PURCHASE DESCRIPTION

FOR

JOINT LIGHT TACTICAL VEHICLE

VERSION 3.0

20TH JANUARY 2012

DISTRIBUTION STATEMENT A. Approved for Public Release; distribution unlimited.

Revision History

Revision	Date	Description
2.0	21st January 2008	January 2008 Web Release
2.1s	15th January 2010	Internal Release
2.2s	12th March 2010	Internal Release
2.3	15th April 2010	April 2010 Web Release
2.4s	29th July 2010	Internal Release
2.5	18th August 2010	August 2010 Web Release. The PD main body updated with new C4I section.
2.6	21st January 2011	January 2011 Web Release. PD main body has been updated and annex A, B, C and D have been consolidated into the main body.
2.7	11th April 2011	April 2011 Web Release PD main body has been revised.
2.8	29th June 2011	June 2011 Web Release PD main body has been revised and included verification section.
2.9	15th September 2011	September 2011 Web Release. Revised requirements.
2.9a	28th September 2011	Three corrections to September 2011 Web Release. PDFOV-8722, 8723 and 8724 corrected.
2.10	27th October 2011	Revised requirements
2.11s	7th December 2011	Internal Release
3.0	9th January 2012	Revised requirements.
3.0	20th January 2012	Final RFP Release. Revised requirements.

1 SCOPE

This Automotive Tank Purchase Description (ATPD) identifies the Joint Light Tactical Vehicle (JLTV) requirements and verification methods for the JLTV including the companion trailer (JLTV-T).
The ATPD is divided into a Main Body supplemented by Annexes. The Main Body of the ATPD defines overarching requirements that are applicable to the JLTV and the JLTV-T. The outlines of the ATPD annexes are as follows:

1. Annex A - Reserved
2. Annex B - Reserved
3. Annex C - Reserved
4. Annex D - Reserved
5. Annex E - Force Protection (Classified)
6. Annex F - Signature Management (Classified)
7. Annex G - Export Controlled Annex (For Official Use Only (FOUO))
8. Annex H - Operational Terrain
9. Annex I - Reserved
10. Annex J - Engineering Drawings
11. Annex K - Item Quantities
12. Annex L - Reserved
13. Annex M - Basic Issue Items List
14. Annex N - 2015 Land Warrior Body Dimensions
15. Annex O - Reserved
16. Annex P - Moving Fuel Efficiency Test
17. Annex Q - Crew Injury Assessment Methodology (FOUO)
18. Annex R - Flat Tow Kit components
19. Annex S - Modifications to DOT-TP-126-3

2 APPLICABLE DOCUMENTS

2.1 Government Documents

The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and in effect on the date of Request for Proposal (RFP).

MILITARY SPECIFICATIONS
DEPARTMENT OF DEFENSE

Section Number	Title
A-A-50271	Plate, Identification
A-A-52432	Mirror Assembly, Rearview: Automotive Exterior Mounting
A-A-52474A	Electrocoating Primer

Section Number	Title
A-A-52525	Horns and Buzzers, Air- and Electrically-Actuated
A-A-52557	Fuel Oil, Diesel; For Posts, Camps and Stations
A-A-52624	Antifreeze, Multi-Engine Type
A-A-59487	Padlock (Key Operated)
ATPD 2352	Purchase Specification Transparent Armor
MIL-PRF-20696	Cloth, Waterproof, Weather Resistant
MIL-PRF-32143	Batteries, Storage: Automotive, Valve Regulated Lead Acid (VRLA)
MIL-PRF-46736	Performance Specification Filter Element, Intake Air Cleaner: Dry Type.
MIL-PRF-62048	Air Cleaners, Automotive: Heavy Duty, Dry-Type (For Internal Combustion Engine) (Metric)
MIL-PRF-62546	Performance Specification Sensor, Fire, Optical
MIL-DTL-62547	Valve And Cylinder Assemblies, Halon 1301
MIL-DTL-7905	Cylinders, Steel, Compressed Gas, Non-Shatterable Seamless, 1800 PSI and 2100 PSI
MIL-DTL-53072	Chemical Agent Resistant Coating (CARC) System Application Procedures and Quality Control Inspection
MIL-DTL-53084	Primer, Cathodic Electrodeposition, Chemical Agent Resistant
MIL-DTL-64159	Coating, Water Dispersible Aliphatic Polyurethane, Chemical Agent Resistant
MIL-DTL-53030	Primer Coating, Epoxy, Water Reducible, Lead and Chromate Free
MIL-DTL-62545	Module, Standard Electronic Control
MIL-DTL-62420	Periscope, Tank
MIL-DTL-83133	Turbine Fuels, Aviation, Kerosene Types, JP-8 (NATO F-34), NATO F-35, and JP-8+100 (NATO F-37)
MIL-T-5578	Tank Fuel Aircraft Self-Sealing
DoD Directive (DoDD) 8500.01	Information Assurance (IA)
DoDI 8500.2	IA Implementation
DoDI 8510.01	DoD Information Assurance Certification and Accreditation Process (DIACAP)
T-C-490C	Cleaning Methods for Ferrous Surfaces and Pretreatments for Organic Coatings

STANDARDS

DEPARTMENT OF DEFENSE

Section Number	Title
MIL-STD-101	Color Code for Pipelines and for Compressed Gas Cylinders
MIL-STD-130	Identification Marking of U.S. Military Property
MIL-STD-209	Lifting and Tie-down Provisions
MIL-STD-461	Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment
MIL-STD-810	Environmental Engineering Considerations and Laboratory Tests
MIL-STD-814	Requirements for Tiedown, Suspension and Extraction Provisions

Section Number	Title
	on Military Materiel for Airdrop
MIL-STD-913	Design Criteria Requirement for the Certification of Externally Transported Military Equipment by Department of Defense Rotary Wing Aircraft
MIL-STD-1179	Lamps, Reflector and Associated Signaling Equipment for Military Vehicles
MIL-STD-1275	Characteristics of 28 Volt DC Electrical Systems in Military Vehicles
MIL-STD-464	Electromagnetic Environmental Effects Requirements for Systems
MIL-STD-642	Identification Marking of Combat and Tactical Transport Vehicle
MIL-STD-662F	V50 Ballistic Test for Armor
MIL-STD-681	Identification Coding and Application of Hookup and Lead Wire
MIL-STD-705	Generator Sets, Engine Driven Methods of Tests and Instructions
MIL-STD-810G	Environmental Engineering Considerations and Laboratory Tests
MIL-STD-1332	Definitions of Tactical, Prime, Precise, and Utility Terminologies for Classification of the DoD Mobile Electric POW
MIL-STD-1366	Transportability Criteria
MIL-STD-1472F	Human Engineering
MIL-STD-1474	Noise Limits
MIL-STD-1180B	Safety Standards for Military Ground Vehicles

HANDBOOKS

DEPARTMENT OF DEFENSE

Section Number	Title
MIL-HDBK-232A	Red/Black Engineering Installation Guidelines
MIL-HDBK-454B	General Guidelines for Electronic Equipment
MIL-HDBK-419	Grounding, Bonding, and Shielding for Electronic Equipments and Facilities
MIL-HDBK-669	Loading Environment and Related Requirements for Platform Rigged Airdrop Material
MIL-HDBK-1223	Nontactical Wheeled Vehicles Treatment, Painting, Identification Marking and Data Plate Standards
MIL-HDBK-1791	Designing for Internal Aerial Delivery in Fixed Wing Aircraft
MIL-HDBK-1857	Grounding, Bonding and Shielding Design Practices

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia PA 19111-5094.)

2.2 Other Government Documents, Drawings, and Publications

The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

Training and Doctrine Command Pamphlet 525-3-90/O&O, The United States (U.S.) Army Objective Force Operational and Organizational Plan Maneuver Unit of Action.
TRADOC Pamphlet 525-4-0, US Army Concept for Maneuver Sustainment Operations in Support of the Objective Force (Draft), U.S. Army White Paper: Concepts for the Objective Force.

(Application for copies should be addressed to the U.S. Army Tank automotive and Armament Command, ATTN: AMSTA-LC-AH, Warren, MI 48397-5000)
C-130 Transportability of Army Vehicles, Military Traffic Management Command Transportation Engineering Agency.

TECHNICAL BULLETIN, TECHNICAL MANUAL AND FIELD MANUAL

Section Number	Title
Technical Bulletin (TB) 43-0147	Color, Marking and Camouflage Patterns Used on Military Equipment
Technical Manual (TM) 4795-34-2	Corrosion Prevention and Control Rustproofing and Underbody Coating Procedures for Tactical Vehicles, Trailers, and Engineer Equipment
TM 4795-12-1	Organizational Corrosion Prevention and Control Proce-dures for United States Marine Corps Equipment
S9310-AQ-SAF-010	Technical Manual for Batteries, Navy Lithium Safety Program Responsibilities and Procedures
Field Manual (FM) 3-11	Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical Defense Operations
FM 3-5	Army Special Operations Forces
Department of Army (DA) Pamphlet (PAM) 25-380-2	Security Procedures for Controlled Cryptographic Items

(Application for copies should be addressed to the U.S. Army Tank automotive and Armament Command, ATTN: AMSTA-LC-AH, Warren, MI 48397-5000)

ARMY REGULATIONS

Section Number	Title
Army Regulation (AR) 70-38	Research, Development, Test and Evaluation of Materiel for Extreme Climatic Conditions
AR-70-12	Fuels and Lubricants Standardization Policy for Equipment Design, Operation, and Logistic Support

(Copies are available from the following website:
http://www.usace.army.mil/inet/usace-docs/army-reg)

TEST OPERATING PROCEDURES

Section Number	Title
Test Operating Procedure (TOP) 1-1-014	Ride Dynamics

Section Number	Title
TOP 1-2-500	Transportability
TOP 1-2-501	Rail Impact Test
TOP 1-2-502	Durability
TOP 1-2-504	Physical Characteristics
TOP 1-2-608	Sound Level Measurement
TOP 1-2-610	Human Factors Engineering
TOP 1-2-621	Outdoor Sand and Dust Testing
TOP 1-2-807	Thermal Comfort Testing for Vehicle Operator/Passenger Workspaces (Truck Cab)
TOP 2-2-002	Dynamic Stability Handling and Steering
TOP 2-2-021	Trailer Landing Leg Devices and Towing Compatibility
TOP 2-2-500	Vehicle Characteristics
TOP 2-2-503	Maintenance
TOP 2-2-505	Inspection and Preliminary Operation of Vehicles
TOP 2-2-506	Endurance Testing of Traced and Wheeled Vehicles
TOP 2-2-508	Automotive Safety and Health Hazard Evaluation
TOP 6-2-542	Electromagnetic Interference Tests
TOP 2-2-602	Acceleration; Maximum and Minimum Speeds
TOP 2-2-603	Vehicle Fuel consumption
TOP 2-2-604	Drawbar Pull
TOP 2-2-607	Cooling Systems
TOP 2-2-608	Braking, Wheeled Vehicles
TOP 2-2-609	Steering
TOP 2-2-610	Gradeability and Side-Slopes Performance
TOP 2-2-611	Standard Obstacles
TOP 2-2-612	Fording
TOP 2-2-614	Toxic Hazards Test for Vehicles and Other Equipment
TOP 2-2-615	Security from Detection (Vehicle)
TOP 2-2-619	Soft Soil Mobility
TOP 2-2-619	Engine Cold-Starting and Warm-Up Tests
TOP 2-2-650	Engine Cold-Starting and Warm-Up Tests
TOP 2-2-707	Kits (Vehicles)
TOP 2-2-708	Vehicle Personnel Heater Compatibility
TOP 2-2-710	Ballistic Test of Armor
TOP 2-2-712	Automotive Winches
TOP 2-2-801	Weight Distribution and Ground Pressure
TOP 2-2-802	Stowage
TOP 2-2-816	High and Low Temperature Tests of Vehicles
TOP 2-2-819	Sand and Dust Testing of Wheeled and Tracked Vehicles and Stationary Equipment
TOP 3-2-812	Field of Vision
TOP 3-2-813	Field of Fire
TOP 4-2-840	Vehicle Vulnerability Tests Against Roadside Improvised Explosive Devices
TOP 6-2-335	Test, Measurement, and Diagnostic Equipment (system peculiar)

Section Number	Title
TOP 8-2-061	Chemical and Biological Decontaminant Testing
U.S Army Test and Evaluation Command (ATEC) 385-082701	Internal Operation Procedure for Corrosion Testing

(Copies are available from general search engines)

INTERNATIONAL TEST OPERATING PROCEDURE

Section Number	Title
International Test Operating Procedure (ITOP) 2-2-617	FR/GE/UK/US Vulnerability Testing of Combat Vehicles and their Components/Subsystems (Utilizing Conventional Weapons)
ITOP 2-2-713	Ballistic Testing of Armor
ITOP 4-2-508	Vehicle Vulnerability Tests Using Mines
ITOP 4-2-812	Performance Testing of Shaped Charge Warheads

(Copies are available from general search engines)

TEST PROCEDURE

Section Number	Title
Test Procedure (TP)-94-01	Transportability Testing Procedures

(Copies are available from general search engines)

ABERDEEN TEST CENTER INTERNAL OPERATING PROCEDURE

Section Number	Title
385-082701	Internal Operation Procedure

(Application for copies should be addressed to the: Technical Director, U.S. Army Edgewood Research Development and Engineering Center, ATTN: SCBRD-RT/ASM, Aberdeen Proving Ground, MD 21010-5423)

GOVERNMENT AGENCIES

DEPARTMENT OF TRANSPORTATION

Section Number	Title
49 CFR 173.309	Fire Extinguisher

(Copies are available from the following website http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR)

FEDERAL MOTOR VEHICLE SAFETY STANDARDS

Section Number	Title
Federal Motor Vehicle Safety Standard (FMVSS) 101	Controls and Displays
FMVSS 102	Transmission Shift Lever Sequence, Starter Interlock, and Transmission Braking Effect
FMVSS 105	Hydraulic and electric brake systems
FMVSS 108	Lamps, Reflective Devices, and Associated Equipment
FMVSS 111	Rearview Mirrors
FMVSS 113	Hood Latch System
FMVSS 119	New Pneumatic Tires for Vehicles other Than Passenger Cars
FMVSS 120	Tire Selection and Rims for Motor Vehicles Other Than Passenger Cars
FMVSS 121	Air Brake Systems
FMVSS 124	Accelerator Control Systems
FMVSS 126	Electronic Stability Control Systems
FMVSS 202	Head Restraints
FMVSS 204	Steering Control Rearward Displacement
FMVSS 206	Door locks and door retention components
FMVSS 207	Seating System
FMVSS 209	Seat Belt Assemblies
FMVSS 210	Seat Belt Assemblies Anchorage

(Copies are available from the following website http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR)

DEPARTMENT OF TRANSPORTATION TEST PROCEDURES

Section Number	Title
Department of Transportation (DOT)-TP-104-08	Laboratory Test Procedure for FMVSS 104, Windshiled Wiping and Washing Systems
DOT-TP-121V-05	Laboratory Test Procedure for FMVSS 121, Air Brake Systems
DOT-TP-124	Laboratory Test Procedure for FMVSS 124, Accelerator Control Systems
DOT-TP-126	Laboratory Test Procedure for FMVSS 126, Electronic Stability Control Systems
DOT-TP-202-08	Laboratory Test Procedure for FMVSS 202, Head Restraints

(Copies are available from the following website http://www.nhtsa.gov/Vehicle+Safety/Test+Procedures)

FEDERAL MOTOR CARRIER SAFETY REGULATIONS

Section Number	Title
Federal Motor Carrier Safety Regulation (FMCSR) 393.11	Lamps and reflective devices
FMCSR 393.40	Required Brake Systems
FMCSR 393.41	Parking Brake System
FMCSR 393.42	Brakes Required on All Wheels
FMCSR 393.43	Breakaway and Emergency Braking
FMCSR 393.45	Brake Tubing and Hose, Adequacy
FMCSR 393.47	Brake Lining
FMCSR 393.48	Brakes to Be Operative
FMCSR 393.49	Single Valve to Operate All Brakes
FMCSR 393.50	Reservoirs Required
FMCSR 393.51	Warning Devices and Gauges
FMCSR 393.52	Brake Performance
FMCSR 393.55	Antilock Brake Systems
FMCSR 393.65	All Fuel Systems
FMCSR 393.67	Liquid Fuel Tanks
FMCSR 393.70	Coupling Devices and Towing Methods, Except for Driveaway-Towaway Operations
FMCSR 393.80	Rear-vision mirrors
FMCSR 393.83	Exhaust Systems
FMCSR 399.207	Truck and truck-tractor access requirements

(Copies are available from the following website http://www.fmcsa.dot.gov/rules-regulations/rules-regulations.htm)

NATIONAL FIRE PROTECTION AGENCY

Section Number	Title
National Fire Protection Agency (NFPA) 2001	Standard on Clean Agent Fire Extinguishing Systems

(Application for copies should be addressed to the National Fire Protection Agency, One Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101)

NORTH ATLANTIC TREATY ORGANIZATION STANDARDIZATION AGREEMENT

Section Number	Title
North Atlantic Treaty Organization (NATO) Standardization Agreement (STANAG) 4007	Electrical Connectors Between Prime Movers, Trailers and Towed Artillery
NATO STANAG 4015	Starter Battery Spaces for Wheeled Tactical Vehicles
NATO STANAG 4074	Auxiliary Power Unit Connections for Starting Tactical Land

Section Number	Title
	Vehicles
NATO STANAG 4478	Emergency Towing and Recovery Facilities for Tactical Land Vehicles

NORTH ATLANTIC TREATY ORGANIZATION ALLIED VEHICLE TESTING PUBLICATION

Section Number	Title
NATO Allied Vehicle Testing Publication (AVTP) 03-160W	Dynamic Stability

(Applicable NATO documents are those that are current at NATO Headquarters Military Agency for Standardization, 1110 Brussels). Copies are available from IHS, Inc., 15 Inverness Way East, Englewood, CO 80112 or online from www http://global.ihs.com/ email globalcustomerservice@ihs.com).

U.S. OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION

Section Number	Title
29 CFR 1910.1000	Air contaminants
29 CFR 1910.1200	Hazard Communication

(Copies are available from the following website http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR)

MARINE CORPORATION ORDER

Section Number	Title
Marine Corporation Order (MCO) 4790.18B	Corrosion Prevention and Control (CPAC) Program

(Copies are available from general search engines)

GLOBAL POSITIONING SYSTEM

Section Number	Title
IS-GPS-154C	Global Positioning System (GPS) Equipment Interface Control Document for the GPS Standard Serial Interface Protocol of DoD Standard GPS UE Radio Receivers
ICD-GPS-153C	GPS User Equipment Interface Specification for ANF/PSN-11 Unique Interface Characteristics

(GFI will be provided per Attachment 36 of the Statement of Work)

AUSTRALIAN GOVERNMENT AGENCIES

Department of Infrastructure, Transport, Regional Development and Local Government
Motor Vehicles Standards Act 1989
Australian Design Rules (ADR) - 3rd Edition

Section Number	Title
ADR 03/03	Seat and Seat Anchorage
ADR 05/05	Anchorage for Seatbelts
ADR 06/00	Direction Indicators
ADR 13/00	Installation of Lighting and Light-Signaling Devices on other than L-Group Vehicles
ADR 14/02	Rear Vision Mirrors
ADR 18/03	Instrumentation
ADR 35/03	Commercial Vehicle Brake Systems
ADR 38/03	Trailer Braking Systems
ADR 42/04	General Safety
ADR 45/01	Lighting & Light-Signaling Devices not covered by ECE Regulations
ADR 49/00	Front and Rear Position (Side) Lamps, Stop Lamps and End-outline Marker Lamps
ADR 62/02	Mechanical Connections Between Vehicles
ADR 74/00	Side Marker Lamps

(Copies are available from the following website
http://www.infrastructure.gov.au/roads/motor/design/adr_online.aspx)

DRAWING

Drawing Number	Title
6433138	M1114 Turret Assembly Interface

(GFI will be provided per Attachment 36 of the Statement of Work)

2.3 Non-Government Documents, Drawings, and Publications

The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are Department of Defense (DoD) adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS

Section Number	Title
American Society for Testing and Materials (ASTM) D975	Standard Specification for Diesel Fuel Oils

Section Number	Title
ASTM D1003	Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics
ASTM F801-96	Standard Test Method for Measuring Optical Angular Deviation of Transparent Parts
ASTM F2156	Standard Test Method for Measuring Optical Distortion in Transparent Parts Using Grid Line Slope

(Applications for copies should be addressed to the: American Society for Testing & Materials 100 Bar Harbor Drive, West Conshohocken, PA 19428-2959)

NATIONAL MARINE ELECTRONICS ASSOCIATION

Section Number	Title
National Marine Electronics Association (NMEA) 0183	Interface Standard

(Copies are available from the following website:
http://www.nmea.org/content/nmea_standards/nmea_standards.asp)

GENERAL MOTORS

Section Number	Title
GMW14872	Accelerated Cyclic Laboratory Corrosion Test (replaces GM 9540P)

(Application for copies should be addressed to IHS, Inc., 15 Inverness Way East, Englewood, CO 80112 or online from http://www.global.ihs.com/ or email globalcustomerservice@ihs.com).

INTERNATIONAL ORGANIZATION OF STANDARDIZATION

Section Number	Title
International Organization of Standardization (ISO) 2575-20	Road vehicles -- Symbols for controls, indicators and tell-tales
ISO 2631-1	Mechanical vibration and shock -- Evaluation of human exposure to whole-body vibration -- Part 1: General requirements
ISO 4009	Commercial vehicles -- Location of electrical and pneumatic connections between towing vehicles and trailers
ISO 12405-1	Electrically propelled road vehicles -- Test specification for lithium-ion traction battery packs and systems
International Electrotechnical Commission (IEC) 60529	Degrees of Protection provided by enclosures (IP Code)
IEC 60309	Plugs, socket-outlets and couplers for industrial purposes

(Application for copies should be addressed to International Organization of Standardization (ISO), Case Postale 56, Geneva, Switzerland CH-1211)

SOCIETY OF AUTOMOTIVE ENGINEERS, INC.

Section Number	Title
Society of Automotive Engineers (SAE) AS8043	Torso Restraint Systems
SAE J198	Windshield Wiper Systems- Trucks, Buses, and Multipurpose Vehicles (DOD Adopted)
SAE J266	Stopping Distance Test Procedure
SAE J294	Service Brake Structural Integrity Test Procedure-Vehicles Over 4500 kg (10,000 lb) GVWR
SAE J318	Automotive Air Brake Line Couplers (Gladhands)
SAE J377	Vehicular Traffic Sound Signaling Devices
SAE J381	Windshield Defrosting Systems Test Procedures -Trucks, Buses, and Multipurpose Vehicles (DOD Adopted)
SAE J516	Hydraulic Hose Fittings
SAE J517	Hydraulic Hose
SAE J534	Lubrication Fittings (DOD Adopted)
SAE J560	Seven Conductor Electrical Connector for Truck-Trailer Jumper Cable (DOD Adopted)
SAE J682	Rear Wheel Splash and Stone Throw Protection (DOD Adopted)
SAE J684	Trailer Coupling, Hitches, and Safety Chains - Automotive Type
SAE J706	Rating of Winches (DOD Adopted)
SAE J839	Passenger Car Side Door Latch Systems
SAE J849	Connection and Accessory Locations for Towing Multiple Trailers (DOD Adopted)
SAE J942	Windshield Washer Tubing
SAE J1404	Service Brake Structural Integrity Requirements-Truck and Bus.
SAE J1436	Requirements for Engine Cooling System Filling, De-aeration, and Drawdown Tests, Information Report
SAE J1559	Determination of Effect of Solar Heating
SAE J1626	Braking, Stability, and Control Performance Test Procedures for Air-Brake-Equipped Trucks, Truck-Tractors and Buses
SAE J1503	Performance Test for Air-conditioned, Heated, and Ventilated Off-Road, Self-propelled Work Machines
SAE J1673	High Voltage Automotive Assembly Wiring Design
SAE J1939	Series: J1939-11 Physical Layer - 250K bits/s, Shielded Twisted Pair
SAE J2422	Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks
SAE J2497	ABS brake intervehicular cable
SAE J2698	Primary Single Phase Nominal 120 VAC Wiring Distribution Assembly Design~Truck and Bus
SAE J2580	Identification and Installation of Air Brake System Components

(Applications for copies should be addressed to the: Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096)

THE TIRE AND RIM ASSOCIATION, INC.
Tire and Rim Association Year Book
(Copies are available from the following website: http://www.us-tra.org/publications.html)

THE EUROPEAN TYRE AND RIM TECHNICAL ORGANISATION
The European Tyre and Rim Technical Organisation Standards Manual 2011
(Copies are available from the following website: http://www.etrto.org/specif/eShop/caddy.asp)

UNDERWRITERS LABORATORIES INCORPORATED

Section Number	Title
Underwriters Laboratories (UL) 299	Dry Chemical Fire Extinguishers
UL 711	Rating and Fire Testing of Fire Extinguishers
UL 2166	Halocarbon Clean Agent Extinguishing System Units
UL 94	Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

2.4 Order of Precedence

If there is a conflict between the text of this specification and the references cited herein, requirements shall be followed by the below listed order of precedence:

1. Contract Document and associated contract clauses.
2. JLTV ATPD.
3. Government documents, drawings and publications specified in the JLTV ATPD.
4. Non-government documents, drawings and publications specified in the JLTV ATPD.
5. Documents, drawings and publications referenced in (3) or (4) above.

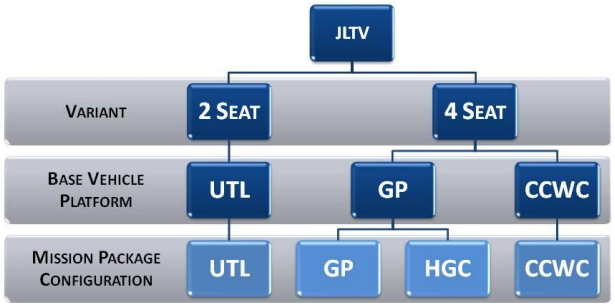
2.4.1 Compliance with Laws & Regulations

