AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. Contract ID Code	Page
Firm Fixed Price	1 Of 12

2. Amendment/Modification No.	3. Effective Date	4. Requisition/Purchase Req No.	5. Project No. (If applicable)
P00049	2013AUG29	SEE SCHEDULE	

6. Issued By Code W56HZV

U.S. ARMY CONTRACTING COMMAND
ALEXANDRIA WENGROWSKI
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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)

GENERAL DYNAMICS LAND SYSTEMS INC.
38500 MOUND RD
STERLING HEIGHTS, MI 48310-3200

Code 7W356 Facility Code

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

9B. Dated (See Item 11)

☒ **10A. Modification Of Contract/Order No.**

W56HZV-13-D-0008

10B. Dated (See Item 13)

2012OCT30

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)

NO CHANGE TO OBLIGATION DATA

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:** Mutual Consent of the Parties

☐ **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)	
		ALEXANDRIA J.M. WENGROWSKI A.WENGROWSKI@US.ARMY.MIL (586)282-7056	
15B. Contractor/Offeror	**15C. Date Signed**	**16B. United States Of America**	**16C. Date Signed**
_____ **(Signature of person authorized to sign)**		**By** /SIGNED/ **(Signature of Contracting Officer)**	2013AUG29

SECTION A - SUPPLEMENTAL INFORMATION

Buyer Name: ALEXANDRIA WENGROWSKI
Buyer Office Symbol/Telephone Number: CCTA-ATCA/(586)282-6538
Type of Contract: Firm Fixed Price
Kind of Contract: Supply Contracts and Priced Orders
Type of Business: Large Business Performing in U.S.
Surveillance Criticality Designator: C
Contract Expiration Date: 2015OCT25

*** End of Narrative A0000 ***

1. Modification P00049 to requirements contract W56HZV-13-D0008 is a bilateral agreement.

2. The purpose of this modification is to update the following:

a. Change MIL-STD-45001-1A to MIL-STD-45001-1B; change MIL-STD-45001-2A to MIL-STD-45001-2B; change MIL-HDK-1222D to MIL-HKD-122E in sections C.4.11.3, C.4.11.4, and C.4.12 of this contract.

b. Delete CDRLs L007, Mission Task Analysis and L008, Work Load Analysis in their entirety from section C.4 and section J.

c. Update the frequency of delivery of CDRLs L003, LMI MARC/BOIP, L004, LMI for RCM, and L009, Skills Analysis and update section J.

3. As a result of this modification, the value of this contract shall neither increase nor decrease.

4. All other terms and conditions remain unchanged and in full force and effect.

*** END OF NARRATIVE A0052 ***

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT
C.4 Logistics Engineering Support (LES)
The contractor shall perform the following Logistics Engineering Support as authorized by WD:

C.4.1 Maintenance. The contractor shall conduct maintenance in accordance with AR 750-1.

C.4.1.1 Logistics Vehicle, Asset Allocations, and Locations. The Government will make the vehicles, major Line Replaceable Units (LRUs) and support equipment available to the contractor as dedicated logistics assets to support logistics product development under this contract as Government Furnished Property (GFX). The Government will provide GFX to GDLS-Shelby location. GFX assets may be moved to other locations only with the prior written approval of the PCO.

C.4.1.1.1 Logistics Facility Vehicle Maintenance. The contractor shall perform periodic schedule maintenance and unscheduled vehicle maintenance of all facility vehicles, in accordance with the applicable technical manual for the vehicle. The contractor shall document the condition and configuration status of all facility vehicles and provide access to the COR upon request.

C.4.1.1.1.2 Facility Vehicle Configuration Management. The contractor shall provide labor to update and maintain all facility vehicles to the configuration it was received in to include all post receipt retrofits. Prioritization and schedule for updating vehicle configurations will be included in the WD.

C.4.1.1.2 Other Government Owned Asset Maintenance. The contractor shall provide on-site maintenance support and technical services for Government-owned assets prior to, during, and subsequent to transportation to destination, as specified in the WD.

C.4.1.2 Parts and Tool Support. The contractor shall acquire repair parts and tools to support Government-furnished vehicles in accordance with the procedures outlined below.

C.4.1.2.1 Common Parts and Tool Support at contractors Facilities. Common parts and tools with a unit cost of less than $500 shall be obtained through the contractor's procurement system. Items exceeding the $500 threshold or not available in the Government supply system shall be identified to the COR for the Government to purchase.

C.4.2 Integrated Logistics Support (ILS). The contractor shall conduct ILS in accordance with AR 700-127. The contractor shall plan and implement an ILS program addressing the 12 elements of integrated product support in support of design and development activities conducted as part of SES and C4 efforts to include:

1. Product support management
2. Design interface
3. Sustaining engineering
4. Supply support
5. Maintenance planning & management
6. Packaging handling storage & transportation
7. Technical data
8. Support equipment
9. Training & training support
10. Manpower & personnel
11. Facilities and infrastructure
12. Computer resources.

The contractor shall conduct the ILS effort as an integral part of the design, development, and integration process to define the range and depth of the required support, and address all applicable and related elements of logistics.

C.4.2.1 The contractor shall use the following reference documents for the ILS areas of support:

a. Logistics Assessment Guidebook, dated July 2011
b. Integrated Logistics Support, AR 700-127, dated 29 April 2009.
c. Army Material Maintenance Policy, AR 750-1, dated 20 Sept 2007

C.4.3 Maintenance Plan, Analysis, and Reports. The contractor shall conduct maintenance plan, analysis, and reports in accordance with AR 750-1 and SR 700-127.

