

1 VEHICLE INSPECTION OVERVIEW

The Contractor shall conduct inspections and tests for all deliverables to be presented for Government testing, prior to delivery to Government test facilities. The Contractor shall plan and conduct inspections, certifications, analyses, and tests, as indicated in the JLTV Purchase Description, to determine conformance to requirements.

The Government will not furnish any inspection equipment for this contract. It is solely the Contractor's responsibility to supply and maintain all inspection and test equipment necessary to fabricate vehicles and assure the end item components conform to contract requirements.

The Contractor shall notify the Government of inspections and tests in sufficient time to allow the Government to make travel arrangements to witness the inspections and tests.

The Contractor may be required to repeat any or all the inspections or tests reported as defective in the FIR. Upon completion of additional Contractor re-inspections, an updated inspection record shall be submitted to the Government for review. All discrepancies found during, and identified in, the FIR shall be corrected on the vehicles prior to start of Government testing.

1.1 Final Inspection Record (FIR)

The Contractor shall prepare a Final Inspection Record (FIR) (CDRL Data Item A097) in Contractor format for each deliverable sub-configuration vehicle and trailer. The Component / Subsystem Tests (C/ST), System-Level Verification Test results, and any contractor-performed Vehicle Inspections (VI) shall be incorporated into the Final Inspection Record (FIR). The FIR shall be organized to be compatible with assemblies, installation, and end item performance and acceptance.

The FIR shall list each characteristic or function inspected or tested, and the relationship to the contract requirement and shall contain all examinations, tests and assembly processes (including rework/replacement) performed on each vehicle during assembly and Contractor's acceptance inspections.

Results from inspection and tests activities, including deficiencies and corrective actions taken by the Contractor, shall be documented in the FIR. All Contractor assembly and inspection documents and certifications required to validate successful completion of work shall have an indication of acceptance in the FIR. Copies of all documents, certifications, and data to support Government Analysis shall be included in the FIR. The Contractor shall deliver certifications in Contractor format, of those requirements designated in the JLTV Purchase Description as Certification (ref: CDRL Data Item A074). The Contractor shall submit all required to support Government Analysis (ref: CDRL Data Item A075). The documentation and certifications shall be provided for review and acceptance prior to Government acceptance of vehicle (DD250).

No final vehicle inspections shall be conducted prior to the conclusion of all component testing, subsystem testing, and system-level verification testing. The Contractor shall be required to repeat any inspections or tests reported as defective in the FIR.

Upon completion of additional Contractor re-inspections, an updated inspection record shall be submitted to the Government for review. All discrepancies found during, and identified in the FIR shall be corrected on the vehicles prior to Government acceptance.

2. QUALITY ASSURANCE

2.1 Quality Management System

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, be third party certified to ISO 9001:2008. TS-16949:2009 compliance is required for those clauses specifically identified in the Scope of Work. The Contractor's Quality System requirements shall apply at engineering design, vehicle in-process and final assembly locations. The quality system shall address all software and hardware contractual requirements. The quality system and manual shall follow the guidelines within ISO 9004:2009.

2.2 Quality Metrics

The Contractor shall develop and maintain a Quality Assurance "Scorecard" that tracks, at a minimum, the metrics identified in CDRL Data Item A098. The Quality Assurance Scorecard shall evolve as the program progress through design into build and test phases, to include metrics appropriate to program phase (e.g. design, component/subsystem testing, vehicle fabrication, etc). The Quality

Scorecard shall function as a method to communicate (both internally within the Contractor and externally to the Government) status of key quality-related metrics, to drive action as needed. The Quality Scorecard shall be available to the Government and discussed at IPT meetings as well as major reviews IAW with the Government provided IMP. (CDRL Data Item A098).