The requirements and specifications contained in the above documents shall not be interpreted as a waiver or allowance to supersede any law or regulation unless a specific exemption has been obtained.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-874		**3 JLTV REQUIREMENTS**					**4. Requirements Verification**
PDFOV-875		The JLTV provides enhanced light tactical mobility as an integral component of future Joint war fighting concepts and the Joint Force's ability to dominate the asymmetric operational environment. The JLTV system includes the vehicle and the companion trailer. Everywhere in the ATPD where it says 'JLTV' means all JLTV variants, base vehicle platforms, mission package configurations, and the companion trailer. Specific JLTV variant, base vehicle platform, mission package configurations, and companion trailer requirements will be noted by 'JLTV-[X]'. If a conflict arises, the callout in the specific variant, base vehicle platform, mission package configuration, or companion trailer takes precedence. If not otherwise specified, all requirements are threshold values (T). Objective values, which are desired capabilities, are labeled with an (O).					Compliance with Section 3 requirements shall be verified through one or more of the following methods as described herein: **Inspection (I).** Inspections constitute those activities conducted by the government for the purpose of evaluating vehicle attributes and characteristics against the JLTV Section 3 requirements. Inspection shall be accomplished by visual or physical examination of the end item, subsystems or components. **Test (T).** Testing shall be conducted by the Government, and shall be accomplished through the systematic physical operation of the JLTV, its subsystems or components, under appropriate and specified conditions, with or without instrumentation, and the collection, analysis, and evaluation of resulting data. Testing also includes the act of recording measurements related to the function of the JLTV, its subsystems or components, and verifying interfaces with respect to form, fit, and function. **Certification (C).** Certifications are defined as contractor furnished documents certifying compliance with the specific Section 3 requirement criteria. Certifications shall be from organizations not affiliated with the Contractor (a.k.a. Third Party Certification). All certification organizations shall be accredited for testing and certification to the standard or specification referenced in the relevant criteria. Presence of a Certification Mark on the product from such an organization is acceptable evidence of certification. **Analysis (A).** Analyses will be conducted by the government, unless otherwise directed. Analysis shall consist of technical or mathematical evaluations, mathematical models, simulations, algorithms, charts, diagrams, representative data, or other appropriate means to demonstrate compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-942		Unless otherwise specified, all mobility requirements are met with the JLTV at Gross Vehicle Weight (GVW) with B-kit armor (with Protection Level 2). If Gross Combined Vehicle Weight (GCVW) is specified, the JLTV-T (with uniformly distributed payload whose center of gravity is 24 in (61 cm) above the cargo bed) is the trailer to be used for testing. All performance requirements are met while operating on JP-8 fuel. All Force Protection and Mobility requirements are met at one (1) ride height.					This is a definition and not verifiable separately.
PDFOV-8260		**3.1 JLTV Variants**					**4.1**
PDFOV-8537		The JLTV is comprised of two (2) variants, a two (2) seat and a four (4) seat variant, and a companion trailer (JLTV-T). The two (2) seat variant has one (1) base vehicle platform, the Utility (JLTV-UTL). The four (4) seat variant has two (2) base vehicle platforms, the General Purpose (JLTV-GP) and the Close Combat Weapons Carrier (JLTV-CCWC). The base vehicle platforms will be delivered in a variety of configurations through the installation of kits and mission essential equipment (as specified in Annex K) required to perform their primary operational role.					This is a definition and not verifiable separately.
PDFOV-8548		**3.1.1 JLTV Two Seat Variant**					**4.1.1**
PDFOV-8273		**3.1.1.1 JLTV-UTL**					**4.1.1.1**
PDFOV-8275		The JLTV-UTL is a base vehicle platform that carries cargo on an open bed; this provides mobility primarily for non-shelter loads, such as boxes, pallets, small containers, or break bulk cargo. As a prime mover, this vehicle tows existing combat loads including 105 mm howitzers, Q-36 radars, or other towed loads typically moved by light tactical vehicles. The JLTV-UTL acts as a Shelter Carrier when outfitted to carry existing standard shelters required for maintenance, communications, etc. A shelter adapter may be required to accept shelter loads and optimize vehicle performance while loaded with a shelter. Standard legacy shelters are supported by this vehicle.					This is a definition and not verifiable separately.
PDFOV-8547		**3.1.2 JLTV Four Seat Variant**					**4.1.2**
PDFOV-8261		**3.1.2.1 JLTV-GP**					**4.1.2.1**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8262		The JLTV-GP is a highly mobile multipurpose base vehicle platform for general utility, movement of troops or small supply items about the battlefield. The JLTV-GP provides general purpose logistical support, including administrative movement. The JLTV-GP will be delivered in a variety of mission package configurations through the installation of kits and mission essential equipment (as specified in Annex K) required to perform their primary operational role. The GP may be equipped with selected kits to become a multi-purpose platform for the general C2 purposes of unit leaders and functional staffs within the USMC Ground Combat Element and the US Army Brigade Combat Teams. When such kits are mounted, the primary purpose of the JLTV GP is to support small-unit leader C2 by providing access to classified or unclassified networks, as well as command and control applications supporting maneuver, fires, aviation, intelligence, signal (including retrans) and logistics.					This is a definition and not verifiable separately.
PDFOV-8809		**3.1.2.1.1 JLTV-GP Mission Package Configurations**					**4.1.2.1.1**
PDFOV-8812		**3.1.2.1.1.1 JLTV Heavy Guns Carrier**					**4.1.2.1.1.1**
PDFOV-8813		The JLTV Heavy Guns Carrier (JLTV-HGC) is a JLTV-GP mission package configuration that accommodates mounting crew served weapons (machine guns and grenade machine-guns) with a protected gun mount and will be the principal light vehicle employed for over-watch and base of fire during infantry attack, convoy escort, and security (military police).					This is a definition and not verifiable separately.
PDFOV-8267		**3.1.2.2 JLTV-CCWC**					**4.1.2.2**
PDFOV-8268		The JLTV-CCWC is the base vehicle platform for employment of the Close Combat Weapons System, currently the tube-launched, optically-tracked, wire command data link, guided missile Improved Target Acquisition System (TOW-ITAS) (U.S. Army) or Saber (USMC), and direct fire kinetic weapons such as the M2 .50 Cal machine-gun. The JLTV-CCWC is employed on avenues of approach, over-watch positions or attack by fire positions. During all types of operations including urban operations, they use precision long range fire capability to enable maneuver of Infantry units in the close fight. The JLTV-CCWC satisfies the requirement for an anti-tank / anti-armor weapons platform within the USMC and U.S. Army.					This is a definition and not verifiable separately.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-9182		**3.1.3 JLTV Variant, Base Vehicle Platform and Mission Package Configuration Decomposition**					**4.1.3**
PDFOV-9183							This is a definition and not verifiable separately.
PDFOV-9184		Figure 1 - JLTV Variant, Base Vehicle Platform and Mission Package Configuration Decomposition					This is a definition and not verifiable separately.
PDFOV-8346		**3.2 JLTV Companion Trailer**					**4.2**
PDFOV-8347		The JLTV-T is capable of meeting the mobility characteristics of the JLTV and capable of safely carrying the payload.					This is a definition and not verifiable separately.
PDFOV-876		**3.3 Physical Requirements**					**4.3**
PDFOV-877		**3.3.1 Curb Weight**					**4.3.1**
PDFOV-878		Curb Weight (CW) is defined as the weight of the empty JLTV with Basic Issue Items (BII) onboard; all armor to meet A-structure requirements; infrastructure to support standard equipment; and a full load of fuel, fluids, and lubricants. BII is defined in Annex M. Standard equipment is defined in Annex K.					This is a definition and not verifiable separately.
PDFOV-879		**3.3.2 Gross Vehicle Weight**					**4.3.2**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-880		Gross Vehicle Weight (GVW) is defined as CW plus B-kit armor (Protection Level 2), Gunner's Protection Kit (GPK) and payload. The residual payload (payload remaining after the JLTV's crew and their personnel equipment with individual weapon, JLTV Mission Package Configuration - Baseline equipment as defined in Table 2 of Annex K, and the self sustainment payload has been applied) may be allocated against the weight of the GPK. Allocate 500 lb (227 kg) as the residual payload.					This is a definition and not verifiable separately.
PDFOV-8190		**3.3.3 GVW Rating**					**4.3.3**
PDFOV-8191		GVW Rating (GVWR) is defined as the maximum allowable total weight of the vehicle so that the vehicle does not exceed the published ratings of the load bearing components (e.g. tires, wheels, axles, suspension frame). It also reserves weight capacity for the Explosively Formed Penetrator (EFP) Protection kit.					This is a definition and not verifiable separately.
PDFOV-881		**3.3.4 Gross Combined Vehicle Weight**					**4.3.4**
PDFOV-882		Gross Combined Vehicle Weight (GCVW) is defined as the GVW of the JLTV excluding tongue weight plus the weight of the towed load. GCVW requirements will be performed using the JLTV-T with full uniformly distributed payload whose center of gravity (CG) is 24 in (61 cm) above the cargo bed.					This is a definition and not verifiable separately.
PDFOV-883		**3.3.5 Payload**					**4.3.5**
PDFOV-884		Payload is defined as any load placed in or on the vehicle that increases the vehicle weight above the CW. Any trailer tongue load will be included as a part of the payload. B-kit armor is not considered part of payload.					This is a definition and not verifiable separately.
PDFOV-8128		**3.3.5.1 GFE Integration**					**4.3.5.1**
PDFOV-8129	1	All Government Furnished Equipment (GFE) as specified by the JLTV base vehicle platform and mission package configurations in Annex K shall be integrated per their Interface Control Documents (ICD) into designated vehicle locations with accounting for Size, Weight, Power and Cooling (SWaPC) (including all electrical interfaces).		**X**			Testing shall be conducted during performance and RAM testing to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8130	2	All GFE as specified by the JLTV base vehicle platform and mission package configurations in Annex K shall be able to be installed without any additional vehicle modifications with the exception of the JLTV-GP. The JLTV-GP mission package configuration items which are not common between the mission package configurations may occupy common SWaPC allocations.		X			Testing shall be conducted during performance and RAM testing to verify compliance with Section 3 requirement.
PDFOV-8788	2	The JLTV base vehicle platforms shall include the infrastructure to support standard equipment as specified in Table 1 of Annex K.		X			Testing shall be conducted during performance and RAM testing to verify compliance with Section 3 requirement.
PDFOV-9201	4	Each JLTV base vehicle platform shall accept the appropriate Baseline Integration Kits for each Mission Package Configuration, as specified in Table 2 of Annex K, without further vehicle modification.		X			Testing shall be conducted during performance and RAM testing to verify compliance with Section 3 requirement.
PDFOV-9202	4	The JLTV shall be capable of accepting any necessary Expansion Kits for each Mission Package Configuration, as specified in Table 3 of Annex K.		X			Testing shall be conducted during performance and RAM testing to verify compliance with Section 3 requirement.
PDFOV-8131	4	The GFE performance shall not be degraded due its integration within JLTV.		X			Testing shall be conducted on each GFE system before and after integration into the JLTV to verify compliance with Section 3 requirement.
PDFOV-895		**3.3.6 Operating Environment**					**4.3.6**
PDFOV-896		**3.3.6.1 Operating Parameters**					**4.3.6.1**
PDFOV-898	4	The JLTV shall start and operate in all altitudes from -500 ft (-152 m) through 12,000 ft (3658 m).			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-899	4	The JLTV shall maintain full mission capability in temperatures from -40°F (-40°C) to 125°F (52°C) under full radiant heat loading (from the sun, crew, electronics, engine heat) in the operating range of the vehicle.		X			Testing shall be conducted IAW TOP 2-2-816, paragraphs 5.1 and 5.2, with temperature range of -40°F (-40°C) to 125°F (52°C) and for compliance with MIL-STD-810 to verify Section 3 requirement.
PDFOV-900		**3.3.6.1.1 Start**					**4.3.6.1.1**
PDFOV-902	4	The JLTV shall start in -25°F (-32°C) to 125°F (52°C) within one (1) minute from the initiation of cranking with no external aids, kits, or prior warming of the batteries.		X			Testing shall be conducted IAW TOP 2-2-650, paragraph 4.1 to verify compliance with Section 3 requirement.
PDFOV-903	4	The JLTV shall start in -40°F (-40°C) to -26°F (-32°C) within two (2) minutes or less from the initiation of cranking. An arctic kit can be used.		X			Testing shall be conducted IAW TOP 2-2-650, paragraph 4.2 to verify compliance with Section 3 requirement at -40°F. If an arctic kit is needed, it shall be initiated no more than 28 minutes prior to the initiation of cranking.
PDFOV-6544		**3.3.6.1.1.1 Automatic Starting Aid**					**4.3.6.1.1.1**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3529	4	If ether is required to assist engine start in cold weather, the vehicle shall be equipped with an automatic starting aid system that will inject controlled amount of vaporized starting fluid into the engine's air intake system.		X			Testing shall be conducted IAW TOP 2-2-650, paragraph 4.1, appendix B, and JLTV Operator Manual (OM).
PDFOV-8816	4	The automatic starting aid system shall only operate when enabled by the driver.		X			Testing shall be conducted IAW TOP 2-2-650, paragraph 4.1, appendix B, and OM.
PDFOV-911		**3.3.6.2 Storage Temperatures**					**4.3.6.2**
PDFOV-912	4	The JLTV and JLTV-T shall be capable of being placed outdoor in long term storage, up to six months, at temperatures ranging between -50°F (-46°C) and 160°F (71°C) , in humid storage conditions in accordance with (IAW) AR 70-38 table 2-1 and in salt-fog conditions per MCO 4790.18B 16 Jul 04 / TM 4795-34-2 / TM4795-12-1 without degradation. The removal of the Driver Smart Display Unit (DSDU)/ Commanders Smart Display Unit (CSDU)/ Auxiliary Smart Display Unit (ASDU) is permitted.		X	X		Testing shall be conducted IAW MIL-STD-810, method high temperature, low temperature, humidity, and salt fog, to verify compliance with Section 3 requirement. Testing must follow the values indicated in section 3 (including AR 70-38 Table 2-1), where indicated.
PDFOV-7985		**3.3.6.3 Height**					**4.3.6.3**
PDFOV-7986	2	The JLTV shall have the ability to be reduced to a height of less than 76 in (193 cm) as measured from the ground to the highest point on the vehicle (excluding GPK and antennas). The vehicle shall maintain a minimum ground clearance of at least 2.5 in (6.4 cm) while at the reduced height.		X			Testing shall be conducted IAW TOP 1-2-504, 6.d.2.a to verify compliance with Section 3 requirement.
PDFOV-941		**3.4 Performance Requirements**					**4.4**
PDFOV-7042		The JLTV must be capable of being produced for either Left Hand Drive or Right Hand Drive operation to meet all requirements in this PD.					This is a definition and not verifiable separately.
PDFOV-943		**3.4.1 Mobility**					**4.4.1**
PDFOV-946		The JLTV Tactical Mobility is defined as 60 percent improved roads (Primary and Secondary) and 40 percent-unimproved roads (trails) and cross-country. Cross-country includes beaches, forests, grasslands, tropical jungles, mountains, and deserts throughout all seasonal conditions. Optimum Central Tire Inflation System (CTIS) (if fitted) setting may be used to meet JLTV Tactical Mobility requirements. The JLTV's Operational Terrain Profile is detailed in Annex H.					This is a definition and not verifiable separately.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7477	1	The JLTV at GVW (except with Protection Level 1 B kit armor instead of Protection Level 2 B kit armor) shall be capable of traversing fine grain soils with a Rating Cone Index (RCI) of 25 in a single pass.		X			Testing shall be conducted IAW TOP 2-2-619, paragraph 6.2.2, to verify compliance with Section 3 requirement. Due to confidence bounds in RCI testing, the requirement shall be considered met if the RCI result is within plus two (2) RCI of the requirement.
PDFOV-9185	1	The JLTV at GVW shall be capable of traversing fine grain soils with a RCI of no more than two (2) RCI above the PDFOV-7477 test results. (T)		X			Testing shall be conducted IAW TOP 2-2-619, paragraph 6.2.2, to verify compliance with Section 3 requirement. Due to confidence bounds in RCI testing, the requirement shall be considered met if the RCI result is within plus two (2) RCI of the requirement.
PDFOV-7987	1	The JLTV at GVW shall be capable of traversing fine grain soils with an RCI of 22 in a single pass. (O)		X			Testing shall be conducted IAW TOP 2-2-619, paragraph 6.2.2, to verify compliance with Section 3 requirement. Due to confidence bounds in RCI testing, the requirement shall be considered met if the RCI result is within plus two (2) RCI of the requirement.
PDFOV-7478	1	The JLTV at GVW (except with Protection Level 1 B kit armor instead of Protection Level 2 B kit armor) shall be capable of ascending coarse grained, dry sand (less than 1 percent moisture content) 30 percent grade. (T)		X			Testing via drawbar pull method shall be conducted IAW TOP 2-2-604, paragraph 4.1 Moisture content to be at 1 percent or less, a cone index of 60 or less for the top 6 in (15 cm) soil layer and recorded per TOP 2-2-619, 6.3.1.2 a to verify compliance with Section 3 requirement.
PDFOV-9338	5	The JLTV at GVW (except with Protection Level 1 B kit armor instead of Protection Level 2 B kit armor) shall be capable of ascending coarse grained, dry sand (less than 1 percent moisture content) 40 percent grade. (O)		X			Testing via drawbar pull method shall be conducted IAW TOP 2-2-604, paragraph 4.1 Moisture content to be at 1 percent or less, a cone index of 60 or less for the top 6 in (15 cm) soil layer and recorded per TOP 2-2-619, 6.3.1.2 a to verify compliance with Section 3 requirement.
PDFOV-8550	4	The JLTV at GVW shall be able to pull a longitudinal load at low speed (or stall) up to the traction limit of the tires from the drawbar on a hard surface in all-wheel drive mode with transfer-case and differentials locked (if so equipped) for at least 10 seconds without a mechanical failure.		X			Testing shall be conducted IAW a modified TOP 2-2-604 for 10 seconds to verify compliance with Section 3 requirement. To explore the confidence bounds, the test will be run three (3) times each on three (3) vehicles.
PDFOV-1271	3	The JLTV at GVW shall be capable of slowly stepping up and down a vertical obstacle of 18 in (46 cm) in forward and reverse on a straight on approach without preparation or modification of the vehicle. No portion of the JLTV other than the tires (and mud flaps if fitted) can contact the ground or the obstacle. Adjustments to CTIS settings are allowed. (T)		X			Testing shall be conducted IAW OM CTIS setting and TOP 2-2-611, paragraph 4.2 and 5.2 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8058	5	The JLTV at GVW shall be capable of slowly stepping up and down a vertical obstacle of 24 in (61 cm) in forward and reverse on a straight on approach without preparation or modification of the vehicle. No portion of the JLTV other than the tires (and mud flaps if fitted) can contact the ground or the obstacle. Adjustments to CTIS settings are allowed. (O)		X			Testing shall be conducted IAW OM CTIS setting and TOP 2-2-611, paragraph 4.2 and 5.2 to verify compliance with Section 3 requirement.
PDFOV-8551	4	The JLTV at GVW shall be able to drive off a 18 in (46 cm) vertical step (oriented perpendicular to the path) at 15 mph (24 kph) without any mechanical damage to the vehicle and without exceeding 2.5G measured at the driver seat base.		X			Testing shall be conducted IAW TOP 2-2-611 to verify compliance with Section 3 requirement.
PDFOV-8552	4	The JLTV at GVW shall traverse a 20 degree V-Ditch 25 ft (8 m) wide at an approach angle of 45 degree bias to the centerline of the obstacle without total loss of tractive capability.		X			Testing shall be conducted over the obstacle described in TOP 2-2-611, figure 3 to verify compliance with Section 3 requirement.
PDFOV-8553	4	The JLTV at GVW shall be able to traverse up and down a 6 in (15 cm) step (curb) parallel to the vehicle direction of travel at 15 mph (24 kph).		X			Testing shall be conducted over the obstacle described in section 3 requirement IAW TOP 2-2-611 to verify compliance.
PDFOV-8554	4	The JLTV at GCVW shall traverse staggered 24 in (61 cm) diameter potholes with depths alternating between 6 in (15 cm) and 12 in (30 cm) and 45 degree edge at 10 mph (16 kph).		X			Testing shall be conducted over the obstacle described in section 3 requirement IAW TOP 2-2-611 to verify compliance.
PDFOV-8555	4	The JLTV at GCVW shall traverse a 20 ft (6 m) flight of stairs with a step rise of 6 in (15 cm) and run of 15 in (38 cm) with an average speed of 5 mph (8 kph).		X			Testing shall be conducted over the obstacle described in section 3 requirement IAW TOP 2-2-611 to verify compliance.
PDFOV-8556	4	The JLTV at GCVW shall traverse an urban rubble pile as defined in Annex H with an average speed of 5 mph (8 kph).		X			Testing shall be conducted over the obstacle described in section 3 requirement IAW TOP 2-2-611 Figure 11 to verify compliance.
PDFOV-8348		**3.4.1.1 Speed**					**4.4.1.1**
PDFOV-3511	2	The accelerator control system shall conform to FMVSS 124.		X			Testing shall be conducted IAW DOT-TP-124 to verify compliance with Section 3 requirement.
PDFOV-978		**3.4.1.1.1 Acceleration Dash Speed**					**4.4.1.1.1**
PDFOV-7392		**3.4.1.1.1.1 0-30 mph Acceleration Dash Speed**					**4.4.1.1.1.1**
PDFOV-980	4	The JLTV at GVW shall be capable of accelerating on dry, level hard terrain from 0 to 30 mph (48 kph) within 9.4 seconds. (T)		X			Testing shall be conducted IAW TOP 2-2-602, paragraph 5.1.1, to verify compliance with Section 3 requirement.
PDFOV-7990	5	The JLTV at GVW shall be capable of accelerating on dry, level hard terrain from 0 to 30 mph (48 kph) within 7 seconds. (O)		X			Testing shall be conducted IAW TOP 2-2-602, paragraph 5.1.1, to verify compliance with Section 3 requirement.
PDFOV-7393		**3.4.1.1.1.2 0-50 mph Acceleration Dash Speed**					**4.4.1.1.1.2**
PDFOV-981	4	The JLTV at GVW shall be capable of accelerating on dry, level hard terrain from 0 to 50 mph (81 kph) within 26 seconds.		X			Testing shall be conducted IAW TOP 2-2-602, paragraph 5.1.1, to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-984		**3.4.1.1.2 Forward Speed**					**4.4.1.1.2**
PDFOV-985	2	The JLTV at GVW shall be capable of maintaining a minimum speed of 70 mph (113 kph) in the forward direction on a dry, level, hard surface road.		X			Testing shall be conducted IAW TOP 2-2-602, paragraph 5.2.1, to verify compliance with Section 3 requirement.
PDFOV-986		**3.4.1.1.3 Reverse Speed**					**4.4.1.1.3**
PDFOV-987	4	The JLTV at GVW shall be capable of operating in reverse at a speed of 8 mph (13 kph) on a dry, level, hard surface road.		X			Testing shall be conducted IAW TOP 2-2-602, paragraph 5.2.1, to verify compliance with Section 3 requirement.
PDFOV-988		**3.4.1.1.4 Speed on Grade**					**4.4.1.1.4**
PDFOV-989	2	The JLTV shall be capable of continuously ascending a 5 percent grade at not less than 45 mph (72 kph) at GVW. (T)		X			Testing shall be conducted IAW TOP 2-2-610 using a towed-dynamometer or a chassis-dynamometer to verify compliance with Section 3 requirement.
PDFOV-8074	5	The JLTV shall be capable of continuously ascending a 5 percent grade at 60 mph (97 kph) at GVW. (O)		X			Testing shall be conducted IAW TOP 2-2-610 using a towed-dynamometer or a chassis-dynamometer to verify compliance with Section 3 requirement.
PDFOV-990		**3.4.1.2 Lateral Stability**					**4.4.1.2**
PDFOV-7599	4	The JLTV shall be capable of sustaining 0.5 g lateral acceleration in a steady state cornering maneuver on a paved surface at CW without two-wheel lift . (T)		X			Testing shall be conducted IAW TOP 2-2-609 and SAE procedure J266 to verify compliance with Section 3 requirement. The JLTV will be tested at curb weight configuration plus the weight of the driver and test equipment.
PDFOV-7991	5	The JLTV shall be capable of sustaining 0.6 g lateral acceleration in a steady state cornering maneuver on a paved surface at CW without two-wheel lift. (O)		X			Testing shall be conducted IAW TOP 2-2-609 and SAE procedure J266 to verify compliance with Section 3 requirement. The JLTV will be tested at curb weight configuration plus the weight of the driver and test equipment.
PDFOV-7600	3	The JLTV shall be capable of sustaining 0.5 g lateral acceleration in a steady state cornering maneuver on a paved surface at GVW without two-wheel lift. (T)		X			Testing shall be conducted IAW TOP 2-2-609 and SAE procedure J266 to verify compliance with Section 3 requirement.
PDFOV-7992	5	The JLTV shall be capable of sustaining 0.6 g lateral acceleration in a steady state cornering maneuver on a paved surface at GVW without two-wheel lift. (O)		X			Testing shall be conducted IAW TOP 2-2-609 and SAE procedure J266 to verify compliance with Section 3 requirement.
PDFOV-8557	4	The JLTV at CW and GVW shall exhibit linear range and limit range under steer characteristics during steady state turns, demonstrating an under steer gradient at least 1.5 deg/g at the wheels.		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 2-2-609 and SAE procedure J266 to verify compliance with Section 3 requirement.
PDFOV-8558	4	The JLTV at CW and GVW shall exhibit a roll gradient not to exceed 12 deg/g during steady state turns, as defined in SAE Procedure J266.		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 2-2-609 and SAE procedure J266 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-992		**3.4.1.3 Approach & Departure Angles**					**4.4.1.3**
PDFOV-994	4	The JLTV angle of approach shall not be less than 60 degrees without winch.		X			Testing shall be conducted IAW TOP 2-2-500 paragraph 5.2.1 to verify compliance with Section 3 requirement.
PDFOV-996	4	The JLTV angle of approach shall not be less than 45 degrees with winch.		X			Testing shall be conducted IAW TOP 2-2-500 paragraph 5.2.1 to verify compliance with Section 3 requirement.
PDFOV-998	4	The JLTV angle of departure shall not be less than 45 degrees.		X			Testing shall be conducted IAW TOP 2-2-500 paragraph 5.2.1 to verify compliance with Section 3 requirement.
PDFOV-8351		**3.4.1.4 Reversing**					**4.4.1.4**
PDFOV-8352	5	The JLTV and JLTV-T combination shall be capable of being backed safely from any normal position (such as when in a turn but not from full jackknife) without damage to truck, trailer, or payload, and without necessity for crew dismounting or other preparation.		X			Testing shall be conducted by doing a 360 degree steering lock turn with the JLTV-T attached, and then reversing the combination with the same steering angle to verify compliance with Section 3 requirement.
PDFOV-1001		**3.4.1.5 Brakes**					**4.4.1.5**
PDFOV-7995	4	All components in the JLTV brake system shall meet or exceed all SAE brake standards relevant based on the type of brakes chosen for implementation on the JLTV.	X			X	Contractor shall provide third party certification (certification markings on components are acceptable) that the brake components meet the SAE standards for the type of braking system provided. Brake lines shall be inspected IAW TOP 2-2-508 to determine that they have the proper marking and colors as defined in SAE J2580 for air brakes and SAE J517 for Hydraulic brakes.
PDFOV-1014		**3.4.1.5.1 Brake Configuration**					**4.4.1.5.1**
PDFOV-1015	2	The JLTV brakes shall conform to FMCSR 393.40 through FMCSR 393.42 (b), FMCSR 393.43, and FMCSR 393.45 through FMCSR 393.52, FMCSR 393.11 and FMCSR 393.55.		X			Testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-1002		**3.4.1.5.2 Service Brakes**					**4.4.1.5.2**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1003	2	The JLTV shall meet the requirements of FMVSS 121 for air brakes or FMVSS 105 for hydraulic brakes to include vehicle stopping distances.		X			The service brakes shall be tested at both CW and at GVW as outlined in TOP 2-2-608, section 4.2.3 (brake effectiveness) and to the requirements of FMVSS 121 or FMVSS 105 as applicable, to verify compliance with Section 3 requirement. FMVSS 121 Table II column 1 shall be used for test speed and stopping distance requirements for air brake systems. FMVSS 105 Table II column D shall be used for test speed and stopping distance requirements for hydraulic brake systems. No permanent deformation of any component, other than brake shoes/pads, is allowed. No cracking of drums or heat-related damage beyond paint peeling shall be permitted as a result of this test.
PDFOV-1007	3	The service brakes shall hold the JLTV on a dry hard surface, 60 percent grade pointing either uphill or downhill.		X			Testing shall be conducted IAW TOP 2-2-608, section 4.2.2, and TOP 2-2-610 to verify compliance with Section 3 requirement.
PDFOV-6858	5	The service brakes shall stop the JLTV from a speed of 20 mph (32 kph) in 25 ft (8 m) or less.		X			Testing shall be conducted IAW TOP 2-2-608 to verify compliance with Section 3 requirement.
PDFOV-7601	2	The brake pedal force required shall not exceed that which can be applied by the driver as defined in MIL-STD-1472F section 5.4.4.3.		X			Testing shall be conducted IAW TOP 2-2-608, section 4.2.8 (maximum pedal effort braking), with use of force transducer installed on brake pedal mechanism, to ensure that the maximum brake force limits of 150 lbf (667 N), as indicated in Section 3, are not exceeded.
PDFOV-6916	4	The JLTV at GCVW shall be capable of downhill mountain highway operation of 11 percent grade over a distance of 2 mi (3.2 km) and a full stop at the bottom of the grade.		X			Testing shall be conducted IAW TOP 2-2-608, section 4.3.3 (mountain highway brake systems test), to verify compliance with Section 3 requirement.
PDFOV-3378	5	If engine assisted braking is provided then this system shall have the ability to be turned off when not needed.		X			The engine assisted brake if used shall be tested for the ability to be turned off if not needed
PDFOV-7994	2	If separate methods of actuation are provided for any functions of the JLTV service brake system, actuation of one function shall not cause operation of another function.		X			Testing shall be conducted to determine that actuation of any of the brake system functions (e.g. ABS, ESC, or trailer brake controller) does not cause the operation of any other brake function.
PDFOV-7998	2	The JLTV shall be equipped with air brake quick connect couplers (gladhands) at the front and rear of the vehicle that meet the requirements of SAE J318 and ISO 4009.	X				Inspection shall be conducted IAW TOP 2-2-508, SAE J318 and ISO 4009 to confirm that the gladhands are properly colored, labeled and located to verify compliance with Section 3 requirement.
PDFOV-8000	2	Each air brake reservoir shall be fitted with either a manual or automatic condensate drain valve fitted at the lowest point.	X				Inspection shall be conducted IAW DOT-TP-121V-05, section 10.E.1, to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7999	2	Where the service brake system incorporates a single brake power unit, an audible warning indicator shall accompany the visible warning indicator referenced in Clause 4.1.2 of ADR 35/03.		X			Testing shall be conducted to ensure visible and audible warnings function during occurrence of events indicated in sections 4.2.2, 4.2.3, 4.2.4 of ADR 35/03, to verify compliance with Section 3 requirement.
PDFOV-8001	2	In the case where the master cylinder also contains fluid for use not in the brake system, the Visible Indicator shall only operate when there is a drop in the fluid used exclusively for the brake system.		X			Testing shall be conducted IAW ADR 35/03 4.2.2, Condition B, B.2, to verify compliance with Section 3 requirement.
PDFOV-8002	2	Where the JLTV is equipped to tow a trailer that also uses air brakes, when the pressure in the supply line drops to or below 65 psi (450 kPa), the visible indicator shall operate as specified in Clause 4.2 of ADR 35/03.		X			Testing shall be conducted IAW ADR 35/03 4.2.4, to verify compliance with Section 3 requirement.
PDFOV-8003	2	The visible indicator referenced in Clause 4.2.4 ADR 35/03 shall not indicate a trailer fault when a trailer is not connected and no other defect is present.		X			Testing shall be conducted IAW ADR 35/03 4.2.4.2, to verify compliance with Section 3 requirement.
PDFOV-8012	2	A hydraulic service brake system shall be a split service brake system.	X				Inspection shall be performed IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8013	2	Where the secondary brake system is a spring brake system, it shall comply with Clauses 4.5.6.1 - 4.5.6.3 of ADR 35/03.		X			Testing shall be conducted to confirm conformance with ADR 35/03, section 4.5.6.1 - 4.5.6.3 to verify compliance with Section 3 requirement.
PDFOV-8019	2	The capacity of each reservoir shall not be less than the fluid displacement resulting when all the wheel cylinders move from a new-lining, full retracted position, to a fully-worn, fully applied position.		X			Testing shall be conducted IAW TOP 2-2-500, section 5.1.14k and ADR 35/03, section 4.6.2. - 4.6.2.4 to verify compliance with Section 3 requirement.
PDFOV-8020	2	Any Stored Energy device shall be so protected that failure of the device generating the energy does not result in depletion of the Stored Energy.		X			Testing shall be conducted to confirm with the performance prescribed for the Laden Secondary Brake Test in ADR 35/03, section 7.7 to verify compliance with Section 3 requirement.
PDFOV-8021	2	Where the service brake system incorporates brake power assist units, and where the secondary brake is not applied by the service brake control, the volume of all stored energy devices shall be such that Clauses 4.7.6.1 and 4.7.6.2 of ADR 35/03 are met.		X			Testing shall be conducted to confirm with the performance prescribed for the Laden Secondary Brake Test in ADR 35/03, section 7.7 to verify compliance with Section 3 requirement.
PDFOV-8022	2	An energy generating device producing energy at a negative pressure shall comply with the volume pressure relationship stated in Clause 4.7.6 of ADR 35/03 IAW Clauses 4.7.7.1 and 4.7.7.2 of ADR 35/03.		X			Testing shall be conducted to confirm with the performance prescribed for the Laden Secondary Brake Test in ADR 35/03, section 7.7 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8023	2	Where the energy generating device for any number of brake power units supplies energy to other devices, it shall preferentially charge the brake power units to a level not less than 65 psi (450 kPa).		X			Testing shall include scenario of simultaneous energy demand on the energy generating device. Testing shall confirm that brake power units are preferentially charged to level indicated to verify compliance with Section 3 requirement.
PDFOV-8024	2	All brake power units shall preferentially service the brake system if the energy falls below 65 psi (450 kPa).		X			Testing shall be conducted IAW SAE J1626 to verify compliance with Section 3 requirement.
PDFOV-8016	2	Where the JLTV uses a split service brake system as the secondary brake system, the JLTV shall be so equipped that operation of the secondary brake system causes a control signal proportional to the level of braking to be present in the trailer control line.		X			Testing shall be conducted by the use of pressure transducers, braking application and data capturing devices to verify compliance with Section 3 requirement.
PDFOV-3921	4	The combination of JLTV and JLTV-T service brake systems shall hold the vehicle at GCVW in either direction on a 40 percent grade longitudinal on a dry, hard surface and free from loose material. Systems or components outside the service brake system cannot be used to augment the braking force during this test.		X			Testing shall be conducted IAW TOP 2-2-608, section 4.2.2 and TOP 2-2-610 to verify compliance with Section 3 requirement.
PDFOV-8015	2	Venting of the trailer supply line (if it occurs), shall not commence until the energy in the supply line falls below 51 psi (350 kPa), or if the energy in the supply line is reducing at a rate of not less than 100 kPa/sec until the energy in the supply line falls below 61 psi (420 kPa).		X			Testing shall be conducted by the use of pressure transducers, braking application and data capturing devices to verify compliance with Section 3 requirement.
PDFOV-7996	2	The traction control system, if provided, may use parts of the service brake system providing failure of the traction control system unique parts shall not interfere with normal braking.		X			Function of the traction control shall be monitored during the RAM testing. Failure of traction control components which are not shared with the service brake system that cause the service brake function to be degraded or fail shall be deemed a failure of this requirement.
PDFOV-1008		**3.4.1.5.3 Parking Brakes**					**4.4.1.5.3**
PDFOV-3924	4	The JLTV parking brake shall be capable of holding the JLTV at GVW in either direction on a 40 percent grade using the JLTV parking brake with the engine off on a dry, hard surface and free from loose material. Systems or components outside the parking brake system cannot be used to augment the braking force during this test.		X			Testing shall be conducted IAW TOP 2-2-610, sec. 4.1.1, at grade specified in section 3, to verify compliance with Section 3 requirement.
PDFOV-8005	2	At least two (2) separate and distinct movements shall be required to disengage the parking brake.		X			Testing shall be conducted IAW TOP 2-2-608, Appendix D, to ensure condition of ADR 35/03, 4.3.2, is satisfied.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8006	2	The parking brake system shall compensate for any increased movement of its components arising from wear.		X			Testing shall be conducted IAW 2-2-506, sec. 5.1.3, to ensure sec. 3 requirements comply with ADR 35/03, sec. 4.3.3.
PDFOV-6819	2	The JLTV parking brake shall have a manual release in the event of an electrical, hydraulic, or pneumatic system failure. "Caging" of air brake chambers within 15 minutes is acceptable to meet this requirement.		X			Testing shall be conducted IAW TOP 2-2-608 to verify compliance with Section 3 requirement.
PDFOV-8007	2	The JLTV parking brake system shall cause the pressure in the supply line to drop below 5 psi (35 kPa).		X			Testing shall be conducted to confirm conformance with ADR 35/03, section 4.3.5 to verify compliance with Section 3 requirement.
PDFOV-8008	2	The pressure in the supply line shall be restored to normal when the parking brake system is released.		X			Testing shall be conducted IAW TOP 2-2-608 and in conformance to ADR 35/03, section 4.3.6 to verify compliance with Section 3 requirement.
PDFOV-8010	2	If the parking brake indicator lamp is separate from all other lamps, at least the words 'PARK BRAKE' or 'PARKING BRAKE' or the symbol for 'PARKING BRAKE' shall be displayed as specified in ISO 2575-20.	X				Inspection shall be conducted IAW TOP 2-2-505 and in conformance with ADR 35/03, section 4.4.4 to verify compliance with Section 3 requirement.
PDFOV-8017	5	An additional control shall be fitted for the independent application of a JLTV-T parking brake system which will cause the pressure in the supply line to drop below 5 psi (35 kPa) IAW Clauses 4.5.10 of ADR 35/03.		X			Testing shall be conducted IAW TOP 2-2-608 and in conformance with ADR 35/03, section 4.5.10 to verify compliance with Section 3 requirement.
PDFOV-8018	5	The control described in Clause 4.5.10 of ADR 35/03 shall be marked with the words 'TRAILER EMERGENCY BRAKES' in letters not less than 5mm high.	X				Inspection shall be conducted IAW TOP 2-2-505 and in conformance with ADR 35/03, section 4.5.10.1 to verify compliance with Section 3 requirement.
PDFOV-1009	4	The combination of JLTV and JLTV-T parking brake system shall be capable of holding the vehicle at GCVW in either direction on a 40 percent grade with the engine off on a dry, hard surface and free from loose material. Systems or components outside the parking brake system cannot be used to augment the braking force during this test.		X			Testing shall be conducted IAW TOP 2-2-610, section 4.1.1, at grade specified in section 3, to verify compliance with Section 3 requirement.
PDFOV-1034		**3.4.1.5.4 Antilock Braking System**					**4.4.1.5.4**
PDFOV-8025	2	An Antilock Braking System (ABS) shall be provided where speeds exceeding 10 mph (15 kph), the wheels will not lock up when a control force of 155 lbf (685 N) is applied on the brake pedal from an initial speed of 25 mph (40 kph) and 50 mph (80 kph).		X			Testing shall be conducted IAW ADR 35/03, Appendix 1 to verify compliance with Section 3 requirement.
PDFOV-8027	2	The warning device check light function shall turn off after not less than two (2) seconds or at the latest when the JLTV reaches a speed of 10 mph (15 kph).		X			Testing shall be conducted IAW ADR 35/03, Appendix 1, to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1043	4	The ABS Electronic Control Unit (ECU) shall include wiring provisions (via existing 12 pin/7 pin cables -STANAG 4007/SAE J560 connectors) to transmit the trailer ABS malfunction signal per FMVSS 121 requirements to the JLTV cab using Power Line Carrier (PLC) (SAE J2497) communication technology.		X			Testing shall be conducted IAW DOT-TP-121V-05, section 10.D.2.C, to verify compliance with Section 3 requirement.
PDFOV-8231		**3.4.1.6 Terrain**					**4.4.1.6**
PDFOV-8239	2	1. The JLTV at GVW shall meet the NATO Reference Mobility Model (NRMM) Cross Country (XC) v50 Prediction Summary with an average speed of 17 mph (27 kph) at the various geographical locations and soil conditions shown in Table 1. The XC v50 Prediction Summary is the average of the v50 speed predictions for all geographical location and soil conditions identified in Table 1. (T)			X		The Analysis shall be conducted using NRMM version 2.7.3c using contractor delivered information from the Vehicle Mobility and Dynamics data sheets.
PDFOV-9339	5	The JLTV at GVW shall meet the NRMM XC Prediction Summary with an average speed of 21 mph (34 kph) at the various geographical locations and soil conditions shown in Table 1 . The XC v50 Prediction Summary is the average of the v50 speed predictions for all geographical location and soil conditions identified in Table 1. (O)			X		The Analysis shall be conducted using NRMM version 2.7.3c using contractor delivered information from the Vehicle Mobility and Dynamics data sheets.
PDFOV-9340	2	The JLTV at GVW shall meet the NRMM %XC No Go Trafficability Prediction Summary with an average %XC No Go of 24 percent at the various geographical locations and soil conditions shown in Table 1. The Trafficability Prediction Summary is the average of the % No Go predictions for all geographical location and soil conditions identified in Table 1. (T)			X		The Analysis shall be conducted using NRMM version 2.7.3c using contractor delivered information from the Vehicle Mobility and Dynamics data sheets.
PDFOV-9341	5	The JLTV at GVW shall meet the NRMM %XC No Go Trafficability Prediction Summary with an average %XC No Go of 18 percent at the various geographical locations and soil conditions shown in Table 1. The Trafficability Prediction Summary is the average of the % No Go predictions for all geographical location and soil conditions identified in Table 1. (O)			X		The Analysis shall be conducted using NRMM version 2.7.3c using contractor delivered information from the Vehicle Mobility and Dynamics data sheets.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8240		**Table 1 Mobility Rating** All values are Thresholds (T) unless indicated by Objective (O) NRMM Prediction Summary: Cross Country v50 (mph) 17 (T)/ 21 (O); Trafficability (%XC No Go) 24 (T)/ 18 (O) Geographical Location / Soil Condition / NRMM Attribute / Value Lauterbach, Germany (Map Sheet 5322) – Dry Normal: Cross Country v50 (mph) ≥ 20; Trafficability (%XC No Go) ≤ 14% Lauterbach, Germany (Map Sheet 5322) – Wet Normal: Cross Country v50 (mph) ≥ 17; Trafficability (%XC No Go) ≤ 25% Lauterbach, Germany (Map Sheet 5322) – Snow: Cross Country v50 (mph) ≥ 16; Trafficability (%XC No Go) ≤ 34% Al Mafraq, Jordan (Map Sheet 3254 IV) – Dry Normal: Cross Country v50 (mph) ≥ 15; Trafficability (%XC No Go) ≤ 10% Al Mafraq, Jordan (Map Sheet 3254 IV) – Sand: Cross Country v50 (mph) ≥ 11; Trafficability (%XC No Go) ≤ 21% Cheorweon, Korea (Map Sheet 3222 III) – Dry Normal: Cross Country v50 (mph) ≥ 12; Trafficability (%XC No Go) ≤ 38% Cheorweon, Korea (Map Sheet 3222 III) – Wet Normal: Cross Country v50 (mph) ≥ 11; Trafficability (%XC No Go) ≤ 40%					This is a table and not verifiable separately.
PDFOV-1051		**3.4.1.7 Ride Quality (Human Exposure)**					**4.4.1.7**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1061		**3.4.1.7.1 Ride Limiting Speeds**					**4.4.1.7.1**
PDFOV-7348	2	The JLTV at CW, GVW and GCVW shall attain no more than 6W average vertical absorbed power, as measured at the bottom of all crew seats of the JLTV, while negotiating 1 in (2.5 cm) Root Mean Square (RMS) ride courses at 30 mph (48 kph) speeds, with the tires at cross-country tire pressure. (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment), GVW and GCVW IAW TOP 1-1-014. Testing shall be conducted at 30 mph (48 kph) with tires at cross-country tire pressure to verify compliance with Section 3 requirement.
PDFOV-8028	5	The JLTV at CW, GVW and GCVW shall attain no more than 6W average vertical absorbed power, as measured at the bottom of all crew seats of the JLTV, while negotiating 1 in (2.5 cm) RMS ride courses at 35 mph (56 kph) speeds, with the tires at cross-country tire pressure. (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment), GVW and GCVW IAW TOP 1-1-014. Testing shall be conducted at 35 mph (56 kph) with tires at cross-country tire pressure to verify compliance with Section 3 requirement.
PDFOV-7349	2	The JLTV at CW, GVW and GCVW shall attain no more than 6W average vertical absorbed power, as measured at the bottom of all crew seats of the JLTV, while negotiating 1.5 in (3.8 cm) RMS ride courses at 20 mph (32 kph) speeds, with the tires at cross-country tire pressure. (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment), GVW and GCVW IAW TOP 1-1-014. Testing shall be conducted at 20 mph (32 kph) with tires at cross-country tire pressure to verify compliance with Section 3 requirement.
PDFOV-8029	5	The JLTV at CW, GVW and GCVW shall attain no more than 6W average vertical absorbed power, as measured at the bottom of all crew seats of the JLTV, while negotiating 1.5 in (3.8 cm) RMS ride courses at 23 mph (37 kph) speeds, with the tires at cross-country tire pressure. (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment), GVW and GCVW IAW TOP 1-1-014. Testing shall be conducted at 23 mph (37 kph) with tires at cross-country tire pressure to verify compliance with Section 3 requirement.
PDFOV-7350	2	The JLTV at CW, GVW and GCVW shall attain no more than 6W average vertical absorbed power, as measured at the bottom of all crew seats of the JLTV, while negotiating 2 in (5.1 cm) RMS ride courses at 15 mph (24 kph) speeds, with the tires at cross-country tire pressure. (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment), GVW and GCVW IAW TOP 1-1-014. Testing shall be conducted at 15 mph (24 kph) with tires at cross-country tire pressure to verify compliance with Section 3 requirement.
PDFOV-8030	5	The JLTV at CW, GVW and GCVW shall attain no more than 6W average vertical absorbed power, as measured at the bottom of all crew seats of the JLTV, while negotiating 2 in (5.1 cm) RMS ride courses at 17 mph (27 kph) speeds, with the tires at cross-country tire pressure. (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment), GVW and GCVW IAW TOP 1-1-014. Testing shall be conducted at 17 mph (27 kph) with tires at cross-country tire pressure to verify compliance with Section 3 requirement.
PDFOV-7351	2	The JLTV at CW, GVW and GCVW shall attain no more than 6W average vertical absorbed power, as measured at the bottom of all crew seats of the JLTV, while negotiating 2.5 in (6.4 cm) RMS ride courses at 13 mph (28 kph) speeds, with the tires at cross-country tire pressure. (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment), GVW and GCVW IAW TOP 1-1-014. Testing shall be conducted at 13 mph (28 kph) with tires at cross-country tire pressure to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8031	5	The JLTV at CW, GVW and GCVW shall attain no more than 6W average vertical absorbed power, as measured at the bottom of all crew seats of the JLTV, while negotiating 2.5 in (6.4 cm) RMS ride courses at 15 mph (24 kph) speeds, with the tires at cross-country tire pressure. (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment), GVW and GCVW IAW TOP 1-1-014. Testing shall be conducted at 15 mph (24 kph)with tires at cross-country tire pressure to verify compliance with Section 3 requirement.
PDFOV-1081		**3.4.1.7.2 Vertical Acceleration, Vibration Dose Value and Suspension Displacement**					**4.4.1.7.2**
PDFOV-8559	3	The JLTV at CW and GVW shall sustain no more than 2.5g peak vertical acceleration, as measured at each crew seat base location while negotiating a non-deformable, half-round 4 in (10 cm) obstacle at the rated speed of 50 mph (81 kph). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 1-1-014, section 2.4, 2.11 and 4.3 at 50 mph (81 kph) to verify compliance with Section 3 requirement. Testing shall have the tires at highway tire pressure.
PDFOV-8032	5	The JLTV at CW and GVW shall sustain no more than 2.5g peak vertical acceleration, as measured at each crew seat base location while negotiating a non-deformable, half-round 4 in (10 cm) obstacle at the rated speed of 65 mph (105 kph). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 1-1-014, section 2.4, 2.11 and 4.3 at 65 mph (105 kph) to verify compliance with Section 3 requirement. Testing shall have the tires at highway tire pressure.
PDFOV-7354	3	The JLTV at CW and GVW shall sustain no more than 2.5g peak vertical acceleration, as measured at each crew seat base location while negotiating a non-deformable, half-round 6 in (15 cm) obstacle at the rated speed of 16 mph (26 kph). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 1-1-014, section 2.4, 2.11 and 4.3 at 16 mph (26 kph) to verify compliance with Section 3 requirement. Testing shall have the tires at cross-country tire pressure.
PDFOV-8033	5	The JLTV at CW and GVW shall sustain no more than 2.5g peak vertical acceleration, as measured at each crew seat base location while negotiating a non-deformable, half-round 6 in (15 cm) obstacle at the rated speed of 18 mph (29 kph). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 1-1-014, section 2.4, 2.11 and 4.3 at 18 mph (29 kph) to verify compliance with Section 3 requirement. Testing shall the tires at cross-country tire pressure.
PDFOV-7355	3	The JLTV at CW and GVW shall sustain no more than 2.5g peak vertical acceleration, as measured at each crew seat base location while negotiating a non-deformable, half-round 8 in (20 cm) obstacle at the rated speed of 15 mph (24 kph). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 1-1-014, section 2.4, 2.11 and 4.3 at 15 mph (24 kph) to verify compliance with Section 3 requirement. Testing shall have the tires at cross-country tire pressure.
PDFOV-8034	5	The JLTV at CW and GVW shall sustain no more than 2.5g peak vertical acceleration, as measured at each crew seat base location while negotiating a non-deformable, half-round 8 in (20 cm) obstacle at the rated speed of 17 mph (27 kph). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 1-1-014, section 2.4, 2.11 and 4.3 at 17 mph (27 kph) to verify compliance with Section 3 requirement. Testing shall have the tires at cross-country tire pressure.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7356	3	The JLTV at CW and GVW shall sustain no more than 2.5g peak vertical acceleration, as measured at each crew seat base location while negotiating a non-deformable, half-round 10 in (25 cm) obstacle at the rated speed of 5 mph (8 kph). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 1-1-014, section 2.4, 2.11 and 4.3 at 5 mph (8 kph) to verify compliance with Section 3 requirement. Testing shall have the tires at cross-country tire pressure.
PDFOV-8035	5	The JLTV at CW and GVW shall sustain no more than 2.5g peak vertical acceleration, as measured at each crew seat base location while negotiating a non-deformable, half-round 10 in (25 cm) obstacle at the rated speed of 6 mph (10 kph). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW IAW TOP 1-1-014, section 2.4, 2.11 and 4.3 at 6 mph (10 kph) to verify compliance with Section 3 requirement. Testing shall have the tires at cross-country tire pressure.
PDFOV-8560	5	The JLTV at CW and GVW shall have a Vibration Dose Value (VDV) of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, half-round 4 in (10 cm) obstacle five (5) times at speeds up to and including 50 mph (81 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8561	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, half-round 4 in (10 cm) obstacle five (5) times at speeds up to and including 65 mph (105 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8562	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, half-round 6 in (15 cm) obstacle five (5) times at speeds up to and including 16 mph (26 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8563	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, half-round 6 in (15 cm) obstacle five (5) times at speeds up to and including 18 mph (29 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8564	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, half-round 8 in (20 cm) obstacle five (5) times at speeds up to and including 15 mph (24 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8565	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, half-round 8 in (20 cm) obstacle five (5) times at speeds up to and including 17 mph (27 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8566	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, half-round 10 in (25 cm) obstacle five (5) times at speeds up to and including 5 mph (8 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8567	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, half-round 10 in (25 cm) obstacle five (5) times at speeds up to and including 6 mph (10 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8568	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, pot hole 4 in (10 cm) obstacle five (5) times at speeds up to and including 20 mph (32 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8569	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, pot hole 4 in (10 cm) obstacle five (5) times at speeds up to and including 30 mph (48 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8570	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, pot hole 6 in (15 cm) obstacle five (5) times at speeds up to and including 16 mph (26 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8571	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, pot hole 6 in (15 cm) obstacle five (5) times at speeds up to and including 18 mph (29 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8572	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, pot hole 8 in (20 cm) obstacle five (5) times at speeds up to and including 15 mph (24 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-8573	5	The JLTV at CW and GVW shall have a VDV of no more than 8.5 m/s^1.75 cumulative, while negotiating a non-deformable, pot hole 8 in (20 cm) obstacle five (5) times at speeds up to and including 17 mph (27 kph). (*VDV shall be calculated according to ISO 2631-1 1997). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) and GVW. Test methodology shall follow paragraph 3 of TOP 1-1-014 (ISO 2631-1 Technique), and data analysis shall be conducted IAW TOP 1-1-014 paragraph 4.1 (ISO 2631-1 Technique). Testing shall be conducted over road profile indicated in Section 3 at maximum speed indicated in Section 3. Test results shall be evaluated versus the Section 3 requirement to determine pass/fail performance. This test will be done concurrently with the half-round test.
PDFOV-1096		**3.4.1.7.3 Vehicular Vibration**					**4.4.1.7.3**
PDFOV-1097	4	The JLTV shall be designed to control the transmission of whole-body vibration to levels that permit safe and effective operation per MIL-STD-1472F section 5.8.4.		X			Testing shall be conducted IAW with TOP 1-1-014 and International Standards Organization (ISO) 2631, to verify compliance with Section 3 requirement. Vehicle shall demonstrate weighted average acceleration of less than 1.15 m/s^2 for each of the 9 terrain modes detailed in Annex H Table 1 (Terrain Values) across a range of speeds ranging from 5 mph to the max speed defined by the contractor for each of the respective terrains.
PDFOV-1108		**3.4.1.8 Grade and Slope Operations**					**4.4.1.8**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3927		Grade and slope operations detailed below will be tested at both 100 percent and 10 percent nominal fuel levels.					This is a definition and not verifiable separately.
PDFOV-1109		**3.4.1.8.1 Grade Operations**					**4.4.1.8.1**
PDFOV-1111	4	The JLTV at GCVW shall be capable of ascending and descending on dry, hard-surfaced grades up to and including 40 percent grade. (T)		X			Testing shall be conducted IAW TOP 2-2-610 with both 100 percent and 10 percent fuel levels to verify compliance with Section 3 requirement.
PDFOV-8434	5	The JLTV at GCVW shall be capable of ascending and descending on dry, hard-surfaced grades up to and including 60 percent grade. (O)		X			Testing shall be conducted IAW TOP 2-2-610 with both 100 percent and 10 percent fuel levels to verify compliance with Section 3 requirement.
PDFOV-8435	3	The JLTV at GVW shall be capable of ascending and descending on dry, hard-surfaced grades up to and including 60 percent grade.		X			Testing shall be conducted IAW TOP 2-2-610 with both 100 percent and 10 percent fuel levels to verify compliance with Section 3 requirement.
PDFOV-8075	4	The JLTV at GCVW shall be capable of starting and stopping on dry, hard-surfaced grades up to and including 40 percent grade. (T)		X			Testing shall be conducted IAW TOP 2-2-610 with both 100 percent and 10 percent fuel levels to verify compliance with Section 3 requirement.
PDFOV-8436	5	The JLTV at GCVW shall be capable of starting and stopping on dry, hard-surfaced grades up to and including 60 percent grade. (O)		X			Testing shall be conducted IAW TOP 2-2-610 with both 100 percent and 10 percent fuel levels to verify compliance with Section 3 requirement.
PDFOV-8437	3	The JLTV at GVW shall be capable of starting and stopping on dry, hard-surfaced grades up to and including 60 percent grade.		X			Testing shall be conducted IAW TOP 2-2-610 with both 100 percent and 10 percent fuel levels to verify compliance with Section 3 requirement.
PDFOV-8439	3	The JLTV engine at GVW shall be capable of being turned off and restarted to assure that there is no loss of fluids or other malfunction while parked on a grade facing upwards or downwards up to and including 60 percent grade.		X			Testing shall be conducted IAW TOP 2-2-610 with both 100 percent and 10 percent fuel levels to verify compliance with Section 3 requirement.
PDFOV-1118		**3.4.1.8.2 Slope Operations**					**4.4.1.8.2**
PDFOV-1119	3	The JLTV shall be capable of laterally traversing, in forward and reverse at GVW, slopes up to and including 40 percent slope with no degradation in driver control. Slope operation is performed with either side of the vehicle facing up slope.		X			Testing shall be conducted IAW TOP 2-2-610, paragraphs 4.2 and 5.2 to verify compliance with Section 3 requirement.
PDFOV-8725	4	The JLTV shall be capable of laterally traversing, in forward at GCVW, slopes up to and including 40 percent slope with no degradation in driver control. Slope operation is performed with either side of the vehicle facing up slope.		X			Testing shall be conducted IAW TOP 2-2-610, paragraphs 4.2 and 5.2 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8726	3	The JLTV engine at GVW shall be capable of being turned off and restarted to assure that there is no loss of fluids or other malfunction while parked on a slope with either side of the vehicle facing up, up to and including 40 percent slopes.		X			Testing shall be conducted IAW TOP 2-2-610, paragraphs 4.2 and 5.2 to verify compliance with Section 3 requirement.
PDFOV-1122		**3.4.1.9 Tires**					**4.4.1.9**
PDFOV-1124	2	The JLTV rims and tires shall conform to FMVSS 119 and FMVSS 120 for the GVWR and maximum speed of the vehicle.				X	Certification shall be provided that indicates compliance to FMVSS 119 and FMVSS 120, to verify Section 3 requirement. Presence of markings required from FMVSS 119 S6.5 and FMVSS 120 S5.2, including "DOT" letters, that indicate compliance with FMVSS 119 and FMVSS 120, shall satisfy certification requirements.
PDFOV-1126	4	The JLTV tires shall be a tubeless radial design with hub piloted wheels.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7602	4	Wheel beadlock shall be provided.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7056	4	The JLTV shall not use any wheel rim assembly that contains a split style locking ring or any other device that has a single point of failure. The JLTV wheel assembly cannot rely on tire air pressure to maintain the integrity of the assembly. The JLTV tire can be safely mounted, inflated, deflated, and dismounted without the use of a safety cage or other restraining device.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-1128	2	The JLTV tire and rim ratings shall conform to The Tire and Rim Association, Inc. Year Book or the European Tyre and Rim Technical Organisation Standards Manual for the GVWR and maximum speed of the vehicle.				X	Certification shall be provided to verify compliance with Section 3 requirement.
PDFOV-1130	3	The JLTV and JLTV-T shall have identical wheel and tire assemblies.	X				Inspection shall be conducted IAW TOP 2-2-505 and the Operators Manual (OM) to verify compliance with Section 3 requirement.
PDFOV-1145		**3.4.1.9.1 CTIS**					**4.4.1.9.1**
PDFOV-8440	4	The Central Tire Inflation System (CTIS) setting shall be independently selectable by the driver.		X			Testing shall be conducted in conformance with MIL-STD-1472F section 5.4 (control orientation and placement) to verify compliance with Section 3 requirement.