C.4.3.1 Level of Repair (LOR) Program and Analysis. The contractor shall conduct a LOR program to include all system-level repairs, and all subsystem, assembly, and subassembly level candidates for analysis. The contractor shall examine the Stryker 2 Level Maintenance philosophy and respective Military Occupational Specialty (MOS) skill set(s) and conduct an economic and non-economic analysis. The contractor's examination and analyses shall determine the system, subsystems, assemblies, and subassemblies level of repair and determine if discard is warranted using the latest version of the Computerized Optimization Model for Predicting and Analyzing Support Structures (COMPASS) or Equipment Designers Cost Analysis System (EDCAS) Model.

C.4.3.1.1 Level of Repair Analysis (LORA) Report. The contractor shall provide a LORA report, to include all COMPASS or EDCAS input and output data files used in the assessment. (CDRL L005)

C.4.3.2 Reliability Centered Maintenance (RCM) Analysis. The contractor shall perform RCM analysis in accordance with AR-700-127 to identify and document on and off system Operator and Maintainer service tasks based on scheduled and on-condition preventive maintenance requirements. The analysis shall be conducted with the assistance of the Government Subject Matter Experts (SMEs) in the areas of operations and maintenance.

C.4.3.2.1 RCM Report. The contractor shall provide a validated final report that will summarize the findings of the RCM analysis and include (CDRL L004):

a) Fully described functions supported by the system under analysis
b) Subsystems of the system under analysis
c) Appropriate and cost effective maintenance policies for the subsystems analyzed
d) Shortcomings and recommended design changes for subsystems analyzed, if discovered
e) Realized RCM output data that may be used as input for decision support tools that allow for electronic maintenance diagnosis

C.4.4 Task Analysis. The contractor shall conduct task analysis in accordance with AR 700-127. The contractor shall identify, evaluate, and document the mission essential, critical operation and maintenance tasks of proposed system designs and provide the Task Analyses (TA) identified below:

C.4.4.1 Mission Task Analysis. The contractor shall identify and document mission, collective, and individual tasks. The contractor shall identify and document mission essential tasks as a part of the vehicle system analysis, and evaluate in accordance with Stryker 2 Level Maintenance philosophy and respective Military Occupational Specialty (MOS) skill set(s) of system functions and roles allocated to operators and maintainers.

C.4.4.2 Workload Analysis. The contractor shall conduct workload analyses to validate the suitability of the projected number of personnel and the team composition to perform required missions, maintain systems and equipment, and provide necessary technical, engineering, material, logistics, and administrative support. The workload analysis shall be conducted using Improved Performance Research Integration Tool (IMPRINT), spreadsheet, or paper-based modeling. The contractor shall evaluate the workload execution of representative scenario(s) placed on the planned operators, maintainers, and support personnel, in accordance with OPTEMPOs of High, Medium and Low with respect to annual operating requirements for each system under analysis. The reports shall summarize the workload analysis methodology, assumptions, data sources, results, and recommendations for human tasks vital to the operation and maintenance of the system.

C.4.4.3 Skills Analysis. The contractor shall conduct a skills analysis to document the knowledge, skills, and aptitudes necessary for the operators, maintainers, and support personnel to execute all anticipated missions and tasks. The contractor shall conduct the analysis to validate the suitability of the number of personnel and the various combinations of knowledge, skills, and aptitudes required. Within the skills analysis, the contractor shall define the training process and capabilities required to ensure the knowledge, skills, and abilities can be developed and maintained. The contractor shall coordinate the skills analysis results with training material, approaches, and methods. (CDRL L004)

C.4.5 Overhaul and Repair data and components. The contractor shall acquire overhaul and repair data in accordance with AR 750-1. The contractor shall identify and provide overhaul and repair data for all items developed under SES and C4ISR engineering efforts. Information required includes: inspection, test, service, remove, replace, and other functions required to maintain the system, subsystems, LRUs, shop replaceable units (SRUs)modules, drawings and special tools and test equipment , and components at field and sustainment levels of maintenance. In the event it is necessary for the contractor to deliver to the Government any required technical data with less than unlimited rights , the contractor shall present to the Government a timely assertion of restrictions listing limited data rights, in accordance with DFARS 252.227.7017 or 252.227-7013 (e), early enough to allow the Government to revisit, and reverse if necessary, this contract requirement. (CDRLs L002, L003, L004, L005, L006, L009, L010, L011, L024, and L025)

C.4.5.1 The contractor shall disclose and deliver the form, fit, and function information necessary for operation, maintenance, installation and training of all Configuration Items (CI) for the purpose of provisioning replacement parts, facilitating emergency repairs, updating the vehicle TDP, and to allow for future upgrades to the vehicle and technical manuals. (CDRLs L002, L003, L004, L005, L006, L009, L010, L011, L023, L024, L025, L028)

C.4.6 Integrated Logistics Support Plan (ILSP). The contractor shall conduct the LMI functions that provide the basis for the ILSP in accordance with AR 750-1. The contractor shall deliver the LMI data (CDRL L001) for the Stryker family of vehicles. The contractor shall provide LMI updates to address all changes or modifications to all Stryker FoV variants.

