 30 days after receipt of Government comments.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A114
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A114
2. TITLE OF DATA ITEM: Testability Requirements Analysis Report
3. SUBTITLE:
4. AUTHORITY: DI-ATTS-81271/MIL-HDBK-2165
5. CONTRACT REFERENCE: C.5.3.1.2.22
6. REQUIRING OFFICE: SFAE-GCS-ABCT-L
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	0	1	0
15. TOTAL:	0	1	0

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16. REMARKS:

The Contractor shall provide analysis as a result of diagnostics concept and testability requirements for the Vehicle Health Management System (VHMS). This is to be derived from a functional gap analysis for VHMS compliance and to provide analysis from these requirements for any LRU/LRM that is created or partially redesigned as part of this contract.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall submit the report 30 days prior to PDR in accordance with the IMS. The Contractor shall submit a final report 30 days prior to CDR in accordance with the IMS. The Contractor shall update and submit the report no later than 30 days after the change has been identified.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A115
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358

F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A115
2. TITLE OF DATA ITEM: Testability Program Plan
3. SUBTITLE:
4. AUTHORITY: DI-ATTS-81271/MIL-HDBK-2165
5. CONTRACT REFERENCE: C.5.3.1.2.22
6. REQUIRING OFFICE: SFAE-GCS-ABCT-L
7. DD250 REQ: LT
8. APP CODE:
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-L	0	1	0
Data Manager	0	1	0
15. TOTAL:	0	2	0

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16. REMARKS:
The Contractor shall provide a plan for testability requirements as a result of diagnostics concept for the Vehicle Health Management System (VHMS). This is to be derived from a functional gap analysis for VHMS compliance and to provide analysis from the VHMS requirements for any LRU/LRM that is created or partially redesigned as part of this contract.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

Blocks 10, 12 and 13: The Contractor shall submit the report 30 days prior to PDR in accordance with the IMS. The Contractor shall submit a final report 30 days prior to CDR in accordance with the IMS. The Contractor shall update and submit the report no later than 30 days after the change has been identified.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.

DD FORM 1423

A. CONTRACT LINE ITEM NO.: A116
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A116
2. TITLE OF DATA ITEM: CANbus Message Matrix
3. SUBTITLE:
4. AUTHORITY: DI-MISC-80711
5. CONTRACT REFERENCE: C.14.6
6. REQUIRING OFFICE: SFAE-GCS-ABCT
7. DD250 REQ: LT
8. APP CODE:

9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT	0	1	0
15. TOTAL:	0	1	0

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16. REMARKS:

Contractor format is acceptable.

Block 4: The matrix shall contain information related to CAN bus message from the LRUs on the CAN bus network including EA, ECM, DVDB, PATH, SSPC, Generators, AFES, BMS, Fan, Throttle, Displays, and Ethernet switch.

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."

*Blocks 10, 12 and 13: The contractor shall deliver in accordance with entry and exit criteria for all major technical reviews in accordance with the IMS.

Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The Contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead.
DD FORM 1423

A. CONTRACT LINE ITEM NO.: A117
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

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1. DATA ITEM NO.: A117
2. TITLE OF DATA ITEM: Corrosion Prevention and Control Plan
3. SUBTITLE:
4. AUTHORITY: DI-MFFP-81403
5. CONTRACT REFERENCE: C.10.4.3
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

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14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction

SFAE-GCS-ABCT	0	1	0
15. TOTAL:	0	1	0

16. REMARKS:

Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING-This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."
Block 12 nd 13: The initial CPCP shall be submitted to the Government within 90 calendar days after modification award. The Government will provide comments back to the contractor within 30 calendar days. The contractor shall submit the final CPCP within 30 calendar days after receipt of Government comments.
The following System Engineering approach to design and manufacturing information shall be included in the CPCP:
a. Physical geometry fluid drainage, sharp edges, stone-chip prone areas
b. Design for handling water accumulation
c. Avoidance of dissimilar metal couple
d. Joint design and torque-tension strategy
e. Material selection such as corrosion-resistance substrates, anti-chip coatings, platings, and paint coatings.
f. Manufacturing process compatibility, such as drain holes for immersion processes and lack of sharp edges for electroplating operations.
g. Operation, Maintenance, and Sustainment, including corrosion prevention coatings, repair materials, and procedures.
h. Storage considerations for short term, long term, transit, ultraviolet exposure, freeze/thaw cycling, while accounting for ambient conditions in these various situations.
Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead

*A. CONTRACT LINE ITEM NO.: A118
B. EXHIBIT: A
C. CATEGORY: Other
D. SYSTEM/ITEM: Bradley ECP
E. CONTRACT/PR NO.: W56HZV-12-C-0358
F. CONTRACTOR: BAE Systems

1. DATA ITEM NO.: A118
2. TITLE OF DATA ITEM: Program Protection Improvement Plan (PPIP)
3. SUBTITLE:
4. AUTHORITY: DI-ADMN-81306
5. CONTRACT REFERENCE: C.5.19.4
6. REQUIRING OFFICE: SFAE-GCS-ABCT-S
7. DD250 REQ: LT
8. APP CODE: A
9. DIST. STATEMENT REQUIRED: D
10. FREQUENCY: SEE BLK 16
11. AS OF DATE:
12. DATE OF FIRST SUB: SEE BLOCK 16
13. DATE OF SUBS: SEE BLK 16