PDFOV-1151	4	The CTIS shall allow the driver to adjust all JLTV tires (not including JLTV-T tires) to any one (1) of four (4) preset tire pressures (highway, cross country, mud/snow/sand, and emergency) independently of other vehicle settings. (T)		X			Testing shall be conducted by physically adjusting CTIS settings through four indicated settings, and confirming via manual tire pressure measurements to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8046	5	The CTIS shall allow the driver to adjust all JLTV and JLTV-T tires to any one (1) of four (4) preset tire pressures (highway, cross country, mud/snow/sand, and emergency) independently of other vehicle settings. (O)		X			Testing shall be conducted by physically adjusting CTIS settings through four indicated settings, and confirming via manual tire pressure measurements to verify compliance with Section 3 requirement.
PDFOV-1155	4	The CTIS shall provide for the automatic isolation of any or all tires from the CTIS in the event of CTIS or tire failure for any reason.		X			Testing shall be conducted by the CTIS being disabled at the applicable location dependent on system design, at each wheel, and the remaining tires shall be monitored for proper tire pressure, to verify compliance with Section 3 requirement.
PDFOV-8441	2	The CTIS shall provide a warning to the driver when vehicle tires have been isolated by the CTIS.		X			Testing shall duplicate this condition, and verify that such condition is communicated to driver to verify compliance with section 3 requirement.
PDFOV-1157	4	The JLTV wheel/tire assembly shall be equipped with a valve stem for manual inflation and deflation of the tire, and be accessible without the removal of other items.		X			Testing shall be conducted by inflating and deflating using standard airline connection to verify compliance with Section 3 requirement.
PDFOV-3977		**3.4.1.9.1.1 Tire Pressure Control System**					**4.4.1.9.1.1**
PDFOV-1166	4	With the CTIS in operation, tire pressure shall be checked and adjusted at intervals necessary to assure that no more than +/-3 psi (20.7 kPa) variation exists between the selected pressure and actual pressure except during the inflation/deflation operation caused by the selection of a new tire pressure or a catastrophic tire failure.		X			Testing shall be conducted by inflating the CTIS to each setting and each wheel shall be checked with an air pressure gage. A greater than 3 psi variation between the selected pressure and actual pressure is cause for rejection, to verify compliance with Section 3 requirement.
PDFOV-1163	4	The JLTV shall be equipped with a visual indicator to warn the driver of excessive speed-at-pressure conditions until the CTIS has adjusted each tire to the appropriate pressure.		X			Testing shall be conducted by safely duplicating the condition indicated in Section 3, and confirming presence of visual indicator, to verify compliance with Section 3 requirement.
PDFOV-1169		**3.4.1.9.1.2 Time to Inflation/Deflation**					**4.4.1.9.1.2**
PDFOV-1170		**3.4.1.9.1.2.1 Deflation**					**4.4.1.9.1.2.1**
PDFOV-7358	5	The CTIS shall be capable of deflating all JLTV tires (not including JLTV-T tires) at the same time from highway to cross-country within two (2) minutes. (T)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to deflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-8047	5	The CTIS shall be capable of deflating all JLTV and JLTV-T tires at the same time from highway to cross-country within two (2) minutes. (O)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to deflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7359	5	The CTIS shall be capable of deflating all JLTV tires (not including JLTV-T tires) at the same time from cross-country to mud/snow/sand within two (2) minutes. (T)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to deflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-8048	5	The CTIS shall be capable of deflating all JLTV and JLTV-T tires at the same time from cross-country to mud/snow/sand within two (2) minutes. (O)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to deflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-7360	5	The CTIS shall be capable of deflating all JLTV tires (not including JLTV-T tires) at the same time from mud/snow/sand to emergency within two (2) minutes. (T)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to deflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-8049	5	The CTIS shall be capable of deflating all JLTV and JLTV-T tires at the same time from mud/snow/sand to emergency within two (2) minutes. (O)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to deflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-1190		**3.4.1.9.1.2.2 Inflation**					**4.4.1.9.1.2.2**
PDFOV-7362	5	The CTIS shall be capable of inflating all JLTV tires (not including JLTV-T tires) at the same time from cross-country to highway within six (6) minutes. (T)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to inflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-8050	5	The CTIS shall be capable of inflating all JLTV and JLTV-T tires at the same time from cross-country to highway within six (6) minutes. (O)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to inflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-7363	5	The CTIS shall be capable of inflating all JLTV tires (not including JLTV-T tires) at the same time from mud/snow/sand to cross-country within three (3) minutes. (T)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to inflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8051	5	The CTIS shall be capable of inflating all JLTV and JLTV-T tires at the same time from mud/snow/sand to cross-country within three (3) minutes. (O)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to inflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-7364	5	The CTIS shall be capable of inflating all JLTV tires (not including JLTV-T tires) at the same time from emergency to mud/snow/sand within two (2) minutes. (T)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to inflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-8052	5	The CTIS shall be capable of inflating all JLTV and JLTV-T tires at the same time from emergency to mud/snow/sand within two (2) minutes. (O)		X			The CTIS shall be tested by using wireless pressure transducers and changing CTIS setting to verify compliance with Section 3 requirement. The time to inflate for each of the sequential tire pressure settings shall be recorded at varying engine and vehicle speeds.
PDFOV-1214		**3.4.1.10 Turning Radius, Curb to Curb**					**4.4.1.10**
PDFOV-8242	3	The turning radius of the JLTV at GCVW shall not exceed 27 ft (8.2 m) curb to curb in both the right and left direction. (T)		X			Testing shall be conducted IAW TOP 2-2-609 to verify compliance to the Section 3 requirement.
PDFOV-8243	5	The turning radius of the JLTV at GCVW shall not exceed 25 ft (7.6 m) curb to curb in both the right and left direction. (O)		X			Testing shall be conducted IAW TOP 2-2-609 to verify compliance to the Section 3 requirement.
PDFOV-1219		**3.4.1.10.1 Steerable/Lockable Rear Axle**					**4.4.1.10.1**
PDFOV-8442	4	If equipped with steerable rear wheels and the rear steer system fails, the rear wheels shall automatically assume a locked neutral steer position during forward movement of the vehicle.		X			With the vehicle parked on pavement and the rear wheels at maximum steer angle the rear steer control will be defeated and a drive-off maneuver will be performed followed by a figure eight maneuver. The test will be repeated with the rear wheels at the opposite maximum steer angle to verify compliance with Section 3 requirement. Completion of the above maneuvers in a controllable fashion shall demonstrate pass/fail criteria.
PDFOV-1216		**3.4.1.11 Lane Changing**					**4.4.1.11**
PDFOV-1217	3	The JLTV at GVW shall be capable of making a NATO lane change IAW AVTP 03-160W at speeds up to 45 mph (72 kph). (T)		X			Testing shall be conducted IAW TOP 2-2-002, Appendix E, and AVTP 03-160W, section 4.2, to verify compliance with Section 3 requirement.
PDFOV-8053	5	The JLTV at GVW shall be capable of making a NATO lane change IAW AVTP 03-160W at speeds up to 65 mph (105 kph). (O)		X			Testing shall be conducted IAW TOP 2-2-002, Appendix E, and AVTP 03-160W, section 4.2, to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8054	4	The JLTV at CW shall be capable of making a NATO lane change IAW AVTP 03-160W at speeds up to 45 mph (72 kph). (T)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) IAW TOP 2-2-002, Appendix E, and AVTP 03-160W, section 4.2, to verify compliance with Section 3 requirement.
PDFOV-8055	5	The JLTV at CW shall be capable of making a NATO lane change IAW AVTP 03-160W at speeds up to 65 mph (105 kph). (O)		X			Testing shall be conducted at CW (plus the weight of the driver and test equipment) IAW TOP 2-2-002, Appendix E, and AVTP 03-160W, section 4.2, to verify compliance with Section 3 requirement.
PDFOV-3917	3	The JLTV at GCVW shall be capable of making a NATO lane change IAW AVTP 03-160W at speeds up to 40 mph (64 kph). (T)		X			Testing shall be conducted IAW TOP 2-2-002, Appendix E, and AVTP 03-160W, section 4.2, to verify compliance with Section 3 requirement.
PDFOV-8056	5	The JLTV at GCVW shall be capable of making a NATO lane change IAW AVTP 03-160W at speeds up to 55 mph (89 kph). (O)		X			Testing shall be conducted IAW TOP 2-2-002, Appendix E, and AVTP 03-160W, section 4.2, to verify compliance with Section 3 requirement.
PDFOV-1262		**3.4.1.12 Operational Range**					**4.4.1.12**
PDFOV-7365	2	The JLTV shall be capable of traveling 300 mi (483 km) at GVW on flat, paved road at 35 mph (56 kph) on a single tank of fuel. (T)		X			Testing shall be conducted IAW TOP 2-2-603, paragraphs sections 2,3,4, paragraphs 5.1, 5.1.1, 5.1.1.1, 5.1.1.2, 5.1.4, 5.1.4.1, 5.1.4.2,6.1 and 6.3 to verify compliance with Section 3 requirement.
PDFOV-8057	5	The JLTV shall be capable of traveling 300 mi (483 km) at GCVW for the Operational Terrain as detailed in Annex H on a single tank of fuel. (O)		X			Testing shall be conducted IAW TOP 2-2-603, paragraphs section 4, paragraphs 2,2, 5.3, 6.2 and 6.3, over the terrain profile identified in Annex P to verify compliance with Section 3 requirement.
PDFOV-1272		**3.4.1.13 Fording**					**4.4.1.13**
PDFOV-8059	3	The JLTV at GVW shall ford a 60 in (152 cm) salt water obstacle (plus wake) with fording kit, in forward and reverse, while maintaining contact with the ground.		X			Testing shall be conducted IAW TOP 2-2-612, paragraphs 4.1, and 5.2, and OM. Salt water bath salinity shall be prepared IAW: The salt used shall be sodium chloride containing, on a dry basis, not more than 0.1 percent of sodium Iodide and not more than 0.2 percent of total impurities. The solution shall be prepared by dissolving 5 parts by weight of salt in 95 parts by weight of distilled water or other water containing not more than 200 parts per million of total solids. The solution shall be kept free of sediment of filtration or decantation. After fording operations, water contamination of engine, brake fluid, transmission, transfer transmission, power steering pump, bearing lubricants, fuel tank(s) and all differentials shall not exceed two (2)% by volume.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1273	3	The JLTV at GVW shall ford a 30 in (76 cm) salt water obstacle (plus wake) without fording kit, in forward and reverse, while maintaining contact with the ground. (T)		X			Testing shall be conducted IAW TOP 2-2-612, paragraphs 4.1, and 5.2, and OM. Salt water bath salinity shall be prepared IAW: The salt used shall be sodium chloride containing, on a dry basis, not more than 0.1 percent of sodium Iodide and not more than 0.2 percent of total impurities. The solution shall be prepared by dissolving 5 parts by weight of salt in 95 parts by weight of distilled water or other water containing not more than 200 parts per million of total solids. The solution shall be kept free of sediment of filtration or decantation. After fording operations, water contamination of engine, brake fluid, transmission, transfer transmission, power steering pump, bearing lubricants, fuel tank(s) and all differentials shall not exceed two (2)% by volume.
PDFOV-8060	5	The JLTV at GVW shall ford a 60 in (152 cm) salt water obstacle (plus wake) without fording kit, in forward and reverse, while maintaining contact with the ground. (O)		X			Testing shall be conducted IAW TOP 2-2-612, paragraphs 4.1, and 5.2, and OM. Salt water bath salinity shall be prepared IAW: The salt used shall be sodium chloride containing, on a dry basis, not more than 0.1 percent of sodium Iodide and not more than 0.2 percent of total impurities. The solution shall be prepared by dissolving 5 parts by weight of salt in 95 parts by weight of distilled water or other water containing not more than 200 parts per million of total solids. The solution shall be kept free of sediment of filtration or decantation. After fording operations, water contamination of engine, brake fluid, transmission, transfer transmission, power steering pump, bearing lubricants, fuel tank(s) and all differentials shall not exceed two (2)% by volume.
PDFOV-8444	4	All JLTV actions required for fording shall occur within one (1) minute when the fording mode is selected by the driver (at a minimum vent closures, and cooling fan shut off) and other required adjustments (suspension height adjustment and engine control logic), using a switch labeled "Fording".		X			Testing shall be performed IAW TOP 2-2-612 and OM to ensure that the actuation of Fording switch enables the required actions to allow fording to verify compliance with Section 3 requirement. This can be tested concurrently with PDFOV-1273 (Fording Requirements).
PDFOV-8727	4	Upon completion of fording, the JLTV shall return to its previous state within one (1) minute when the fording mode is deselected.		X			Testing shall be conducted by deselecting the fording mode upon completion of fording, IAW OM, and to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8728	4	The JLTV's speed shall be limited to no more than 10 mph (16 kph) while in fording mode.		X			Testing shall be conducted IAW TOP 2-2-612 and OM to ensure that during the fording performance required in PDFOV-1273, the JLTV is not capable of achieving a speed greater than 10 mph.
PDFOV-8061	4	The JLTV cooling fan shall not turn on during fording restart.		X			Testing shall be conducted during the fording of 30 inches and 60 inches IAW TOP 2-2-612 paragraph 5.3, and OM, to verify compliance with Section 3 requirement.
PDFOV-1277	5	Vented components shall be vented above the 60 in (152 cm) fording line without the fording kit.	X				Inspection shall be conducted IAW TOP 2-2-505, as described in the OM, verify compliance with Section 3 requirement.
PDFOV-1278		**3.4.1.14 Towing**					**4.4.1.14**
PDFOV-1293		**3.4.1.14.1 Towed Load Braking and Lighting**					**4.4.1.14.1**
PDFOV-1300	3	A 28 VDC 12 pin male receptacle (STANAG 4007) with cover shall be mounted at the rear of the JLTV.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8062	3	A 12 VDC 7 pin male receptacle (SAE J560) shall be mounted at the rear of the JLTV.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8063	3	A 28 VDC 12 pin male receptacle (STANAG 4007) with cover shall be mounted at the front of the JLTV for powering the vehicle lights when it is flat towed.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-1279		**3.4.1.14.2 Like Vehicle Towing**					**4.4.1.14.2**
PDFOV-1284	3	The JLTV at GVW shall be capable of towing another JLTV at GVW for 100 mi (161 km) over flat secondary roads. All available on-board fuel including additional fuel cans, as well as any necessary attachments and flat tow kit, are permitted to meet this requirement. (T)		X			Testing shall be conducted by towing a JLTV IAW the OM to verify compliance with Section 3 requirement.
PDFOV-8064	5	The JLTV at GVW shall be capable of towing another JLTV at GVW for 100 mi (161 km) over cross country terrain. All available on-board fuel including additional fuel cans, as well as any necessary attachments and flat tow kit, are permitted to meet this requirement. (O)		X			Testing shall be conducted by towing a JLTV IAW the OM to verify compliance with Section 3 requirement.
PDFOV-1286		**3.4.1.14.3 Towing and Recovery**					**4.4.1.14.3**
PDFOV-1287	3	The JLTV shall be capable of being recovered and lift or flat towed from both the front (at GCVW) and rear (at GVW) by 5-ton M939 series, MTVR, LVSR, FMTV, HEMTT wreckers, and MRAP Recovery Vehicle with no alteration to the JLTV required.		X			Testing shall be conducted by lift and flat towing to verify compliance with Section 3 requirement. Recovery shall be demonstrated during RAM testing on an as required basis, with no further operational damage.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7604	3	The JLTV shall provide tow eyes front and rear for lift-tow operations that provide two pin attachment points per side (four each front and rear) for connection to the HEMTT, MTVR, and LVSR Wrecker Multi-Use Adapter (NSN 5340-01-516-2058 (L), 5340-01-516-2059 (R)).		X			Testing shall be conducted by physically connecting the Multi-Use Adapter to verify compliance with Section 3 requirement.
PDFOV-1305	4	The JLTV tow eyes shall be of a size such that the vehicle can be towed with the Heavy Duty Tow Bar (NSN 2540-01-267-2912 and NSN 2540-01-558-3533), which is referenced in MS500048, Medium Tow Bar (NSN 2530-01-496-8356), and the Light Duty Tow Bar (NSN 4910-01-365-9304).		X			Testing shall be conducted by the JLTV being flat towed with the towbars indicated in Section 3 requirement to verify compliance.
PDFOV-7331	2	The JLTV front and rear tow eyes shall conform to STANAG 4478.		X			Testing shall be conducted IAW STANAG 4478 to verify compliance with Section 3 requirement.
PDFOV-1288		**3.4.1.14.4 Towed Load Capability**					**4.4.1.14.4**
PDFOV-8353	2	When towed on level primary roads, the JLTV-T and the JLTV shall be capable of maintaining posted speed limits and conform to FMCSR 393.70 which limits trailer oscillation.		X			Testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-7440	3	The JLTV shall have mechanical connections as specified per ADR 62/02 Mechanical Connections Between Vehicles for NB Class Vehicles (Medium Goods Vehicles).		X			Testing shall be conducted IAW ADR 62/02 to verify compliance with Section 3 requirement.
PDFOV-1291		**3.4.1.14.4.1 Backward Compatibility.**					**4.4.1.14.4.1**
PDFOV-1292	3	The JLTV shall be able to tow the fully loaded M101A3 in a degraded manner, which is defined as towing that legacy trailer at the safe operating limit of the legacy trailer.		X			Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement. The legacy trailers shall not be loaded to exceed the towing capacity of the JLTV.
PDFOV-8065	3	The JLTV shall be able to tow the fully loaded M105A2 in a degraded manner, which is defined as towing that legacy trailer at the safe operating limit of the legacy trailer.		X			Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement. The legacy trailers shall not be loaded to exceed the towing capacity of the JLTV.
PDFOV-8066	3	The JLTV shall be able to tow the fully loaded M1101 (LTT-L) in a degraded manner, which is defined as towing that legacy trailer at the safe operating limit of the legacy trailer.		X	X		Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement. The legacy trailers shall not be loaded to exceed the towing capacity of the JLTV.
PDFOV-8068	3	The JLTV shall be able to tow the fully loaded M1102 (LTT-H) in a degraded manner, which is defined as towing that legacy trailer at the safe operating limit of the legacy trailer.		X			Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement. The legacy trailers shall not be loaded to exceed the towing capacity of the JLTV.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8069	3	The JLTV shall be able to tow the fully loaded M116A2 in a degraded manner, which is defined as towing that legacy trailer at the safe operating limit of the legacy trailer.		X	X		Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement. The legacy trailers shall not be loaded to exceed the towing capacity of the JLTV.
PDFOV-8070	3	The JLTV shall be able to tow the fully loaded M149A2 in a degraded manner, which is defined as towing that legacy trailer at the safe operating limit of the legacy trailer.		X	X		Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement. The legacy trailers shall not be loaded to exceed the towing capacity of the JLTV.
PDFOV-8071	3	The JLTV shall be able to tow the fully loaded USMC M1102-MCC in a degraded manner, which is defined as towing that legacy trailer at the safe operating limit of the legacy trailer.		X			Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement. The legacy trailers shall not be loaded to exceed the towing capacity of the JLTV.
PDFOV-1308		**3.4.1.14.5 Pintle**					**4.4.1.14.5**
PDFOV-1309	3	A swivel-type pintle shall be provided which permits a single crew wearing Mission Orientated Protective Posture (MOPP) level IV to latch/unlatch the JLTV-T from the JLTV within five (5) minutes.		X			Testing shall be conducted by crew in gear specified in Section 3, IAW the intent of MIL-STD-1472F sections 5.9.1.6, 5.9.1.7, and 5.9.10.2, to verify compliance with Section 3 requirement.
PDFOV-6691	4	The JLTV pintle shall be centered laterally on the vehicle.		X			Testing shall be dimensional measurement conducted in the following manner: Using tape measure, measure from center of pintle to left rear wheel track, and right rear wheel track of vehicle. To successfully pass this requirement, measurements shall be within 2 in (5 cm) of each other.
PDFOV-8729	4	The JLTV pintle shall be located at the rear of the vehicle per SAE J849.		X			Testing shall be conducted IAW TOP 1-2-504 to verify compliance with Section 3 requirement.
PDFOV-6693	4	The JLTV (including any installed shelters) shall cause no interference when towing trailers and Howitzers in a minimum turning radius (right or left) while traveling in the forward direction, or over the Operational Terrain as detailed in Annex H.		X			Testing shall be conducted IAW TOP 2-2-609, paragraph 5.2.1, to verify compliance with Section 3 requirement.
PDFOV-6695	2	Provision for attachment of trailer safety chains shall be provided as per SAE J849 (per truck installation note) for single axle trailers.		X			Testing shall be conducted IAW TOP 1-2-504 to verify compliance with Section 3 requirement.
PDFOV-8577	2	Provisions for attachment of trailer safety chains shall meet the Class 4 strength requirements per SAE J684.		X			Testing shall be conducted with a tensile strength test on the safety chain provisions. A load equivalent to the trailer GVWR will be applied in a direction parallel to the trailers or towing vehicles longitudinal axis to each attachment provision and maintained for one (1) minute as required by SAE J684.
PDFOV-3438		**3.4.1.15 Electronic Stability Control System**					**4.4.1.15**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3439	2	The JLTV shall be equipped with an Electronic Stability Control (ESC) system that conforms to FMVSS 126 with modified performance parameters, regardless of the weight of the vehicle.		X			Testing shall be conducted IAW DOT-TP-126 using the modifications in Annex S to verify compliance with Section 3 requirement.
PDFOV-6722		**3.4.1.16 Vehicle Horn**					**4.4.1.16**
PDFOV-6723	4	The JLTV shall be equipped with a horn that meets the requirements of A-A-52525 Section 3.3 for a Type II horn.		X			Testing shall be conducted IAW SAE J377, paragraph 4.1.2, to verify compliance with Section 3 requirement.
PDFOV-8078	2	The JLTV horn activation mechanism shall be within easy reach of the driver.		X			Testing shall be conducted IAW TOP 2-2-508 and in conformance with MIL-STD-1472F using Annex N dimensions for Large Male and Small Female to verify compliance with Section 3 requirement.
PDFOV-8079		**3.4.1.17 Wheel Splash and Stone Throw Protection**					**4.4.1.17**
PDFOV-8080	5	The JLTV and JLTV-T shall have the capability to accept mud flaps IAW SAE J682.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify the provisions, as outlined in SAE J682, can be met.
PDFOV-1310		**3.4.2 Force Protection**					**4.4.2**
PDFOV-8081		**3.4.2.1 Signature**					**4.4.2.1**
PDFOV-8789		The JLTV Signature Management requirements are defined in Annex F.					This is a definition and not verifiable separately.
PDFOV-3208	5	The JLTV cab interior and upholstery shall be dark, non-reflective color.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7310	5	The external fuel covers shall visually blend in with the body of the JLTV to preclude the covers being identified as potential targets.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-6702		**3.4.2.2 B-Kit Armor Interchangeability**					**4.4.2.2**
PDFOV-1311		The JLTV hull will provide protection to the crew (at a seated weight of 255 lb (115 kg) each) from a variety of threats as defined in Annex E. The provisions to provide this minimum level of protection, often called inherent armor, are defined as A-structure armor. For weight accounting purposes, A-structure armor is counted as part of CW. Additional armor to meet higher level of threats as defined in Annex E, often called bolt-on or supplemental armor is defined as B-kit armor. Injury scoring criteria is defined in Annex Q. B-kit armor is a unique category for weight accounting purposes.					This is a definition and not verifiable separately.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1323	3	The installation of JLTV B-kit armor shall be completed within seven (7) hours using materiel handling equipment (MHE) and with no more than four (4) personnel. (T)		X			Testing shall be conducted IAW TOP 1-2-504, paragraph 6.d.3.b to verify compliance with the time components of the Section 3 requirement. Timer starts without preparation (without removal of A structure components) and the B kit in its shipping/ storage containers.
PDFOV-8085	5	The installation of JLTV B-kit armor shall be completed within five (5) hours without MHE using two (2) personnel. (O)		X			Testing shall be conducted IAW TOP 1-2-504, paragraph 6.d.3.b to verify compliance with the time components of the Section 3 requirement. Timer starts without preparation (without removal of A structure components) and the B kit in its shipping/ storage containers.
PDFOV-6703	4	The JLTV B-kit armor components shall be interchangeable across the same Base Vehicle Platform.		X			Testing shall be conducted IAW TOP 2-2-707, paragraph 6.2 to verify compliance with Section 3 requirement.
PDFOV-1726		**3.4.2.3 Kinetic Damage**					**4.4.2.3**
PDFOV-1727	2	The JLTV at GVW, on trail condition at half the rated cross country speed shall be capable of traveling for 0.6 mi (1 km) cross country after a total loss of fuel from the main fuel tank(s) due to perforation. (T)		X			Testing shall be conducted by removing as much fuel as possible from the fuel tank to traverse the required mileage to verify compliance with Section 3 requirement.
PDFOV-8578	5	The JLTV at GVW, on trail condition at half the rated cross country speed shall be capable of traveling for 3 mi (5 km) cross country after a total loss of fuel from the main fuel tank(s) due to perforation. (O)		X			Testing shall be conducted by removing as much fuel as possible from the fuel tank to traverse the required mileage to verify compliance with Section 3 requirement.
PDFOV-1588		**3.4.2.4 Weapon Provisions**					**4.4.2.4**
PDFOV-1596		**3.4.2.4.1 Weapon Mount Integration**					**4.4.2.4.1**
PDFOV-1597	3	The JLTV with each of the MK-93, M197 and MK-107 weapons mount shall permit operation of the weapon while traversing 360 degrees azimuth without interfering with crew operations.		X			Testing shall be conducted IAW TOP 3-2-813, paragraph 4.1, to verify compliance with Section 3 requirement.
PDFOV-1599	3	The JLTV with each of the MK-93, M197 and MK-107 weapon mount equipped with a weapon shall be able to be operated safely by 5th percentile female to the 95th percentile male (as defined in PDFOV-3132) gunners.		X			Testing shall be conducted for compliance with MIL-STD-1472F using Annex N dimensions for Large Male and Small Female to verify Section 3 requirement.
PDFOV-7420	3	Weapon BII required to operate or perform immediate action on the weapon when mounted on the JLTV shall be stowed in close proximity to the weapon so that the weapon BII is readily accessible by the gunner. Other items, such as cleaning items, or items used in ground-mounted configuration may be stored elsewhere.		X			Testing shall be conducted IAW TOP 2-2-802, paragraph 5.1.1.c, to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1607	4	The integration of the weapons mount and weapon on the JLTV shall preclude the firing of the weapon at the main body of the vehicle.		X			Testing shall be conducted IAW TOP 3-2-813, paragraphs 4.1, 4.2, and 5.1 to verify compliance with Section 3 requirement.
PDFOV-1609	3	The weapon when mounted on the JLTV shall be capable of being elevated to +60 degrees and depressed to -20 degrees.		X			Testing shall be conducted IAW TOP 3-2-813, paragraphs 4.1. g, h, and 4.2, to verify compliance with Section 3 requirement.
PDFOV-1617	3	A means shall be provided to prevent spent brass and links from entering the crew compartment.		X			Testing shall be conducted IAW TOP 3-2-813, during the conduct of previous tests related to TOP 3-2-813. Tester shall evaluate effectiveness of design to prevent spent brass and links from entering crew compartment, to verify compliance with Section 3 requirement.
PDFOV-1639		**3.4.2.4.2 Gunner's Restraint System**					**4.4.2.4.2**
PDFOV-6843	3	The JLTV gunner's restraint system shall prevent the gunner from being ejected during off-road operations or in an accident.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.6.3.1.4, to verify Section 3 requirement.
PDFOV-8092	4	The JLTV gunner's restraint shall allow the gunner to quickly return to the inside of the vehicle during a vehicle rollover.		X			Testing shall include functional verification that restraint will allow gunner access back into vehicle to verify compliance with Section 3 requirement.
PDFOV-6845	3	The JLTV gunner's restraint system shall allow weapons operation of the gunner in full combat equipment for a duration of at least two (2) hours.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.6.3.1.4, to verify Section 3 requirement. Testing shall consist of tester, in full combat gear, in GPK, with restraint system in use, with the JLTV traversing the Operational Terrain as detailed in Annex H at safe speeds, to verify compliance with Section 3 requirement.
PDFOV-7273	3	The JLTV gunner's restraint system shall allow for multiple (adjustable) seating heights varying from complete defilade to name tag defilade, and accommodating Small Female to the Large Male (as defined in PDFOV-3132) gunners such that the gunner can effectively employ the assigned weapon.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.6.3.1.4, using Annex N dimensions for Large Male and Small Female to verify Section 3 requirement.
PDFOV-8094	2	The JLTV gunner's restraint system shall incorporate a release mechanism IAW FMVSS 209 S4.1(e) to permit emergency extrication of the gunner.				X	Certification shall be provided to verify compliance with Section 3 requirement.
PDFOV-7312	3	The JLTV gunner's restraint system shall enable the gunner to maintain 360 degree visibility with only the gunners head exposed.		X			Testing shall be conducted IAW TOP 3-2-812 by situating a gunner/tester into the gunner's restraint system and assessing the ability to maintain 360 degree visibility with only head/kevlar exposed, to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8448	2	The JLTV gunner's restraint and gunner's sling webbing shall meet the requirements of FMVSS 209 S4.1 (d)-(f), S4.1(h)-(k), S4.2, S4.3(a)-(e), and S4.4(a).				X	Certification shall be provided that indicates compliance IAW FMVSS 209 S5.1, S5.2(a)-(e), and S5.3(a), to verify compliance with Section 3 requirement.
PDFOV-8449	2	The JLTV gunner's restraint and gunner's sling anchorages, attachment hardware, and attachment bolts shall meet the requirements of FMVSS 210 S4.2 for a Type I seat belt assembly.				X	Certification shall be provided that indicates compliance IAW FMVSS 210 S5.1, to verify compliance with Section 3 requirement.
PDFOV-1640		**3.4.2.4.3 Storage**					**4.4.2.4.3**
PDFOV-1641	2	The JLTV and JLTV-T shall store and transport Commodity Class V (ammunition and missiles) IAW the Defense Ammunition Center certification requirements.		X			Testing shall be conducted IAW TP-94-01 to verify compliance with Section 3 requirement.
PDFOV-1643	4	Ammunition storage provisions shall have a readily accessible quick release.		X			Testing shall be conducted IAW TOP 2-2-802, paragraph 5.1.1.d(1) to verify compliance with Section 3 requirement.
PDFOV-1645	3	The JLTV shall have designated stowage locations, protected to either the level of ballistic, blast and fragmentation protection as provided by the vehicle and the GPK; or shock, vibration and weather protection, and securable; for the ammunition quantities listed in Annex G.	X				Inspection shall be conducted IAW TOP 2-2-802 to verify compliance with Section 3 requirement.
PDFOV-1354		**3.4.2.5 Fire Extinguishing**					**4.4.2.5**
PDFOV-1396		**3.4.2.5.1 Cylinder Requirements**					**4.4.2.5.1**
PDFOV-1397	2	The fire extinguisher cylinders shall meet all applicable Department of Transportation (DOT) 49 CFR 173.309.				X	The Contractor shall provide documentation from an independent third party test facility certifying that the fire extinguisher cylinders meet DOT 49 CFR 173.309. Fire extinguishers shall be inspected to confirm that they are marked IAW 49 CFR 173.309 section (3) (iii).
PDFOV-8095	4	The fire extinguisher cylinders shall meet the fragmentation resistance requirements of MIL-DTL-7905 "Cylinders, Steel, Compressed Gas, Non-Shatterable, Seamless, 1800 PSI and 2100 PSI" section 3.3.9	X				Inspection shall be performed IAW TOP 2-2-505 and IAW MIL-DTL-7905 section 4.6.9 to verify compliance with Section 3 requirement.
PDFOV-8096	4	The fire extinguisher cylinders shall be marked and color coded IAW MIL-STD-101 Color Code for Pipelines and for Compressed Gas Cylinders.	X				Inspection shall be performed IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7631		**3.4.2.5.2 Automatic Fire Extinguishing System**					**4.4.2.5.2**
PDFOV-1355	3	The JLTV shall be equipped with Automatic Fire Extinguishing Systems (AFES) or systems to protect the crew cabin and engine compartment.	X				Inspection shall be performed IAW TOP 2-2-505 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8098	2	The AFES shall meet UL 2166.	X				Inspection shall be performed IAW 2-2-505 to confirm that the markings required by UL2166, Section 58, are present, to verify compliance with Section 3 requirement.
PDFOV-1408		**3.4.2.5.2.1 Extinguishing Agent**					**4.4.2.5.2.1**
PDFOV-1409	4	HFC-227ea (heptafluoropropane) with 5%-10% sodium bicarbonate powder by weight shall be used as the AFES extinguishing agent.				X	The Contractor shall certify that the agent used is HFC-227ea as required.
PDFOV-7598	2	Agent concentrations shall not exceed the exposure limits of Table 1.5.1.2.1 (c) of NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems under worst case vehicle operating condition (hatches and doors closed, engine running, HVAC in recirculate mode with fan on high).		X			Testing shall be conducted IAW ITOP 2-2-617 to verify compliance with Section 3 requirement.
PDFOV-1400		**3.4.2.5.2.2 Extinguisher Refill/Recharge**					**4.4.2.5.2.2**
PDFOV-1401	4	For refillable AFES tanks the refill capabilities and procedures shall be compatible with military recharge equipment (NSN 4210-01-474-6206).		X			Testing shall be conducted IAW TOP 2-2-505 Section 4.1.2.1.F to verify compliance with Section 3 requirement.
PDFOV-1388		**3.4.2.5.2.3 Accidental Discharge**					**4.4.2.5.2.3**
PDFOV-1389	4	Mounting provisions shall be provided on the extinguisher mounting bracket to secure the anti-recoil plugs after removal.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate that the all extinguishers are equipped with means to prevent accidental discharge and compliance with Section 3.
PDFOV-1404		**3.4.2.5.2.4 AFES Toxic Gases**					**4.4.2.5.2.4**
PDFOV-1405	2	Levels of toxic gases during and following any fire event shall remain below the exposure criteria of Occupational Safety and Health Administration (OSHA) 29 CFR 1910. 1000. (T)		X			Testing shall be conducted IAW ITOP 2-2-617 and TOP 2-2-614 to verify compliance with Section 3 requirement.
PDFOV-8730	5	Levels of toxic gases during and following any fire event shall remain below the most stringent exposure criteria for each compound of OSHA, National Institute for Occupational Safety and Health (NIOSH), or American Conference of Industrial Hygienists (ACGIH). (O)		X			Testing shall be conducted IAW ITOP 2-2-617 and TOP 2-2-614 to verify compliance with Section 3 requirement.
PDFOV-1410		**3.4.2.5.2.5 Extinguisher Discharge**					**4.4.2.5.2.5**
PDFOV-1411	4	The AFES extinguisher nozzles shall not discharge directly at any normally occupied crew position IAW NFPA 2001 section 7.7.2.2.7.		X			Testing shall be conducted IAW ITOP 2-2-617 section 4.2.1 to verify compliance with Section 3 requirement.
PDFOV-1358		**3.4.2.5.2.6 Battery Back-up**					**4.4.2.5.2.6**
PDFOV-1359	4	The AFES shall remain energized for 10 minutes following JLTV shut down.		X			Testing shall be conducted with a voltmeter to ensure that the AFES remains energized for a minimum of 10 minutes following vehicle shutdown.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1364		**3.4.2.5.2.7 Status Indicators**					**4.4.2.5.2.7**
PDFOV-1365	4	System status indicators, independent of the DSDU, shall be provided that visually inform crew that the AFES is powered and operational.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-1362		**3.4.2.5.2.8 Extinguishing Activation**					**4.4.2.5.2.8**
PDFOV-1363	3	The AFES shall be capable of both automatic sensing and extinguishing Fires IAW MIL-PRF-62546 section 3.3.3.		X			Testing shall be conducted IAW MIL-PRF-62546 sections 4.3.3.2-4.3.3.4 and 4.3.3.6-4.3.3.8, to verify compliance with Section 3 requirement.
PDFOV-8450	4	The manual means of AFES operation required in UL2166 Section 9.2 shall meet the control protection requirements of MIL-STD-1472F section 5.4.1.8.4 method b, c, or d.		X			Testing shall be conducted IAW TOP 2-2-508 section 4.12.2 and MIL-STD 1472 Section 5.4.1.8.4 to verify compliance with Section 3 requirement.
PDFOV-8451	4	The manual means of AFES operation required in UL2166 Section 9.2 shall be located within reach of the driver and commander.		X			Testing shall be conducted IAW TOP 2-2-508 section 4.12.2 and MIL-STD 1472 Section 5.1.2.3.8 to verify compliance with Section 3 requirement.
PDFOV-8731	4	The AFES Electronic Control Module shall meet the requirements of MIL-DTL-62545 Section 3.5.		X			Testing shall be conducted IAW MIL-DTL-62545 Section 4.6.8 to verify compliance with Section 3 requirement.
PDFOV-8732	4	The AFES fire sensors shall meet the requirements of MIL-PRF-62546 Section 3.6.		X			Testing shall be conducted IAW MIL-PRF-62546 Section 4.3.6 to verify compliance with Section 3 requirement.
PDFOV-8733	4	The AFES valves and cylinders shall meet the requirements of MIL-DTL-62547 Section 3.7.		X			Testing shall be conducted IAW MIL-DTL-62547 Section 4.4.5 with HFC-227ea in place of Halon 1301 to verify compliance with Section 3 requirement.
PDFOV-1366		**3.4.2.5.2.9 Maintenance**					**4.4.2.5.2.9**
PDFOV-1367	2	A means shall be provided to disconnect AFES power to permit safe maintenance IAW NFPA 2001 section 4.3.6.		X			Testing shall be conducted IAW the OM to verify the AFES system is capable of being safely powered down to permit safe maintenance to verify compliance with Section 3 requirement.
PDFOV-1368		**3.4.2.5.2.10 False Activation Prevention**					**4.4.2.5.2.10**
PDFOV-1369	4	The AFES controller shall preclude false activation of any extinguisher(s) during removal or replacement of the optical fire sensor, extinguisher bottle, or any interconnecting electrical harness IAW MIL-DTL-62545 section 3.3.8.		X			Testing shall be conducted IAW TOP 2-2-508 and MIL-DTL-62545 4.6.3 to verify Section 3 requirement by demonstrating the AFES does not activate after an extinguisher bottle, fire sensor, or any interconnecting electrical harness has been removed or replaced.
PDFOV-8099	4	The removal of any individual fire sensor or extinguisher tank shall not render the remainder of the system inoperative IAW MIL-DTL-62545 section 3.3.8.		X			Testing shall be conducted IAW TOP 2-2-508 and MIL-DTL-62545 4.6.3 to verify Section 3 requirements by demonstrating the remainder of the system functions after a bottle or sensor has been removed from one section of the system.
PDFOV-1379		**3.4.2.5.2.11 Radiation Stimuli Response**					**4.4.2.5.2.11**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1380	4	The fire detectors shall not respond at distances equal to or greater than the immunity distance when exposed to the radiation sources of MIL-PRF-62546 Table 1 - False alarm susceptibility.		X			Testing shall be conducted IAW MIL-PRF-62546 Sections 4.3.3.7 -4.3.3.7.15 to verify compliance with Section 3 requirement. The sensor shall not respond to the stimuli at distances equal to the limits identified in MIL-PRF-62546 Table 1.
PDFOV-1402		**3.4.2.5.2.12 AFES Performance within Crew Compartment**					**4.4.2.5.2.12**
PDFOV-1403	3	The AFES in the crew compartment shall be capable of detecting and extinguishing Petroleum, Oil, and Lubricant (POL) fires within 10 seconds to prevent crew incurring second-degree or greater burns.		X			Testing shall be conducted IAW ITOP 2-2-617 section 4.2.1 and MIL-PRF-62546 sections 4.3.3.2-4.3.3.4 and 4.3.3.6-4.3.3.8, to verify compliance with Section 3 requirement.
PDFOV-1414		**3.4.2.5.2.13 AFES Engine Compartment Fire Suppression**					**4.4.2.5.2.13**
PDFOV-1415	3	The POL fires in the engine compartment shall be detected and extinguished prior to a fire induced operational mission failure, but in no case will exceed 10 seconds from ignition.		X			Testing shall be conducted to verify compliance with Section 3 requirement. To verify lack of fire induced operational mission failure, after this test, the vehicle must be able to perform an Operational Mission defined in Annex H without fire damage induced operational mission failure.
PDFOV-1422		**3.4.2.5.3 Portable Extinguisher**					**4.4.2.5.3**
PDFOV-1423	2	The JLTV shall be equipped with at least one (1) portable, dry chemical extinguisher with a minimum 5-B:C rating per UL 711.				X	Certification shall be provided to verify compliance with Section 3 requirement.
PDFOV-8579	4	The JLTV portable fire extinguisher shall be mounted within reach of the driver when seated with the extinguisher pressure gauge or charge indicator device clearly visible to the crew.		X			Testing shall be conducted IAW TOP 2-2-508 and for compliance with MIL-STD 1472 using Annex N dimensions for Large Male and Small Female to verify Section 3 requirement.
PDFOV-8100	2	The JLTV portable fire extinguisher shall meet UL 299 requirements.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-1416		**3.4.2.5.4 Fuel Tank Protection**					**4.4.2.5.4**
PDFOV-1417		**3.4.2.5.4.1 Self-Sealing Requirement**					**4.4.2.5.4.1**
PDFOV-1418	5	All fixed fuel tanks shall be self-sealing. See MIL-T-5578 (as applicable to a tactical vehicle using JP-8) for reference. (O)		X			Testing shall be conducted IAW TOP 2-2-710 to verify compliance with Section 3 requirement.
PDFOV-1419		**3.4.2.5.4.2 Fixed Fuel Tanks**					**4.4.2.5.4.2**
PDFOV-1420	4	All fixed fuel tanks shall be mounted external to the crew compartment or compartmented away from the crew.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8101	4	The JLTV fixed fuel tanks shall be shielded by the JLTV structure.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-6893		**3.4.2.5.4.3 Protection of Ingress/Egress Route**					**4.4.2.5.4.3**
PDFOV-6894	4	The fuel tanks, including jerry cans, shall be positioned away from the JLTV's egress points to allow for safe egress of the crew in the event of a fuel fire.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8102	2	A passive fire protection method (internal or external to fuel tanks) shall be provided to prevent any sustained fuel fires in the vehicle fuel tank.		X			Testing shall be conducted IAW ITOP 2-2-617 to verify compliance with Section 3 requirement.
PDFOV-1700		**3.4.2.6 Chemical, Biological, and Radiological/Nuclear, Incidents**					**4.4.2.6**
PDFOV-1711		**3.4.2.6.1 Chemical, Biological and Radiological/Nuclear Detection**					**4.4.2.6.1**
PDFOV-1703	3	The JLTV shall provide power, space claim, and interfacing to accept a sensor (GFE) compliant with the Common Chemical, Biological Radiological/Nuclear (CBRN) Sensor Interface (CCSI) document.	X	X			Testing shall be conducted IAW CCSI document paragraph 4.8 to verify compliance with Section 3 requirement.
PDFOV-1718		**3.4.2.6.2 Decontamination**					**4.4.2.6.2**
PDFOV-1719	2	The JLTV shall be capable of being decontaminated to the Operational decon levels (as defined by FM 3-11 and FM 3-5) using current existing decon methodology and performance standards. (T)		X	X		Testing shall be conducted IAW TOP 8-2-061, paragraph 4.5, to verify compliance with Section 3 requirement.
PDFOV-8104	5	The JLTV shall be capable of being decontaminated to the Thorough decon levels (as defined by FM 3-11 and FM 3-5) using current existing decon methodology and performance standards. (O)		X			Testing shall be conducted IAW TOP 8-2-061, paragraph 4.5, to verify compliance with Section 3 requirement.
PDFOV-1728		**3.4.3 Transportability**					**4.4.3**
PDFOV-1734		**3.4.3.1 Lifting and Tiedown Provisions**					**4.4.3.1**
PDFOV-1735	2	The JLTV and JLTV-T shall meet lifting and tiedown provision requirements per MIL-STD-209 and MIL-STD-1366.		X			Testing shall be conducted for compliance with MIL-STD-209, at GVWR and MIL-STD-1366 to verify Section 3 requirement.
PDFOV-4026	2	The JLTV shall be equipped with lifting provisions that meet the requirements of MIL-STD-913 for Helicopter Sling Load (HSL).		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.1, to verify compliance with Section 3 requirement.
PDFOV-1768		**3.4.3.2 Preparation Time.**					**4.4.3.2**
PDFOV-1769	4	The JLTV and JLTV-T shall be prepared for embarkation on C-130 aircraft, Maritime Prepositioning Force (MPF) ships, and Rail in 30 minutes by two (2) persons. Reassembly after transport shall also be completed in 30 minutes by two (2) persons. Installation and removal of shelters, GPK, or rigging are not included in the preparation time.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8118	4	The JLTV and JLTV-T shall be prepared for embarkation on C-130 aircraft, MPF ships, and Rail using only on-board BII (Annex M) - excluding removal and reinstallation of the GPK and shelters. Reassembly after transport shall also be completed using only on-board BII.		X			Testing shall be conducted using only on-board BII IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-8119	4	All parts required to be removed from the JLTV and JLTV-T prior to transport on C-130 aircraft, MPF ships, and Rail shall be capable of being stowed on or in the vehicle during transport (excluding GPK and shelters).		X			Testing shall be conducted IAW the OM and TOP 2-2-802 to verify compliance with Section 3 requirement.
PDFOV-1736		**3.4.3.3 Air Transport**					**4.4.3.3**
PDFOV-1738		**3.4.3.3.1 Fixed Wing Transport**					**4.4.3.3.1**
PDFOV-8194	2	Two (2) JLTV at CW, with B-kit armor (no GPK) installed, shall be transportable by C-130 aircraft IAW MIL-STD-1366 as described in MIL-HDBK-1791. (T)			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-8195	5	Two (2) JLTV, at GVW, shall be transportable by C-130 aircraft IAW MIL-STD-1366 as described in MIL-HDBK-1791. (O)			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-7605	2	The JLTV shall be air transportable at GVW in C-17 aircraft IAW MIL-STD-1366.			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-7606	2	The JLTV shall be air transportable at GVW in C-5 aircraft IAW MIL-STD-1366 as described in MIL-HDBK-1791.			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-8196	5	The JLTV at GCVW shall be air transportable in C-130 aircraft IAW MIL-STD-1366 as described in MIL-HDBK-1791. (O)			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-7611	2	The JLTV-T with full payload shall be air transportable in C-130 aircraft IAW MIL-STD-1366 as described in MIL-HDBK-1791.			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-7612	2	The JLTV-T with full payload shall be air transportable in C-17 aircraft IAW MIL-STD-1366.			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-7613	2	The JLTV-T with full payload shall be air transportable in C-5 aircraft IAW MIL-STD-1366 as described in MIL-HDBK-1791.			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-3938		**3.4.3.3.1.1 Low Velocity Aerial Delivery**					**4.4.3.3.1.1**
PDFOV-4019	2	The JLTV at GVW, excluding GPK and shelters, shall be capable of Low Velocity Aerial Delivery (LVAD) from C-130 aircraft and meet the requirements of MIL-HDBK-669, MIL-STD-814, MIL-HDBK-1791, and MIL-STD-1366. (T)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-8580	5	The JLTV at GVW, with GPK, excluding shelters, shall be capable of Low Velocity Aerial Delivery (LVAD) from C-130 aircraft and meet the requirements of MIL-HDBK-669, MIL-STD-814, MIL-HDBK-1791, and MIL-STD-1366. (O)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8105	2	The JLTV at GVW, excluding GPK and shelters, shall be capable of LVAD from C-17 aircraft and meet the requirements of MIL-HDBK-669, MIL-STD-814, and MIL-STD-1366. (T)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-8581	5	The JLTV at GVW, with GPK, excluding shelters, shall be capable of LVAD from C-17 aircraft and meet the requirements of MIL-HDBK-669, MIL-STD-814, and MIL-STD-1366. (O)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-8107	2	The JLTV-T with full payload shall be capable of LVAD from C-130 aircraft, excluding shelters, and meet the requirements of MIL-HDBK-669, MIL-STD-814, MIL-HDBK-1791, and MIL-STD-1366.		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-8108	2	The JLTV-T with full payload shall be capable of LVAD from C-17 aircraft, excluding shelters, and meet the requirements of MIL-HDBK-669, MIL-STD-814, and MIL-STD-1366.		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-8109	2	The JLTV-T with full payload shall be capable of LVAD from C-5 aircraft, excluding shelters, and meet the requirements of MIL-HDBK-669, MIL-STD-814, MIL-HDBK-1791, and MIL-STD-1366.		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-8110	5	The JLTV at GVW, excluding GPK and shelters, and JLTV-T with full payload shall be capable of LVAD simultaneously on the same platform from C-130 aircraft (O).		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-8112	4	The rigged load for LVAD shall not exceed 100 in (254 cm) in height. The rigged load includes the airdrop platform, energy-dissipating material, and JLTV. (T)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-8113	5	The rigged load for LVAD shall not exceed 96 in (243.8 cm) in height. The rigged load includes the airdrop platform, energy-dissipating material, and JLTV. (O)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-1764	2	The JLTV shall be ready for operation after LVAD within 15 minutes. Time to remount the shelter is not included in this time period. (T)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-8116	5	The JLTV shall be ready for operation after LVAD within 10 minutes. Time to remount the shelter is not included in this time period. (O)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.9, to verify compliance with Section 3 requirement.
PDFOV-1748		**3.4.3.3.2 Rotary Wing Aircraft**					**4.4.3.3.2**
PDFOV-1749	2	The JLTV and JLTV-T shall be air-transportable by military rotary wing aircraft IAW air transport requirements of MIL-STD-1366, except for the rotary-wing aircraft external load capabilities listed in tables 42-44.		X			Testing shall be conducted IAW TOP 1-2-500 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8197	2	One (1) JLTV shall be transportable external to a CH-53E. Payload and/or supplemental armor will be added to the vehicle to achieve a transport weight of 16,800 lb (7,620 kg) for CH-53E testing.		X			Testing shall be conducted IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-8198	1	Two (2) JLTV shall be transportable external to a CH-53K. Payload and/or supplemental armor will be added to each vehicle to achieve a combined transport weight of 32,330 lb (14,664 kg) for testing.		X	X		Testing shall be conducted IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-8199	4	One (1) JLTV shall be transportable external to a CH-47F. Payload and/or supplemental armor will be added to the vehicle to achieve a transport weight of 16,300 lb (7,400 kg) for CH-47F testing.		X			Testing shall be conducted IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-8200	5	One (1) JLTV shall be transportable internal to a MH-47G. 2,000 lb (907 kg) of payload and/or supplemental armor will be added to the vehicle to achieve a transport weight of 10,000 lb (4,536 kg) for MH-47G testing. (O)		X			Testing shall be conducted IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-8360	4	One (1) JLTV-T with full payload, and without the soft top kit installed, shall be externally transportable by CH-53E. (T)		X			Testing shall be conducted IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-8361	5	Two (2) JLTV-T with full payload, and without the soft top kit installed, shall be externally transportable by CH-53E. (O)		X			Testing shall be conducted IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-8432	4	One (1) JLTV-T with full payload, and without the soft top kit installed, shall be externally transportable by CH-47F.		X			Testing shall be conducted IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-8433	5	One (1) JLTV-T with full payload and without the soft top kit installed shall be externally transportable by MV-22 Block C. (O)		X			Testing shall be conducted IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-1754		**3.4.3.4 Highway Transport**					**4.4.3.4**
PDFOV-1755	2	The JLTV and JLTV-T shall meet United States (US) and NATO highway legal limits.		X			Testing shall be conducted with JLTV-T coupled and uncoupled IAW TOP 1-2-500, paragraph 4.3 to verify compliance with Section 3 requirement.
PDFOV-1756		**3.4.3.5 Rail Transport**					**4.4.3.5**
PDFOV-1757	2	The JLTV and JLTV-T shall be rail transportable IAW MIL-STD-1366. Preparation of the JLTV for rail transport may include removal of antennas, securing canvas items, and folding mirrors.		X			Testing shall be conducted with JLTV-T coupled and uncoupled IAW TOP 1-2-500 to verify compliance with Section 3 requirement.
PDFOV-4036		**3.4.3.5.1 Dimensional Requirements**					**4.4.3.5.1**
PDFOV-4038	2	The JLTV and JLTV-T shall meet the dimensional requirements of the Association of American Railroads (AAR) outline diagram when loaded on a 51 in (129.5 cm) deck-height railcar.		X			Testing shall be conducted with JLTV-T coupled and uncoupled IAW TOP 1-2-500 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7614	2	The JLTV and JLTV-T shall meet the dimensional requirements of the Gabarit International de Chargement (GIC) gauge when placed on a 51.4 in (130.5 cm) high railcar.		X			Testing shall be conducted for compliance with MIL-STD-1366, paragraphs 5.2.3.2, , 5.2.3.3, and Figure 6, to verify Section 3 requirement.
PDFOV-4035		**3.4.3.5.2 Rail Impact**					**4.4.3.5.2**
PDFOV-7615	4	The JLTV at GVW shall meet the requirements of MIL-STD-810 method 526.		X			Testing shall be conducted IAW TOP 1-2-501 to verify compliance with Section 3 requirement.
PDFOV-4039	2	The JLTV at GCVW shall meet the requirements of MIL-STD-810 method 526.		X			Testing shall be conducted IAW TOP 1-2-501 to verify compliance with Section 3 requirement.
PDFOV-4040	4	The JLTV-T, with full payload, shall meet the requirements of MIL-STD-810 method 526.		X			Testing shall be conducted IAW TOP 1-2-501 to verify compliance with Section 3 requirement.
PDFOV-1758		**3.4.3.6 Sealift Transport**					**4.4.3.6**
PDFOV-1759	2	The JLTV and JLTV-T (coupled or un-coupled) shall be transportable by Landing Craft Air-Cushioned (LCAC), Ship-to-Shore Connector (SSC), Joint High Speed Vessel (JHSV), Landing Craft Utility (LCU), Logistic Support Vehicle (LSV), and Improved Navy Lighterage System (INLS) IAW MIL-STD-1366.		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.4, and 6.4 to verify compliance with Section 3 requirement. Testing shall also consist of actual loading of vehicle onto ship.
PDFOV-3934	2	The JLTV and JLTV-T (coupled or un-coupled) shall be transportable by Amphibious Ships, MPF ships, Afloat Pre-positioning Ship (APS) and Roll-On Roll-Off (RORO) ships as defined in MIL-STD-1366.		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.4, and 6.4 to verify compliance with Section 3 requirement. Testing shall also consist of actual loading of vehicle onto ship.
PDFOV-8452	1	The JLTV shall be capable of entering and exiting the "58'-0 Platform (78" high deck space) on the following Military Sealift Command ships: T-AK 3005, T-AK 3006, and T-AK 3007. Removal of the weapon, GPK, any shelter, and antennas is permitted to meet this requirement. The Loading Height Setting may be used to satisfy this requirement.		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.4, and 6.4 to verify compliance with Section 3 requirement. Testing shall also consist of actual loading of vehicle onto ship.
PDFOV-8453	1	The JLTV shall be capable of entering and exiting the A and G decks on the following Military Sealift Command ships: T-AK 3008, T-AK 3009, T-AK 3010, T-AK 3011, and T-AK 3012. Removal of the weapon, GPK, any shelter, and antennas is permitted to meet this requirement. The Loading Height Setting may be used to satisfy this requirement.		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.4, and 6.4 to verify compliance with Section 3 requirement. Testing shall also consist of actual loading of vehicle onto ship.
PDFOV-3389	3	The JLTV shall be capable of withstanding external saltwater spray while on-board an LCAC during typical LCAC operations for periods up 60 minutes at a time, without essential function failure. (T)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.4, and 6.4 to verify compliance with Section 3 requirement. Testing shall also consist of actual loading of vehicle onto ship.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8117	5	The JLTV shall be capable of withstanding external saltwater spray while on-board an LCAC during typical LCAC operations for periods up 120 minutes at a time, without essential function failure. (O)		X			Testing shall be conducted IAW TOP 1-2-500, paragraph 4.4, and 6.4 to verify compliance with Section 3 requirement. Testing shall also consist of actual loading of vehicle onto ship.
PDFOV-7298		**3.4.3.7 Adjustable Height Suspension**					**4.4.3.7**
PDFOV-8734		The JLTV adjustable height suspension includes the following ride heights: (1) Operational Height: Used for all mobility and force protection requirements, unless otherwise stated in the PD. (2) Tie-down Height: Allows the suspension to rest on its bump stops. (3) Administrative Height: Maximizes JLTV handling and/or fuel economy. (4) Fording Height (optional): Uses a suspension ride height setting above the operational height that is optimized for fording operations. Fording height is optional and would be an allowable exception to (1) above. (5) Loading Height: Allows loading operations aboard sea lift shipping where overhead height and breakover angles are constrained simultaneously.					This is a definition and not verifiable separately.
PDFOV-8735	4	The JLTV Tie-down Height shall each be selectable by the driver and the activation will meet the protection requirements of MIL-STD-1472F section 5.4.1.8.4 method d. If the DSDU is not kitted, this capability must be resident on the DSDU.		X			Testing shall be conducted with the DSDU to confirm actuation of tie-down height. Testing shall include attempts to select tie-down height from operational height and confirmation that the selection methods meet MIL-STD-1472F to verify compliance with Section 3 requirement.
PDFOV-8736	4	The JLTV's speed shall be limited to no more than 10 mph (16 kph) while in Tie-down Height.		X			Testing shall be conducted to verify that the vehicle speed is governed while the suspension is at tie-down height.
PDFOV-8737	4	The JLTV Tie-down Height shall be de-selectable by the driver, returning the suspension to Operational Height, and the activation will meet the protection requirements of MIL-STD-1472F section 5.4.1.8.4 method d. If the DSDU is not kitted, this capability must be resident on the DSDU.		X			Testing shall be conducted with the DSDU to confirm actuation of tie-down height. Testing shall include attempts to select tie-down height from operational height and confirmation that the selection methods meet MIL-STD-1472F to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8457	4	The JLTV Administrative Height shall only be selectable or de-selectable while in the maintainer role. If the DSDU is not kitted, this capability must be resident on the DSDU.		X			Testing shall be conducted with the DSDU to confirm actuation of administrative height in the maintainer setting. Testing shall include attempts to select administrative height in non-maintainer settings to verify compliance with Section 3 requirement.
PDFOV-8738	4	The JLTV Loading Height shall each be selectable by the driver and the activation will meet the protection requirements of MIL-STD-1472F section 5.4.1.8.4 method d. If the DSDU is not kitted, this capability must be resident on the DSDU.		X			Testing shall be conducted to confirm actuation of loading height. Testing shall include attempts to select loading height from operational height and confirmation that the selection methods meet MIL-STD-1472F to verify compliance with Section 3 requirement.
PDFOV-8739	4	The JLTV's speed shall be limited to no more than 10 mph (16 kph) while in Loading Height.		X			Testing shall be conducted to verify that the vehicle speed is governed while the suspension is at loading height.
PDFOV-8740	4	The JLTV Loading Height shall be de-selectable by the driver, returning the suspension to Tie-town Height, and the activation will meet the protection requirements of MIL-STD-1472F section 5.4.1.8.4 method d. If the DSDU is not kitted, this capability must be resident on the DSDU.		X			Testing shall be conducted to confirm the return to tie-down height from loading height when de-selected by the driver. Testing shall confirm that the selection methods meet MIL-STD-1472F to verify compliance with Section 3 requirement.
PDFOV-8458	4	The JLTV shall have a physical means to lock out the adjustable height suspension system.		X			Testing shall be performed to ensure that the vehicle will not change ride height during transport, repair, or maintenance when the lockouts are engaged.
PDFOV-7302	5	The adjustable height suspension shall be lowered from Operational Height to Tie-down Height within two (2) minutes.		X			Testing shall be conducted on a vehicle at GVW, running at engine idle speed. A stopwatch shall be used to determine the time required. Time shall start for vehicle at its Operational Height, and stop when vehicle reaches its Tie-down Height, within the timeframes specified, to verify compliance with Section 3 requirement.
PDFOV-8741	5	The adjustable height suspension shall be raised from Tie-down Height to Operational Height within two (2) minutes.		X			Testing shall be conducted on a vehicle at GVW, running at engine idle speed. A stopwatch shall be used to determine the time required. Time will start with the vehicle at Tie-down Height, and stop when vehicle reaches its Operational Height, within the timeframes specified, to verify compliance with Section 3 requirement.
PDFOV-7306	5	The suspension height selections shall be disabled while the JLTV is in motion.		X			Testing shall be conducted by attempting to change the ride height settings while in motion to verify compliance with Section 3 requirement.