C.4.6.1 Logistics Management Information (LMI) and LMI data products. The LMI effort and data products apply to engineering change and software development efforts, as well as Government approved logistics engineering efforts necessary to change logistics support products. The contractor shall conduct a LMI program and maintain it with continuously updated LMI data. The overall LMI program shall be conducted with guidance from GEIA-STD-0007 Logistics Management Information LMI, MIL-HDBK 502, DoD Requirements Logistics Support Analysis Record (LSAR). LMI Data Elements to be considered will be identified in the WD (Worksheet 2 Appendix B of MIL-PRF-49506). The

level of analysis shall be in accordance with the Stryker 2 Level maintenance philosophy, unless directed otherwise via WD. (CDRL L009)

C.4.6.2 LMI and LMI data products maintenance. The contractor shall conduct LMI analysis and maintain LMI Data as a result of SES and C4ISR engineering design efforts, Engineering Change Proposals (ECPs) or Engineering Change Orders (ECOs), DA Forms 2028s, validation and verification comments, logistics demonstration comments, Test Incident Reports (TIRs), approved suggestions, Supply and Maintenance Assessment Review Team (SMART) initiatives, after action reports from units returning from the Area of Responsibility (AOR), Army directed changes to maintenance and supply philosophy, and as required by WD.

C.4.6.3 LMI Program Analyses and Reports. The contractor shall prepare and deliver LMI Reports (CDRL L003) as identified in this scope of work. The reports shall be developed from the LSAR database developed for the Stryker Fleet using MIL-HDBK 502 as guidance.

C.4.6.3.1 Supportability data shall be stored in the contractor's integrated system database and shall be accessible to the Government at the contractors facility. The contractor's supportability database shall be capable of producing preformatted logistics reports such as Maintenance Allocation Charts (MAC) (CDRL L006) and Manpower Estimate Reports (MER) (CDRL L003) and shall have a query capability. The contractors supportability database shall provide the capability to download provisioning files which are compatible with the US Army Logistics Modernization Program (LMP) or successor system.

C.4.6.3.2 The contractor shall maintain three operational scenarios based on OPTEMPOs of High, Medium and Low with respect to annual operating requirements for each system under analysis. OPTEMPO definitions will be provided in the WD.

C.4.6.4 LMI Reviews and Logistics Analysis Reviews (LARS). LMI reviews shall be conducted quarterly and LARs as required by WD. All reviews will be held at a mutually agreed upon location as specified by the WD. The contractor shall provide participation by Logistics Engineers (LE) Managers to serve on the LMI and LAR review team.

C.4.6.5 Supportability Analysis (SA). The contractor shall perform a supportability analysis for new, unique or modified Stryker FoV support items and concepts. The contractor shall conduct analysis to define optimal support concept planning. The analysis shall consider and define impacts of new, unique or modified support items on the Stryker FoV. Performance of the required SA tasks shall be tailored to meet vehicle system performance specification requirements and integrated within the system engineering process. Interface and connectivity of the supportability data to any GFX or existing platform support structure shall be the responsibility of the contractor.

C.4.6.6 Supplemental Technical Documentation. The contractor shall also provide access to all engineering documentation required to develop supportability data. The contractor shall update their integrated systems database with any existing GFX logistics data required. In instances where the GFX logistics data will not integrate or fails to integrate properly the contractor shall cease integration efforts and notify the Government of the suspected cause.

C.4.6.7 Task Analysis. The contractor shall define all tasks required to operate, maintain, support the system to the lowest field replaceable assembly, and include sustainment and national level maintenance, unless directed otherwise via WD. The task analysis shall identify all logistic support resources (i.e., manpower, force structure, facilities, support equipment, test program sets, training, initial parts allocations, etc) required to perform each task. The analysis shall consider and define the impacts on the Stryker FoV. Task analysis shall be documented via LMI reports and provided to the Government (CDRL L003). The contractor shall update and maintain Logistics Supportability Assessment (LSA), LMI, Basis of Issue Plan (BOIP) and Manpower Requirements Computations (MARC) data as a result of modifications to the Stryker support system, deployment conditions or changing operational tempos.

C.4.7 Provisioning. The contractor shall conduct provisioning in accordance with AR 700-18, AR 700-82, and GEIA-STD-0007. Provisioning shall be done in accordance with the established Stryker 2 Level maintenance philosophy down to the lowest field replaceable assembly, and sustainment and national level, unless directed otherwise via WD. The contractor shall provide production representative drawings for all P-coded items to support item identification, application and next higher assembly in accordance with CDRL L002.

C.4.7.1 Provisioning Conferences. The contractor shall conduct formal provisioning conferences quarterly (unless otherwise directed via WD) and shall provide the necessary information to allow the Government to screen all part numbers for existing National Stock Numbers (NSNs) prior to delivery of LMI in accordance with CDRL L002. Provisioning conferences shall be held quarterly unless otherwise directed via WD.

C.4.7.2 Provisioning Maintenance. The Government and contractor shall coordinate and schedule provisioning conferences and Repair Parts & Special Tools List (RPSTL) updates (CDRLs L002, L003, L004, L005, L006, L009, L010, L011, L024 and, L025) to ensure configuration in RPSTL updates align with configuration of technical manual tasks. Provisioning updates, along with supporting data such as ECO's, ECP's, and updated drawings, shall provisioned and included in a quarterly provisioning conference unless otherwise directed via WD.