14. DISTRIBUTION

A. ADDRESSEES:	B. COPIES: Draft	FINAL Regular	Reproduction
SFAE-GCS-ABCT-S	0	1	1
15. TOTAL:	0	1	1

16. REMARKS: In accordance with DoDI 5200.39 and DTM 09-16, the contractor shall prepare a Program Protection Implementation Plan (PPIP) documenting the planned implementation of countermeasures described in the Governments Program Protection Plan (PPP), including the identification of Points of Contact for each countermeasure in each contractor location. The contractors Supplier Quality Requirements

for subcontractors shall be included in the PPIP as an annex. The PPIP shall be submitted in the contractors preferred format. Classified information will be managed in accordance with the approved Bradley Classification Guide.
Block 9: All technical documents that are determined to contain export-controlled technical data shall be marked "WARNING--This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et.seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et.seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25."
Block 11: The contractor shall begin preparation of the PPIP upon receipt of the Government approved PPP.
Block 12: The contractor shall submit the PPIP for Government approval six months following receipt of the Government approved PPP.
Block 13: After acceptance of the PPP by the Government, the contractor shall prepare updates to the PPIP 60 calendar days after receipt of an update to the PPP.
Comments from the Government on the contractors PPIP will be delivered to the contractor sixty calendar days after receipt of the initial draft and any updates. Those comments will be adjudicated and addressed in a re-submission from the contractor within 30 calendar days after receipt of Government comments.
Block 14: All data deliverables shall be submitted to the PM ABCT Bradley ECP Integrated Development Environment (IDE). The contractor shall provide e-mail notification of data submissions to the PCO, COR, and Government IPT Lead
* Updated/Incorporated per Modification P00004

ATTACHMENT 0004
GOVERNMENT PROGRAM SCHEDULE

*Attachment 0004 can be found in the separate attachment enclosed with the contract.

ATTACHMENT 0006
ENGINEERING CHANGE PLANS (ECPs)& ENGINEERING ORDERS (M2A3)

Approved ECPs with Unreleased ERRs:

ECP	ERR	TITLE/DESCRIPTION
V6422R1	V6422R1	BATTERY RELAY BRACKET SHARP EDGE
V6430	V6430	SECONDARY SOURCE FOR MULTIPLE FACE SEALS
V7807	V7807	A3 VVID 00.08.02.08-09R1 SOFTW. RELEASE
V8959	V8959	AFES CEP FAILURE ISSUE
V8979	V8979	ADDRESS DEFORMATION OF BRACKET 12540575
V9035	V9035	AFES ELEC CLEAN-UP&HULL ELEC INSTL UPDAT
V9037	V9037	A3 BFIST FS3 VVID 01.08.02.14-15 R2 SOFTW. RELEASE
V9040	V9040	FS3 MOD KIT IMPROVEMENTS
V9865	V9865	ADDRESS ISSUES W/FWD VENT BOX LATCH SLOTS
L09M5052	L09M5052	REVISE SINGARS RADIO GUARD, IMPROVE CABLE ROUTING
L09M5096	L09M5096	TDCU/TDCU II EMI ISSUE AT VEH LEVEL
L11M5097	L11M5097	ADD 7.62 GUN DOOR MOD KIT IMPROVEMENTS TO VEH TDPS
V9028	BUNDLED ERR V9038	ADD IED ARMOR TO THE BFV VEH TDPS
V9039	BUNDLED ERR V9038	BUSK II CLEAN-UP CLEAN-UP CHGS
L11M5095	BUNDLED ERR V9038	BUSK 1 MOD KIT "CLEAN-UP" UPDATES
*L11M5094	L11M5094	FS3 CONTROL BOX UPDATES
*L11M5103	L11M5103	FS3 FRONT LOCK ALIGNMENT IMPROVEMENT
*L12M5001	L12M5001	FS3 CONTROL BOX APPLICATION CODE UPDATE
*V8975	V8975	BFIST CHILLER MOD KIT UPDATES
*V8981	V8981	BFIST BUSK II STOWAGE UPDATES
*V8997	V8997	BFIST BLUE FORCE TRACKING MOD KIT UPDATES

In Process ECPs:

ECP	TITLE/DESCRIPTION
V6455	BUSK III TDP IMPLEMENTATION
V8967	ISSUE WITH PERSONNEL HEATER INSTALLATION ANGLE
V9030	SQUAD LEADER DISPLAY RELOACTION
V9866	AFES HARNESS UPDATES
V9875	BRADLEY AFES CEP GUARD ENHANCEMENT
V9876	A3 VVID FBCB2 F12 SOFTWARE PATCH
V9888	DRAIN PLUG ACCESS IMPROVEMENT
L07M5086R1	CREW-2 ENHANCEMENT
L11M5095	BUSK MOD KIT "CLEAN-UP" UPDATES
L11M5102	BFV GUNNER'S SEAT BACK REMOVAL
*V9903	FSSO SEAT CUSHIONS AND FOOTREST (MOD KIT 57K6752)

Future ECPs:

ECP	TITLE/DESCRIPTION
TBD	A3 / FS3 BFIST VVID 8.03 SOFTWARE ENHANCEMENT
TBD	INTRODUCTION OF BLUE FORCE TRACKING INTO THE TDPS
TBD	MRE HEATER REINSTATEMENT
*TBD	A3 BFIST W/FS3 VVID 8.03 PHASE 2
*TBD	ODS SA M7 BFIST SA VVID 02.03.00.00/06.03.01.00

*Incorporated per Modification P00004

ATTACHMENT 0009
TDP OPTION SELECTION WORKSHEET

*Attachment 0009 can be found in the separate attachment enclosed with the contract.