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PDFOV-7308	4	The JLTV shall indicate a caution when the suspension height does not match the suspension height setting. If the DSDU is not kitted, this capability must be resident on the DSDU.		X			Testing shall be conducted by switching suspension height setting in the DSDU to verify compliance with Section 3 requirement.
PDFOV-8583		**3.4.3.8 Suspension Aided Egress System**					**4.4.3.8**
PDFOV-8584	4	The JLTV shall have a Suspension Aided Egress System (SAES) which uses the adjustable height suspension to provide an automatic self leveling capability for normal operations egress when the vehicle parking brake is engaged.		X			With the SAES enabled, testing shall be conducted on grades and slopes by engaging JLTV parking brake to verify compliance with Section 3 requirement.
PDFOV-8585	4	The JLTV doors, with and without B kit armor, without door assists shall be capable of being opened and closed by the 5th percent female while the vehicle is stopped up to and including 15 percent grade (facing up and down) or up to and including 25 percent slope (facing in either direction) using the SAES.		X			Testing shall be conducted IAW TOP 2-2-508 and for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-8586	4	On extreme slopes the SAES shall use the full articulation of the adjustable height suspension to provide the optimal self leveling capability possible by the JLTV.		X			Testing shall be conducted by parking JLTV on a grade and slope greater than the ability of the suspension to articulate and ensuring full articulation has been achieved to verify compliance with Section 3 requirement.
PDFOV-8587	4	The SAES will adjust all required points simultaneously toward the level position.		X			Testing shall be conducted concurrent with verification of PDFOV-8586. During verification of PDFOV-8586, observation of suspension adjustment shall provide confirmation that all suspension corners are adjusted simultaneously, to verify compliance with Section 3 requirement.
PDFOV-8588	2	The SAES shall automatically disengage and return to the previous ride height when the vehicle parking brake is released.		X			Testing shall be conducted by parking on a slope such that the SAES suspension has leveled the vehicle chassis followed by a drive-off event to verify compliance with Section 3 requirement.
PDFOV-8589	4	The SAES shall be able to be selectively disabled.		X			Testing shall be conducted concurrent with verification of PDFOV-8586. During verification of PDFOV-8586, attempt to disable SAES to verify compliance with Section 3 requirement.
PDFOV-8590	3	The SAES will configure the system so that the step on the uphill side is no more than 18 in (46 cm) from the ground		X			Testing shall be conducted by parking on a grade of approximately 15 percent in each direction and slope of approximately 25 percent in each direction to verify compliance with Section 3 requirement.
PDFOV-1770		**3.4.4 Vehicle Electrical and Command, Control, Communications, Computers, Intelligence, Surveillance & Reconnaissance/ Electronic Warfare Systems**					**4.4.4**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7480		This section specifies integration of all of the vehicle electrical systems: Vetronics; Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) and Electronic Warfare (EW) components; and Power Generation and Distribution. The overall goal is to minimize the number of independent "Bolt On" components and to promote sharing of components and capabilities across multiple applications. The integrated design utilizes mature technologies to implement an open architecture that meets DoD Information Assurance (IA) requirements. Implementation of this concept is via an A Kit/B Kit electronics design: infrastructure electronics refers to the components which are "built-in" into the vehicle during vehicle production, B-Kit electronics refers to the components which are installed onto the vehicle at a later date and may be optional based on vehicle mission. To control cost, a Family of C4ISR/EW Architectures shall be developed consisting of a base architecture that is incrementally scalable to provide added capability levels to JLTV variant that require additional C4ISR/EW systems. The base architecture includes embedded driver's display and controls for vehicle processing, which include, but are not limited to: vetronics, diagnostics, and power management. Scalable increments add commander's and rear workstation/displays and controls, which add capabilities including, but not limited to: battle command applications, radio control, network management, and intercom connection. Overall areas of scalability may include: Displays, Computing Resources, Networking, Enclaves, Cross Domain Solutions, and Power Generation and Distribution.					This is a definition and not verifiable separately.
PDFOV-7632		**3.4.4.1 Environmental Survivability and Reliability**					**4.4.4.1**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8464		Open Standards: In order to ensure compatibility and interoperability across the current and future military equipment portfolio, the JLTV requires adherence to established industry standards. Various national and international standards bodies, such as the Society for Automotive Engineers (SAE), American National Standards Institute (ANSI), International Organization for Standardization (ISO), Institute of Electrical and Electronics Engineers (IEEE), Internet Engineering Task Force (IETF), and International Telecommunication Union-Telecommunication Standardization Sector (ITU-T), develop a variety of protocol and service specifications that are similar to requirements defined here. National and international groups also publish "implementers' agreements" capturing a body of implementation-specific detail concerned with the practical application of their standards. All of these are considered to be "open external standards" for the purposes of the JLTV requirements definition.					This is a definition and not verifiable separately.
PDFOV-7634	4	All JLTV electrically powered equipment requiring 28 VDC power shall use the MIL-STD-1275 bus.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate that all contractor provided equipment requiring 28VDC power will be connected to the MIL-STD-1275 bus to verify compliance with Section 3 requirement.
PDFOV-2690	4	There shall be neither unacceptable response nor malfunction of any JLTV system or subsystem due to electromagnetic interference (EMI) produced by any or all of the JLTV systems and sub-systems.		X			Testing shall be conducted IAW TOP 06-2-542 to verify compliance with Section 3 requirement.
PDFOV-7635	4	The JLTV shall comply with MIL-STD-464 section 5.2 such that all systems (including all CFE and GFE) are electromagnetically compatible within the JLTV and does not impact operational performance requirements.		X			Testing shall demonstrate that the vehicle systems EMI does not interfere (reduce data throughput, generate errors, degrade comms signal to noise ratio, voice comms speech intelligibility of 91% (or greater) using the modified rhyme test IAW MIL-STD-1472F) with the GFE radio transmission or reception (for each vehicle communication system) from a base station while the vehicle engine is running and electrical systems being exercised.
PDFOV-7636	4	The JLTV shall comply with MIL-STD-464 section 5.3.		X			Testing shall be conducted IAW MIL-STD-464 to verify compliance with Section 3 requirement.
PDFOV-7637	4	The JLTV shall be IAW MIL-STD-464 section 5.5 Table 8.		X			Testing shall be conducted IAW MIL-STD-464 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7638	4	The JLTV subsystems (individual subsystems and components) shall comply with MIL-STD-464 sections 5.7 and 5.7.1 IAW MIL-STD-461 Table V.		X			Testing shall be conducted on each of the individual components and subsystems (tested separately) IAW MIL-STD-461 to verify compliance with Section 3 requirement.
PDFOV-7639	4	The JLTV shall comply with MIL-STD-464 sections 5.8, 5.8.1, 5.8.3 and 5.8.4.		X			Testing shall be conducted IAW MIL-STD-464 to verify compliance with Section 3 requirement.
PDFOV-7640	2	The JLTV shall comply with MIL-STD-464 sections 5.9, 5.9.1, 5.9.2 and 5.9.3.		X			Testing shall be conducted IAW MIL-STD-464 to verify compliance with Section 3 requirement.
PDFOV-7641	5	The JLTV shall comply with MIL-STD-464 section 5.10.		X			Testing shall be conducted IAW MIL-STD-464 to verify compliance with Section 3 requirement.
PDFOV-7643	2	The JLTV shall comply with MIL-STD-464 section 5.13.		X			Testing shall be conducted IAW MIL-STD-464 to verify compliance with Section 3 requirement.
PDFOV-7644		**3.4.4.1.1 Electrostatic Discharge**					**4.4.4.1.1**
PDFOV-7645	4	The JLTV subsystems shall be compliant to MIL-STD-1275 ESD.		X			Testing shall be conducted on each of the individual components and subsystems (tested separately) IAW MIL-STD-1275 ESD to verify compliance with Section 3 requirement.
PDFOV-2782		**3.4.4.1.2 Co-site Interference**					**4.4.4.1.2**
PDFOV-2784	5	Co-located antennae on the JLTV shall be sited IAW with the analysis specified in the Statement of Work (SOW) Section C "Co-site Interference and Antenna Optimization" paragraph.		X			Testing shall be conducted on the JLTV requiring certified anechoic chambers for antennas on the JLTV platform. Test shall be considered successful when JLTV co-site interference interactions meet the minimized co-site interference per the Modeling and Stimulation (M&S) recommendations.
PDFOV-2727		**3.4.4.1.3 Grounding**					**4.4.4.1.3**
PDFOV-7642	4	The JLTV shall comply with MIL-STD-464 section 5.11 (excluding plastic housing and enclosures).		X			Testing shall be conducted IAW MIL-STD-464 to verify compliance with Section 3 requirement.
PDFOV-2731	2	The JLTV shall come equipped with a connection point to connect a ground rod for use while the vehicle is halted IAW MIL-HDBK-419 vol.2 section 1.11 Military Mobile Facilities and MIL HDBK 1857 section 3.2.7.	X				Inspection shall be conducted to verify Section 3 requirement.
PDFOV-7648	4	Hinges and slides shall not be relied upon as the sole means of grounding.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate that every component attached to the vehicle through slides or hinges also includes a separate means of grounding (e.g. ground strap) to verify compliance with Section 3 requirement.
PDFOV-7649		**3.4.4.1.4 Environmental and Design Reliability**					**4.4.4.1.4**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7650	2	The wiring distribution systems (harness, connectors, plugs, switching, bus bars, etc.) shall be protected to prevent fluid (fresh and salt water, etc.) damage from fording, condensation from HVAC system and environmental effects.		X			Testing shall be conducted IAW TOP 2-2-505 following environmental tests (e.g. humidity, temperature extremes, salt spray/fog, power wash, and fording) to ensure no water intrusion is evident to verify compliance with Section 3 requirement.
PDFOV-7651	2	The wiring distribution systems (harness, connectors, plugs, switching, bus bars, etc.) subject to submersion shall meet IP67 for locations less than 1m of submersion and IP68 for locations greater than 3.3 ft (1 m).		X			Functional testing shall be conducted concurrently with PDFOV-8059 to verify compliance with Section 3 requirement.
PDFOV-7652	4	The power distribution subsystems (harness, connectors, plugs, switching, bus bars, etc.) shall be protected against power wash/spraying to IP66.		X			Functional testing shall be conducted concurrently with RAM testing to verify compliance with Section 3 requirement.
PDFOV-6576	2	All electrical/electronic components/devices shall be routed/installed to prevent fresh and salt water damage from fording, condensation from HVAC system and environmental effects.		X			Functional testing shall be conducted concurrently with PDFOV-8059 and RAM testing to verify compliance with Section 3 requirement.
PDFOV-7653	2	All electrical/electronic components/devices, excluding GFE, subject to submersion shall meet IP67 for locations less than 1m of submersion and IP68 for locations greater than 3.3 ft (1 m).		X			Functional testing shall be conducted concurrently with PDFOV-8059 to verify compliance with Section 3 requirement.
PDFOV-7654	4	All electrical/electronic components/devices, excluding GFE, shall be protected against power wash/spraying to IP66.		X			Functional testing shall be conducted concurrently with RAM testing to verify compliance with Section 3 requirement.
PDFOV-1849		**3.4.4.1.4.1 Connectors, Harness and Routing**					**4.4.4.1.4.1**
PDFOV-1855	4	All harnesses shall be protected from physical damage such as impact and abrasion as well as routed in a fashion that avoids contact/chafing with rough surfaces or sharp edges.		X			Testing shall be conducted concurrent with RAM testing to verify compliance with Section 3 requirement.
PDFOV-1861	4	All electrical wiring, cables and harnesses shall comply with MIL-STD-681. Circuit Identification labeling are required for wiring classified as System IV, and V.	X				Inspection shall verify all harnesses labeled IAW MIL-STD-681 System IV and V identification labeling requirements to verify compliance with Section 3 requirement.
PDFOV-7655	4	Identification shall include brief but intuitive description of wiring function and intended connection devices.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify all harness labels include a wiring function and intended connection device descriptions to verify compliance with Section 3 requirement.
PDFOV-7656	4	All receptacle connections shall be labeled with intended component connection identifiers.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify all receptacle connections are labeled with intended component connection identifiers to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7657	5	Unused electrical connectors and receptacles shall include covers to prevent accidental contact and/or damage.	X				Inspection shall be conducted in IAW TOP 2-2-505 to demonstrate all unused external connectors and receptacles have covers to verify compliance with Section 3 requirement.
PDFOV-7658	4	Nearby electrical connectors shall include positive means (keying) to prevent the inadvertent reversing or mismatching connectors.		X			Testing shall verify that each electrical connector cannot be incorrectly plugged into any connectors that can be reached by the cable as installed to verify compliance with Section 3 requirement.
PDFOV-7659	4	All harnesses and connector wiring shall be strain relieved to prevent physical damage due to harness and connector movement.		X			Testing shall be conducted concurrent with RAM testing to verify compliance with Section 3 requirement.
PDFOV-7660	4	All electrical connectors shall use MIL grade connectors unless approved through a waiver/deviation.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify connectors are MIL grade connectors, or other connectors which were approved through the waiver process to verify compliance with Section 3 requirement.
PDFOV-7681		**3.4.4.2 Data Distribution**					**4.4.4.2**
PDFOV-1797		**3.4.4.2.1 JLTV Data Bus Architecture Requirements**					**4.4.4.2.1**
PDFOV-7241	2	The JLTV Data Bus architecture shall include a C4ISR/EW Data Bus(es) and a Vehicle Sensor Data Bus(es).		X			Testing shall be conducted to demonstrate that no interconnection exists between Vetronics (vehicle operation sensors and controllers) enclave and C4ISR/EW enclave to demonstrate compliance with Section 3 requirement.
PDFOV-7243	4	The C4ISR/EW Data Bus Local Area Network (LAN) shall be gigabit ethernet (IEEE 802.3z and IEEE 802.3ab standards).		X			Testing shall be conducted to demonstrate that the C4ISR/EW Data Bus LAN provides data transfer rates and protocols as described in IEEE standards 802.3z and 802.3ab to demonstrate compliance with Section 3 requirement.
PDFOV-7246	4	The JLTV data bus architecture and connected components shall support communication using IPv4 and IPv6 protocols.		X			Testing shall be conducted to verify all equipment that uses IP for data transmission supports IPv4 and IPv6 standards to demonstrate compliance with Section 3 requirement.
PDFOV-7247	3	The Vehicle Sensor Data Bus(es) shall be compliant with the SAE J1939 standard in order to enable and facilitate the exchange and update of vehicle diagnostics data.		X			Testing shall be conducted to demonstrate that the Vetronics Data Bus operates according to protocols as described in the SAE standard J1939 to demonstrate compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7682	3	All data from the Vehicle Sensor Data Buses shall be accessible (bi-directional) off-board via a single vehicle SAE J1939 diagnostic connector (Maintenance Support Device (MSD) and Vehicle Automated Diagnostic System (VADS)) for diagnostics, vehicle health status and data transfer.		X			Testing shall be conducted to verify that all device and/or sensor data from the Vehicle Sensor Data Buses is be accessible (bi-directional) from off-board via a single vehicle J1939 diagnostic connector to demonstrate compliance with Section 3 requirement. Testing shall require MSD and VADS tools to demonstrate diagnostics, vehicle health status and data transfer.
PDFOV-8742	4	Data bus architecture and physical layout shall physically separate data by enclave IAW MIL-HDBK-232A (Red-Black separation).	X				Inspection shall verify the architecture implements necessary separation of classified and unclassified data busses and equipment for compliance with MIL-HDBK-232A and other governing regulations to verify Section 3 requirement. Logical wiring diagrams, schematics, and physical routing diagrams (harnesses and cabling) of the C4ISR/EW and Vetronics architecture described in SOW-CDRL-1085 shall be used to facilitate verification of this requirement.
PDFOV-1832		**3.4.4.2.1.1 Growth**					**4.4.4.2.1.1**
PDFOV-1844	4	The C4ISR/EW bus routing/switching functionality shall provide a minimum one (1) spare ports per enclave more than the maximum JLTV B-Kit electronics requirement to provide connections to additional routing/switching.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8743	2	The C4ISR/EW bus routing/switching functionality shall provide the capability for authorized administrators to electronically disable unused ports.		X			Testing shall demonstrate that the ability to enable and disable data bus ports is restricted to authenticated administrators.
PDFOV-7684	4	All Vehicle Sensor Data Bus(es) individually shall not exceed 75% maximum sustained utilization.		X			Testing shall collect CAN Bus utilization using a CAN Bus analyzer at 30 minute intervals. This collection should be done when the vehicle is in different modes (start up, idle, shut down, etc) to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7685	4	No link on the C4ISR/EW Data Bus shall exceed 70% sustained link utilization, regardless of the installed B-Kit electronics.		X			Testing shall demonstrate that this requirement is met via one of the below methods. -Testers shall use the "show interface" (or equivalent) command while logged into the router and visually observe the utilization of the interfaces. This will be repeated at one minute intervals for the duration of the test. -Tester shall use the Network Management core service on the CSDU to observe the reported link utilization. This will be repeated at one minute intervals for the duration of the test.
PDFOV-1882		**3.4.4.2.1.2 Failsafe Mode**					**4.4.4.2.1.2**
PDFOV-1883	2	The electrical components that are controlled and/or configured from the JLTV J1939 data bus shall provide for failsafe operation if any segment of the Vehicle Sensor Data Bus fails.		X			Testing shall be conducted as part of RAM and performance testing to verify compliance with Section 3 requirement.
PDFOV-1782		**3.4.4.2.2 C4ISR/EW Data Bus Architecture Requirements**					**4.4.4.2.2**
PDFOV-1786	1	The C4ISR/EW architecture shall provide the ability to transfer data from onboard C4ISR/EW subsystems to networks external to the JLTV via the kits and mission essential equipment as specified in Annex K.		X			Testing shall be conducted to demonstrate the ability to transfer data from the JLTV C4ISR/EW internal network to remote networks to verify compliance with Section 3 requirement. Testing will be conducted as part of Force XXI Battle Command Brigade and Below (FBCB2) verification testing and data collection.
PDFOV-6860	2	The systems, sub-systems, and components that make up the C4ISR/EW architecture shall provide a graceful power down and power up (i.e. prevent operating system corruptions) following the loss of power.		X			Testing shall be conducted to demonstrate that the C4ISR/EW systems, sub-systems, and components restart, returning to an operational state following power loss to verify compliance with Section 3 requirement.
PDFOV-1821	4	The C4ISR/EW vehicle routing/switching functionality shall be configured and monitored from the CSDU and ASDU.		X			Testing shall be conducted by making configuration changes (from CSDU and ASDU) to an existing configuration, importing and exporting configurations, displaying the status of the router and/or switch to verify compliance with Section 3 requirement.
PDFOV-7686	5	The JLTV shall have an external signal entry point connection that is accessible near the rear seat occupant compartment wall for each C4ISR/EW data bus network enclave.		X			Testing shall be conducted to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8744	2	The JLTV external signal entry point connection near the rear of the vehicle shall include a means to disable the port from inside the vehicle.		X			Testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-1981		**3.4.4.3 Security and Information Assurance**					**4.4.4.3**
PDFOV-8462		All accounts used for authentication will support individual accountability and role based access control. Users will be granted the most restrictive set of privileges that still allow the user to perform authorized tasks. Common roles include: **User -** User is the default mode of operation for all systems. The user role will not be permitted to make changes that affect the overall security or stability of the system. The user may have read-only access to status and diagnostic information for systems and applications; the user may also be granted read and write access to data files as required. **Maintainer -** The maintainer role will be granted access to functions necessary to diagnose and support system operation. The description of maintainer includes automotive-related maintenance typically performed by mechanics, as well as electronic and information system maintenance performed by communications and automations personnel. The differences in required access may drive distinct access privileges for each type of maintainer. Examples of maintainer functions include: access to vehicle functions; ability to change suspension ride height setting; and Vetronics data transfer; access to: audit configurations and application logs; and manage software updates. Accounts used for audit log management will not be used for other activities. **Administrator** - The administrator will be granted full root level access to the system, including the ability to create and delete accounts. Activities of the administrator will be logged for audit review. Additional roles may be necessary if they are justified in supporting separation of duties and do not increase the administrative and maintenance burden.					This is a definition and not verifiable separately.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8463	2	The JLTV C4ISR/EW smart displays (CSDU, ASDU) shall incorporate an external dual action zeroize switch which is accessible from inside the vehicle cabin that clears the memory and renders the device not usable until being reimaged.		X			Testing shall require disk duplicator and master image of CSDU and ASDU. Testing shall demonstrate the JLTV CSDU and ASDU are zeroized by activation of the dual-action switch accessible from within the vehicle cabin. CSDU and ASDU will be inoperable until reloading from master image to verify compliance with Section 3 requirement.
PDFOV-7687		**3.4.4.3.1 Physical Security**					**4.4.4.3.1**
PDFOV-7688	2	All Controlled Cryptographic Items (CCI) shall have a means of being physically locked in its mounted position.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify physical security measures to protect all CCI items and items containing CCI IAW DA PAM 25-380-2 to verify compliance with Section 3 requirement.
PDFOV-8591	2	All CCI shall be removable when unlocked.		X			Testing shall be conducted by removing the CCI when unlocked to verify compliance with Section 3 requirement.
PDFOV-1998		**3.4.4.3.2 Classification**					**4.4.4.3.2**
PDFOV-1999	2	The C4ISR/EW architecture shall be capable of processing the following type of data: UNCLASSIFIED, SECRET and NATO SECRET.				X	Certification through accreditation shall demonstrate equipment within the enclave boundary is approved to connect and operate in the manner described in the accreditation artifacts to verify compliance with Section 3 requirement. Accreditation requirements are specified in PDFOV-1984.
PDFOV-1982		**3.4.4.3.3 Information Assurance Capabilities**					**4.4.4.3.3**
PDFOV-1984	1	The JLTV shall be certifiable and accreditable IAW processes described in DoDD 8500.01, DoDI 8500.2 and DoDI 8510.01.				X	Certification through accreditation by the Designated Approving Authority (DAA) (unclassified and US Secret) and the United States Central Registry (NATO Secret) shall demonstrate compliance with Section 3 requirement.
PDFOV-7710	4	The JLTV DSDU, ASDU, and CSDU shall include roles based access.		X			Testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-2042		**3.4.4.3.4 Management of System Security policies**					**4.4.4.3.4**
PDFOV-2043	4	The C4ISR/EW architecture shall include a single interface to manage the system security policies implemented for all IT devices per enclave. Management includes controlling power state of device, definition and rules updates, log transfer and other actions that control the operation of the device or its output.		X			Testing shall be conducted to verify the ability to manage system security policies, rules, updates, and log archival for all IT devices from a single interface per enclave to verify compliance with Section 3 requirement.
PDFOV-2060		**3.4.4.3.5 End Crypto Unit Management**					**4.4.4.3.5**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-2080	4	All key filled devices shall be positioned to allow the JLTV crew to initiate zeroization of red and black keys from inside the vehicle cabin within one (1) minute for each device without tools.		X			Testing shall demonstrate that equipment with a key fill can be zeroized to verify compliance with Section 3 requirement. The clock shall start from the crew in their assigned crew seat.
PDFOV-8745	4	All devices that require key loading shall receive key fill from within vehicle.		X			Testing shall demonstrate that any device requiring key loading can receive a key fill from within vehicle to verify Section 3 requirement.
PDFOV-2083		**3.4.4.3.5.1 Key Management**					**4.4.4.3.5.1**
PDFOV-2107	2	All Contractor Furnished Equipment (CFE) C4ISR/EW devices that require key loading shall implement Electronic Key Management System (EKMS) Simple Key Loading, AN/CYZ-10 devices or Key Management Infrastructure (KMI) key loading specifications.		X	X		Testing shall demonstrate CFE devices that require cryptographic key loading support Electronic Key Management System (EKMS) Simple Key Loading, AN/CYZ-10 devices or KMI key loading specifications
PDFOV-7689		**3.4.4.4 Vehicle Command and Control Systems - Display and Onboard Computing Resources**					**4.4.4.4**
PDFOV-7691		The JLTV display and processing subsystem solutions will consist of a combination of the following: DSDU - shared display and processing unit; CSDU - shared display and processing unit; ASDU - shared display and processing unit. Each of these solutions may be kitted.					This is a definition and not verifiable separately.
PDFOV-1912		**3.4.4.4.1 Common Display Requirements**					**4.4.4.4.1**
PDFOV-7692	3	The JLTV displays greater than 12.1 in (30.7 cm) shall provide resolution greater than 1024 x 768 pixels.	X	X			Testing shall be conducted IAW MIL-STD-1472F paragraph 5.2 to verify compliance with Section 3 requirement.
PDFOV-1957	4	The JLTV display interface electronics shall have the ability to display, at a minimum, 18 bit color depth at the native resolution of the screen.		X			Testing shall be conducted using the display setting from the video source (adjust screen color bit depth) to verify compliance with Section 3 requirement.
PDFOV-1955	4	The JLTV display shall have the ability to automatically display formats greater or less than the screen's native grid size, scaled to match the screen's parameters.		X			Testing shall be conducted using external video sources that are less than and greater than the native screen resolution to verify compliance with Section 3 requirement.
PDFOV-7694	4	The viewing angle shall be at least 140 degrees when viewed from the center of the display, for both the horizontal and vertical axes.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-7695	4	There shall be no contrast or color or grey reversal within the viewing angle cone.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-7696	5	The JLTV displays white-to-black contrast ratio for a dark ambient light environment (< 0.1 foot-lamberts (fL)) shall have a minimum contrast ratio of 400:1.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.2.1.2.3 to verify Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7698	5	The JLTV displays shall provide a minimum of six, √2 grey shades, and have a High Ambient Contrast Ratio (HACR) of at Least 5.66:1 as per Table II of MIL-L-85762 under the following simultaneous worst case ambient conditions: a. Diffuse measurement illuminance source of 5,000 fC (53,821 lux) b. Specular measurement luminance source of 1000 fL (3,426cd/m2) c. The specular and diffuse reflectance values shall be at an angle of 30° IAW Figure 4.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.2.1.2.3 to verify Section 3 requirement.
PDFOV-1928	4	The JLTV displays shall include adjustable contrast and brightness controls.	X				Inspection shall be conducted IAW TOP 2-2-505 by visual inspection to verify compliance with Section 3 requirement.
PDFOV-1930	5	The JLTV displays shall include vertical and horizontal image adjustment controls for analog video sources.	X				Inspection shall be conducted IAW TOP 2-2-505 by visual inspection to verify compliance with Section 3 requirement.
PDFOV-1934	5	The JLTV displays (for both analog and digital signals) shall include the power indicator, and a front panel indicator or pop-up message to indicate "sync operation" or no video signal.		X			Testing shall be conducted by turning the display power on and visually inspection the power indicator and a front panel indicator or pop-up message to indicate "sync operation" or no video signal are present to verify compliance with Section 3 requirement.
PDFOV-7231	3	The JLTV displays shall include the capability of reducing the display brightness to a level that is sufficient to not be detected by unaided human eyes at ranges greater than 0.03 mi (50 m) or by NVG (AN/PVS-7 & AN/PVS-14) at ranges greater than 0.3 mi (500 m) from the host vehicle under clear atmospheric conditions and starlight. All JLTV displays, indicators, and lighted buttons dim to the above levels when blackout mode is enabled.		X			Testing shall be conducted IAW TOP 2-2-615 to verify compliance with Section 3 requirement.
PDFOV-1940	3	The JLTV displays luminance shall be dimmable to 0.05 fL or less. Light security filter is permissible.		X			Testing shall be conducted IAW TOP 2-2-615 to verify compliance with Section 3 requirement.
PDFOV-6862	4	The JLTV displays shall permit viewing under blue and red lighting.		X			Testing shall be conducted to monitor under blue and red lighting conditions confirming viewability to verify compliance with Section 3 requirement.
PDFOV-6743		**3.4.4.4.1.1 Controls**					**4.4.4.4.1.1**
PDFOV-1914	3	The JLTV displays shall include a touch screen and buttons around the perimeter of the display as Human Machine Interfaces (HMI) for manipulation of displayed object.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7699	3	The JLTV display's HMI shall be operable in MOPP IV and cold weather gear.		X			Testing shall be conducted to include using Army/USMC issued MOPP equipment and cold weather gear to ensure the displays can be manipulated under these conditions to verify compliance with Section 3 requirement.
PDFOV-1941		**3.4.4.4.1.2 The Display Interfaces**					**4.4.4.4.1.2**
PDFOV-1943	4	The CSDU and ASDU Interface electronics shall have the ability to auto sync display analog and digital data and video signals fed from C4ISR/EW Data Bus and direct interface sources.		X			Testing shall be conducted using external and onboard video sources interfaced to the displays to verify compliance with Section 3 requirement.
PDFOV-1947	4	Displays shall have the ability to display static and dynamic (full motion video), analog and digital data signals with no perceivable flicker.		X			Testing shall be conducted thru visual observation of dynamic digital and analog signals fed into the display to verify compliance with Section 3 requirement.
PDFOV-2128		**3.4.4.5 Electronically Aided Survivability**					**4.4.4.5**
PDFOV-2553		**3.4.4.5.1 Driver's Visual Aid Capability (includes DVE)**					**4.4.4.5.1**
PDFOV-7830	2	The installed GFE DVE (with associated bracketry) display shall be positioned directly in front of the driver at eye level for an Average Male (as defined in PDFOV-3132) when lowered from the stow position for operational use.		X			Testing shall be conducted to verify the mid-point of the DVE is located 31 in (78.7 cm) +/- 2 in (5 cm) above the seat reference point when lowered and laterally centered on seat to verify compliance with Section 3 requirement.
PDFOV-8598	2	The DVE camera shall be mounted on the same side as the driver's seating location.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-2510		**3.4.4.5.2 Counter Radio-Controlled Improvised Explosive Device Electronic Warfare**					**4.4.4.5.2**
PDFOV-4312	4	The Counter Radio-Controlled Improvised Explosive Device EW (CREW) Remote Control Unit shall be integrated in the crew compartment and be accessible to the driver or commander for operation when installed.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate that the CREW Remote Control Unit is integrated in the crew compartment and is accessible IAW MIL-STD-1472F to verify compliance with Section 3 requirement.
PDFOV-8599		**3.4.4.5.3 Backup Video Camera**					**4.4.4.5.3**
PDFOV-9244	4	The JLTV shall be equipped with a backup viewing capability.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify Section 3 requirement.
PDFOV-8600	4	The backup camera video feed shall be automatically displayed on the DSDU (if equipped) when the JLTV is put in reverse, regardless of back-up camera selection control.		X			Testing shall be conducted through multiple backup camera configuration selections (if available) to demonstrate that the back-up camera feed automatically appears on the DSDU when the JLTV is put in reverse, to verify compliance with Section 3 requirement.
PDFOV-8601	4	The driver shall have the ability to select and unselect the backup camera video feed for the purpose of situational awareness.		X			Testing shall be conducted to the demonstrate that the backup camera feed can be selected and unselected by the driver in normal operation conditions to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8602	4	The backup camera's field of view shall not be inhibited when a shelter, spare tire or other kits are installed.		X			Testing shall be conducted to demonstrate that when the driver selects the backup camera feed (with shelter, spare tire or any other kit with potential to block field of view of back-up camera installed) that no obstruction blocks the cameras field of view to verify compliance with Section 3 requirement.
PDFOV-8603	3	The backup camera video shall be able to see the ground from the outer edge of the rear of the vehicle to a distance at least 5 ft (1.5 m) away and be able to show the trailer mechanical connections to the JLTV.		X			Testing shall be conducted to demonstrate that the camera shows objects at the specified distance to verify compliance with Section 3 requirement.
PDFOV-8604	3	The backup camera video shall be able to distinguish a human threat to a distance of at least 25 ft (7.7 m) away from the rear bumper.		X			Testing shall be conducted to demonstrate that the camera allows the crew to distinguish a human form from a non-human form to verify compliance with Section 3 requirement.
PDFOV-2189		**3.4.4.6 Communication Capability**					**4.4.4.6**
PDFOV-2190		**3.4.4.6.1 Military Radio Capability**					**4.4.4.6.1**
PDFOV-7832	4	All military radios (capable of voice communication) shall utilize the JLTV intercom system headsets for voice communications (if equipped).		X			Testing shall verify that the radios can be used through the Intercom headsets to verify compliance with Section 3 requirement.
PDFOV-7834	4	All military radios that support data shall transmit all data through the C4ISR/EW Data Bus.		X			Testing shall verify the C4ISR/EW data bus contains data traffic from each military radio installed in the JLTV to verify compliance with Section 3 requirement.
PDFOV-8751	2	The JLTV shall include a tactical speaker for each military voice radio used for communication.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8752	2	The JLTV shall include a tactical handset (H-250) for each military voice military radio used for communication.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-2528		**3.4.4.7 Position and Timing Capability (includes GPS)**					**4.4.4.7**
PDFOV-2548	4	The C4ISR/EW architecture shall ensure the proper implementation and distribution of GPS timing and data to include, but not limited to, AN/PSN-11 TOD and One Pulse Per Second (1 PPS) IAW IS-GPS-154C, NMEA 0183 and ICD-GPS-153C.		X			Testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-7842	4	The C4ISR/EW architecture shall provide GPS data and timing to all subsystems using a single Ground-Based GPS Receiver Application Module (GB-GRAM).		X			Testing shall be conducted to demonstrate functionality of devices dependent on GPS data to verify compliance with Section 3 requirement. Examples of systems using GPS data include M20-20 antenna, FBCB2.
PDFOV-2346	4	The C4ISR/EW Data Bus shall be the interface between the GFE JCR/JBC-P software and the GFE JCR/JBC-P hardware, and GFE radios. JCR/JBC-P shall have the ability to communicate over the JCR/JBC-P satellite network with or without the KGV-72.		X			Testing shall demonstrate that satellite and terrestrial communication can be established and SA information transferred with the FBCB2 Network Operation Center (NOC) to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-2570		**3.4.4.8 Power Management and Distribution Capability**					**4.4.4.8**
PDFOV-2571		**3.4.4.8.1 General**					**4.4.4.8.1**
PDFOV-2573	5	The power management and distribution subsystem shall have the capability to detect and report faults such as electrical shorts, opens, under voltage, under current, over voltage, over current. If the DSDU is not kitted, this capability must be reported on the DSDU.		X			Testing shall demonstrate that seeded faults are detected and reported through the DSDU to verify compliance with Section 3 requirement.
PDFOV-2579	2	The power distribution subsystem shall incorporate safety features. For example; protective covers, grounding, interlocks, leakage detection to mitigate electric shock potential to crew and maintainers.	X				Inspection shall be conducted IAW TOP 2-2-508 to demonstrate that safety features are present to verify compliance with Section 3 requirement.
PDFOV-2581	2	The power management and distribution subsystem shall contain an isolated electrical bus IAW MIL-STD-1275 for On Board Vehicle Power (OBVP).		X			Testing shall be conducted to demonstrate that supplied OBVP is provided power from the 28VDC MIL-STD-1275 compliant bus. This testing shall include verification that the provided power meets the quality of the specified MIL-STD to verify compliance with Section 3 requirement. Power quality shall be measured simultaneously at the GFE component located closest and furthest from the power generation device. Full load is defined as 10kW plus hotel load. This test shall be performed at Tactical Idle (PDFOV-7848 and PDFOV-3507).
PDFOV-2583	4	The power management and distribution subsystem shall be capable of automatically transitioning between on-board and off-board power sources without any loss of functionality.		X			Testing shall be conducted to verify compliance with Section 3 requirement. The vehicle needs to be powered to a pre-defined load condition (eg. silent watch level). The batteries should be supplying power. The vehicle should be started and run to verify that the power supply transitions to the power generation system. The vehicle should be shut down again to observe that the batteries supply power. An off board power source should be connected to the NATO slave and the power supply should be transitioned to the off board power source. The vehicle should be restarted and the supply should be transitioned to on board power generation. No equipment should show signs of degradation or produce any faults throughout the conduct of this test.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-4316	2	The power management and distribution subsystem shall provide for electrical isolation between all AC voltage buses and grounded DC voltage buses.		X			Testing shall be conducted to demonstrate the isolation of the electrical system and will be performed at a minimum before and after fording test to verify compliance with Section 3 requirement. Testing shall be done on components and wiring between each bus and vehicle chassis.
PDFOV-4318	4	The power management and distribution subsystem shall provide protection from voltage reversals, short circuits, and arcing of high voltage circuits.		X			Testing shall demonstrate protection against voltage reversal, short circuits and arcing to verify compliance with Section 3 requirement.
PDFOV-7844	4	The power management, generation and distribution subsystems shall prevent sympathetic tripping due to any system fault.		X			Testing shall be conducted to demonstrate that when loads are dumped to simulate a faulty component that no disturbances are created that cause other components to unintentionally shut down to verify compliance with Section 3 requirement.
PDFOV-2623		**3.4.4.8.2 Low Voltage Distribution**					**4.4.4.8.2**
PDFOV-7847	4	The power management and distribution subsystem shall provide and control power to all electrical devices.		X			Testing shall be conducted to demonstrate control and monitoring of all electrical components. If the item is not installed, then a load bank shall be used to verify power is available and the component is controllable and monitorable to verify compliance with Section 3 requirement.
PDFOV-1222		**3.4.4.8.3 Power Generation**					**4.4.4.8.3**
PDFOV-1223		**3.4.4.8.3.1 DC Power Source/ On-board Electrical Power Requirement**					**4.4.4.8.3.1**
PDFOV-8488		Hotel loads are all electrical loads that are required in order to operate the JLTV in any condition, and do not include any GFE loads. Hotel loads include but are not limited to the following: vehicle lighting, environmental control units, heating and cooling fans and blowers, cooling fans, engine ECU, wipers, all suspension loads, ABS, AFES, heated frontal transparent armor, all sensors, solenoids, modules, transducers, compressors, heaters/dryers, all pumps, and clutches.					This is a definition and not verifiable separately.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1224	2	The JLTV shall be capable of providing 10 kW sustained electrical power to on-board vehicle subsystems (On-board power generation), in addition to the power required for the JLTV hotel loads. (T)		X			Testing shall be conducted to verify compliance with Section 3 requirement as follows: The vehicle load will be supplemented with load banks to check that total on-board power generation is capable of simultaneously providing 10 kW and hotel loads. The amount of power required for hotel load and on-board power shall be measured and documented prior to connecting the supplemental load banks. For test purposes, the hotel load shall be all loads required to operate the vehicle, in addition, all internal and external (service) lighting loads shall be on, headlamps on high beam, windshield wipers on continuous wipe, and air conditioning shall be operated at maximum condition with blower on maximum speed. If the power to installed OBVP cannot be determined, the OBVP loads must be disconnected in order to accurately determine the ability to draw the 10 kW. If all loads cannot be removed, the amount of power drawn must be determined by measuring the power out of the power generation devices (power generation AND energy storage). This shall be a steady state test and shall measure the steady state heating of wires and cooling demands on any electrical generation devices. Following a soak of 1 hour, while producing the full 10 kW plus hotel load, the power distribution system shall be measured for voltage drop of distribution components and temperature rise of connection points and wiring above ambient. All temperature rises shall be analyzed to ensure no connection points or wiring's temperature rises above the ratings for that component or wire Any cooling systems used to cool electronics should have the flow rates and inlet and outlet temperatures from the cooled components measured This test will be performed at Tactical Idle (PDFOV-7848)