C.4.7.3 Engineering Data for Provisioning (EDFP). The contractor shall assemble the EDFP 30 days prior to the provisioning conference. EDFP shall NOT be provided when the items is previously cataloged and assigned an active NSN with type 1 item identification. This is technical data used to describe parts and equipment and consists of data such as specifications, standards, drawings, photographs, sketches and descriptions, and necessary assembly and general arrangement drawings, schematic drawings, schematic diagrams, wiring and cable diagrams necessary to indicate the physical characteristics, location, and function of the item. EDFP must provide:

1. Repair Data of items for maintenance support considerations.
2. Item identification and descriptions necessary for;
a. Cataloging actions and assignment of a National Stock Number.
b. Review for item entry control.
c. Standardization to include standardization and interchangeability.
d. Item management coding.
e. Identification and procurement of initial spares.
f. Preparation of allowance or issue lists.

C.4.7.4 The contractor shall furnish EDFP in the following order of precedence:
1. Government or industry recognized specifications or standards.
2. Engineering drawings.
3. Commercial catalogs or catalog descriptions.
4. Sketches or photographs with brief descriptions of dimensional, material, mechanical, electrical, or other descriptive characteristics. EDFP shall be submitted in a mutually agreed upon electronic format. (CDRL L002)

C.4.7.5 EDFP Marking. The Marking of EDFP, as well as all other deliverable technical data or software is to be marked in accordance with the requirements of DFARS 252.227-7013 (e) and 252.227-7014 (e). (CDRL L002)

C.4.8. *Reserved*

C.4.9 Technical Data Configuration Control Board-Logistics (CCB-L). The contractor shall conduct CCB-L in accordance with AR-750-10. The contractor shall establish and maintain a configuration management program for logistics products. The purpose of the program is to synchronize the design engineering configuration control activities with the logistics configuration management activities to ensure that information presented in logistics products are aligned with the changing product over its life cycle.

C.4.10 Start of Work Meeting. The contractor shall conduct start of work meetings in accordance with AR 750-1 and AR 750-127. The contractor shall conduct a logistics kick-off start-of work meeting at the contractors facility no later than 30 days after award of a WD, or as mutually agreed to with the COR.
The contractor shall present an overview of the WD(s) effort to include a summary of the contractors understanding of the requirements and program milestones, the project plan and processes to meet requirements, detailed delivery schedules and any known risks with appropriate mitigation option.

C.4.10.1 Working Groups. Quarterly joint contractor-Government working groups will be convened in order to identify and prioritize changes to be incorporated in the scheduled semi-annual TM deliveries unless otherwise directed via WD. These reviews will determine content of each semi-annual TM delivery and document any necessary revisions to the WD.

C.4.11 Publication Deliveries. The contractor shall deliver publications in accordance with AR 25-30 and DA PAM 25-40. The contractor shall update and provide, in accordance with CDRLs L010 and L011, validated and verified Interactive Electronic Technical Manuals (IETMs) and paper Operator manuals to include an editable PDF file on CD-ROM or DVD. The publications shall be based on the production configuration of the Stryker variants or configurations for Operator and Field echelons of maintenance.

C.4.11.1 PUBLICATION HISTORY FILE. The contractor shall maintain a publication history file (CDRL L015) for the period of this contract. This file shall contain a record of all changes to each publication as a result of approved change drivers (i.e. ECOs or ECPs, DA Form 2028s, Government comments).

C.4.11.2 IETM FORMAT. The IETM(s) shall be in English and use the electronic maintenance system version Next Generation (EMS-NG) unless directed via WD. The contractor shall provide intrusive diagnostic IETMs that interface and interact with the vehicle system sensors. Task information must dovetail between maintenance echelons and be supported by a RPSTL. RPSTL updates shall match the TM update baseline and include NSNs and part numbers on the part list page as specified by the Government. The contractor shall monitor and document (CDRL L010) any Government validation and verification of the IETMs, and paper operator manuals, and incorporate all changes or corrections into the final products.

C.4.11.3 The contractor shall comply with the latest Military (MIL) Standard for the development of paged based TMs, MIL STD 40051-1B, MIL HDBK -1222E and IETM MIL STD 40051-2B, MIL HDBK -1222E. The applicable MIL standard to be utilized for an effort will be provided in the WD. MIL Standard versions shall be reviewed semi-annually to ensure publications are produced to the latest applicable standards.

C.4.11.4 The IETM shall be Continuous Acquisition and Lifecycle Support (CALS) compliant and Standard Generalized Markup Language (SGML) based; meet content per latest MIL-STD-40051-1B and latest MIL-STD-40051-2B, latest MIL-PRF-87268A and provisions of latest MIL PRF-87269A. Illustrations shall meet the requirements of latest MIL-PRF-28002C and the latest MIL-PRF-28003B. SGML tagging and Document Type Definition (DTDs) per EMG-NG preferred over governing latest MIL-STD 2361C.

C.4.12 Style Guide. The contractor shall prepare the style guide in accordance with DA PAM 25-40 and MIL-STD 40051-1B.The contractor shall prepare, and provide for Government concurrence, a style guide which clarifies common interpretations of latest MIL-STD

specification data required in the development of Stryker FoV publications per CDRL L013 (refer to Attachment 0021 Technical and Language Style Guide for Stryker, Attachment 0023 BCT Illustration Style Guide, and Attachment 0024 RPSTL Style Guide).

C.4.13 Technical Manual Quality Assurance Plan (TM QA). The contractor shall conduct TM QA in accordance with AR 25-30 and DA PAM 25-40. Quality Assurance (QA) is the responsibility of the contractor. TM QA process shall be documented in the TM quality assurance plan (CDRL L014). The contractor shall use the accepted style guides, Failure Mode Effects, and Criticality Analysis (FMECA) in the development of a quality assurance plan for the TMs which documents the rejection or acceptance criteria for work packages.