2.3 Software Quality Assurance Plan

The Contactor shall develop and deliver a JLTV Software Quality Assurance Plan. The information used to create this CDRL shall be available to the Government and discussed at IPT meetings as well as major reviews IAW the Government provided IMP. (CDRL Data Item A099)

2.4 Supplier Quality Assurance Program

The Contractor shall develop and maintain a Supplier Quality Assurance (SQA) program that will be used to guide all Contractor supplier interaction. The Contractor's supplier quality assurance program shall be compliant with ISO/TS 16949:2009 and shall ensure that each supplier has a documented quality program that directs all quality activities, and includes the process for regular monitoring of supplier quality and delivery performance. The Contractor's SQA program shall address, at a minimum, the items indicated in CDRL Data Item A100. The Contractor shall deliver a Supplier Quality Assurance Plan, including provisions for periodic audits. An existing Supplier Quality Assurance manual, that addresses all requirements of Section E and this CDRL, is acceptable. The information used to create this CDRL shall be available to the Government and discussed at IPT meetings as well as major reviews IAW the Government provided IMP. (CDRL Data Item A100)

3. GOVERNMENT QUALITY AUDITS

The Government will monitor the contractor's performance using QA procedures established for the contract. This may involve quality audits (process audits, manufacturing audits, product audits) as required. The Contractor shall support the Government in performance of such audits (e.g. provision of required documentation, product, personnel, or other resources to conduct the audits). Government audits of sub-suppliers, if required, will be conducted with the prime Contractor.

3.1 Manufacturing Process Audits

Manufacturing Process Audits – manufacturing process audits will consist of review of Contractor manufacturing processes, including process layout, documentation, material and information flow, tooling, and any other aspects of the process that may affect quality of the finished product.

3.2 Quality Management System Audits

Quality Management System (QMS) Audits – QMS audits will consist of review of Contractor processes as contained in the Contractor's QMS system, including those items outlined in CDRL (QMS System), CDRL (Quality Plan), and CDRL (Supplier Quality Plan). Such audits may involve accompanying the Contractor to a sub-supplier location to conduct audit activities.

3.3 Product Audits

Product audits – Product audits will consist of review of any product (component, sub-system, system level) for purposes of verifying conformance to any dimensional, material, fit, form or function requirements. These audits may involve review of product documentation such as drawings, control plans, specifications, technical manuals, or other documentation as necessary to verify conformance of product to requirements.

4. GOVERNMENT TESTING LOCATIONS

4.1 Ballistic Testing Site

Ballistic testing (Coupon, Hulls, Rolling Chassis, and Vehicles) will be conducted at:

- 1) Aberdeen Proving Grounds (APG)
- 2) Tank Automotive, Research, Development, and Engineering Center (TARDEC)
- 3) Graytown, Victoria, AUS

4.2 Reliability, Availability, and Maintainability (RAM) Test Sites

RAM testing will be conducted at:

- 1) Yuma Test Center, Yuma, AZ, USA
- 2) Aberdeen Test Center, Aberdeen, MD, USA

The vehicles will be evaluated while operating under varying payloads with and without B-Armor kit as specified in the Operational Mode Summary/Mission Profile (OMS/MP) (Attachment SOWC-173).

4.3 Performance Test Sites

Performance testing will be conducted at:

Aberdeen Test Center (ATC), Aberdeen Proving Grounds (APG), Maryland;
Electronic Proving Grounds (EPG) Fort Huachuca, Arizona;
White Sands Missile Range (WSMR), New Mexico;
Yuma Test Center (YTC), Yuma Proving Grounds (YPG), Arizona;
Redstone Test Center (RTC), Redstone Arsenal, Alabama;
LVAD Testing, Fort Bragg, North Carolina;
Soft Soil Mobility Testing-ERDC, Vicksburg, Mississippi;
Jennerstown Brake Testing-Pennsylvania;
Joint Interoperability Testing-NSWC Indian Head, Maryland;
Ship Testing-Blount Island Command (BIC), Jacksonville, Florida;
Norfolk Naval Base, Virginia;
Monegetta Proving Grounds, Victoria, Australia.