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-9342	5	The JLTV shall be capable of providing 15 kW sustained electrical power to on-board vehicle subsystems (On-board power generation), in addition to the power required for the JLTV hotel loads. (O)		X			
PDFOV-1226	4	The On-board power generation shall be simultaneously provided as the JLTV is charging the energy storage consistent with the specifications of the component manufacturer.		X			Testing shall demonstrate that during the test of power generation capability, the battery can be charged to verify compliance with Section 3 requirement. The battery current should be monitored and the test should be conducted at the worst case of battery SOC based on the specifications of the energy storage manufacturers.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1228	2	The On-board power generation and hotel load power shall be provided on the move over the Operational Terrain described in Annex H.		X			Testing shall be conducted using the developed load profile and testing on the road load simulator to verify compliance with Section 3 requirement. This testing shall be conducted at full electrical load (10kW + all hotel loads). The test setup for this test is a road load dyno. The load profile must be created for operation on the dyno. The profile must be a dynamic series of accelerations, steady speeds, decelerations, and so on to simulate actual Operational Terrain driving. The expectation is that during some portions of the cycle, the power generation will not produce enough to supply the 10 kW - the battery should be able to supplement power to maintain all electrical load during that time. When the power generation is again able to produce enough power, the battery should recharge. At completion of the load profile, an evaluation of the energy storage device flow shall be conducted to ensure that the total flow of energy into the device throughout the conduct of the profile is equal to or greater than the flow of energy out. The profile shall be a combination of all the conditions in the correct percentages listed in the Operational Terrain and is summarized below: 3.4 min at Primary Surfaces 10 min idle 5 min at Secondary Surfaces 10 min idle 4.5 min at Unimproved Surfaces (Trails) 10 min idle 7.1 min at Unimproved Surfaces (Cross Country) 10 min idle This profile shall be one (1) hour in length and the test shall be five (5) cycles of the profile. For each successive cycle, the order of conditions should be rotated so that throughout the test each cycle contains the conditions run in a different order.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7848	2	The On-board power generation and hotel load power shall be provided at the halt with engine at tactical idle. (T)		X			Testing shall be conducted to verify compliance with Section 3 requirement. This shall be the default condition at which power generation testing is conducted. PDFOV 1224 and PDFOV 2581 will be tested at this condition. In addition, the test shall include a verification of the amount of power the vehicle can produce at normal idle. The vehicle shall be made to operate at normal idle and the load will be adjusted so that there is no flow of current out of the energy storage device. The test shall be run for 15 minutes in this condition while recording the current flow from the energy storage device to verify a steady state condition. The amount of power the power generation device is able to produce in this state shall be determined.
PDFOV-7849	5	The On-board power generation and hotel load power shall be provided at the halt with engine at normal idle. (O)		X			Testing shall be conducted to verify compliance with Section 3 requirement. This test shall be a repeat of the testing completed at the default condition (PDFOV 7848). PDFOV 1224 and PDFOV 2581 will be retested at this condition.
PDFOV-1252		**3.4.4.8.3.2 Depleted Energy Storage Engine Start**					**4.4.4.8.3.2**
PDFOV-1253	4	The power management subsystem shall disengage the energy storage devices from the bus before they are depleted below the charge level required to start the JLTV when the energy storage devices are providing on board power during silent watch or when the engine is off.		X			Testing shall be conducted to verify compliance with Section 3 requirement. Loads shall be used to create a power draw. The energy storage device SOC shall be monitored and recorded when activation of the disengagement device occurs. After the energy storage device is disengaged, verify that all powered equipment is now off. After a 5 minute wait, the vehicle shall be able to start.
PDFOV-1255	4	The JLTV combat override switch when engaged shall allow the energy storage devices to remain connected and supplying power to the bus even when they have reached and gone below the level required to start the vehicle. A warning indicator shall illuminate to warn the driver when the energy storage devices have reached and gone past this level of charge.		X			Testing shall be conducted to verify that when the combat override switch is engaged, the energy storage device continues to supply power below the level required to start the vehicle and that an indicator illuminates to warn the crew to verify compliance with Section 3 requirement.
PDFOV-1258		**3.4.4.8.3.3 Energy Storage**					**4.4.4.8.3.3**
PDFOV-1259	4	The JLTV energy storage devices shall be maintenance free.	X				Inspection of the OM shall be conducted to confirm the presence of no maintenance requirement for the energy storage devices to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-6872	4	The JLTV energy storage devices shall be shock, vibration, and weather protected; and be readily accessible for service.		X			Testing shall be conducted to verify the energy storage mounting and locations meet the criteria developed to check these requirements (shock, vibration, and weather protection) during RAM and performance testing (at periodic intervals) to verify compliance with Section 3 requirement.
PDFOV-8489	3	The surface temperatures of the JLTV energy storage device case exposed to crew during normal operation or maintenance shall not exceed the limits specified in MIL-STD-1472F section 5.13.4.6.		X			Testing shall be conducted by the use of a temperature sensor/thermocouple mounted on the hottest spot on the energy storage device case and assessed throughout performance testing data collection. This temperature should be recorded throughout testing and verified to never exceed the values specified in order to verify compliance with Section 3 requirement.
PDFOV-6868	3	The JLTV energy storage enclosures shall not be vented into the cab. This requirement does not apply to GFE equipment with self-contained batteries.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate that the venting system does not vent into the cab to verify compliance with Section 3 requirement.
PDFOV-6866	2	Under any operating condition, including abuse conditions such as ballistic events, short circuit, and overcharge, energy storage devices shall not present a hazard to the crew.		X			Testing shall be conducted using the tests in section 2.3.7 of S9310-AQ-SAF-010 (TECHNICAL MANUAL FOR BATTERIES, NAVY LITHIUM SAFETY PROGRAM RESPONSIBILITIES AND PROCEDURES) to verify compliance with Section 3 requirement.
PDFOV-8490	4	The JLTV energy storage device shall have a minimum calendar life of three (3) years.				X	Certification shall be provided to verify compliance with Section 3 requirement.
PDFOV-6982	4	If lead-acid Starting, Lighting, and Ignition (SLI) batteries are utilized they shall meet the requirements of MIL-PRF-32143 and NATO STANAG 4015.				X	Certification shall be provided IAW NATO STANAG 4015 to verify compliance with Section 3 requirement.
PDFOV-8492	4	The JLTV energy storage system shall comply with form factor requirements specified in NATO STANAG 4015.		X			Testing shall be conducted IAW TOP 1-2-504 to verify compliance with Section 3 requirement.
PDFOV-8531	5	The JLTV shall be able to utilize Lead-Acid Starting, Lighting, and Ignition (SLI) batteries of a 6T form factor and meet the requirements of MIL-PRF-32143 and NATO STANAG 4015 to start and operate the vehicle.		X			Testing shall be conducted IAW TOP 1-2-504 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1261	2	The JLTV with the engine off and without the use of an auxiliary power unit, shall have the capability of supplying continuous, rechargeable electrical power during a silent watch mission for two (2) hours when undergoing the load described in Annex K throughout a 32°F (0°C) to 125°F (52°C) ambient temperature range. Silent watch systems and duty cycles are defined in Annex K. This capability may be kitted. (T)		X			Testing shall be conducted at the two (2) extreme temperatures listed by loading the vehicle per Annex K and ensuring a fully charged battery will provide power for two (2) hours to verify compliance with Section 3 requirement.
PDFOV-8120	5	The JLTV with the engine off and without the use of an auxiliary power unit, shall have the capability of supplying continuous, rechargeable electrical power during a silent watch mission for four (4) hours when undergoing the load described in Annex K throughout a 32°F (0°C) to 125°F (52°C) ambient temperature range. Silent watch systems and duty cycles are defined in Annex K. This capability may be kitted. (O)		X			Testing shall be conducted at the two (2) extreme temperatures listed by loading the vehicle per Annex K and ensuring a fully charged battery will provide power for four (4) hours to verify compliance with Section 3 requirement.
PDFOV-2584		**3.4.4.8.4 Power Management System**					**4.4.4.8.4**
PDFOV-2586	5	The JLTV shall provide power management via the Vehicle Sensor Data Buses to control and collect the status of the power generation, energy storage, state of charge (SOC), and power control/distribution components. If the DSDU is not kitted, this capability must be resident on the DSDU.		X			Testing shall be conducted to verify compliance with Section 3 requirement. Testing shall demonstrate the ability to control the power management devices including the ability to provide and remove power to loads. Record all available information regarding power generation, energy storage, SOC, and power control/ distribution components.
PDFOV-2588	4	The JLTV shall be capable of dynamic load prioritization, load shedding and be re-configurable to allow the crew to prioritize and shed unneeded loads during operations including charging of the Silent Watch energy storage devices when installed.		X			Testing shall be conducted to verify compliance with Section 3 requirement. Perform load shedding and load prioritization functions including reconfiguring the load shedding and prioritization function. With the vehicle stationary and in a state of providing power to all devices, the operator shall shed loads and verify that the loads are no longer powered. The operator shall be able to reconfigure the load shedding function and set priority of specific loads.
PDFOV-8494	2	If a lithium ion battery is used, the JLTV battery management subsystem shall supply overcharge protection in compliance with ISO 12405-1, Section 9.3.		X			Testing shall be conducted IAW ISO 12405-1, Section 9.3.2, to verify compliance with Section 3 requirement.
PDFOV-909		**3.4.4.8.4.1 Capacitor Starting**					**4.4.4.8.4.1**
PDFOV-910	5	If a capacitor is used for JLTV starting, the capacitor shall have a minimum service life of 100,000 cycles.			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-2614		**3.4.4.8.5 Power Interface for COTS**					**4.4.4.8.5**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7394	2	The 120 VAC power outlets shall meet design requirements IAW SAE J2698.		X			Testing shall be conducted to ensure conformance with design guidelines and performance requirements in SAE J2698 Sections 4-16, to verify compliance with Section 3 requirement.
PDFOV-7851	2	The power management and distribution system shall provide at least one (1) GFCI outlet accessible by the driver and one (1) GFCI outlet accessible by the crew.		X			Testing shall be conducted to using a GFCI simulator to ensure outlet GFCI is wired correctly and performs the required function to prevent injury to personnel and outlets accessibility by driver and crew comply with MIL-STD 1472 to verify compliance with Section 3 requirement.
PDFOV-7852	4	The JLTV shall have the capability to accept as a convenience outlet both Type B NEMA 5-15 North American 120V and Type I AS-NZS 3112 AUS 10/240V.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement. The ability to accept the Type B NEMA 5-15 North American 120V outlet will be verified in PDFOV-8756 and other outlets will be verified in PDL-71.
PDFOV-8756	4	The JLTV shall accept the Type B NEMA 5-15 North American 120V.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate the correct outlet is installed (Type B NEMA 5-15 North American 120V) to verify compliance with Section 3 requirement.
PDFOV-8497	4	There shall be a minimum total of 15A available for the 120VAC circuit or 10A for the 240VAC.		X			Testing shall verify that 15A total is available to verify compliance with Section 3 requirement. Power draw should be varied between the outlets to ensure there is no issue drawing the complete 15 amps from either outlet or splitting the draw between the outlets.
PDFOV-7853	4	Output wave form shall be either a 60 Hz (for 120VAC) or 50 Hz (for 240VAC) sine wave with a maximum total harmonic distortion of less than 6%.		X			Testing shall verify the wave form meets the specified requirement to verify compliance with Section 3 requirement.
PDFOV-2618	3	The power management and distribution system shall provide at least one (1) 10A 12 VDC outlet accessible by driver and one outlet accessible by the crew.		X			Testing shall be conducted to demonstrate outlet can provide 10 Amps at 12 VDC and outlets accessibility by driver and crew comply with MIL-STD 1472 to verify compliance with Section 3 requirement.
PDFOV-2622	3	The power management and distribution subsystem shall provide at least one (1) 5A 28 VDC outlet accessible by the crew.		X			Testing shall be conducted to demonstrate outlet can provide 5 Amps at 28 VDC and outlets accessibility by driver and crew comply with MIL-STD 1472 to verify compliance with Section 3 requirement.
PDFOV-2651		**3.4.4.8.6 NATO Slave Interface**					**4.4.4.8.6**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-2653	2	The JLTV shall be equipped with a standard NATO slave interface as defined by STANAG 4074.		X			Testing shall be conducted by measuring the NATO slave interface and verifying it meets the dimensional requirements of the specified document to verify compliance with Section 3 requirement.
PDFOV-2655	3	The NATO slave interface shall be capable of jump starting the vehicle (with or without the energy storage devices), recharging the vehicle energy storage devices, and receiving power from an external DC low voltage source for an indefinite amount of time without damage to on-board vehicle energy storage devices or sub-systems.		X			Testing shall be conducted to demonstrate each of the functions listed to verify compliance with Section 3 requirement.
PDFOV-8606	3	The NATO slave interface shall provide 28 VDC electrical power output to another vehicle with enough power to slave start the vehicle.		X			Testing shall be conducted to demonstrate the function listed to verify compliance with Section 3 requirement.
PDFOV-2657	4	The NATO slave interface shall be located externally at the front of the vehicle.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate NATO slave location to verify compliance with Section 3 requirement.
PDFOV-7619	4	The NATO slave interface shall be protected from environmental and fording events.		X			Testing shall be conducted concurrent with PDFOV-1273 and PDFOV-8059; and RAM, performance of interface protector to be evaluated to verify compliance with Section 3 requirement.
PDFOV-1251	4	The NATO slave receptacle and wiring shall be IAW STANAG 4074 (Type 1) and located so as to preclude damage, corrosion or contamination, and tripping hazards upon entering or exiting the cab.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate the NATO slave connection and wiring conform to the standard to verify compliance with Section 3 requirement.
PDFOV-2662		**3.4.4.8.7 High Voltage Distribution**					**4.4.4.8.7**
PDFOV-7396	2	The JLTV electrical distribution subsystem shall be designed to mitigate the occurrence of Accidental Contact to both crew and maintenance personnel IAW MIL-HDBK-454B Guideline 1 Sections 4.5.3 and 5.2.4.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate the features described in the reference are in place to verify compliance with Section 3 requirement.
PDFOV-7398	2	The high voltage JLTV electrical distribution subsystem shall meet the requirements specified in SAE J1673.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate that design guidelines as per the SAE J1673 were used to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7402	4	All components, conductors, and wiring with voltages above 42.4 VAC peak or 60 VDC shall be located outside of crew occupied spaces or compartmentalized to contain primary and secondary effects of an arc flash and arc blast.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate that all components/ conductors/ wiring with voltages above 42.4 VAC peak or 60 VDC are either located outside of crew occupied spaces or are compartmentalized to verify compliance with Section 3 requirement.
PDFOV-2818		**3.4.4.9 Lighting**					**4.4.4.9**
PDFOV-2819		**3.4.4.9.1 General**					**4.4.4.9.1**
PDFOV-2889	2	The JLTV shall be equipped with self canceling turn indicators IAW FMVSS 108.		X			Testing shall demonstrate self-canceling turn indicators function appropriately to verify the Section 3 requirement.
PDFOV-2836	2	The headlights shall meet the illumination requirements of FMVSS 108. The headlight height restrictions of FMVSS 108 do not apply.				X	Certification shall be provided that indicates compliance to the FMVSS 108, to verify compliance with Section 3 requirement. Presence of markings required from FMVSS 108 shall satisfy certification requirements.
PDFOV-8500	2	The JLTV side marker lamps shall be located to meet both FMVSS 108 and ADR 13/00 requirements.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate location in compliance with FMVSS 108 and ADR 13/00 requirements to verify compliance with Section 3 requirement.
PDFOV-8499	2	The JLTV shall be equipped with three (3) side marker lamps (front, rear, and mid) which meet FMVSS 108 requirements.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate side marker lamps in compliance with FMVSS 108 to verify compliance with Section 3 requirement.
PDFOV-8501	2	The JLTV shall accept side marker lamps which meet the requirements of ADR 13/00, ADR 45/01, and ADR 74/00.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate the JLTV accepts side marker lamps which meet the requirements of ADR 13/00, ADR 45/01, and ADR 74/00 to verify compliance with Section 3 requirement.
PDFOV-8125	2	FMVSS 108 Table I shall supersede ADR 45/01 45.3.1 for the color of the emitted light of the side marker lamps.		X			Testing shall demonstrate the color of the emitted light of the side marker lamps are compliant with FMVSS 108 Table I which shall supersede ADR 45/01 45.3.1 to verify compliance with Section 3 requirement to verify compliance with Section 3 requirement.
PDFOV-8126	2	FMVSS 108 Table X shall supersede ADR 45/01 Section 45.3.1.2.1 "Side-Marker Lamp, Minimum Light Intensity".				X	Certification shall be provided that indicates compliance to the FMVSS standards (571.108 side -marker lamps), to verify compliance with Section 3 requirement. Presence of markings required from 571.108 shall satisfy certification requirements.
PDFOV-8127	2	FMVSS 108 Table X shall supersede ADR 45/01 Section 45.3.1.3.2 "Side-Marker Lamp, Forward/Backward facing visible Angle, Maximum/Minimum Starting Sweep Angle from Vertical Centreline".				X	Certification shall be provided that indicates compliance to the FMVSS standards (FMVSS 108 side -marker lamps), to verify compliance with Section 3 requirement. Presence of markings required from FMVSS 108 shall satisfy certification requirements.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8122	2	FMVSS 108 Tables VI-a and Table VI- b shall supersede ADR 06/00 Appendix A Section 6.1 for front facing indicators.				X	Certification shall be provided that indicates compliance to the FMVSS standards (571.108 side -marker lamps), to verify compliance with Section 3 requirement. Presence of markings required from 571.108 shall satisfy certification requirements.
PDFOV-8123	2	FMVSS 108 Table VII shall supersede ADR 06/00 Appendix A Section 6.1 Rear Facing Indicators.				X	Certification shall be provided that indicates compliance to the FMVSS standards (571.108 side -marker lamps), to verify compliance with Section 3 requirement. Presence of markings required from 571.108 shall satisfy certification requirements.
PDFOV-7454	2	In addition to FMVSS 108 standards the JLTV shall be equipped with direction indicators as specified per ADR 06/00 "Direction indicators for NB Class Vehicles (Medium Goods Vehicles), TB Class Trailer (Light Trailer) and TC Class Trailer (Medium Trailer)".	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7456	2	In addition to FMVSS 108 standards the JLTV shall have installed lights and light-signaling devices as specified per ADR 45/01 "Lighting & Light Signaling Devices not covered by ECE Regulations for NB Class Vehicles (Medium Goods Vehicles), TB Class Trailer (Light Trailer) and TC Class Trailer (Medium Trailer)".	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7460	2	The JLTV shall be equipped with front and rear position (side) lamps, stop lamps and end-outline marker lamps as specified per ADR 49/00 Front and Rear Position (side) Lamps, Stop Lamps and End-Outline Marker Lamps for NB Class Vehicles (Medium Goods Vehicles), TB Class Trailer (Light Trailer) and TC Class Trailer (Medium Trailer).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8124	5	The JLTV direction indicator shall be a single intensity IAW FMVSS 108 and not type "2b" "Direction indicators with two levels of intensity for the rear of the vehicle" as described in Annex 1 of Appendix A of ADR 06/00 (UN/ECE REGULATION NO. 06/00).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7455	2	The JLTV shall have installed lights and light-signaling devices as specified per ADR 13/00 Installation of Lighting and Light-Signaling Devices on other than L-Group Vehicles for NB Class Vehicles (Medium Goods Vehicles), TB Class Trailer (Light Trailer) and TC Class Trailer (Medium Trailer).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7073	2	The JLTV shall be equipped with Hazard Warning Lights IAW FMVSS 108.		X			Testing shall be conducted IAW TOP 2-2-508 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-2895	3	The JLTV shall have one (1) map light located at each crew seat with individual switches.		X			Testing shall demonstrate map light and switches at each seat location for functionality and use to verify the Section 3 requirement.
PDFOV-2857		**3.4.4.9.2 Blackout Lighting**					**4.4.4.9.2**
PDFOV-2858	3	The JLTV shall be equipped with controls to enter blackout mode, which will over-ride all interior and exterior lights, turn on blackout lights, disable audible alerts, and put displays and other light sources into blackout settings.		X			Testing shall verify controls execute the desired functions as specified in requirement. TOP-2-2-615 shall be used to verify the Section 3 requirement.
PDFOV-2862	3	Exterior blackout lighting shall consist of, either separately mounted or in a composite light assembly, one (1) blackout drive lamp, and two (2) rear mounted blackout stop lamp assemblies IAW MIL-STD-1179.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-2864	3	During blackout mode, all JLTV blackout illumination sources shall be compatible with night vision devices (i.e. night goggles) AN/PVS-7(NSN 5855-01-228-0937) , AN/PVS-14 (NSN 5855-01-432-0524) and AN/PSQ-20 (NSN 5855-01-534-6449).		X			Testing shall be conducted at night, with driver using each pair of night vision goggles with blackout lighting mode activated to ensure safe operation and verify compliance with Section 3 requirement.
PDFOV-2866	4	The emission of any vehicle interior or exterior light source, which may be illuminated (including warning lights) in the blackout mode, shall be limited to the visible spectrum (380 to 700 nanometers).		X			Testing shall be conducted IAW with TOP 2-2-615, paragraphs 4.4 and 4.5, to verify compliance with Section 3 requirement.
PDFOV-2868	5	No energy shall be emitted in the 700 to 1200-nanometer portion of the electromagnetic (EM) spectrum. (Emission peaks shall not exceed 1% relative to the peak emission in the visible spectrum.)		X			Testing shall be conducted IAW with TOP 2-2-615, paragraph 4.1, to verify compliance with Section 3 requirement.
PDFOV-2871		**3.4.4.9.3 Crew Indicators**					**4.4.4.9.3**
PDFOV-8502	2	The JLTV controls and displays shall meet the requirements of FMVSS 101.		X			Testing shall be conducted to ensure all functionality and other requirements of FMVSS 101 are met, to verify compliance with Section 3 requirement.
PDFOV-8503	3	The JLTV controls and displays that are not regulated by FMVSS 101 shall meet the size, spacing, labeling, and activation force requirements of MIL-STD-1472F sections 5.4, 5.5, and 5.14.2.2.		X			For JLTV controls that are not regulated by FMVSS 101, testing shall be conducted (by evaluating size, spacing, labeling, and activation force) for compliance with MIL-STD-1472F to verify Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8613	4	Minimum spacing between physical controls or any adjacent obstruction shall be increased 0.3 in (0.7 cm) from the clearances defined in MIL-STD-1472F Table VII to accommodate starting the engine, steering, driving, and operating environmental controls, DSDU, blast restraints, and seat adjustments while wearing arctic gloves, arctic mittens, or CBRN protective hand wear.		X			Testing shall be conducted (via dimensional measurements) IAW TOP 1-2-504 to verify compliance with Section 3 requirement.
PDFOV-8757	3	Audible warnings and signals shall meet the requirements of MIL-STD-1472F section 5.3.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.3 to verify Section 3 requirement.
PDFOV-8758	3	The JLTV shall be equipped with an inclinometer that permits readout of front-rear and side-side tilt within +/- two (2) degrees. This capability may be resident on the DSDU.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.12.7.2.4 to verify Section 3 requirement.
PDFOV-2873	3	The JLTV shall be equipped with gauges/indicators that shall be readily visible to the driver and illuminated for night operation.		X			Testing shall demonstrate all visible gauges and indicators for driver, for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-2875	4	Speed, tach, engine coolant temperature, oil pressure, fuel indicators, and AFES status indicators shall be dedicated gauges that continue to operate if the driver DSDU fails. Other gauges and indicators can be replaced by the driver DSDU.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate the speedometer, tachometer, water temperature, oil pressure, fuel indicators and AFES status indicators are dedicated gauges and indicators and operate when DSDU is removed to verify compliance with Section 3 requirement.
PDFOV-2877	4	Gauges and indicators shall include as a minimum, fuel level, engine oil level, engine coolant temperature, transmission fluid temperature, engine oil pressure, engine tachometer, speedometer, odometer, DC bus voltage, indication whether energy storage device is charging or discharging, air pressure (air assist vehicle and trailer brakes), brake warning, park brake engaged and air filter flow gauge.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate gauges and indicators are functional to verify compliance with Section 3 requirement.
PDFOV-2879	2	The JLTV speedometer shall display both miles per hour (MPH) and kilometers per hour (KPH).	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate speedometer has MPH and KPH to verify compliance with Section 3 requirement.
PDFOV-2881	5	The JLTV odometer shall be capable of being switched between miles and kilometers.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate odometer for capability to toggle between miles and kilometers to verify the Section 3 requirement.
PDFOV-7467	2	The JLTV shall be equipped with instrumentation as specified per ADR 18/03 Instrumentation for NB Class Vehicles (Medium Goods Vehicles).	X	X			Inspection shall be performed IAW TOP 2-2-505 to ensure the requirements of ADR 18/03, paragraphs 5.1, 5.1.1, 5.1.2, 5.1.3, and 5.1.4 are met. Testing shall be conducted IAW ADR 18/03 Paragraph 5.2 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-2885	4	The JLTV shall be equipped with an audible warning to indicate low air pressure, low oil pressure, and high coolant temperature.		X			Testing shall verify audible alerts for low air pressure, low oil pressure, and high coolant temperature to verify the Section 3 requirement.
PDFOV-2887	5	The audible warning indicators shall be inactive while in the blackout mode except for intercom sound.		X			Testing shall demonstrate audible alerts are inactive in blackout mode. Verify headset/intercom are audible in blackout mode to verify the Section 3 requirement.
PDFOV-7075	2	The JLTV shall be equipped with controls to adjust instrument panel light brightness.		X			Testing shall be conducted by operating outside lights and instrument panel for functionality to verify compliance with Section 3 requirement.
PDFOV-2891	4	Gauges and switches shall use coded indicators such as color, position, text and other approaches to indicate information type (desirable, cautionary, and dangerous operating levels).	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate colors or other indicators are applied to gauges to inform user of severity of each range to verify compliance with Section 3 requirement.
PDFOV-8759	2	The JLTV visual displays, warnings, and cautions shall meet the requirements of MIL-STD-1472F section 5.1.5 and 5.2.		X			Testing shall be conducted for compliance with MIL-STD-1472F sections 5.1.5 and 5.2 to verify Section 3 requirement.
PDFOV-2893	4	Lenses on gauges and displays shall not discolor throughout the life of the JLTV.	X				Inspection shall be conducted at beginning and end of RAM testing to determine any occurrence of discoloration, to verify compliance with Section 3 requirement.
PDFOV-2903		**3.4.5 Supportability**					**4.4.5**
PDFOV-7665	2	The DSDU shall be common across all JLTV configurations.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify that the DSDU in each JLTV utilizes common DSDU hardware to verify compliance with Section 3 requirement.
PDFOV-7669	2	The CSDU hardware shall be common across all JLTV configurations (if equipped).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7234		**3.4.5.1 Measurement Standard**					**4.4.5.1**
PDFOV-7235	4	The JLTV shall use only one measurement standard, either Metric or U.S. English. (T)			X		Analysis shall be conducted during Design Review process, including review of the bill of material (BOM) and OM's, to verify compliance with section 3.
PDFOV-7334	5	The JLTV shall use only the Metric measurement standard. (O)			X		Analysis shall be conducted during Design Review process, including review of BOM and OM's, to verify compliance with section 3.
PDFOV-2904		**3.4.5.2 Reliability, Availability, and Maintainability**					**4.4.5.2**
PDFOV-2905		**3.4.5.2.1 Reliability**					**4.4.5.2.1**