C.4.14 Digital Imaging. The contractor shall create digital imaging in accordance with AR 25-30 and DA PAM 25-40. The contractor is authorized to use digital imaging instead of a line drawing where practical, taking into account the purpose and suitability of the illustration in the publication and the desire to keep the size of the IETM down to a manageable level. When authorized by a Government approved work directive, the contractor shall create multimedia enhancements to new, existing, or updated publications. Delivery of such documentation shall be in paper format, CD-ROM or DVD, or as directed by the WD (CDRL L010).

C.4.15 TM Review and Evaluation Criteria. The contractor shall conduct TM review and evaluation criteria in accordance with AR 25-30 and DA PAM 25-40. The contractor and Government shall jointly review contractually specified product delivery formats and specifications in order to establish mutually understood interpretation of the formats and specifications. These mutually agreed to interpretation of formats and specifications must be documented in the contractor and Government approved Style Guides (CDRL L023), and will be the base line criteria for TM content review and evaluation.
C.4.16 IETM Hosting Devices. The contractor shall utilize IETM hosting devices in accordance with AR 25-30 and DA PAM 25-40.The contractor shall load the IETM onto and operate on the Maintenance Support Device (MSD) and interface with the on-board diagnostics. The contractor shall update and provide the operator IETM in Hypertext Markup Language of Extensible Markup Language (HTML/XML) format to be loaded on Secure Digital (SD) Cards or other Government approved media and Standard Army Management Information System (STAMIS) as required by the work directive.

C.4.17 Technical Publications and Source Materials. The contractor shall create, provide and deliver technical publication and source materials in accordance with AR 25-30 and DA PAM 25-40.The contractor shall deliver technical publications source material as part of all deliveries of the IETM (CDRL L010), TMs (CDRL L011), Technical Bulletins (TBs) (CDRL L023 & CDRL L028), Modification Work Orders (MWOs) (CDRL L023), National Maintenance Work Requirements (NMWRs) (CDRL L024 & CDRL L029) and any other technical publication provided as part of this contract.

C.4.18 Other Technical Information. The contractor shall provide other technical information in accordance with AR 25-30 and DA PAM 25-40.The contractor shall develop and provide other new, revised, or changes to technical publications to include MWO, Technical Manuals (TM) (including Demilitarization procedures and Combat Vehicle Evaluation (CVE) procedures), Installation Instructions, National Maintenance Work Requirements, Depot Maintenance Work Requirements, Data Cards, Hand Receipts, and Schematics or Diagrams in paper, PDF, or other electronic format, in accordance with CDRL L025.

C.4.19 Technical Manual Validation Verification Plan. The contractor shall conduct technical manual validation and verification plan in accordance with AR 25-30. The contractor shall develop and deliver a Technical Manual Validation Verification Plan in accordance with CDRL L012. The plan shall assure that required assemblies, parts, support, equipment, tools, personnel and facilities are available for TM validation and verification (CDRL L012).

C.4.20 Site Support Personnel. The contractor shall provide support personnel in accordance with AR 700-127. The contractor shall provide technical and administrative support to the Government presently located at the GDLS Shelby Facility. This support may consist of Management support, logistics engineering support, writing support, Provisioning support, field representative support and other specialties engaged in development, production, and maintenance of ILS products.

C.4.20.1 Contractor training for the use of Government required hardware and software tools used in the development of logistics products or support shall be funded at the request of the contract and at the discretion of the PCO. The contractor shall make available the personnel and facilities required to execute this training.

C.4.21 Battle Damage Assessment and Repair (BDAR) Technical Manual. The contractor shall create provide and deliver BDAR technical manual in accordance with AR 25-30 and DA PAM 25-40. The contractor shall develop expedient methods of repair specific to Stryker class vehicles and subsystems. Investigate and evaluate use of high performance glues, sealants, or other joining or forming compounds for use in expedient repair. Prepare and document potential alternate materials for Stryker systems through controlled exchange, commercial supply, and cannibalization of components from other systems likely to be found in forward operating areas. Prepare and document potential alternate materials for Stryker systems likely to be found in forward operating areas. Investigate expedient operating methods and actions for Stryker vehicle mobility, firepower, and communications operations. Investigate expedient recovery methods and actions for Stryker systems to include towing. The contractor shall develop recommended BDAR kit contents and kit packaging for Stryker Crew and Field Level Maintenance. Prepare draft BDAR kit purchase description or specification. Prepare and document potential alternate tools and support equipment for Stryker systems from materials likely to be found in forward operating areas (CDRL L011).

C.4.22 Interim Support Package for Rapidly Fielded Product. The contractor shall develop an interim support package for rapidly fielded product in accordance with AR 25-30 and DA PAM 25-40. The contractor shall conduct rapid or abbreviated supportability analysis, task analysis, FMECA, LORA, provisioning, publications and publications validation and verification. The contractor shall produce logistics

products, as required by the work directives to fill in logistics gaps (CDRL L016).

C.4.23 Special Tools and Test Equipment (STTE). The contractor shall provide STTE in accordance with AR 750-1. The contractor shall conduct an analysis of the tools, special tools and test equipment for existing, new, or redesigned components. If STTE requires a change as a result of design change or field identified problems, an ECP shall be prepared.

C.4.23.1 The contractor shall provide all necessary personnel, services, materials, and facilities to evaluate and deliver prototype and final configuration model tools, support equipment, spares and support. The contractor shall validate the redesign, and incorporate necessary changes, as part of the tool redesign or design effort.