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-2907		The extremely high system-level reliability of the JLTV coupled with a trained crew is essential to make platform availability goals. It is through inherent, high reliability and maintainability that the JLTV is able to operate at extended ranges, for long periods of time without mission failure, with a smaller force and logistics footprint. The Reliability, Availability, and Maintainability (RAM) requirements for the JLTV do not account for failures of government furnished equipment or mission-specific equipment such as radios, weapons, C4, medical, etc.					This is a definition and not verifiable separately.
PDFOV-8574	4	The JLTV brakes, suspension and drive train shall be robust enough to tolerate repeated low speed maximum deceleration stops IAW SAE J294 in forward and reverse for extended periods.	X	X			Testing shall be conducted IAW SAE J294, paragraph 6.5 (Structural Ultimate Strength Test) to verify compliance with Section 3 requirement. Test results are evaluated per SAE J1404 to determine if test was successful. Additionally, visual inspection of brake and suspension components shall be performed IAW TOP 2-2-505 to confirm no structural/mechanical failures.
PDFOV-2908		**3.4.5.2.1.1 Mean Miles Between Hardware Mission Failure**					**4.4.5.2.1.1**
PDFOV-2909	1	The JLTV shall demonstrate at a minimum, a point estimate of 3,800 Mean Miles Between Hardware Mission Failure (MMBHMF). (T)		X			Testing shall be conducted IAW TOP 2-2-506 to verify compliance with Section 3 requirement.
PDFOV-8132	1	The JLTV shall demonstrate at a minimum, a point estimate of 25,000 MMBHMF. (O)		X			Testing shall be conducted IAW TOP 2-2-506 to verify compliance with Section 3 requirement.
PDFOV-8760		**3.4.5.2.1.2 Mean Miles Between Essential Function Failure**					**4.4.5.2.1.2**
PDFOV-8761	2	The JLTV shall demonstrate at a minimum, a point estimate of 325 Mean Miles Between Essential Function Failure (MMBEFF). (T)		X			Testing shall be conducted IAW TOP 2-2-506 to verify compliance with Section 3 requirement.
PDFOV-8762	5	The JLTV shall demonstrate at a minimum, a point estimate of 600 MMBEFF. (O)		X			Testing shall be conducted IAW TOP 2-2-506 to verify compliance with Section 3 requirement.
PDFOV-2917		**3.4.5.2.2 Operational Availability**					**4.4.5.2.2**
PDFOV-2918	1	The JLTV shall demonstrate the operational availability (Ao) of 95%. (T)			X		Analysis shall be conducted to verify compliance with Section 3 requirement using data generated in PDFOV-2909 and PDFOV-3947 and the formula in PDFOV-2920.
PDFOV-8134	1	The JLTV shall demonstrate the Ao of 98%. (O)			X		Analysis shall be conducted to verify compliance with Section 3 requirement using data generated in PDFOV-2909 and PDFOV-3947 and the formula in PDFOV-2920.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-2919		Ao is the degree (expressed as a decimal between 0 and 1, or the percentage equivalent) to which one can expect a piece of equipment or weapon system to work properly when it is required. Ao is calculated by dividing uptime by the sum of uptime and downtime. It is the quantitative link between readiness objectives and supportability.					This is a definition and not verifiable separately.
PDFOV-2920		Ao = Uptime/Total Time = 1-Downtime/Total Time = 1-(OM/TT)*(ALDT/MMBOMF + MR/K) Where, OM = Operational Miles per Year (6,000 miles/year Wartime) TT = Total Time in Clock Hours (8760 hours/year) MMBOMF = Mean Miles Between Operational Mission Failure (Miles/OMF) MR = Field Level Maintenance Ratio in Maintenance Man-hours per Operating Mile (MMH/Mile) ALDT = Administrative and Logistics Downtime (96 Clock Hours/OMF) K = Ratio of Maintenance Man-hours to Clock-Hours (MMH/CH = 1.123)					This is a definition and not verifiable separately.
PDFOV-2921		Uptime is that time when the system is considered to be ready for use and is either operating, in standby, or off.					This is a definition and not verifiable separately.
PDFOV-2922		Downtime is the time the system is down for repair of operational mission hardware failures and/or for restoration from operational mission software faults, including off-board logistic delays. It also includes planned maintenance time with a periodicity less than or equal to the test duration time that prevents the system from performing its assigned mission.					This is a definition and not verifiable separately.
PDFOV-2924		**3.4.5.2.3 Maintainability**					**4.4.5.2.3**
PDFOV-3946		**3.4.5.2.3.1 Maintenance Ratio**					**4.4.5.2.3.1**
PDFOV-3947	2	The JLTV shall demonstrate a Maintenance Ratio of 0.005 MMH/OM for the Operational Terrain as detailed in Annex H. (T)		X			Testing shall be an ongoing activity during RAM test phase, IAW TOP 2-2-503. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-8135	5	The JLTV shall demonstrate a Maintenance Ratio of 0.0036 MMH/OM for the Operational Terrain as detailed in Annex H. (O)		X			Testing shall be an ongoing activity during RAM test phase, IAW TOP 2-2-503. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-2970		**3.4.5.2.3.2 Time to Repair**					**4.4.5.2.3.2**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-2933		Maintenance operations assigned to Field Level Maintenance include: (1) Performance of preventive maintenance checks and services (PMCS); (2) Inspections by sight and touch of accessible components per the OM and condition-based maintenance indicators or instrumentation; (3) Lubrication, cleaning (including corrective actions to repair corrosive damage), preserving (including spot painting), tightening, replacement, and adjustments; (4) Diagnosis and fault isolation; (5) Replacement of unserviceable parts, modules, LRU/LRM, and assemblies; (6) Verification of faults and level of repair of unserviceable materiel prior to evacuation; (7) Recovery or coordination for transportation of equipment for Field Level Maintenance; (8) Diagnosis and isolation of materiel or module malfunctions, adjustment, and alignment of modules that can be readily completed with assigned tools and Test, Measurements, and Diagnostic Equipment (TMDE); (9) Performance of body repair, including straightening, welding, sanding, and spot painting of skirts, fenders, body, and hull sections when required to stop corrosion or restore structural integrity; and (10) Turn-in of unserviceable end items and components.					This is a definition and not verifiable separately.
PDFOV-2971		**3.4.5.2.3.2.1 Mean Time to Repair**					**4.4.5.2.3.2.1**
PDFOV-2972	2	Each JLTV shall have a Mean Time To Repair (MTTR) of 0.5 clock-hours or less for field level maintenance. MTTR is measured as "hood up to hood down" repair time and includes isolation of failure and repair, remove and replace, and verification of success or failure of the repair.		X			Testing shall be an ongoing activity during RAM test phase, IAW TOP 2-2-503. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-2975		MTTR is the sum of scheduled and unscheduled maintenance times divided by the total number of scheduled and unscheduled field level maintenance actions during a given period of time under stated conditions. MTTR applies to the system-level configuration; it will be used as an "on-system" or "at-system" maintainability index and not for the repair of components.					This is a definition and not verifiable separately.
PDFOV-2973		**3.4.5.2.3.2.2 Maximum Time to Repair Field Level**					**4.4.5.2.3.2.2**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3953		Maximum Time to Repair (MaxTTR) is that time within which a specified percentage of all corrective maintenance tasks must be completed. MaxTTR is used as an "on-system" maintainability parameter; it is not used for the off-system repair of replaced components. MaxTTR is measured as "hood up to hood down" repair time and includes isolation of failure and repair, remove and replace, and verification of success or failure of the repair.					This is a definition and not verifiable separately.
PDFOV-2977	3	The JLTV shall have a MaxTTR for crew maintenance tasks of 0.5 clock-hours using two (2) crew.		X			Testing shall be an ongoing activity during RAM test phase, IAW TOP 2-2-503. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-3956	3	The JLTV shall have a MaxTTR for field level maintenance tasks performed by a Military Occupant Specialty (MOS) Mechanic of 2.5 clock-hours. (T)		X			Testing shall be an ongoing activity during RAM test phase, IAW TOP 2-2-503. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-8136	5	The JLTV shall have a MaxTTR for field level maintenance tasks performed by a MOS Mechanic of two (2) clock-hours. (O)		X			Testing shall be an ongoing activity during RAM test phase, IAW TOP 2-2-503. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-3000		**3.4.5.2.3.2.3 Removal and Replacement**					**4.4.5.2.3.2.3**
PDFOV-3001	3	The JLTV shall be designed so the power-pack can be removed from the vehicle and replaced in under two and half (2.5) clock-hours by two (2) maintainers. (T)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-8137	5	The JLTV shall be designed so the power-pack can be removed from the vehicle and replaced in under two (2) clock-hours by two (2) maintainers. (O)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-3002	3	The JLTV shall be designed so that the transfer case (if applicable) can be removed from the power-pack (once the power-pack is removed) and replaced in under one (1) clock-hour by two (2) maintainers. (T)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-8608	5	The JLTV shall be designed so that the transfer case (if applicable) can be removed from the power-pack (once the power-pack is removed) and replaced in under 0.75 clock-hours by two (2) maintainers. (O)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3003	3	The JLTV shall be designed so that the engine can be removed from the power-pack (once the power-pack is removed) and replaced in under two (2) clock-hours by two (2) maintainers. (T)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-8609	5	The JLTV shall be designed so that the engine can be removed from the power-pack (once the power-pack is removed) and replaced in under 1.5 clock-hours by two (2) maintainers. (O)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-3004	3	The JLTV shall be designed so that the transmission can be removed from the power-pack (once the power-pack is removed) and replaced in under one (1) clock-hour by two (2) maintainers. (T)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-8610	5	The JLTV shall be designed so that the transmission can be removed from the power-pack (once the power-pack is removed) and replaced in under 0.75 clock-hours by two (2) maintainers. (O)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-3005	3	The JLTV shall be designed so that the Integrated Starter Generator (ISG) (if applicable) can be removed from the power-pack (once the power-pack is removed) and replaced in under two (2) clock-hours by two (2) maintainers. (T)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-8611	5	The JLTV shall be designed so that the Integrated Starter Generator (ISG) (if applicable) can be removed from the power-pack (once the power-pack is removed) and replaced in under 1.5 clock-hours by two (2) maintainers. (O)		X			This shall be an ongoing activity during government testing, IAW TOP 2-2-503 as the situation arises. Maintenance data shall be recorded and analyzed to verify compliance with Section 3 requirement.
PDFOV-3964		**3.4.5.2.3.3 Tools**					**4.4.5.2.3.3**
PDFOV-3970	4	The JLTV shall be capable of being maintained by the Field Level Maintainer with tools that are within the General Mechanics Tool Kit (GMTK) or Standard Auto Tool Set (SATS).		X			Testing shall be conducted IAW TOP 2-2-503 and OM to verify compliance with Section 3 requirement.
PDFOV-3971	4	The JLTV shall be capable of being maintained with tools listed in the BII (Annex M) for crew associated maintenance tasks.		X			Testing shall be conducted IAW TOP 2-2-503 and OM to verify compliance with Section 3 requirement.
PDFOV-3976	4	The JLTV shall be able to be maintainable without special tools or TMDE beyond a multimeter (no calibration required) and a torque wrench (no calibration required) at field level.		X			Testing shall be conducted IAW TOP 2-2-503 and OM to verify compliance with Section 3 requirement.
PDFOV-2964	3	The JLTV shall have mounting and stowage provisions for all BII (Annex M) that is operationally accessible.		X			Testing shall be conducted IAW TOP 2-2-802, paragraph 3.2 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8655	4	The JLTV shall include a manually operated compact jack as BII (Annex M) that has a capacity of at least 100 percent of the maximum axle load rating to safely lift the vehicle on hard level surfaces for tire changing activities.			X		Analysis shall be conducted by checking the jack capacity against the axle load rating to verify compliance with Section 3 requirement.
PDFOV-2946		**3.4.5.2.3.4 Component Accessibility and Identification.**					**4.4.5.2.3.4**
PDFOV-2948	3	All reservoirs, filters, drains, vents, valves, and fuses requiring regularly scheduled maintenance, per Tech Manual specifications, shall be easily accessible and identified for inspection and servicing.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-2950	3	Drain plugs installed in engine, transmission, transfer case, axles, and hydraulic reservoir shall be of the permanent magnet type and compliant with MIL-STD-1472F accessibility guidelines.		X			Testing shall be conducted for compliance with MIL-STD-1472F and presence of permanent magnetism to verify Section 3 requirement.
PDFOV-2952	4	The function of all drains, vents and valve openings shall not permit the draining fluids to adversely affect the function of or damage to any other vehicle component (i.e. battery box).		X			Testing shall be conducted IAW TOP 2-2-503 to verify compliance with Section 3 requirement.
PDFOV-2978		**3.4.5.2.3.5 PMCS**					**4.4.5.2.3.5**
PDFOV-2989	3	The PMCS in total shall require no more than 30 minutes to complete.		X			Testing shall be conducted IAW TOP 2-2-503 and OM, to verify compliance with Section 3 requirement.
PDFOV-3007	4	The JLTV equipment checked as part of routine or daily maintenance checks shall be physically accessible without the use of tools.		X			Testing shall be conducted for compliance with MIL-STD-1472F and IAW TOP 2-2-503 to verify compliance with Section 3 requirement.
PDFOV-3038		**3.4.5.2.3.6 Automotive Filters**					**4.4.5.2.3.6**
PDFOV-3046	4	All filters within the JLTV for water, fuel, oil, hydraulic, pneumatic and air shall be directly accessible by the crew or maintainer (with or without B-kit armor installed).		X			Testing for ease of accessibility shall be conducted for compliance with MIL-STD-1472F sections 5.9.4.5, 5.9.4.6, 5.9.9.3, 5.11.3.17.6, and 5.12.9.1.2 to verify Section 3 requirement.
PDFOV-3047	4	Life of all filters within the JLTV for water, fuel, oil, hydraulic, pneumatic and air shall be displayed through the diagnostic system. A time based algorithm may be used to satisfy this requirement.		X			Testing shall be conducted IAW TOP 6-2-335, paragraph 10, to verify compliance with Section 3 requirement.
PDFOV-3048	4	Each filter element shall be able to be changed in five (5) minutes with the use of onboard tools by the crew.		X			Testing shall be conducted IAW TOP 2-2-503 and OM to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3043	4	The engine air filter (if applicable) shall meet MIL-PRF-46736 for a 200 hour service life capacity.		X			Testing of the air cleaner assembly and air filter(filter element) shall be conducted IAW MIL-PRF-62048 and MIL-PRF-46736. The air cleaner assembly shall have a service life of 200 hours and achieve an accumulative efficiency of 99.9% when tested on SAE/PTI coarse test dust, and the initial efficiency shall achieve an efficiency of 99.5% at engine's rated air flow when tested on SAE/PTI fine test dust to verify compliance with Section 3 requirement.
PDFOV-3051		**3.4.5.2.3.6.1 Air Cleaner**					**4.4.5.2.3.6.1**
PDFOV-3053	4	The JLTV shall incorporate an air cleaner system that complies with the requirements of MIL-PRF-62048, Air Cleaners, Automotive, Heavy Duty and Dry Type; at the 200 hour service life.		X			Testing of the air cleaner assembly and air filter(filter element) shall be conducted IAW MIL-PRF-62048 and MIL-PRF-46736. The air cleaner assembly shall have a service life of 200 hours and achieve an accumulative efficiency of 99.9% when tested on SAE/PTI coarse test dust, and the initial efficiency shall achieve an efficiency of 99.5% at engine's rated air flow when tested on SAE/PTI fine test dust to verify compliance with Section 3 requirement.
PDFOV-8808	2	The JLTV air cleaner system shall prevent engine failure attributed to dust ingestion.		X			Testing shall be conducted IAW TOP 2-2-819 to verify compliance with Section 3 requirement.
PDFOV-3060		**3.4.5.2.3.7 Interactive Electronic Technical Manual**					**4.4.5.2.3.7**
PDFOV-3097	5	Each DSDU shall host and operate full Interactive Electronic Technical Manual (IETM) that include crew and maintainer TM and Repair Parts and Special Tool Lists (RPSTL) for all onboard equipment, including GFE items. (O)		X			Testing shall be conducted via DSDU and operation of IETM to confirm crew and maintainer TM, Repair Parts and Special Tool Lists for all onboard equipment, including GFE is present to verify compliance with Section 3 requirement.
PDFOV-3099	5	The DSDU shall host and operate an embedded training system to assist the crew/maintainer in performing maintenance tasks and diagnosis. (O)		X			Testing shall be conducted via DSDU and operation of IETM to confirm embedded training is present to verify compliance with Section 3 requirement.
PDFOV-3103	5	The IETM on-platform software shall allow the crew/maintainer to view actual video coverage of Field and Sustainment Level Maintenance Tasks. (O)		X			Testing shall be conducted via operation of IETM to confirm actual video is present to verify compliance with Section 3 requirement.
PDFOV-3105	5	The IETM on-platform software shall interoperate with the embedded diagnostic software for fault isolation and maintenance task demonstration. (O)		X			Testing shall be conducted via initiation of intentional fault and operation of IETM on-platform software and diagnostic software to verify compliance with Section 3 requirement.
PDFOV-8468		**3.4.5.2.3.8 HMS**					**4.4.5.2.3.8**
PDFOV-7717	3	The JLTV shall host and display the Health Management System (HMS) software application. If the DSDU is not kitted, this capability must be resident on the DSDU.		X			Testing shall verify the DSDU allows interaction with the full functionality of the Health Management System software application to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8469	3	A HMS software application shall be used to provide a user interface to the vehicle health. The HMS provides the user diagnostics, fault notifications, fault storage, CBM data storage, and vehicle configuration data.		X			Testing shall be conducted by accessing the HMS and confirming the interface to the vehicle health and the features indicated to verify compliance with Section 3 requirement.
PDFOV-8470	3	The HMS shall provide a view of major subsystem health with the ability to select any subsystem to reveal more detail on component fault codes, and display a readable description of the fault condition and impact to vehicle performance.		X			Testing shall be conducted by using a series of contrived/manufactured faults from each electronically monitored subsystem and verifying that the fault can be diagnosed and viewed through the HMS as described in the Section 3 requirement.
PDFOV-8471	4	The HMS shall provide a reference to the relevant section of the EOM in the fault code detail description.		X			Testing shall be conducted through the use of a contrived/manufacturered faults and the verification that the induced fault provides an appropriate EOM reference to verify compliance with Section 3 requirement.
PDFOV-8472	3	The HMS shall provide a method for the driver to enter information/notes about vehicle issues/concerns, which can be accessed by maintainers to assist troubleshooting.		X			Testing shall exercise the DSDU HMS application by entering contrived vehicle issues and verifying that the details were stored and accessible to verify compliance with Section 3 requirement.
PDFOV-8746	3	The HMS shall enable display and storage of vehicle configuration parameters, to include automated subsystem and component identifiers accessible on the J1939 bus, and a method for a maintainer to manually input subsystem and component identifiers not accessible on the J1939 bus.		X			Testing shall exercise the DSDU HMS application by entering vehicle configuration parameters and verifying that the details were stored and accessible to verify compliance with Section 3 requirement.
PDFOV-8478	3	The HMS diagnostic software shall detect faults by utilizing information from any existing embedded diagnostic capabilities included in the subsystems, components, and modules resident on the vehicle.		X			Testing shall verify through a series of contrived/ manufactured faults to verify that fault data on the J1939 bus is detected, displayed and recorded as a fault on the DSDU; correct contrived fault and verify fault is no longer active to verify compliance with Section 3 requirement.
PDFOV-8480	5	The HMS diagnostic software false alarm occurrences shall be less than one (1) percent of failure notifications.		X			Testing shall verify through the process of investigating fault notifications and the resulting failure analysis (confirm source if fault and if it was a false alarm) during vehicle RAM test operations to verify compliance with Section 3 requirement.
PDFOV-8473		**3.4.5.2.3.8.1 Notifications**					**4.4.5.2.3.8.1**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8747	4	The HMS shall provide fault notifications requiring driver acknowledgment when a Warning (Indicates the existence of a hazardous condition requiring immediate corrective action) or Caution (Indicate to the operator that an impending dangerous condition exists that requires attention but not necessarily immediate action) occurs.		X			Testing shall be conducted through the use of contrived/manufactured faults, confirm that the induced fault provides an appropriate Warning or Caution and requires driver acknowledgement to verify compliance with Section 3 requirement.
PDFOV-8748	4	Acknowledged fault notifications shall not repeat unless a new fault occurs or the vehicle is restarted.		X			Testing shall exercise the notifications by the following process, to verify compliance with Section 3 requirement: insert a Warning and Caution level fault, acknowledge the fault on the DSDU, re-insert the same fault, verify that the notification is not repeated, restart the vehicle, re-insert the same fault, and verify that the notification is once again displayed on the DSDU.
PDFOV-8749	4	The HMS shall provide a notification of Alert (Indicates conditions which are not hazardous or dangerous to the crew) that does not require acknowledgment.		X			Testing shall be conducted through the use of contrived/manufactured conditions, confirm that the induced condition provides an appropriate Alert to verify compliance with Section 3 requirement.
PDFOV-8474		**3.4.5.2.3.8.1.1 CBM Data Storage**					**4.4.5.2.3.8.1.1**
PDFOV-8750	4	CBM data stored shall include matured faults, date and timestamp, vehicle speed, miles, RPM, transmission gear, brake on/off, vehicle hours, throttle position, temperature. Additional design specific parameters as specified by contractor should also be stored.		X			Testing shall be conducted by examination of the CBM data collected from a vehicle and at least one fault diagnosed by the HMS, to verify the Section 3 requirement.
PDFOV-8475	4	All CBM data shall be capable of storage for a minimum of 96 engine hours without overwrite or data loss. Once the data storage capacity is reached, unprocessed data should be overwritten on a First In First Out (FIFO) basis.		X			Testing shall verify through the examination of the CBM data record time stamps that a vehicle with more than 96 hours of engine runtime has a minimum of 96 hours of CBM data to verify compliance with Section 3 requirement.
PDFOV-8476	3	The CBM data shall use Army Bulk CBM Data (ABCD) format for bulk data transfers to at-platform diagnostic devices (MSD and VADS).		X			Testing shall verify the transfer of CBM data to MSD and EMSS to verify compliance with Section 3 requirement.
PDFOV-8477		**3.4.5.2.3.8.1.2 Vehicle Embedded Diagnostics Software**					**4.4.5.2.3.8.1.2**
PDFOV-8479	4	The JLTV embedded diagnostic software shall automatically isolate faults to a single component /Line Replaceable Unit (LRU) /Line Replaceable Module (LRM) and its associated wiring.		X			Testing shall verify through a series of contrived/ manufactured faults to verify that fault data on the J1939 bus is detected and isolated as a fault on the DSDU; correct contrived fault and verify fault is no longer active to verify compliance with Section 3 requirement.
PDFOV-6543		**3.4.5.3 Safety**					**4.4.5.3**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8612	2	The JLTV shall meet FMVSS 113 requirements for the hood and any front opening hatch and access panel that partially or fully obstructs the drivers' forward view.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8504	4	The JLTV hood or any front opening hatch and access panel that partially or fully obstructs the drivers forward view, shall have a mechanism to hold the hood or access panel open during maintenance.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8817		**3.4.5.3.1 Combat Override Switch**					**4.4.5.3.1**
PDFOV-8818	2	The JLTV shall be equipped with a combat override switch that when engaged shall override any control feature that prevents engine start or limits powertrain performance.		X			Testing shall be conducted by engaging combat override switch and verifying that all engine start prevention modes and powertrain performance limiters are overridden by the combat override switch, to verify compliance with Section 3 requirement.
PDFOV-8819	4	The JLTV combat override switch shall be selectable by the driver and the activation will meet the protection requirements of MIL-STD-1472F section 5.4.1.8.4 method c or d.		X			Testing shall be conducted to confirm actuation of combat override. Testing shall include confirmation that the selection methods meet MIL-STD-1472F to verify compliance with Section 3 requirement.
PDFOV-8820	4	A warning indicator shall illuminate to warn the driver that the combat override switch has been engaged.		X			Testing shall be conducted by engaging the combat override switch to confirm that the warning indicator illuminates. to verify compliance with Section 3 requirement.
PDFOV-8821	4	Instances of when the combat override switch has been engaged shall be recorded by the HMS.		X			Testing shall be conducted by engaging the combat override switch at least 3 times and confirm it was recorded by the HMS to verify compliance with Section 3 requirement.
PDFOV-3161		**3.4.5.3.2 Cab Crush Protection**					**4.4.5.3.2**
PDFOV-3162	1	The JLTV cab shall have a crush resistant roof capable of withstanding the JLTV's GVW (excluding GPK and RWS) when loaded IAW SAE J2422 Section 5 and 6. (T)		X			Testing shall be conducted when loaded IAW SAE 2422 Section 5 and 6 to verify compliance with Section 3 requirement. Variable "mg" shall be set equal to 1.0 GVW. Survival space shall be determined per SAE J2422 section 10, however the 95th Hybrid III test dummy in personal equipment with the seat in the full rear, full down position shall be used in place of the 50th Hybrid III in the median position that is called out in SAE J2422.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8139	5	The JLTV cab shall have a crush resistant roof capable of withstanding 150% of the JLTV's GVWR (excluding GPK and RWS) when loaded IAW SAE J2422 Section 5 and 6. (O)		X			Testing shall be conducted when loaded IAW SAE 2422 Section 5 and 6 to verify compliance with Section 3 requirement. Variable "mg" shall be set equal to 1.5 GVWR. Survival space shall be determined per SAE J2422 section 10, however the 95th Hybrid III test dummy in personal equipment with the seat in the full rear, full down position shall be used in place of the 50th Hybrid III in the median position that is called out in SAE J2422.
PDFOV-3176		**3.4.5.3.3 Crew Restraint System**					**4.4.5.3.3**
PDFOV-3177	3	Each JLTV crew seat shall have a combined seat and blast restraint device.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-6920	2	The front and rear JLTV seats shall conform to FMVSS 207 and ADR 03/03.				X	Certification shall be provided in compliance with FMVSS 207 to verify Section 3 requirement. Load shall be maintained for more than one (1) second to satisfy the ADR 03/03 requirements.
PDFOV-3179	4	The blast restraints shall be a minimum of a five (5) point system (Type 3 seat belt system as defined by SAE AS8043 section 2.2.1.3).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8506	4	The blast restraint shall adjust to fit Small Female to Large Male wearing combat gear and MOPP IV protection.		X			Testing shall be conducted IAW TOP 2-2-508 to verify compliance with Section 3 requirement.
PDFOV-8614	4	The blast restraint shall be mounted to the seat in such a manner that the mounting points move with any energy absorbing stroke of the seat.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8615	4	No belt webbing or straps shall contact or rub against any surface (such as bolts, seat mounting hardware, or metal-seat edge structure) that may cause the webbing to fray, wear, or degrade.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8140	2	The Type 3 blast restraint assemblies shall conform to requirements of FMVSS 209 as described for a Type 2 seat belt assembly.				X	Certification shall be provided to verify compliance to the Section 3 requirement.
PDFOV-8616	4	Shoulder belts shall come off the large male shoulder at an angle from 0 degrees to +/- 5 degrees to the horizontal, in the XZ plane.		X			Testing shall be conducted IAW TOP 2-2-508 using the large male to verify compliance with Section 3 requirement.
PDFOV-8617	4	The minimum distance between the inside edges of the shoulder belts, as they ride at the top of the seat, shall be 7 in (18 cm).		X			Testing shall be conducted by measuring the distance between the shoulder belts without crew in the seat IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8618	4	The shoulder belts shall be individually adjustable by means of separate emergency locking retractors (ELR).		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8619	2	The shoulder belt retractor shall incorporate an ELR that meets the requirements of FMVSS 209 S4.3.(j)(2).				X	Certification shall be provided for compliance with FMVSS 209 to verify Section 3 requirement.
PDFOV-8620	4	The lap belt sections shall include a mechanism to allow the crew to adjust the lap belt length.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-8621	4	The lap belt sections shall include a mechanism to present the belts to the crew and prevent the lap belt from being trapped in the door.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-8622	4	Upon release of the blast restraint buckle, the shoulder belts shall release away from the body to a position within arm's reach of the crew while seated.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-8623	4	The blast restraint release mechanism shall be attached to the crotch belt.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8624	4	The crotch belt shall include a manual mechanism within reach of the seated crew to allow the crew to adjust the crotch belt length.	X				Inspection shall be conducted IAW TOP 2-2-505 and for compliance with MIL-STD-1472F section 5.6.3.1.4 using Annex N dimensions for Large Male and Small Female to verify Section 3 requirement.
PDFOV-8625	4	The crotch belt shall pass through or over the seat 14 in (35.56 cm) to 16 in (40.64 cm) forward of the seat reference point as referenced in MIL-STD-1472F.		X			The seats shall be tested to measure the location of the crotch strap IAW TOP 1-2-504 to verify compliance with Section 3 requirement.
PDFOV-8141	2	The blast restraint anchorages shall conform to FMVSS 210, with the requirements for a Type 2 seat belt assembly to be met by the JLTV Type 3 blast restraint system.				X	Certification shall be provided to verify compliance to the Section 3 requirement.
PDFOV-7450	2	In addition to FMVSS 207, the JLTV seat and blast restraint device shall pass the specifications and testing as per ADR 05/05 Anchorages for Seatbelts for NB Class Vehicles (Medium Goods Vehicles).				X	Certification shall be provided to verify compliance to the Section 3 requirement.
PDFOV-8507	4	Under normal operations, the blast restraint shall be able to be donned and properly adjusted within 20 seconds when the crew is seated in the vehicle. (T)		X			Testing shall be conducted in the following manner to verify compliance with Section 3 requirement: Time to don an adjust JLTV blast restraint shall start with all personnel seated, in combat gear. Manually adjustable straps shall be in the minimum adjustment setting at start of test. Time shall end when last crew member has properly donned and adjusted blast restraint.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8508	5	Under normal operations, the blast restraint shall be able to be donned and properly adjusted within 10 seconds when the crew is seated in the vehicle. (O)		X			Testing shall be conducted in the following manner to verify compliance with Section 3 requirement: Time to don an adjust JLTV blast restraint shall start with all personnel seated, in combat gear. Manually adjustable straps shall be in the minimum adjustment setting at start of test. Time shall end when last crew member has properly donned and adjusted blast restraint.
PDFOV-8509	4	The blast restraint quick release mechanism shall be sized such that it can be operated while wearing cold weather or MOPP IV gloves.		X			Testing shall be conducted concurrent with testing performed as required by PDFOV-3181. For this requirement, crew shall don MOPP IV gloves and will attach and release mechanism to verify compliance with Section 3 requirement.
PDFOV-8142	4	The blast restraints shall not contain a "loop" that will snag the crews gear upon release of the restraint.		X			Testing shall be conducted in compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-3181	3	The blast restraint locking mechanism shall be operable by one (1) hand in one (1) direction.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-3187	4	The blast restraint system shall allow vehicle and crew operation without hindrance or the need to loosen and/or remove the restraint.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-6849		**3.4.5.3.4 Crew Ingress**					**4.4.5.3.4**
PDFOV-6851		The crew ingress time includes the time it takes for the crew to open the door(s), step up into the JLTV, sit in assigned seat, close the door, and fully latch the blast restraint.					This is a definition and not verifiable separately.
PDFOV-6856	4	The total crew ingress time for a crew of four (4) shall be 30 seconds or less with crew in combat equipment.		X			Testing shall be conducted in the following manner to verify compliance with Section 3 requirement: crew in combat gear shall be located immediately outside of vehicle at planned entry door. At time zero (recorded by stopwatch), crew shall begin entry to vehicle and stopwatch shall stop when last crew is seated and blast restraints secured.
PDFOV-8626	2	The JLTV shall have at least one (1) step located no less than 7 in (18 cm) below the cab floor which must conform to the height, strength, and surface requirements in FMCSR 399.207.		X			Testing shall be conducted IAW FMCSR 399.207 (b) 1 and 2 (height), (b) 3 (step construction), (b) 4 (width), (b) 5 (strength), and location to verify compliance with Section 3 requirement.
PDFOV-6850		**3.4.5.3.5 Crew Egress**					**4.4.5.3.5**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8763		The crew egress time starts with the JLTV stopped on level terrain, all doors locked (and combat lock engaged (if equipped)), all crew seated in blast restraints, in combat gear, headset on (if equipped) and all vehicle doors closed and completion of the SAES functionality. Time to egress ends with all crew outside the vehicle with their personal weapon.					This is a definition and not verifiable separately.
PDFOV-8627	3	The JLTV shall provide each crew a primary and secondary means of egress from the vehicle.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement. Primary means of egress is the door adjacent to the crew seated position. Secondary means is the opposite side door to which the crew has access without the need to remove or modify personal equipment or vehicle equipment.
PDFOV-6847	3	The JLTV gunners hatch shall have either a circular opening with a minimum of 30 in (76 cm) diameter or an oval opening with a minimum of 17 in (43 cm) by 28 in (71 cm).		X			Testing shall be conducted for compliance with MIL-STD-1472F sections 5.6.3.1.2, 5.6.3.1.3, and 5.7.7.3, to verify Section 3 requirement.
PDFOV-3155	3	The crew shall egress the JLTV with B-Kit doors within 14 seconds. (T)		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-8143	5	The crew shall egress the JLTV with B-Kit doors within 10 seconds. (O)		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-7236		**3.4.5.3.6 Toxic Gases**					**4.4.5.3.6**
PDFOV-7238	2	Personnel, while occupying, operating, or maintaining the JLTV, shall not be exposed to toxic gas concentrations in excess of OSHA 29 CFR 1910.1000. (T)		X			Testing shall be conducted IAW TOP 2-2-614 to verify compliance with Section 3 requirement.
PDFOV-8764	5	Personnel, while occupying, operating, or maintaining the JLTV, shall not be exposed to toxic gas concentrations in excess of the most stringent of OSHA, NIOSH, or ACGIH levels. (O)		X			Testing shall be conducted IAW TOP 2-2-614 to verify compliance with Section 3 requirement.
PDFOV-3131		**3.4.5.4 Human Systems Integration / Manpower and Personnel Integration**					**4.4.5.4**
PDFOV-3132		**3.4.5.4.1 Human Factor Engineering**					**4.4.5.4.1**
PDFOV-8628		Small Female is defined as the set of anthropometric dimensions for the Small Overall Female in Annex N.					This is a definition and not verifiable separately.
PDFOV-8629		Large Male is defined as the set of anthropometric dimensions for the Large Male in Annex N.					This is a definition and not verifiable separately.
PDFOV-8630		Average Male is defined as the set of anthropometric dimensions for the Average Size Male in Annex N.					This is a definition and not verifiable separately.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8765		5th percentile female refers to the requirements in MIL-STD-1472F for the 5th percentile female and 5th percentile women.					This is a definition and not verifiable separately.
PDFOV-8766		95th percentile male refers to the requirements in MIL-STD-1472F for the 95th percentile male and 95th percentile men.					This is a definition and not verifiable separately.
PDFOV-3138	4	The JLTV shall ensure functionality, ease and safety of operation for all functions performed by the crew and maintainers based on Small Female through Large Male for dimensional requirements, and 5th percentile female through 95th percentile male for force requirements.		X			Testing shall be conducted IAW TOP 1-2-610 to verify compliance with Section 3 requirement.
PDFOV-1572	2	The JLTV steady state noise limits within the crew compartment shall not exceed 85 dBA IAW MIL-STD-1474 Table 1-II "Category D".		X			Testing shall be conducted IAW TOP 1-2-608 with ventilation systems running at high setting to verify compliance with Section 3 requirement. Testing shall be conducted with vehicle doors closed and both with the gunner's hatch opened and with the gunner's hatch closed. Noise limits shall be measured under the conditions as stated in MIL-STD-1474.
PDFOV-913		**3.4.5.4.1.1 Heating, Ventilation, Air Conditioning and Defroster**					**4.4.5.4.1.1**
PDFOV-914		**3.4.5.4.1.1.1 Heater**					**4.4.5.4.1.1.1**
PDFOV-916	3	The heater shall be capable of raising the crew compartment temperature from -25°F (-32°C) to 41°F (5°C) within 60 minutes after the heater has been turned on IAW MIL-STD-1472F section 5.12.6.1. (T)		X			Testing shall be conducted IAW TOP 2-2-708 and SAE J1503 to verify compliance with Section 3 requirement. Testing shall be conducted without GFE operation, unless the GFE is required for operation of the heating system or the vehicle powertrain.
PDFOV-8146	5	The heater shall be capable of raising the crew compartment temperature from -25°F (-32°C) to 65°F (18°C) within 60 minutes after the heater has been turned on IAW MIL-STD-1472F section 5.12.6.1. (O)		X			Testing shall be conducted IAW TOP 2-2-708 and SAE J1503 to verify compliance with Section 3 requirement. Testing shall be conducted without GFE operation, unless the GFE is required for operation of the heating system or the vehicle powertrain.
PDFOV-8147	3	The heater shall be capable of raising the crew compartment temperature from -40°F (-40°C) to 41°F (5°C) within 60 minutes after the heater has been turned on. An arctic kit may be used to assist the JLTV heating system to achieve the threshold. (T)		X			Testing shall be conducted IAW TOP 2-2-708 and SAE J1503 to verify compliance with Section 3 requirement. Testing shall be conducted without GFE operation, unless the GFE is required for operation of the heating system or the vehicle powertrain.
PDFOV-8148	5	The heater shall be capable of raising the crew compartment temperature from -40°F (-40°C) to 65°F (18°C) within 60 minutes after the heater has been turned on. An arctic kit may be used to assist the JLTV heating system to achieve the objective. (O)		X			Testing shall be conducted IAW TOP 2-2-708 and SAE J1503 to verify compliance with Section 3 requirement. Testing shall be conducted without GFE operation, unless the GFE is required for operation of the heating system or the vehicle powertrain.
PDFOV-937		**3.4.5.4.1.1.2 Ventilation**					**4.4.5.4.1.1.2**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-922	4	The ventilation fan speed control shall operate independent of the heater and air-conditioning temperature controls.		X			Testing shall be conducted IAW TOP 1-2-807 to verify compliance with Section 3 requirement.
PDFOV-920	5	The JLTV individual vents or ducts shall have hand moveable controls to adjust the amount of air output and position the air flow in a range from directly on crew to completely off crew.		X			Testing shall be conducted for compliance with MIL-STD-1472F and IAW TOP 1-2-807 to verify Section 3 requirement.
PDFOV-9203	4	The JLTV ventilation system shall have the capability to adjust the origin of air flow from 100% fresh air to nearly 100% recirculated air.		X			Testing shall be conducted IAW TOP 1-2-807 to verify compliance with Section 3 requirement.
PDFOV-6989	3	The JLTV ventilation system shall comply with the ventilation system performance requirements in MIL-STD-1472F section 5.12.6.2, when set to 100% fresh air.		X			Testing shall be conducted IAW TOP 1-2-807 and for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-9186	4	The JLTV crew compartment dust levels shall remain below OSHA 29 CFR 1910.1000 requirements for Particles Not Otherwise Regulated (PNOR) when operated with the doors and hatches closed.		X			Testing shall be conducted IAW TOP 1-2-621 to verify compliance with Section 3 requirement. Testing will be conducted with the doors and hatches closed and latched. Tests will be conducted with the HVAC system set to 100% fresh air setting and set to the maximum recirculation setting.
PDFOV-8631	4	The JLTV shall include a mechanism to exhaust a minimum of 50% of the inflowing airflow volume provided by the HVAC system at 1 in (2.5 cm) H2O interior pressure, with all doors and hatches closed.		X			Testing shall be conducted IAW TOP 1-2-807 and for compliance with MIL-STD-1472F to verify Section 3 requirement. The air flow entering and exiting the crew compartment shall be measured. The flow rating exiting the crew compartment must be greater than 50% of the flow rate entering the crew compartment.
PDFOV-8632	5	The ventilation system exhaust path location(s) shall be in a negative pressure area and secure from water, fume, dust, and debris intrusion.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-927		**3.4.5.4.1.1.3 Air Conditioning**					**4.4.5.4.1.1.3**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-6987	3	The JLTV air conditioning system shall be capable of lowering the crew compartment temperature from 120°F (49°C) with 1120 W/m2 solar load to 90°F (32°C) within 60 minutes after the air conditioner is turned on. (T)		X			Testing shall be conducted to IAW SAE J1503 and for compliance with MIL-STD-810G to verify Section 3 requirement with the following section exceptions to SAE J1503: [1] Modify 7.5.2 The test has run for 3 hours. [2] Modify 8.1.2.1 Minimum dry bulb temperature 51C. [3] Modify 8.1.2.2 Minimum moisture content of 0.015 kg H20 per kg of dry air. [4] Add 8.1.2.3 Before carrying out the tests, the machine shall be heat soaked for a minimum of 8 hours at the temperature specified in 8.1.2. [5] Add 8.1.2.4 It is required that solar loading be applied in accordance with SAE J1559 EXCEPT 3.2.2 A measured average energy of 1120 W/m2 ñ 95 W/m2 is considered 'normal' test conditions. [6] Modify 8.1.4 Prior to conducting tests , the machine shall be operated as specified in 8.1.3 for at least 2 hours with the ac system not in use. [7] Modify 8.1.6 It is required that solar loading be applied in accordance with SAE J1559 EXCEPT 3.2.2 A measured average energy of 1120 W/m2 ñ 95 W/m2 is considered 'normal' test conditions. [8] Modify 8.1.6.a If the machine is heat soaked using the engine as defined in 8.1.4, the solar loading is to start at the beginning of the soak operation. [9] Modify 8.1.6.b If the machine or operator enclosure is not heat soaked as defined in 8.1.4, the solar loading is to begin a minimum of 3 hours prior to conducting the air conditioning tests. Doors and windows shall be open for the first 2 hours, then closed for a minimum of 1 hour. During this period, ambient temperature shall be as specified in 8.1.2. [10] Add 8.1.7 Soldier heat load of 150Watts per soldier and JLTV-GP heat loads shall be simulated in the machine. Heat loads shall be applied when the air conditioner is turned on.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8150	5	The JLTV air conditioning system shall be capable of lowering the crew compartment temperature from 120°F (49°C) with 1120 W/m2 solar load to 90°F (32°C) within 40 minutes after the air conditioner is turned on. (O)		X			Testing shall be conducted to IAW SAE J1503 and for compliance with MIL-STD-810G to verify Section 3 requirement with the following section exceptions to SAE J1503: [1] Modify 7.5.2 The test has run for 3 hours. [2] Modify 8.1.2.1 Minimum dry bulb temperature 51C. [3] Modify 8.1.2.2 Minimum moisture content of 0.015 kg H20 per kg of dry air. [4] Add 8.1.2.3 Before carrying out the tests, the machine shall be heat soaked for a minimum of 8 hours at the temperature specified in 8.1.2. [5] Add 8.1.2.4 It is required that solar loading be applied in accordance with SAE J1559 EXCEPT 3.2.2 A measured average energy of 1120 W/m2 ñ 95 W/m2 is considered 'normal' test conditions. [6] Modify 8.1.4 Prior to conducting tests , the machine shall be operated as specified in 8.1.3 for at least 2 hours with the ac system not in use. [7] Modify 8.1.6 It is required that solar loading be applied in accordance with SAE J1559 EXCEPT 3.2.2 A measured average energy of 1120 W/m2 ñ 95 W/m2 is considered 'normal' test conditions. [8] Modify 8.1.6.a If the machine is heat soaked using the engine as defined in 8.1.4, the solar loading is to start at the beginning of the soak operation. [9] Modify 8.1.6.b If the machine or operator enclosure is not heat soaked as defined in 8.1.4, the solar loading is to begin a minimum of 3 hours prior to conducting the air conditioning tests. Doors and windows shall be open for the first 2 hours, then closed for a minimum of 1 hour. During this period, ambient temperature shall be as specified in 8.1.2. [10] Add 8.1.7 Soldier heat load of 150Watts per soldier and JLTV-GP heat loads shall be simulated in the machine. Heat loads shall be applied when the air conditioner is turned on.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-928	3	The JLTV air conditioning system after initial cool down (as defined in PDFOV-6987) shall be capable of maintaining average temperature of not greater than 85°F (30°C) at any seating position after 60 minutes from initial cool down final temperature IAW MIL-STD-1472F section 5.12.6.4.		X			Testing shall be conducted IAW SAE J1503 and for compliance with MIL-STD-810G to verify Section 3 requirement. Testing shall be conducted immediately following, and the same test conditions as, PDFOV-6987.
PDFOV-932	4	The JLTV air conditioner shall operate using refrigerant with a global warming potential (GWP) less than or equal to 1300 over a 100 year time horizon calculated using methodologies from IPCC Third Assessment Report: Climate Change 2001. (T)			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-8151	5	The JLTV air conditioner shall operate using refrigerant with a GWP less than or equal to 10 over a 100 year time horizon calculated using methodologies from IPCC Third Assessment Report: Climate Change 2001. (O)			X		Analysis shall be conducted to verify compliance with Section 3 requirement.
PDFOV-923		**3.4.5.4.1.1.4 Defroster**					**4.4.5.4.1.1.4**
PDFOV-924	3	The frontal transparent armor shall be capable of being defrosted within 30 minutes IAW SAE J381 (exception: ambient temperature shall be at -40°F (-40°C) with Arctic Kit and -25°F (-32°C) without Arctic Kit) and with the crew allowed to manually assist.		X			Testing shall be conducted for compliance with MIL-STD-1180B requirement 103.1 and SAE J381, to verify Section 3 requirement. Scraping shall not be a part of "manual assistance".
PDFOV-3147		**3.4.5.4.2 Crew Compartment**					**4.4.5.4.2**
PDFOV-6921		**3.4.5.4.2.1 Interior Occupant Protection**					**4.4.5.4.2.1**
PDFOV-6923	2	The interior components of the JLTV shall not have sharp edges (radius of curvature must be > 0.125 in (3.2 mm)).		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-8633	2	Components within the crew compartment shall meet the flammability requirements of UL 94.				X	Certification shall be provided to verify compliance to the Section 3 requirement.
PDFOV-3163		**3.4.5.4.2.2 Seating**					**4.4.5.4.2.2**
PDFOV-3165	3	The driver seat shall be individually adjustable while in the seat without the use of tools fore and aft and up and down to accommodate the height of a Small Female to Large Male. (T)		X			Testing shall be conducted with crew in driver seat, adjusting seat fore/aft and up/down, within the ranges required for small female to large male, to verify compliance with Section 3 requirement.
PDFOV-8154	5	All seats shall be individually adjustable while in the seat without the use of tools fore and aft and up and down to accommodate the height of a Small Female to Large Male. (O)		X			Testing shall be conducted with crew in all seats, adjusting seat fore/aft and up/down, within the ranges required for small female to large male, to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3169	2	Each seat and restraint system on the JLTV shall be designed to accommodate a crew wearing, improved outer tactical vest, Army combat helmet, 100 oz (3 L) hydration system (filled) and M50 gas mask with hood (on leg).		X			Testing shall be conducted using outfitted physical manikin testing to verify compliance with Section 3 requirement.
PDFOV-7031	4	All seats shall recline a sufficient amount such that a crew outfitted as described in PDFOV-3169 will not be seated in a position where his upper body leans forward beyond an upright, vertical position.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.12.2.4 to verify Section 3 requirement.
PDFOV-8634	4	All seats shall include measures to reduce transfer of blast energy to crew, including barriers to preclude intentional or unintentional stowage in locations that would reduce the seat blast attenuation functionality.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8635	5	All seats shall be designed to automatically recover stroke distance and reset for a second attenuation between the primary blast and 'slam-down' deceleration. (O)		X			The seat shall be drop tested at the Army Research Lab (ARL) to verify compliance with Section 3 requirement. Full vehicle testing shall be conducted IAW TOP 2-2-508 and ITOP 2-2-617 to verify compliance with Section 3 requirement.
PDFOV-8636	1	Blast attenuation measures shall be incorporated into the floor space beneath each seating location. Such measures shall cover the entire surface of the floor where the crew may naturally place his or her feet for comfort and stability.		X			During blast testing, ATD feet placement shall include the locations included in Section 3, to verify compliance with Section 3 requirement.
PDFOV-6924		**3.4.5.4.2.3 Seat Head Restraints**					**4.4.5.4.2.3**
PDFOV-6925	4	The head restraints shall be provided at each designated seating.	X				Inspection shall be conducted IAW TOP 2-2-508 to verify compliance to the Section 3 requirement.
PDFOV-8155	4	The head restraint, when adjusted to its fully extended design position, and measured parallel to the torso line, the top of the head restraint must not be less than 700 mm above the seating reference point.				X	Contractor shall provide third party certification that the head restraint meets the Section 3 requirement when tested IAW DOT-TP-202-08 Laboratory Test Procedure for FMVSS 202 Head Restraints.
PDFOV-8156	4	The head restraint, when adjusted to its fully extended design position, and measured either 64 mm below the top of the head restraint or 635 mm above the seating reference point (whichever is greater), the lateral width of the head restraint must be not less than 170 mm.				X	Contractor shall provide third party certification that the head restraint meets the Section 3 requirement when tested IAW DOT-TP-202-08 Laboratory Test Procedure for FMVSS 202 Head Restraints.
PDFOV-8157	4	The back set (distance from the head/helmet to the head restraint) when the head restraint is adjusted to its fully extended height shall not exceed 100 mm.				X	Contractor shall provide third party certification that the head restraint meets the Section 3 requirement when tested IAW DOT-TP-202-08 Laboratory Test Procedure for FMVSS 202 Head Restraints.
PDFOV-3170		**3.4.5.4.2.4 Re-configurable/Removable Seats**					**4.4.5.4.2.4**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3171	5	The JLTV shall be fitted with re-configurable and removable rear seats that the crew can re-configure and remove with BII (Annex M). (O)		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-3175	5	The JLTV crew compartment of the four (4) crew variant shall be capable of safely securing one Talon II litter (NSN 6530-01-504-9051) with patient in support of non-standard casualty evacuation. The seats can be reconfigured and the handles of the Talon II folded to allow the Talon II and occupant to be transported. (O)		X			Testing shall be conducted IAW TOP 2-2-508 to determine that the Talon II litter can be secured inside the vehicle, and can support and restrain a 95% male without injury due to contact with other interior components. A Hybrid III 95% male ATD dressed in personal equipment shall be placed on the Talon II litter in a supine position. The occupied litter shall be installed and secured in the vehicle. No part of the ATD test device or litter sling shall come in contact with components in the vehicle, other than those components used to support and secure the litter.
PDFOV-3188		**3.4.5.4.2.5 Frontal Transparent Armor and Windows**					**4.4.5.4.2.5**
PDFOV-3190	4	Frontal transparent armor and windows shall satisfy optical requirements listed in ATPD 2352, paragraph 3.4.				X	Certification shall be provided of: - Luminous transmittance IAW MIL-DTL-62420, - Haze IAW ASTM D1003, - Optical deviation using the methods specified in ASTM F801-96, - Optical distortion IAW ASTM F2156, to verify compliance with Section 3 requirement.
PDFOV-3194	3	Visors or other means, that are stowed above the frontal transparent armor and can be manually rotated downward to provide coverage across the entire width of the frontal transparent armor and side transparent armor (though not simultaneously) to block sunlight and reduce sun exposure, shall be provided.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-3196	4	Visors shall have a mechanical detent to prevent movement while in the stowed position.	X	X			Testing shall be conducted for compliance with MIL-STD-1472F and IAW TOP 2-2-506 to verify Section 3 requirement.
PDFOV-3201		**3.4.5.4.2.6 Frontal Transparent Armor Wipers and Washers**					**4.4.5.4.2.6**
PDFOV-3202	2	The JLTV shall be equipped with multi-speed frontal transparent armor wipers with an adjustable, intermittent wiper setting.		X			Testing shall be conducted IAW SAE J198 and DOT-TP-104-08 to verify compliance with Section 3 requirement.
PDFOV-8158	2	The JLTV shall be equipped with frontal transparent armor washing system.		X			Testing shall be conducted IAW SAE J942 and DOT-TP-104-08 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3204	5	A minimum size of 3-qt (2.8 l) washer reservoir compatible with cleaner and appropriate additives for the climatic conditions for destination shall be furnished.		X			Testing shall be conducted IAW SAE J942, DOT-TP-104-08, and during government RAM testing to verify compliance with Section 3 requirement.
PDFOV-3213		**3.4.5.4.2.7 Cab Floor Drains**					**4.4.5.4.2.7**
PDFOV-3220	4	The JLTV shall be designed to prevent unintended accumulation and containment of fluids and other materials, while maintaining crew protection performance against Annex E threats.		X			Testing shall be conducted by performing grit trough test IAW with the following procedure: 1) The JLTV shall pass through a grit trough four times each at three (3) different speeds for a total of 12 passes, within its range of service operation. 2) Next, the JLTV shall be evenly sprayed from the top and sides with 20 gal (76 liters) of water over a period of 10 minutes. 3) Then, the JLTV shall be pressure washed with fresh water using Armed Forces routine maintenance tools, equipment, and procedures. 4) Then, the JLTV shall be moved to a controlled environment, 77 +/-3 °F (25 +/-2 °C) and 70 +/- 10% relative humidity, in its normal storage orientation. After 3 hours , an inspection shall reveal no evidence of standing water or collection of deposits. NOTE: The grit trough shall be approximately 75 ft (23 m) long and contain a mixture of water and fine particles (including sand, fire clay, and limestone dust) at a ratio of 6:1. The depth of the mixture shall be a minimum of 4 in (102 mm).
PDFOV-3231		**3.4.5.4.2.8 M4/M16/F88 AUSTEYR Rifle Mounting**					**4.4.5.4.2.8**
PDFOV-3232	4	The JLTV shall provide stowage capable of accepting all versions of the M4, M16, and F88 AUSTEYR rifles. The mounted rifles shall not interfere with vision, operation of vehicle controls, or vehicle ingress/egress, and shall be accessible to crew without hindrance or the need to loosen and/or remove the seat restraint.		X			Testing shall be conducted IAW TOP 2-2-802 to verify compliance with Section 3 requirement.
PDFOV-7069	4	The JLTV shall provide stowage of one rifle per crew member.	X				Inspection shall be conducted in addition to the PDFOV-3232 functional test to verify compliance with Section 3 requirement.
PDFOV-3235		**3.4.5.4.2.9 Beverage Holders**					**4.4.5.4.2.9**
PDFOV-3236	5	The JLTV shall be equipped with rugged, cup holders for the driver and commander that are capable of holding containers in the range of a standard 12 ounce aluminum soda pop can to a 24 ounce plastic soda pop bottle. (O)		X			Testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-8824		**3.4.5.4.2.10 Situational Awareness**					**4.4.5.4.2.10**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8645	3	The driver, while seated and restrained, shall be able to maintain 180 degree visibility, with and without the items identified in Annex K, unaided by any mechanical or electronic devices. The driver may use the full range of motion allowed by the blast restraint system.		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.
PDFOV-8646	3	The driver, while seated and restrained, shall be able to maintain 220 degree visibility, with and without the items identified in Annex K, with the aid of mechanical devices. The driver may use the full range of motion allowed by the blast restraint system.		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.
PDFOV-7278	3	The driver, while seated and restrained, shall be able to maintain visibility of the JLTV-T, or part thereof, when tracking directly behind the JLTV, with and without the items identified in Annex K, aided by any mechanical devices. The driver may use the full range of motion allowed by the blast restraint system.		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.
PDFOV-8647	4	With the gunner's hatch closed, the crew, while seated and restrained, shall collectively be able to maintain 270 degree visibility, with and without the items identified in Annex K, unaided by any mechanical or electronic devices. The crew may use the full range of motion allowed by the blast restraint system.		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.
PDFOV-940	3	With the gunner's hatch closed, the crew, while seated and restrained, shall be able to maintain 360 degree visibility, with and without the items identified in Annex K, with the aid of mechanical or electronic devices. The crew may use the full range of motion allowed by the blast restraint system. Use of a back-up camera is allowable to meet this requirement.		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.
PDFOV-8648	4	The JLTV crew compartment shall allow the driver and commander, while seated and restrained, with and without the items identified in Annex K, to view the ground at all distances beyond 30 ft (9 m) in front of the vehicle, unaided by any electronic or mechanical devices, while at the operational ride height. The crew may use the full range of motion allowed by the blast restraint system. (T)		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8649	5	The JLTV crew compartment shall allow the driver and commander, while seated and restrained, with and without the items identified in Annex K, to view the ground at all distances beyond 10 ft (3 m) in front of the vehicle, without the aid of electronic or mechanical devices, while at the operational ride height. The crew may use the full range of motion allowed by the seat restraint system. (O)		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.
PDFOV-8650	3	The JLTV crew compartment shall allow the driver and commander, while seated and restrained, with and without the items identified in Annex K, to view the ground at all distances beyond 5 ft (1.5 m) in front of the vehicle, with the aid of mechanical devices.		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.
PDFOV-8651	3	The JLTV crew compartment shall allow the crew, with and without the items identified in Annex K, to view the ground beyond 5 ft (1.5 m) in front of each vehicle door, without the aid of electronic or mechanical devices, while at the operational ride height with the door closed.		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.
PDFOV-8652	4	The JLTV crew compartment shall allow the crew, with and without the items identified in Annex K, to view the ground directly in front of each vehicle door, with the aid of mechanical devices with the door closed.		X			Testing shall be conducted IAW TOP 3-2-812, paragraph 4.3, to verify compliance with Section 3 requirement.
PDFOV-3242		**3.4.5.4.2.11 Rear View Mirrors**					**4.4.5.4.2.11**
PDFOV-3243	2	The exterior rearview mirrors shall conform to A-A-52432, FMCSR 393.80, FMVSS 111 (S5.2.2 adjustment requirements shall apply to all exterior rearview mirrors), and ADR 14/02. If these standards are in conflict, the more stringent criterion apply.		X			Testing shall be conducted to verify horizontal and vertical adjustability from driver's seat. Testing shall also be conducted to confirm that size requirements of reflective surface is at least 50 sq in (323 sq cm) and meets size requirements of ADR 14/02, paragraph 6.1.2.1. Testing shall also be conducted to ensure ADR 14/02, paragraph 6.1.2.2 (reflecting surface and coeff. of reflection, and 6.1.3 (Impact test) are met, to verify compliance with Section 3 requirement.
PDFOV-8637	3	The exterior mirrors shall resist damage from impacts with brush and other obstacles consistent with the Operational Terrain as detailed in Annex H.		X			Testing shall be conducted by performing the pendulum tests specified in ADR 14/02 to verify compliance with Section 3 requirement.
PDFOV-8159	4	The exterior rearview mirrors shall incorporate a convex mirror on the lower portion of each side mirror.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8487	4	The mirror mounts shall be of sufficient strength to prevent failure of the mounting during any performance or RAM testing.		X			Testing shall be conducted IAW TOP 2-2-506 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3244		**3.4.5.4.2.12 Stowage**					**4.4.5.4.2.12**
PDFOV-1733	4	The JLTV and JLTV-T shall be equipped with cargo tiedowns (recessed tiedowns where applicable) IAW MIL-STD-209.		X			Testing shall be conducted for compliance with MIL-STD-209 to verify Section 3 requirement.
PDFOV-3245	4	BII (Annex M) shall be stowed in designated compartments securable with a standard military padlock A-A-59487 (Part Identification Number AA59487-1BC).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3251	4	Provisions shall be included that inhibit contents of BII (Annex M) from obstructing the drain holes.		X			Testing shall be conducted IAW TOP 2-2-802 and TOP 2-2-506 to verify compliance with Section 3 requirement.
PDFOV-3280		**3.4.5.4.2.13 Door and Entry Point Operation**					**4.4.5.4.2.13**
PDFOV-3281	2	The JLTV doors shall self latch securely in the closed position without crew input above and beyond effort needed to close door.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-8638	2	The JLTV door latch shall meet FMVSS 206 requirements.				X	Proof of third party certification from the latch manufacturer to FMVSS 206 shall be provided to verify compliance with Section 3 requirement.
PDFOV-8639	4	From inside the vehicle the crew shall be able to release the lock and open the door by a single operation.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-8511	4	All JLTV doors and hatches shall be sealed to minimize sand, dust, and water intrusion.	X				JLTV doors and crew hatches shall be inspected IAW TOP 2-2-505 to verify presence of panel-mounted and/or body-mounted seal.
PDFOV-8512	3	The JLTV shall have jam resistant doors such that the crew can open at least one (1) door or hatch and escape the vehicle after a roll-over, IED, or mine strike event.		X			Testing shall be conducted IAW TOP 2-2-508 after blast events and roof crush tests to ensure that the crew can access defined points of egress without removal or modification of personal gear or equipment within the vehicle. At least one (1) means of egress for each crew shall be able to be opened after a mine or IED threat event defined in Annex E and the rollover test.
PDFOV-3283	2	All JLTV doors shall be capable of being locked from the inside.		X			Testing shall be conducted IAW TOP 1-2-610 to verify compliance with Section 3 requirement.
PDFOV-8161	3	All JLTV doors shall be capable of being unlocked from the outside with rescue tool per drawing part number 6437086 (Annex J).		X			Testing shall be conducted IAW TOP 2-2-508 to verify compliance with Section 3 requirement.
PDFOV-6910	3	The JLTV doors with and without B-kit armor shall be equipped with an external ring, as a rescue provision for First Responders to remove or open any of the doors in the event of a combat emergency situation.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8641	4	The JLTV doors shall include an integrated door hold open mechanism to hold the door in the full open position when the vehicle is stopped on slopes and grades of up to five (5) percent independent of the SAES.		X			Testing shall be conducted IAW TOP 1-2-610. Vehicle will be place on a (5) percent slope then doors will be opened to the full open position and must maintain the full open position to verify compliance with Section 3 requirement.
PDFOV-8642	4	The force required to release the integrated door hold open mechanism shall not exceed the strength capability of 5th percent female.		X			Testing shall be conducted IAW TOP 1-2-610 to verify compliance with Section 3 requirement.
PDFOV-8767	4	From inside the vehicle the crew shall be able to release the integrated door hold open mechanism and close the door by a single operation		X			Testing shall be conducted IAW TOP 1-2-610 to verify compliance with Section 3 requirement.
PDFOV-8643	4	The JLTV hatches shall include a mechanism to hold the hatch in the full open position during operations, including operation up to 60 percent grade (facing up and down) and up to 40 percent slope.		X			Testing shall be conducted IAW TOP 1-2-502 to verify compliance with Section 3 requirement. Hatches shall be opened to the full open position and must maintain the full open position during operations, including on grades and slopes.
PDFOV-8644	3	The force required to release the hatch hold open mechanism shall not exceed 20 lbf (90 N).		X			Testing shall be conducted IAW TOP 1-2-610 to verify compliance with Section 3 requirement.
PDFOV-7451		**3.4.5.4.2.14 Organic Material**					**4.4.5.4.2.14**
PDFOV-7452	2	The JLTV components that are susceptible to ingress of insects, seeds and micro-organisms (i.e. components made of organic materials) shall be replaceable by the crew.			X		Analysis shall be conducted by reviewing the JLTV Bill of Material (BOM) and OM, with organic components identified and replaceability confirmed, to verify compliance with Section 3 requirement.
PDFOV-3394		**3.4.5.5 Vehicle Security**					**4.4.5.5**
PDFOV-3395	4	The JLTV shall have a means to provide physical security using military padlock A-A-59487 (Part Identification Number AA59487-1BC) on every door, roof hatch, bustle and fuel filling location.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3379		**3.4.5.6 Paint and Corrosion**					**4.4.5.6**
PDFOV-6573		**3.4.5.6.1 Paint**					**4.4.5.6.1**
PDFOV-6574	4	The JLTV interior and exterior shall be cleaned, pretreated, primed, and top coated IAW MIL-DTL-53072, using primer MIL-DTL-53030, MIL-DTL-53084, A-A-52474 , or an ARL-approved powder coat, and topcoat MIL-DTL-64159 Type II. For A-A-52474 primer, apply a topcoat dry film thickness that is greater than or equal to 50.8 ‘m (2.0 mils) and less than or equal to 63.5 ‘m (2.5 mils).		X			Testing shall be conducted IAW MIL-DTL-53072 to verify compliance with Section 3 requirement. The contractor shall provide test samples processed IAW TT-C-490. The test samples shall be made of the same materials used to build the vehicle. The test samples shall be cleaned and coated simultaneously with vehicle builds.
PDFOV-3384		**3.4.5.6.2 Corrosion Resistance**					**4.4.5.6.2**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3385	3	The JLTV shall meet its Operational Terrain mission profile as detailed in Annex H without functional corrosion failures throughout its 20 year service life, with JLTV scheduled cleaning, maintenance, storage, and shipping procedures.		X			Testing shall be conducted IAW ATEC Internal Operation Procedure 385-082701 for Corrosion Testing to verify compliance with Section 3 requirement.
PDFOV-6941		**3.4.5.7 Markings and Data Plates**					**4.4.5.7**
PDFOV-6942		**3.4.5.7.1 Markings**					**4.4.5.7.1**
PDFOV-6943	2	The JLTV's exterior markings shall be marked with CARC paint IAW MIL-DTL-53072, and placed and sized IAW MIL-STD-642.	X				Inspection shall be conducted for compliance with MIL-DTL-53072 and MIL-STD-642, and IAW TOP 2-2-505 to verify Section 3 requirement.
PDFOV-9188	4	The JLTV shall have Unique Identification (IUID) data markings IAW MIL-STD-130 and the JLTV IUID Plan.	X				Inspection shall be conducted for compliance with MIL-STD-642 and IAW TOP 2-2-505 to verify Section 3 requirement.
PDFOV-6944		**3.4.5.7.2 Data Plates**					**4.4.5.7.2**
PDFOV-6945	4	Identification and data plates shall be provided with the information specified in MIL-HDBK-1223 IAW A-A-50271.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-6951	4	The JLTV shall have a weight classification sign installed IAW TB 43-0147.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-3440		**3.4.5.8 Kits**					**4.4.5.8**
PDFOV-4305	4	The installation of kits (to include B-kit armor) shall not hinder the maintainability of the system. The time required to repair kits as a result of damage caused by design failure or corrosion will be included in the maintenance ratio, mean time to repair, and maximum time to repair calculations. The JLTV maintainability requirements do not include the maintenance time required to prepare a vehicle for its mission mode through conversion or installation of kits.		X			Section 3 requirement shall be verified during testing of PDFOV-3947 and PDFOV-2970.
PDFOV-3441		The JLTV and JLTV-T shall operate IAW the specification requirements after installation of and use of the kits specified herein.					This is a definition and not verifiable separately.
PDFOV-8164	2	The JLTV shall have the ability to integrate kits per Annex K, including interfaces such as predrilled holes, electrical hook-up, hole accesses and coolant ports for heater.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3446		**3.4.5.8.1 Engine Arctic Kit**					**4.4.5.8.1**
PDFOV-3447	4	The JLTV shall be capable of accepting an Engine Arctic Kit IAW the Operating Parameters of the JLTV PD (if kitted).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8844	5	The Engine Arctic Kit installation shall not take longer than two (2) man-hour at Field Level maintenance and subsequently completed by the crew within one (1) hours.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-3942	4	The JLTV engine shall be able to be started within 30 minutes from the initiation of the Engine Arctic Kit aided start sequence.		X			Testing shall be conducted IAW TOP 2-2-650, paragraph 4.2 to verify compliance with Section 3 requirement (including 30 min. start requirement) at -40°F. If an arctic kit is needed, this item will be confirmed concurrently with PDFOV-903 test.
PDFOV-3400		**3.4.5.8.2 Winch Kit**					**4.4.5.8.2**
PDFOV-8768	2	The JLTV shall be capable of accepting a Winch Kit.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8845	5	The Winch Kit installation shall not take longer than one (1) man-hour initially at Field Level maintenance and subsequently completed by the crew within 15 minutes.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-8167	4	The JLTV shall be equipped with winch mounting and power supply provisions located at the front of the vehicle.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3401	4	The Winch Kit shall consist of a winch; and a chain, shackle, and snatch block.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3409	4	The winch and winch accessories shall be able to withstand and overcome loads equal to 1.5 times the GVWR of the JLTV. (T)		X			Testing shall be conducted IAW TOP 2-2-712 to verify compliance with Section 3 requirement.
PDFOV-8168	5	The winch and winch accessories shall be able to withstand and overcome loads equal to two (2) times GVWR of the JLTV. (O)		X			Testing shall be conducted IAW TOP 2-2-712 to verify compliance with Section 3 requirement.
PDFOV-3411	4	The winch cable shall be long enough to reach an anchor 45 ft (14 m) from the JLTV and return (using the snatch block) to enable self-recovery with a 2:1 mechanical advantage.		X			Testing shall be conducted IAW TOP 2-2-712 to verify compliance with Section 3 requirement.
PDFOV-3415	4	The Winch Kit shall provide external controls for winch operations while not requiring the crew to be between the vehicle and the anchor.		X			Testing shall be conducted IAW TOP 2-2-712 to verify compliance with Section 3 requirement.
PDFOV-7433	4	The Winch Kit shall receive all electrical power from the vehicle power management/distribution system.		X			Source of power shall be confirmed during winch performance testing to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8486	2	The winch shall meet the specifications in SAE J706 Section 4.		X			Testing shall be conducted IAW TOP 2-2-712, 4.3 measurement of wire rope and drum diameter to verify compliance with Section 3 requirement.
PDFOV-8653	2	The winch shall include an overload protection feature which ensures that the maximum permissible pull of the winch system cannot be exceeded.		X			Testing shall be conducted IAW TOP 2-2-712 Section 4.2 to verify Section 3 requirement.
PDFOV-8170		**3.4.5.8.3 Flat Tow Kit**					**4.4.5.8.3**
PDFOV-8171	3	The JLTV shall be capable of accepting a Flat Tow Kit that includes the items listed in Annex R.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement.
PDFOV-8846	4	The Flat Tow Kit installation shall not take longer than five (5) minutes by the crew.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-6676		**3.4.5.8.4 Fording Kit**					**4.4.5.8.4**
PDFOV-6677	4	The JLTV shall be capable of accepting a Fording Kit IAW the fording depth and venting requirements in the Fording section of this document (if kitted).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-8847	5	The Fording Kit installation shall not take longer than 10 minutes by the crew.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-6737		**3.4.5.8.5 Rocket Propelled Grenade Protection Kit**					**4.4.5.8.5**
PDFOV-6738	2	The JLTV shall be capable of accepting a Rocket Propelled Grenade (RPG) Protection Kit. Additional requirement for this kit are defined in Annex E.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement.
PDFOV-8848	5	The RPG Protection Kit installation shall not take longer than two (2) man-hours at Field Level maintenance and subsequently completed by the crew within 30 minutes. (O)		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8769	4	The RPG Protection Kit shall weigh no more than 800 lb (363 kg), including all components.		X			Testing shall be conducted IAW TOP 2-2-801 to verify compliance with Section 3 requirement. This will involve weighing the JLTV without RPG Protection Kit, and with RPG Protection Kit, and recording the difference. Alternative method is to weigh just the RPG kit, including all components and required armor protection, to verify compliance with Section 3 requirement.
PDFOV-8770	4	If the RPG Protection Kit is an active system, the crew shall be able to manually deactivate a portion of the coverage area.		X			Testing shall be conducted IAW OM to verify compliance with Section 3 requirement.
PDFOV-8803		**3.4.5.8.6 Explosively Formed Projectile Protection Kit**					**4.4.5.8.6**
PDFOV-8859	5	The Explosively Formed Projectile (EFP) Protection Kit installation shall not take longer than four (4) man-hours at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-8804	4	The JLTV with full mission load plus EFP Protection kit shall not exceed GVWR. For weight accounting purposes, some of payload may be used to cover the EFP Kit weight without reducing crew, personal equipment, weapons or ammunition assigned to the vehicle. (T)		X			Testing shall be conducted to ensure that the resultant weight is less than the GVWR, to verify compliance with Section 3 requirement.
PDFOV-8805	5	The JLTV at GVW (with Protection Level 2) plus EFP Protection Kit shall not exceed GVWR. (O)		X			Testing shall be conducted to ensure that the resultant weight is less than the GVWR, to verify compliance with Section 3 requirement.
PDFOV-8806	3	The EFP Protection Kit shall provide a door assist mechanism which allows the crew to open or close the door within the force requirements of MIL-STD-1472F.		X			Testing shall be conducted IAW MIL-STD-1472F to verify Section 3 requirement.
PDFOV-8513	4	The EFP Protection Kit doors shall provide safety feature(s) to prevent pinch hazards and entrapment of users during closing operations.		X			Door assist shall be tested IAW TOP 2-2-508 to verify compliance with Section 3 requirement. A surrogate finger (3/8 in (9 mm) wooden dowel rod or equivalent) shall be placed in the path of the closing door. The door assist system shall reverse the direction of the door to prevent the finger from being crushed or entrapped.
PDFOV-8459	4	The controls to activate the door assist mechanism shall meet the protection requirements of MIL-STD-1472F section 5.4.1.8.4 method b, c, or d.		X			Testing shall be conducted IAW TOP 2-2-508 to verify compliance with Section 3 requirement.
PDFOV-1618		**3.4.5.8.7 GPK**					**4.4.5.8.7**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1630	5	The GPK shall be installable (to include assembly) with MHE using two (2) maintainers plus an MHE operator within four (4) hours. (T)		X			Testing shall be conducted IAW TOP 2-2-707, paragraphs 5.1, 6.1, 6.2 and 6.4, and for compliance with MIL-STD-1472F section 5.6.1 to verify Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-8091	5	The GPK shall be installable (to include assembly) with MHE using two (2) maintainers plus an MHE operator within two (2) hours. (O)		X			Testing shall be conducted IAW TOP 2-2-707, paragraphs 5.1, 6.1, 6.2 and 6.4, and for compliance with MIL-STD-1472F section 5.6.1 to verify Section 3 requirement.
PDFOV-6739		**3.4.5.8.8 Silent Watch Energy Storage Kit**					**4.4.5.8.8**
PDFOV-6740	4	The JLTV shall be capable of accepting a Silent Watch Energy Storage Kit (if kitted).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8849	5	The Silent Watch Energy Storage Kit installation shall not take longer than two (2) man-hours at Field Level maintenance and subsequently completed by the crew within 30 minutes.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-1135		**3.4.5.8.9 Spare Tire Kit**					**4.4.5.8.9**
PDFOV-1136	3	The JLTV shall be capable of accepting a Spare Tire Kit, with spare wheel and tire identical to that employed on the vehicle.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement.
PDFOV-8850	5	The Spare Tire Kit installation shall not take longer than one (1) man-hour at Field Level maintenance and subsequent installation be completed by the crew within 30 minutes.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-1138	4	A device, capable of operating independent of vehicle power, shall be provided on each JLTV to facilitate spare tire loading and unloading from stowed position by two (2) crew members. (T)		X			Testing shall be conducted IAW TOP 1-2-504, paragraphs 6.d.1.b, 6.d.3 and 6.d.3.b, and for compliance with MIL-STD-1472F section 5.9.11.3.1, to verify Section 3 requirement.
PDFOV-8040	5	A device, capable of operating independent of vehicle power, shall be provided on each JLTV to facilitate spare tire loading and unloading from stowed position by one (1) crew member. (O)		X			Testing shall be conducted IAW TOP 1-2-504, paragraphs 6.d.1.b, 6.d.3 and 6.d.3.b, and for compliance with MIL-STD-1472F section 5.9.11.3.1, to verify Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1140	4	A two (2) person JLTV crew shall be capable of completing a field tire change on the JLTV and companion trailer, using only BII (Annex M), within 30 minutes per tire while the vehicle is on a flat, hard surface without unhitching any towed load.		X			Testing shall be conducted for compliance with MIL-STD-1472F and OM, to verify Section 3 requirement.
PDFOV-8654	4	The crew, while wearing arctic gear, shall be able to complete a field tire change using only BII (Annex M) and the components of the spare tire kit.		X			Testing shall be conducted IAW TOP 1-2-610 Part II Sec 2.2.2 and 2.6.2.4 to verify compliance with Section 3 requirement.
PDFOV-8656	5	The Spare Tire Kit shall contain an impact wrench powered by an on-vehicle or self contained source and suitable to remove and replace the vehicle wheel fasteners. (O)		X			Testing shall be conducted by changing JLTV tire using Spare Tire Kit and impact wrench, to verify compliance with Section 3 requirement.
PDFOV-8657	4	The JLTV at GCVW while fitted with Spare Tire Kit shall traverse a 22.5 degree V-ditch 25 ft (8 m) wide at an approach angle 90 degrees to the obstacle without interference between the trailer and vehicle.		X			Testing shall be conducted IAW TOP 2-2-611 paragraph 5.3 Trench Crossing to verify compliance with section 3 requirement.
PDFOV-1141		**3.4.5.8.10 Run-Flat Kit**					**4.4.5.8.10**
PDFOV-8771	4	The JLTV shall be capable of accepting a Run-Flat Kit (if kitted).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8851	5	The Run-Flat Kit installation shall not take longer than two (2) man-hours at Field Level maintenance and subsequent completed by the crew within one (1) hour.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-1142	3	The Run-Flat Kit shall permit driving while at GCVW for a total of 18 mi (29 km) at a sustained speed of 20 mph (32 kph) on paved roads after complete loss of air pressure in any two (2) tires for the vehicle or one (1) tire for the trailer. Reduction in speed and degradation in mobility are allowable while utilizing the run-flat device in conjunction with a deflated tire. (T)		X			Testing shall be conducted for 18 mi (29 km) over a paved road at a sustained speed of 20 mph (32 km/h) to verify compliance with Section 3 requirement.
PDFOV-8041	5	The Run-Flat Kit shall permit driving for a total of 30 mi (48.28 km) over the Operational Terrain as detailed in Annex H after loss of air pressure in any two (2) tires for the JLTV or one (1) tire for the JLTV-T. Reduction in speed is allowable while utilizing the run-flat device. (O)		X			Testing shall be conducted for 30 mi (48.3 km) over the Operational Terrain as detailed in Annex H at a sustained speed of 20 mph (32 km/h) to verify compliance with Section 3 requirement.
PDFOV-6901	4	The Run-Flat Kit when installed shall not damage the JLTV's tires, wheels or suspension components when run at highway, cross-country and mud/sand/snow inflation levels.		X			Testing shall be conducted IAW TOP 2-2-506 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8371		**3.4.5.8.11 120 mm Quickstow Mortar Kit**					**4.4.5.8.11**
PDFOV-8372	5	The JLTV-T shall be capable of accepting the 120mm Quickstow Mortar Kit.		X			Testing shall be conducted by installing the 120mm Quickstow Mortar Kit on the JLTV-T to verify compliance with Section 3 requirement.
PDFOV-8852	5	The Quickstow Mortar Kit installation shall be completed by the crew within four (4) hours.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-8373		**3.4.5.8.12 Soft Top Kit**					**4.4.5.8.12**
PDFOV-8772	5	The JLTV-T shall be capable of accepting a Soft Top Kit.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8853	5	The Soft Top Kit installation shall be completed by the crew within five (5) minutes.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-8374	5	The Soft Top Kit shall contain a one-piece tarpaulin that can be installed and fastened on the JLTV-T by two (2) crew without MHE.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement.
PDFOV-8375	5	In the JLTV-T, the tarpaulin material shall be vinyl-coated nylon conforming to type II, class 2 of MIL-PRF-20696 or equivalent.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8376	5	In the JLTV-T, the front of the tarpaulin shall be contour sewn such that there is no opening at the corners.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8377	5	The tarpaulin shall form-fit the front end of the JLTV-T.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement.
PDFOV-8378	5	In the JLTV-T, a bolt-on weather resistance stowage box shall be provided to stow the soft top kit.		X			Testing shall be conducted IAW TOP 2-2-506 to verify compliance with Section 3 requirement.
PDFOV-8379	5	In the JLTV-T, the bottom of the stowage box shall be located no lower than the frame.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8380	5	The JLTV-T shall provide stowable tarp bows for use with the soft top kit.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8381	5	The JLTV-T stowable tarp bows shall provide the soft top kit with a height of approximately equal to that of the base vehicle and fit two Joint Modular Intermodal Containers (JMIC) in its internal volume. The JMIC dimensions are 43.75 in (111 cm) x 51.75 in (131 cm) x 43 in (109 cm) (L x W x H).		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement.
PDFOV-8658		**3.4.5.8.13 Combat Bumper Kit**					**4.4.5.8.13**
PDFOV-8659	3	The JLTV shall be capable of accepting a Combat Bumper Kit which is capable of pushing passenger cars (at 6,000 lbs GVW) from lanes of maneuver (disabled cars, damaged vehicles, etc.) without damage to the JLTV.		X			Testing shall be conducted to verify compliance with Section 3 requirement. This testing shall include a combat bumper equipped JLTV physically pushing an obstacle out of the way, to validate Section 3. The JLTV speed will be IAW the OM.
PDFOV-8856	5	The Combat Bumper Kit installation shall not take longer than one (1) man-hour at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-2228		**3.4.5.8.14 Intercom System Kit**					**4.4.5.8.14**
PDFOV-8827	5	The Intercom System Kit installation shall not take longer than one (1) man-hour at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-8753	2	The JLTV shall provide the capability to accept wired Intra Vehicle Communication (IVC) kits which allow the crew to communicate during noisy combat operations.		X			Functional testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-8605	4	In addition to the crew, the intercom shall be able to expand to add one (1) additional crew station.		X			Testing shall be conducted by connecting one (1) additional crew station to the C4ISR/EW data bus and properly configuring to verify compliance with Section 3 requirement. NOTE: To verify this requirement this additional crew station does not need to be mounted in the JLTV to do so.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8754	5	The intercom shall include a secure certified wireless (up to SECRET) headset for vehicle gunner and dismounted vehicle crew up to 330 ft (100 m). (O)		X			Testing shall verify that a wireless headset user can communicate with the vehicle crew and tactical radio assets connected to the vehicle intercom to verify compliance with Section 3 requirement. SECRET certification will be checked in PDFOV-1999 accreditation.
PDFOV-7839	4	The intercom system shall provide the crew (accessible from each position) local display and control of the intercom and radio assets independent of the CSDU and ASDU.		X			Testing shall verify that the crew can independently display and control each intercom and radio asset without use of CSDU and ASDU to verify compliance with Section 3 requirement.
PDFOV-7840	4	The intercom crew stations shall be able to take control precedence over CSDU and ASDU intercom control.		X			Testing shall verify that the intercom crew station controls will over-ride the control settings of the CSDU and ASDU to verify compliance with Section 3 requirement.
PDFOV-2244	5	The intercom system shall provide an interface for use with standard tactical headsets/handsets including H-250 type handsets, or hand microphones and shall be accessible from each crew station.		X			Testing shall demonstrate the handset (H-250 type) or hand microphone interfaces with the intercom system at each crew station to verify compliance with Section 3 requirement.
PDFOV-2246	2	The intercom system shall provide noise cancelation, and echo cancellation.		X			Testing shall verify that when communicating over the intercom, that speech is intelligible when background noise is present and that an echo from their own voice cannot be heard (echo cancelation) to verify compliance with Section 3 requirement.
PDFOV-8755	4	Headsets provided shall be compatible with the Advanced Combat Helmet (ACH), Enhanced Combat Helmet (ECH) and Lightweight Helmet (LWH).		X			Testing shall verify that headsets are compatible with the stated helmets to verify compliance with Section 3 requirement.
PDFOV-2248	5	Each crew member shall be able to select either voice-operated switch (VOX) or push to talk methods to trigger communication.		X			Testing shall be conducted to demonstrate the Push-Talk and voice-operated functionality exists at each intercom to verify compliance with Section 3 requirement.
PDFOV-2252	5	A connection for at least one adjustable volume level, external speaker shall be provided.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-2256	2	The intercom subsystem shall be capable of generating Voice over Internet Protocol (VoIP) calls using G.711, G.729A and G.723.1 CODECs at a minimum.		X			Testing shall be conducted by making a phone call with each one of these protocols selected to verify compliance with Section 3 requirement.
PDFOV-8323		**3.4.5.8.15 Cargo Covering Kit**					**4.4.5.8.15**
PDFOV-8324	4	The JLTV-UTL shall be capable of accepting a Cargo Covering Kit with a tarpaulin conforming to MIL-PRF-20696, Type I, Class 2 and necessary supports.		X			Testing shall be conducted by installing the Cargo Covering Kit and check for form fit and function to verify compliance with Section 3 requirement.
PDFOV-8828	5	The Cargo Covering Kit installation shall not take longer than one (1) man-hour at Field Level maintenance and subsequently completed by the crew within 15 minutes.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-8484		**3.4.5.8.16 Power Expansion Kit**					**4.4.5.8.16**
PDFOV-8485	4	The JLTV shall be capable of accepting a Power Expansion Kit which includes spare (connectorized, switchable and controllable through the DSDU) auxiliary 28 VDC power connections (three 75A and three 30A) to permit adding additional equipment without changing the DSDU user interface.		X			Testing shall be conducted by confirming the functionality of the Power Expansion Kit to verify compliance with Section 3 requirement.
PDFOV-8854	5	The Power Expansion Kit installation shall not take longer than two (2) man-hours at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-1233		**3.4.5.8.17 Exportable Electrical Power Kit**					**4.4.5.8.17**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-1234	2	The JLTV shall be capable of accepting an Exportable Electrical Power Kit which provides 10 kW of sustained electrical export power, with engine running at tactical idle speed and when the JLTV is moving, to an external power customer. This capability does not need to be provided simultaneously with On-board power generation. (T)		X			Testing shall be conducted to verify compliance with Section 3 requirement as follows: A load bank capable of drawing 10 kW of exportable power will be connected and all OBVP will be turned off so that only exportable power and hotel loads are on during testing. For test purposes, the hotel load shall be all loads required to operate the vehicle, in addition, all internal and external (service) lighting loads shall be on, headlamps on high beam, windshield wipers on continuous wipe, and air conditioning shall be operated at maximum condition with blower on maximum speed. This shall be a steady state test and shall measure the steady state heating of wires and cooling demands on any electrical generation devices. Following a soak of 1 hour, while producing the full 10 kW of exportable power plus hotel load, the export power distribution system shall be measured for voltage drop of distribution components and temperature rise of connection points and wiring above ambient. All temperature rises shall be analyzed to ensure no connection points or wiring's temperature rises above the ratings for that component or wire. Any cooling systems used to cool electronics shall have the flow rates and inlet and outlet temperatures from the cooled components measured This test will be performed at Tactical Idle. The power quality shall meet the requirements of the specifications listed in PDFOV-1238.
PDFOV-9204	5	The JLTV Exportable Electrical Power Kit shall provide 10 kW of sustained electrical export power, with engine running at tactical idle speed and when the JLTV is moving, to an external power customer and be provided simultaneously with the on-board power generation and hotel load power requirements. (O)		X			Testing shall be conducted to verify compliance with Section 3 requirement. During testing of the OBVP (PDFOV-1224), the export power kit shall also be capable of producing 10 kW (as defined in PDFOV-1234) while still meeting the requirements of the OBVP. The power quality shall meet the requirements of the specifications listed in PDFOV-1238.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8855	5	The Exportable Electrical Power Kit installation shall not take longer than two (2) man-hours at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-7617	5	The JLTV shall be capable of stacking Exportable Electrical Power Kits in blocks of 10 kW up to a maximum of 30 kW providing of sustained electrical export power to an external power customer, with the engine running at tactical idle speed and when the vehicle is moving. The loads may be unbalanced. (O)		X			Testing shall be conducted to verify compliance with Section 3 requirement. During testing of the OBVP, the stacked export power kits shall also be capable of producing 30 kW while still meeting the requirements of the OBVP. The power quality shall meet the requirements of the specifications listed in PDFOV-1238.
PDFOV-7616	2	Exportable power shall be provided nominally at 110/120VAC L-N, 220/240VAC L-L @ 60Hz.		X			Testing shall be conducted to verify compliance with Section 3 requirement. Each of the voltage level/ frequencies shall be verified during test.
PDFOV-9205	4	If greater than 10 kW of exportable power is provided, it shall be provided nominally at 110/120VAC L-N @ 60Hz, 220/240VAC L-L, 208VAC 3-phase @ 60Hz and 240 L-N @ 50Hz.		X			Testing shall be conducted to verify compliance with Section 3 requirement. Each of the voltage level/ frequencies shall be verified during test.
PDFOV-1238	4	The exportable power shall be IAW MIL-STD-1332 for a type 1, class 1, mode 1 generator.		X			Testing shall be conducted IAW MEP-STD-001 (for AC voltages) and MIL-STD-705 to verify compliance with Section 3 requirement.
PDFOV-8460	2	The Exportable Electrical Power Kit shall come equipped with a connection point to connect a ground rod for use while the vehicle is halted IAW MIL-HDBK-419 vol.2 section 1.11 Military Mobile Facilities and MIL-HDBK-1857 section 3.2.7.		X			Testing IAW MIL-HDBK-419 vol.2 section 1.11 to verify compliance with Section 3 requirement.
PDFOV-7700		**3.4.5.8.18 DSDU Kit**					**4.4.5.8.18**
PDFOV-7664	3	The DSDU shall be integrated within usable distance and not blocking any of the frontal transparent armor or other indicators and switches. (T)		X			Testing shall be conducted to verify that the DSDU's position from the driver does not block any of the windshield, indicators, or switches, and is within a usable distance to operate from the driver's position per MIL-STD-1472F to verify compliance with Section 3 requirement.
PDFOV-7663	5	The DSDU shall be integrated into the JLTV instrument panel. (O)	X				Inspection shall be conducted IAW TOP 2-2-505 to verify that the DSDU is integrated into the JLTV Instrument Panel to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8829	5	The DSDU installation shall not take longer than one (1) man-hour at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-7701	5	The DSDU shall provide an active viewing area, measured diagonally greater than 8 in (20 cm).		X			Testing shall be conducted through measurement of the active viewing area to verify compliance with Section 3 requirement.
PDFOV-7702	4	The DSDU shall be a combined display and processor unit.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7703	4	The DSDU shall be operated without the use of an external hardware keyboard, except for maintenance.		X			Testing shall demonstrate user functionality of the DSDU without use of an external keyboard to verify compliance with Section 3 requirement.
PDFOV-7713		The DSDU's primary function is to support the operational needs of the JLTV driver.					This is a definition and not verifiable separately.
PDFOV-7705		**3.4.5.8.18.1 Security and Enclave Classification**					**4.4.5.8.18.1**
PDFOV-8465	4	The DSDU shall not require a driver log-in for user mode operation.		X			Testing shall be conducted to demonstrate user functionality of the DSDU without requiring credentials from the crew to verify compliance with Section 3 requirement.
PDFOV-7707	4	The classification state of the DSDU shall be UNCLASSIFIED and not connected to the C4ISR/EW Data Bus.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate the JLTV electronics data enclave is separated and it connects to only unclassified devices to prevent data transmission to or from the C4I enclave to verify compliance with Section 3 requirement.
PDFOV-7709	4	The DSDU shall require authentication of maintainer or administrator role credentials prior to allowing electronic data transfer to or from the DSDU.		X			Testing shall verify authentication using maintainer or administrator role credentials is required to transfer data to and from the DSDU to verify compliance with Section 3 requirement.
PDFOV-7712		**3.4.5.8.18.2 Functionality and Application Hosting**					**4.4.5.8.18.2**
PDFOV-7718	4	The DSDU shall be able to concurrently execute/run all functionalities specified in this section.		X			Testing shall be conducted as a part of the DSDU functionality verification that if it crashes or fails to operate it shall be consider a failure to verify compliance with Section 3 requirement.
PDFOV-7714	2	The JLTV shall be able to continue operation (basic vehicle operations - starting, accelerating, steering, braking and other critical functions as identified in the Failure Definition and Scoring Criteria (FDSC)) in the event that a DSDU fails.		X			Testing shall verify the basic vehicle mobility functions can be performed without a DSDU connected to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7715	4	The DSDU hardware shall be capable of running current versions of Microsoft Windows and Linux operating systems configured IAW applicable security guidance.		X			Testing shall be conducted by loading each OS and exercising the input/output (I/O) to verify compliance with the Section 3 requirement. The OS's installed shall include each OS utilized by GFE software, and the most up to date commercial Windows and Linux OS desktop versions available at contract award.
PDFOV-7716	2	From JLTV start, ignition on or accessory power on, the DSDU shall automatically startup in less than 30 seconds. The conclusion of startup occurs when the user is able to interact with DSDU full functionality.		X			Testing shall be conducted by starting the vehicle and noting the time it takes to be able to interact with the DSDU full functionality to verify compliance with Section 3 requirement.
PDFOV-7720	2	The DSDU shall provide a graceful power up and power down during rapid ignition cycling and abrupt power loss such that there are no file corruptions.		X			Testing shall demonstrate there is no loss of integrity of the system or data when the DSDU is tested through multiple external power cycles and abrupt power loss at various operational states (during boot, operation, application launch, shut-down) to verify compliance with Section 3 requirement.
PDFOV-8466	3	The DSDU shall provide crew Electronic OM (EOM) that are electronically text searchable. (T)		X			Testing shall verify that EOM is text searchable to verify compliance with Section 3 requirement.
PDFOV-7723	5	The DSDU shall host JLTV UNCLASSIFIED Interactive Electronic Technical Manual (IETM). (O)		X			Testing shall demonstrate full IETM capability is resident on the DSDU to verify compliance with Section 3 requirement.
PDFOV-8807	3	If the DSDU is kitted, an OM shall be provided with the JLTV.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7724	3	The DSDU shall enable transfer of CBM and bulk data to the at-platform maintenance devices (MSD and VADS).		X			Testing shall demonstrate the JLTV CBM and bulk transfer vetronics data is imported into MSD and VADS from the DSDU to verify compliance with Section 3 requirement.
PDFOV-7725	4	The DSDU shall be software upgradable without removing the display.		X			Testing shall verify the JLTV DSDU software is successfully upgraded without removing the DSDU from its installed location to verify compliance with Section 3 requirement.
PDFOV-8467	5	The DSDU shall be able to display the temperature of the external environment in both Celsius and Fahrenheit.		X			Testing shall verify the JLTV DSDU displays the current temperature outside the cabin throughout the operational temperature range to verify compliance with Section 3 requirement.
PDFOV-7727		**3.4.5.8.18.3 Hardware and Interfaces**					**4.4.5.8.18.3**
PDFOV-7728	3	The DSDU shall provide a minimum of one (1) J1939/CAN interface(s).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify through visual examination of the DSDU hardware that it provides a J1939/CAN bus interface to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7729	4	The DSDU shall provide a minimum of two (2) IEEE 802.3 compliant Gigabit Ethernet Interfaces.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify through visual examination of the DSDU hardware I/O that it has a minimum of two (2) Ethernet interfaces to verify compliance with Section 3 requirement.
PDFOV-7829	4	One (1) of the DSDU Gigabit Ethernet Interfaces shall be hard mounted and environmentally protected to provide high capacity transfer of stored CBM data from the DSDU to the MSD and VADS.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify through visual examination of the DSDU hardware I/O that it provides one (1) Ethernet interfaces IAW MIL-STD-1472F to verify compliance with Section 3 requirement.
PDFOV-7731	4	The DSDU shall provide a minimum of two (2) Universal Serial Bus (USB) interfaces in locations accessible to the driver without requiring display removal.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify through visual examination of the DSDU hardware I/O that it has a minimum of two (2) USB interfaces to verify compliance with Section 3 requirement.
PDFOV-7732	4	The DSDU shall provide an upgradeable Solid State Hard Drive (SSHD) with memory cell wear leveling capabilities that is sufficient to run all operating systems, applications, and provide a minimum of 20GB of CBM data storage.		X	X		Testing shall be conducted by performing repetitive data writes to the SSHD, and tracking the physical address at which the data is stored. The test will be run on a test asset computer, over a continuous period of one week. At the conclusion, the physical address data will be analyzed to verify that the number of data writes to each address block is within a 50% margin of the mean number of writes expected in a perfect average distribution. The hard drive storage capacity shall be validated by exploring the hard drive from the DSDU administrative mode.
PDFOV-7734		**3.4.5.8.18.4 Growth and Expansion**					**4.4.5.8.18.4**
PDFOV-7735	4	To permit future growth the DSDU processor(s) shall not exceed 50% maximum sustained utilization (typical running configuration).		X			Testing shall demonstrate processor performance (supported by physical and processor benchmark testing) to verify compliance with Section 3 requirement.
PDFOV-7736	4	To permit future growth the DSDU processor random-access memory shall not exceed 50% sustained utilization (typical running configuration).		X			Testing shall demonstrate processor random-access memory utilization (supported by physical and processor memory benchmark testing) to verify compliance with Section 3 requirement.
PDFOV-7737		**3.4.5.8.19 CSDU Kit**					**4.4.5.8.19**
PDFOV-7667	3	The CSDU, if equipped, shall be capable of being operated from the commander's location.		X			Testing shall be conducted to verify that the CSDU's position is compliant with reach requirements in MIL-STD-1472F using Annex N dimensions for Large Male and Small Female.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8830	5	The CSDU installation shall not take longer than one (1) man-hour at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-4009	2	The CSDU shall provide an active viewing area, measured diagonally of at least 12 in (30.5 cm).		X			Testing shall be conducted by measuring the active viewing area to verify compliance with Section 3 requirement.
PDFOV-7738	4	The CSDU shall be a combined display and processor unit.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-7739	4	The CSDU shall utilize its touch screen, stylus, bezel buttons, and keyboard (virtual and physical) as the HMI.		X			Testing shall demonstrate that the HMI supports the specified functionality to verify compliance with Section 3 requirement.
PDFOV-8798	4	The CSDU shall display all the information available to the TOW-ITAS/Saber Gunner's Control Box (GCB).		X			Testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-7741		**3.4.5.8.19.1 Security and Enclave Classification**					**4.4.5.8.19.1**
PDFOV-7742	2	The CSDU common hardware shall be software configurable (re-image) to support UNCLASSIFIED, SECRET, or BOTH SECRET/UNCLASSIFIED security enclaves depending on mission role.		X			Testing shall be conducted by re-imaging to a different security enclave configuration to verify compliance with Section 3 requirement.
PDFOV-7745		**3.4.5.8.19.2 Functionality and Application Hosting**					**4.4.5.8.19.2**
PDFOV-7747	4	The CSDU usability startup time (user can interact with full functionality of the display i.e. launch FBCB2) shall be less than 2 minutes from power on.		X			Testing shall be conducted through stop watch measurement (multiple times) from CSDU power on to FBCB2 launch to verify compliance with Section 3 requirement.
PDFOV-7748	4	The CSDU shall host the DoD approved Windows and Linux operating systems and GFE applications.		X			Testing shall demonstrate the CSDU hardware supports Microsoft Windows and Linux operating systems by loading both operating systems and applications to verify compliance with Section 3 requirement.
PDFOV-7749	4	The CSDU shall host and display all Core Services and a single Primary Application (as defined below) concurrently.		X			Testing shall be conducted by starting a single primary application and all Core Services as listed below to verify compliance with Section 3 requirement.
PDFOV-7750	4	The CSDU shall host, display and control the intercom, if installed. (Core Service)		X			Testing shall be conducted by starting the intercom service; and displaying and controlling (reconfigure communication presets, channels, status, etc.) intercom parameters to verify compliance with Section 3 requirement.