C.4.23.2 When STTE is needed the contractor shall follow the order of precedence below:
a. Use of equipment available to Stryker units or Stryker support units.
b. The modification of already available equipment or a Table of Organization and Equipment (TOE) change which authorized the recommended item at a lower level.
c. The use of federal supply item by adding it to the unit's TOE as common equipment.
d. The use of a federal supply item by adding it to the Stryker RPSTL as a special item.
e. The development of a new support item.

C.4.23.3 The most current series TOEs shall be provided by the Government at the start of work meeting for use in making support equipment determinations.

C.4.23.4 Table of Distribution Allowances (TDA) and TOEs for National Guard units, as approved and implemented, shall be used to make support equipment determinations related to fielding of National Guard units. The TDAs shall be provided by the Government at the start of work meeting.

C.4.23.5 In addition to LMI Records, the contractor shall maintain and furnish to the Government, special tool records and documentation. (CDRL L002). These shall include drawing and print files; implementation of ECP, Engineering Change Requests (ECRs), Equipment Improvement Recommendations (EIRs), and field suggestions.

C.4.23.6 The contractor shall work with the appropriate Test Measurement Diagnostic Equipment (TMDE) contractor to ensure the compatibility of TMDE hardware, software and Department of Defense Information Assurance Certification and Accreditation Process (DIACAP) compliant to the Stryker Program.

C.4.24 Support Services. The contractor shall conduct support services in accordance with AR 750-1. The contractor shall provide support relating to the contract items and data at their Shelby facility and any other Government specified CONUS location. Such services consist of training, attendance at program, technical and logistics meetings, support of Government tests, Government demonstrations, and field review of deficient or defective items. The contractor shall develop special interim or work around procedures or techniques to solve Stryker field problems. This may include inspection or repair of any vehicles or assemblies. This may include labor hours, as well as miscellaneous material and parts costs as requested by the work directive.

C.4.25 Other Government Contractor Support. The contractor shall support other contractors the Government has contracted with to develop and maintain logistics products. In instances where the other Government contractors logistics data will not integrate or fails to integrate properly, the contractor shall cease integration efforts and notify the COR of the suspected cause. Technical accuracy and format of material provided by other Government contractors shall be the responsibility of the Government.

C.4.26 MWO Documentation. The contractor shall create and provide MWO documentation in accordance with AR 750-10. MWOs for field vehicles shall be developed following the guidance of the TACOM LCMC MWO Management Office (CDRL L010). The contractor shall identify and recommend the need a MWO. The recommendation shall include an MWO development schedule, an ILS retrofit milestone chart, a man-hour estimate per vehicle to accomplish the change, the resources necessary to provide a complete LMI package, the resources necessary to retrofit the fleet, and a multimedia enhancement recommendation.

C.4.27 Packaging Data Development. The contractor shall develop and provide packaging data for existing and new items with a Source, Maintenance & Recoverability (SMR) code of P (procure) excluding PR (procure terminal obsolete, replaced) and PZ (procure terminal obsolete, not replaced) to provide for life cycle support and safe distribution of repairable items. Packaging data development priority shall be given to repairable items, Line Replaceable Units, NMWR/DMWR candidate items, and any large, high cost item classified as a Special Group Item. Packaging shall be developed in accordance with (IAW) MIL-STD-2073-1D and all items shall be classified as a selective group item or special group item. Contractor shall provide facilities, equipment, materials, and access to the provisioned items for packaging development. The contractor shall complete verification and provide support data with each data submittal. Validation support data shall include item drawings and copies of any applicable Material Safety Data Sheets for Hazardous Material items. Items with assigned Contractor and Government Entity (CAGE) Codes of: 1T416, 21450, 80204, 96906, 10060, 24617, 80205, 99237, 80244, 81343, 81346, 81348, 81349, 81352, 88044, 05047 are excluded from packaging data development.

C.4.27.1 Logistic Management Information (LMI) Data Products - Packaging. The contractor shall make LMI packaging data in accordance with GEIA-STD-0007 and provide for the entry of information to the Governments data repository. At the contractors request, the Government may provide a MS ACCESS application that provides data formatting and edit features for coding of packaging LMI data

products. The contractor shall develop, maintain and update packaging data IAW MIL-STD-2073-1D and CDRL L017 including attachments.

C.4.27.2 The contractor shall develop a SPI for each item classified as a Special group item. Figures and narrative data shall be developed to describe the form, fit, and function of packaging in sufficient detail for production. SPI format shall be IAW MIL-STD-2073-1D and CDRL L018.

C.4.27.2.1 Validation Testing of Packaging. Validation testing of Special group items shall be in accordance with ASTM D 4169 (Standard Practice for Performance Testing of Shipping Containers and Systems) Distribution Cycle 18, Assurance Level I, with Acceptance Criterion 3 (product is damage free and packaging is intact) excluding tests: Low Pressure Hazard and Environmental Hazard. Each SPI submitted shall have a validation report including photographs. Photographs shall show the product is undamaged. Validation report shall be submitted concurrently with SPI submittal and in accordance with CDRL L018.

C.4.27.3 Equipment Preservation Data Sheets (EPDS). Contractor shall develop Equipment Preservation Data Sheets (EPDS) for each vehicle variant. Contractor shall include requirements for disassembly procedures to meet clearance requirements for land, air, and sea shipments. Procedures shall ensure an option for drive-on/drive-off capability. Packaging requirements for BII and COEI shall be developed by the contractor. BII shall be packed separate from COEI. HAZMAT (if applicable) will be packaged and shipped separately in accordance with CFR Title 49. Contractor shall ensure the stowage locations shall deter pilferage and shall not interfere with lifting, tie down or other transportation handling. The contractor shall revise the EPDS to reflect design changes that affect the system's shipment configuration, weight, or transportability. The contractor shall also provide revisions to the EPDS for each provisioning change affecting packaging of BII or COEI. Format of EPDS shall be IAW MIL-STD-3003 and CDRL L022.

C.4.27.3.1 Validation of EPDS. The Government will determine if all or selected portions of the Equipment Preservation Data procedures shall be validated to determine the adequacy of the vehicle preservation procedures. Primary considerations will be given to the complexity and/or uniqueness of the process and/or materials involved. Government representative may attend and witness contractors validation. Validation report shall be IAW CDRL L018.

C.4.27.4 Reusable Containers

C.4.27.4.1 Container Design Retrieval System (CDRS). This is a management system program to provide a DoD centralized automated data base system for storing, retrieving, and analyzing existing container designs and test information concerning specialized containers. The contractor shall use this system when making search requests for DoD Long Life Reusable Container (LLRC) designs.

C.4.27.4.2 Reusable Container Searches. The contractor shall identify engines, transmissions and other major repairable items, including Line Replaceable Units (LRUs), and items requiring special handling or condemnation procedures as possible LLRC candidates. The contractor shall make a CDRS search request for any item that TACOM approves as a LLRC candidate. The contractor shall search for new or existing commercially available reusable container designs that are suitable for LLRC candidates. Format of CDRS search request shall be IAW CDRL L0026.

C.4.27.4.3 Reusable Container Assessment. The contractor shall perform assessments to determine if existing container designs are suitable. The contractor shall assess the fit and function of existing containers and compare costs of modifications with the cost of new designs. Assessment data shall include analysis of the need for a new or modified LLRC. Assessment data shall compare costs for conventional packaging and LLRC packaging.

C.4.27.4.4 Reusable Container Proposal. The contractor shall propose reusable container development for TACOM approved LLRC candidates. Each proposal shall include assessment data, cost of development, design, LLRC prototype manufacture, validation, and completion of the technical data package for competitive procurement. Container proposals, testing/validation, and TDP development shall be IAW CDRL L030 and Attachment 0045.

C.4.27.4.5 Development and Validation. Upon approval of a LLRC design proposal or container modification proposal, the contractor shall build a prototype and validate the design. A Government representative will witness validation. Validation report and technical data shall be IAW the approved design proposal and CDRL L018.

C.4.28 Sustainment Level Logistics Engineering. The contractor shall conduct sustainment level logistics engineering in accordance with AR 750-1 and AR 100-127.

C.4.28.1 The contractor shall provide support for the maintenance planning of sustainment level maintenance, develop NMWRs, and provide support to agencies retained to develop NMWRs as determined by the Government. The contactor shall provide technical data and logistics support required for the Government to achieve core depot capability (CDRL L029).

C.4.28.2 The contractor shall provide Original Equipment Manufacturer (OEM) or Commercial Off The Shelf (COTS) repair and overhaul manuals to support the NMWR development (CDRL L020).

C.4.29 National Maintenance Source Data. The contractor shall create and deliver national maintenance source data in accordance with AR 750-1 and AR 700-127.

C.4.29.1 Subcontractor and vendor data for NMWR Development. The contractor shall work with required vendors and subcontractors to obtain source data required for development of LRU NMWRs. Data shall be limited to that necessary to affect item inspection, repair, and test serviceability to restore the item to a known service life. Manufacturing and manufacturing process data does not need to be included as source data for maintenance.

C.4.29.2 Subcontractor and vendor support items for NMWR Development. The contractor shall work with required vendors to obtain support items, STTE, Test Program Sets (TPS), and spare and repair parts required to support NMWR development.

C.4.29.3 Proprietary Data. In instances where a NMWR candidate requires the use of data asserted by a vendor or subcontractor to be proprietary, the contractor will confirm with the vendor or subcontractor the true proprietary nature of the data. The vendor will be advised of the Governments commitment to protect the proprietary data. If the data cannot be obtained the COR and PCO shall be notified in writing.

C.4.29.4 The contractor shall provide test stands, test equipment to support NMWR verifications.

C.4.29.5 The contractor shall supply technical support to PM TMDE, or other Government agencies, to aid in the development of TPSs. Technical support includes; providing the latest Stryker engineering drawings, schematics, diagrams, TMs; providing Stryker technical information, explanations, and guidance; providing access to contractors facility with COR approval.

C.4.29.6 The Government and contractor shall jointly develop a detailed NMWR development schedule. The contractor shall provide NMWR status and schedules per CDRL L019.

C.4.29.7 The contractor shall assist the Government in identifying special tools and facilities required to complete overhaul of the NMWR candidates. STTE List, (CDRL L027), is defined as tools not found in any of the Armys common tool sets that are listed in the CDROM EM 0074 which is updated every 6 months (April and October) and U.S. Army Supply Catalogs.

C.4.30 Performance Standards

C.4.30.1. Quality of Tasks Presented for Contractor/Government Validation/Verification. The contractor shall ensure the quality of the tasks presented for contractor/Government Validation/Verification to minimize the amount of rejections and rewrites to a task prior to government acceptance. Tasks that do not pass acceptance the first time around are to be deemed unacceptable, but will be validated/verified in their entirety to ensure all relevant issues are identified. Tasks presented for contractor/Government COTR validation/verification for the first ordering period shall meet acceptance standards (Go or Go/with changes) 80% of the time. Tasks presented for contractor/Government validation/verification for the second ordering period shall meet acceptance standards (Go or Go/with changes) 85% of the time. Tasks presented for contractor/Government COTR validation/verification for the third ordering period shall meet acceptance standards (Go or Go/with changes) 90% of the time. Determination of Go or Go/with changes and No Go will be based upon the current revision of the Stryker Style Guide and ILS Product Failure Mode Evaluation and Criticality Analysis (FMECA) (Attachments 0021, 0022, 0023, 0024).

C.4.30.2 Validated/Verified Tasks Comment Incorporation Cycle Time. Validated/Verified tasks that have been accepted with changes (or without changes) shall have all requested comments incorporated within 20 working days of the contractor receiving the closed-out and finalized Government validated/verified comment sheet. Incorporation shall be demonstrated to the Government by on line review of the IETM content on the contractors working database on a monthly basis as determined by the COTR. (Government may use sampling to ensure incorporation). The contractor shall adhere to this 94% of the time during the first ordering period, 96% of the time during the second ordering period, and 98% of the time during the third ordering period. Schedule may be subject to re-base lining due to Government priority changes or influences affecting schedule outside GDLS control.

C.4.30.3 External Agency Tasks Review Comment Incorporation Cycle Time. External agency review comments shall be incorporated within 30 working days of the contractor receiving direction to include these comments by the COTR. Incorporation shall be demonstrated to the Government by a joint review of the IETM content upon final delivery. (Government may use sampling to ensure incorporation). The contractor shall adhere to this 100% of the time during all ordering periods. Schedule may be subject to re-base lining due to Government priority changes or influences affecting schedule outside GDLS control.

C.4.30.4 Validated/Verified Rejected Tasks Cycle Time. Validated/Verified tasks that have been rejected shall have all requested comments incorporated, and be presented to the Government within 20 working days of the contractor receiving the closed-out and finalized Government validated/verified comment sheet. The contractor shall adhere to this 90% of the time during the first ordering period, 93% of the time during the second ordering period, and 96% of the time during the third ordering period. Schedule may be subject to re-base lining due to Government priority changes or influences affecting schedule outside GDLS control.

C.4.30.5 Quality of Deliveries. The contractor shall ensure a quality product is produced prior to delivery to the government. All applicable government comments shall be fully incorporated, internal IETM links shall be functional, RPSTL content shall align with applicable maintenance tasks, connectivity, multimeter functions, and intrusive testing shall function with vehicle interfaces. For all IETMs, the contractor shall install the deliverable CD/DVD on a Maintenance Support Device (MSD) with all applicable software. A joint contractor and government review shall verify that the applicable content is included, and record the results of the review. The contractor shall adhere to this 94% of the time during the first ordering period, 96% of the time during the second ordering period, and

98% of the time during the third ordering period. Schedule may be subject to re-base lining due to Government priority changes or influences affecting schedule outside GDLS control.

C.4.30.6 Quality of LSA 036 Reports. The contractor shall ensure that the LSA 036 reports presented to the government are acceptable for loading into the Logistics Modernization Program (LMP) system. The contractor shall deliver the LSA 036 based on a mutually agreed upon schedule for provisioning conferences. The quality of the LSA 036 will be measured by the number of Provisioning Line Item Sequence Numbers (PLISNs) presented versus the number of errors found at each provisioning conference. For all ordering periods, the contractor shall present LSA 036s for each conference with a 90% acceptance rate (no more than 10 errors per 100 lines). The contractor shall strive to provide all drawings to support the provisioning conferences. For all ordering periods, the contractor shall provide 90% of all drawings (90 or more out of 100 drawings shall be provided)

C.4.30.7 ECP/ECO Incorporated into Technical Manual Cycle Time. The time from an ECP/ECO/USG authorizing document logistics start date (sales order/mod executed and funding in place COTR approval) to submission of next scheduled delivery of updated technical manuals incorporating the ECP/ECO (to include the necessary provisioning and RPSTL updates) shall be IAW schedule agreed to at Configuration Control Board-Logistics (CCB-L) for that ECP/ECO. The contractor shall adhere to this schedule 94% of the time (measured every three months) during the first ordering period, 96% of the time (measured every three months) during the second ordering period, 98% of the time (measured every three months) during the third ordering period. Scheduled may be subject to re-base lining due to Government priority changes or influences affecting schedule outside GDLS control.

C.4.30.8 Remedies. Contractor Performance Assessment Report (CPSR) Failure to comply with this Section C.4.30 that is attributed to the contractors performance will be documented by the COR and recorded in the Contractor Performance Assessment Report (CPAR).

*** END OF NARRATIVE C0004 ***

Name of Offeror or Contractor: GENERAL DYNAMICS LAND SYSTEMS INC.

SECTION J - LIST OF ATTACHMENTS

List of Addenda	Title	Date	Number of Pages	Transmitted By
Exhibit BW	CDRL L003 - LMI FOR MARC AND BOIP	08-AUG-2013	001	EMAIL
Exhibit BX	CDRL L004 - LMI FOR RCM	08-AUG-2013	001	EMAIL
Exhibit CA	CDRL L007 - LMI MISSION TASK ANALYSIS	DELETED	001	EMAIL
Exhibit CB	CDRL L008 - LMI WORKLOAD ANALYSIS	DELETED	001	EMAIL
Exhibit CC	CDRL L009 - LMI SKILLS ANALYSIS	08-AUG-2013	001	EMAIL