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PDFOV-7751	4	The CSDU shall host, display and control the military radio remote control to include all radio parameters similar to the front panel operations of the equipment. (Core Service)		X			Testing shall be conducted by starting the military radio remote control; and displaying and controlling (reconfigure communication presets, channels, status) military radio remote control parameters to verify compliance with Section 3 requirement.
PDFOV-7752	5	The CSDU shall host, display and control the EW system (if GFE is capable). (Core Service)		X			Testing shall be conducted by starting the electronic warfare system; and displaying and controlling (mission threat load, status) electronic warfare parameters if the GFE is capable of remote display and control, to verify compliance with Section 3 requirement.
PDFOV-7753	4	The CSDU shall display the situational awareness (SA) video feeds. (Core Service)		X			Testing shall be conducted by starting the DVE, external cameras, CROWS, ITAS/TOW/LRAS and displaying each on the CSDU to verify compliance with Section 3 requirement.
PDFOV-7754	4	The CSDU shall integrate, display, and control the network device(s) in the C4ISR enclave. The CSDU will serve as the interface for management, maintenance, and control the enclave network equipment. (Core Service)		X			Testing shall be conducted by starting the network management on the CSDU; and displaying and controlling (edit, configure parameters) enclave network equipment to verify compliance with Section 3 requirement.
PDFOV-7755	4	The CSDU shall display the CBRN sensors data. (Core Service)		X			Testing shall be conducted by accessing the CBRN sensor data on the CSDU to verify compliance with Section 3 requirement.
PDFOV-7756	4	The CSDU shall integrate Virtual Network Computer (VNC) like display sharing and control (view and hosting) with the ASDU (Core Service).		X			Testing shall be conducted by demonstrating that other display/computer assets can share application control and display (e.g. verify that the CSDU can interact with the ASDU primary application) to verify compliance with Section 3 requirement.
PDFOV-7757	4	The CSDU shall be able to integrate virtualized operating systems (Virtual Machines) for both Microsoft Windows and Linux or as specified by application ICD (Core Service).		X			Testing shall be conducted by loading each OS in a virtualized environment and exercising the I/O to verify compliance with the Section 3 requirement. The OS's installed shall include each OS used by GFE software, and the most up to date commercial Windows and Linux OS desktop versions available at the start of contract.
PDFOV-7758	5	The CSDU shall provide the up/down status of all the components that comprise the C4ISR/EW subsystem to the user (Core Service). (T)		X			Testing shall demonstrate the specified functionality is present on the CSDU to verify compliance with Section 3 requirement.
PDFOV-8592	5	The CSDU shall provide all available diagnostic status of all the components that comprise the C4ISR/EW subsystem to the user (Core Service). (O)		X			Testing shall demonstrate the specified functionality is present on the CSDU to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7760	2	The CSDU shall integrate, display, and control mobile shot detection system(s) (Core Service).		X			Testing shall be conducted to demonstrate that the shot detection system is integrated and interfaced to the CSDU to verify compliance with Section 3 requirement.
PDFOV-7761	4	The CSDU shall host and display the Light Vehicle Obscuration Smoke System (LVOSS) status (Core Service).		X			Testing shall be conducted by demonstrating that the LVOSS status (system readiness) is accessible through the CSDU to verify compliance with Section 3 requirement.
PDFOV-2341		**3.4.5.8.19.2.1 Joint Capabilities Release and Joint Battle Command - Platform**					**4.4.5.8.19.2.1**
PDFOV-8593	3	The CSDU shall host and integrate the Joint Capabilities Release (JCR) system and Joint Battle Command - Platform (JBC-P), but not concurrently (Primary Application).		X			Testing shall verify that the JCR and JBC-P application are hosted and perform basic functions on the CSDU to verify compliance with Section 3 requirement.
PDFOV-8594	3	The CSDU shall transmit/receive JCR and JBC-P data via EPLRS and L-Band for classified and unclassified data.		X			Testing shall demonstrate that JCR and JBC-P can communicate and transfer data to another JCR/JBC-P base/setup to verify compliance with Section 3 requirement.
PDFOV-7762	4	The CSDU shall be reconfigurable without reimaging for different JCR and JBC-P configurations.		X			Testing shall be conducted by demonstrating that the CSDU can be reconfigured (per specified configurations) and radio communication established to verify compliance with Section 3 requirement.
PDFOV-8481	5	If GPS information is available, the CSDU shall be able to display the vehicle's heading in mils (milli-radians) and degrees.		X			Testing shall demonstrate that the CSDU has a compass function to verify compliance with Section 3 requirement.
PDFOV-7763		**3.4.5.8.19.2.2 Advanced Field Artillery Tactical Data System**					**4.4.5.8.19.2.2**
PDFOV-7764	4	The CSDU shall host and integrate the Advanced Field Artillery Tactical Data System (AFATDS) (Windows based) system (Primary Application).		X			Testing shall demonstrate that the AFATDS application is hosted and performs basic functions on the CSDU to verify compliance with Section 3 requirement.
PDFOV-7765	4	The CSDU shall transmit/receive AFATDS data via Single Channel Ground to Air Radio System (SINCGARS) and High Frequency (HF) radio.		X			Testing shall demonstrate that AFATDS can communicate and transfer data to another SINCGARS and HF AFATDS base/setup to verify compliance with Section 3 requirement.
PDFOV-9245		**3.4.5.8.19.2.3 Command and Control Personal Computer (C2PC) System**					**4.4.5.8.19.2.3**
PDFOV-9246	4	The CSDU shall host and integrate the Command and Control Personal Computer (C2PC) (Windows based) system (Primary Application).		X			Testing shall demonstrate that the C2PC application is hosted and performs basic functions on the CSDU to verify compliance with Section 3 requirement.
PDFOV-9247	4	The CSDU shall transmit/receive C2PC data via the EPLRS data radio.		X			Testing shall demonstrate that the C2PC application is hosted and performs basic functions on the CSDU to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7766		**3.4.5.8.19.2.4 One System Remote Video Terminal**					**4.4.5.8.19.2.4**
PDFOV-7767	4	The CSDU shall host and integrate the One System Remote Video Terminal (OSRVT) system (Primary Application).		X			Testing shall demonstrate that OSRVT application is hosted and functions on the CSDU to verify compliance with Section 3 requirement.
PDFOV-7769		**3.4.5.8.19.3 Hardware and Interfaces**					**4.4.5.8.19.3**
PDFOV-7772	4	The CSDU shall provide a minimum of three (3) IEEE 802.3 compliant Gigabit Ethernet interfaces.		X			Testing shall be conducted by connecting a known IEEE 802.3 compliant Gigabit Ethernet device to each interface to verify compliance with Section 3 requirement.
PDFOV-7773	4	The CSDU shall provide a minimum of three (3) RS232/RS422 serial interfaces.		X			Testing shall verify compliance by connecting the CSDU to another device with a RS232/422 interface to each interface to verify compliance with Section 3 requirement.
PDFOV-7774	4	The CSDU shall provide a minimum of two (2) accessible (without display removal) USB interfaces to include one specifically for the Mission Data Loader (MDL) connector and one as an open unused spare interface.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate through visual examination of the CSDU hardware to verify compliance with Section 3 requirement.
PDFOV-7775	4	The CSDU shall provide a minimum 128GB removable SSHD/storage with memory cell wear leveling capabilities.		X			Testing shall be conducted by performing repetitive data writes to the SSHD, and tracking the physical address at which the data is stored. The test will be run on a test asset computer, over a continuous period of one week. At the conclusion, the physical address data will be analyzed to verify that the number of data writes to each address block is within a 50% margin of the mean number of writes expected in a perfect average distribution. The hard drive shall be removed and the manufacturing label will be inspected to verify compliance with Section 3 requirement.
PDFOV-8595	4	The CSDU removable SSHD/storage shall be compatible with HD cloning hardware (Greystone DF-5 disk duplicator).		X			Testing shall demonstrate that the removable drive is compatible with the disk duplicator to verify compliance with Section 3 requirement.
PDFOV-7776	4	The CSDU shall provide one (1) Personal Computer Memory Card International Association (PCMCIA) interfaces.	X				Inspection shall be conducted IAW TOP 2-2-505 to demonstrate through visual examination of the CSDU hardware to verify compliance with Section 3 requirement.
PDFOV-7778	4	The CSDU shall provide a minimum of one (1) VGA video input to produce a minimum of 1024 x 768 pixel color image interface.		X			Testing shall be conducted by connecting a test video signal to the input to verify compliance with Section 3 requirement. The video image on the display shall be clearly discernible.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-7779	3	The CSDU shall provide a minimum of one (1) RS170 video input.		X			Testing shall be conducted by connecting a test video signal to the input to verify compliance with Section 3 requirement. The video image on the display shall be clearly discernible.
PDFOV-7782		**3.4.5.8.19.4 Growth and Expansion**					**4.4.5.8.19.4**
PDFOV-7783	4	To permit future growth, the CSDU processor(s) shall not exceed 50% maximum sustained utilization (typical running configuration - Core Services and one Primary Application).		X			Testing shall demonstrate processor performance (supported by physical and processor benchmark testing) to verify compliance with Section 3 requirement.
PDFOV-7784	4	To permit future growth the processor(s) RAM shall not exceed 50% sustained utilization (typical running configuration - Core Services and one Primary Application).		X			Testing shall demonstrate RAM utilization (supported by physical and processor memory benchmark testing) to verify compliance with Section 3 requirement.
PDFOV-7785		**3.4.5.8.20 ASDU Kit**					**4.4.5.8.20**
PDFOV-7668	3	The ASDU, if equipped shall be located near the rear seat occupant positions between 20 in (51 cm) and 25 in (64 cm) away from the crew's face longitudinally, no further than 21 in (53 cm) away laterally, and between 14 in (36 cm) to 25 in (64 cm) above the sitting surface.		X			Testing shall be conducted via measurement IAW MIL-STD-1472F to verify compliance with Section 3 requirement.
PDFOV-8831	5	The ASDU installation shall not take longer than one (1) man-hour at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-7786	4	The ASDU shall use common hardware and meet all specified functionality requirements of the CSDU.		X			Testing shall be conducted by installing an ASDU into the CSDU location and verifying functionality to verify compliance with Section 3 requirement.
PDFOV-9206		**3.4.5.8.21 Baseline Integration Kit**					**4.4.5.8.21**
PDFOV-9207	4	The JLTV shall be capable of accepting Baseline Integration Kits which will consist of all necessary cabling (power, signal, RF), connector(s) near the location of each LRU, and attachment hardware required above and beyond the Infrastructure, to integrate the Baseline equipment quantities in Table 2 of Annex K.		X			Testing shall be conducted during performance and RAM testing to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-9208	5	Each Baseline Integration Kit installation shall not take longer than seven (7) man-hours at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-9209		**3.4.5.8.22 Expansion Kits**					**4.4.5.8.22**
PDFOV-9210	4	The JLTV shall be capable of accepting Expansion Kits which will consist of all necessary cabling (power, signal, RF), connector(s), and hardware required above and beyond the Contractor Furnished Infrastructure and Baseline Integration Kits for installation of the equipment detailed in Table 3 of Annex K.		X			Testing shall be conducted during performance and RAM testing to verify compliance with Section 3 requirement.
PDFOV-9211	5	Each Expansion Kit installation shall not take longer than one (1) man-hour at Field Level maintenance.		X			Testing shall be conducted IAW TOP 2-2-707 to verify compliance with Section 3 requirement. Timer starts without preparation to the vehicle (i.e., removal of components from vehicle) and with the kit in its shipping/ storage container. The number of personnel, manhours, and tools required to install the kit will be documented.
PDFOV-3325		**3.4.5.9 Fuel**					**4.4.5.9**
PDFOV-3328	2	The primary fuel to start and operate the JLTV shall be JP-8 per MIL-DTL-83133, Table 1 - Chemical and physical requirements and test methods.		X			Testing shall be conducted during performance and RAM testing to verify compliance with Section 3 requirement.
PDFOV-8180	2	The JLTV shall be capable of operating on DF2 diesel fuel per A-A-52557 or ASTM D975.		X			Testing shall be conducted during performance and RAM testing to verify compliance with Section 3 requirement.
PDFOV-3330	5	The JLTV shall be capable of operating with alternate fuels as defined by AR-70-12 with minimal operational impact except for the gasoline like fuels. (O)		X			Testing shall be conducted with the alternate and emergency fuels defined in AR-70-12 to verify compliance with Section 3 requirement.
PDFOV-3336	5	If liquid cooled, the engine shall be serviced with a solution of propylene glycol conforming to A-A-52624 and water in equal parts by volume. In conditions below -25°F (-32°C) a 60/40 Propylene Water Mixture is used.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-3337		**3.4.5.9.1 Fuel Efficiency**					**4.4.5.9.1**
PDFOV-3338	1	The JLTV shall achieve 10 payload ton-mpg at GVW over the Operational Terrain as detailed in Annex H. (T)		X			Testing shall be conducted IAW TOP 2-2-603 using the courses and calculations in Annex P to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8181	1	The JLTV shall achieve 15 payload ton-mpg at GVW over the Operational Terrain as detailed in Annex H. (O)		X			Testing shall be conducted IAW TOP 2-2-603 using the courses and calculations in Annex P to verify compliance with Section 3 requirement.
PDFOV-8192	1	The JLTV shall have a maximum of a 1.6 Gallon/Hour idle fuel consumption rate while providing 10kW of total 28 VDC power. (T)		X			Testing shall be conducted IAW TOP 2-2-603 with the vehicle stationary and at the engine speed necessary to provide 10kW of on-board power to verify compliance with Section 3 requirement.
PDFOV-8193	5	The JLTV shall have a maximum of a 1.0 Gallon/Hour idle fuel consumption rate while providing 10kW of total 28 VDC power. (O)		X			Testing shall be conducted IAW TOP 2-2-603 with the vehicle stationary and at the engine speed necessary to provide 10kW of on-board power to verify compliance with Section 3 requirement.
PDFOV-3345		**3.4.5.10 Lubricants**					**4.4.5.10**
PDFOV-3359	5	Grease lubrication fittings shall conform to SAE J534.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-3472		**3.4.5.11 Engine/Drive Train**					**4.4.5.11**
PDFOV-3473		**3.4.5.11.1 Engine Cooling System**					**4.4.5.11.1**
PDFOV-3474	4	The cooling system shall meet the requirements of SAE J1436 with the exception that inspection of fluid fill levels can be accomplished without removal of caps from coolers or surge tanks.		X			Testing shall be conducted IAW SAE J1436 and TOP 2-2-607 to verify compliance with Section 3 requirement.
PDFOV-3478	3	The JLTV shall be equipped with a brush guard for front end protection of vehicle lights, hood, body, and engine compartment components.	X				Inspection shall be conducted IAW TOP 2-2-505, to verify compliance with Section 3 requirement.
PDFOV-8660	3	The brush guard must withstand the impact of a 1.5 in (38 mm) diameter tree limb without deformation while the vehicle is traveling at 25 mph (40 kph).		X			Testing shall be conducted during RAM test phase to verify compliance with Section 3 requirement.
PDFOV-3484	2	Given clean heat exchanger(s), the required cooling, including the capability of cooling the ancillary vehicle power (hydraulic, electrical, electronics, pneumatic, etc.) shall be provided continuously at all ambient operating conditions between -40°F (-40°C) and 125°F (52°C), and full radiant heat load at 750 mm HG.		X			Testing shall be conducted at full rated power of the engine and at 0.6 Tractive Effort/Weight IAW TOP 2-2-607 to verify compliance with section 3 requirement.
PDFOV-3490		**3.4.5.11.2 Fan Clutch**					**4.4.5.11.2**
PDFOV-3491	4	If a fan clutch is used, a positive lockup shall be provided in case of a clutch or a control system failure.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-3493	4	The cooling fan shall be designed so that it will not experience aerodynamic stall with a 30% cooler face area blockage.			X		Analysis shall be conducted to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3495	4	The fan shall be equipped with a control so that fan use is minimized when not required for cooling.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-3496		**3.4.5.11.3 Oil Filtration**					**4.4.5.11.3**
PDFOV-6762	4	Spin-on type oil filters shall be used for engine oil filtration.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-3504		**3.4.5.11.4 Engine Speed Control**					**4.4.5.11.4**
PDFOV-3507	4	The tactical idle (≤1800 RPM Engine speed) control shall operate only when the vehicle is in park or neutral and automatically disengage when the vehicle is placed in gear.		X			Testing shall be conducted with vehicle in park or neutral and engaging the tactical idle then placing the vehicle in gear to verify compliance with Section 3 requirement.
PDFOV-3526		**3.4.5.11.5 Exhaust System**					**4.4.5.11.5**
PDFOV-3527	2	The exhaust system shall conform to FMCSR 393.83.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8182	2	Horizontal exhaust systems, where fitted, shall have the direction of discharge between horizontal and 45 degrees downward to minimize the entry of water.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8661	2	Vertical exhaust systems, where fitted, shall meet ADR 42/04 Section 10.4.2 or 10.4.3.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8185	3	The exhaust system shall be furnished with adequate guards or shields to prevent personnel contact. The exposed surface of the exhaust guards/shields cannot exceed the surface temperatures defined in MIL-STD-1472F section 5.13.4.6		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-3532		**3.4.5.11.6 Transmission**					**4.4.5.11.6**
PDFOV-3533	4	The transmission (if applicable) shall be automatic.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3538	2	The JLTV if transmission is provided shall comply with FMVSS 102 S3.1.		X			Testing shall be conducted IAW FMVSS 102 S3.1 to verify compliance with Section 3 requirement.
PDFOV-3540		**3.4.5.11.7 Transfer Case**					**4.4.5.11.7**
PDFOV-3541	4	The transfer case (if applicable) shall have the ability to provide torque proportioning full time all-wheel drive.		X			Testing shall be conducted IAW TOP 2-2-604 to verify compliance with Section 3 requirement.
PDFOV-3543	4	A multi-speed transfer case (if applicable) shall possess a low range speed of at least 20 mph (32 kph).		X			Testing shall be conducted in the following manner to verify compliance with Section 3 requirement: per the OM, the vehicle shall be engaged into the low range setting and driven on flat surface at increasingly faster speeds, within the maximum engine RPM, to determine if 20 mph (32 kph) is achievable.
PDFOV-3544		**3.4.5.11.8 Steering**					**4.4.5.11.8**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3545	4	Power assist steering shall be furnished and provide full limit steer when the JLTV is stationary on paved surface.		X			Testing shall be conducted for compliance with MIL-STD-1472F and IAW AVTP 03-30WT to verify Section 3 requirement. Maximum vehicle steering force shall be 40 lb or less.
PDFOV-8483	3	The minimum clearance around the JLTV steering wheel shall be 3 in (7.6 cm).		X			Testing shall be conducted for compliance with MIL-STD-1472F by physically measuring the distance radially out from the outer edge of the steering wheel (through full 360 deg. coverage of steering wheel) before any impediments are hit, to verify compliance with Section 3 requirement. If no measurements less than 3 in (7.6 cm) are obtained, this requirement is successfully achieved.
PDFOV-3547	4	The steering system shall have a mechanical linkage between the steering system and the wheels.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3549	4	In the event power assist is lost, the system shall be manually steerable.		X			Testing shall be conducted for compliance with MIL-STD-1472F and IAW TOP 2-2-609, paragraph 5.6 to verify Section 3 requirement.
PDFOV-3553	5	The steering wheel shall be capable of being locked in a neutral position with either a standard padlock A-A-59487 (Part Identification Number AA59487-1BC) or chain. (O)	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-7434	2	The steering control system shall be constructed so that no components or attachments, including the horn actuating mechanisms and trim hardware, can catch the driver's clothing, watch, rings, or bracelets during normal driving maneuvers.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-7435	2	The steering column and shaft in the vehicle shall not be displaced more than 5 in (127 mm) in the horizontal rearward direction parallel to the longitudinal axis of the vehicle during a 30 mph (48 kph) perpendicular impact into a fixed collision barrier.			X		Analysis shall be conducted IAW FMVSS 204, paragraph S5, to verify compliance with Section 3 requirement.
PDFOV-3583		**3.4.5.11.9 Engine EPA Emissions Requirements**					**4.4.5.11.9**
PDFOV-3588	2	The JLTV shall meet National Security Exemption labeling requirements IAW EPA regulations.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3592	4	Pollution control technologies that are affected by the sulfur level of the JP-8 fuel either in maintenance or life expectancy shall not be used.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-6744		**3.4.5.12 Fuel System**					**4.4.5.12**
PDFOV-6747	2	The fuel system shall meet the requirements of FMCSR 393.65 and FMCSR 393.67 and incorporate the Standard Army Refueling System (SARS) components.				X	Certification shall be provided to verify compliance with FMCSR 393.67.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8778	4	The fuel system shall permit filling of all fuel tanks using only one (1) filling location.		X			Testing shall be conducted by fueling the JLTV and observing the fuel gage to read full to verify compliance with Section 3 requirement.
PDFOV-8779	4	The fuel system shall permit filling the tank with fuel at a rate of at least 20 gal/m (76 L/m) without fuel spillage.		X			Testing IAW FMCSR 393.67 will be conducted to verify compliance to the Section 3 requirement. The vehicle shall be refilled from various military equipment (fixed pumping stations and tanker trucks) without spillage with the pump set at a rate of 20 gal/min.
PDFOV-8780	4	The fuel system shall permit filling the tank with nozzles up to 2.5 in (6.3 cm) diameter without fuel spillage.		X			Testing shall be conducted by refueling the vehicle with the 1 in (2.5 cm), 1.5 in (3.8 cm) and 2.5 in (6.35 cm) diameter nozzles without spillage when the pump is set at 20 gal/min (76 L/m) rate. Can be combined PDFOV-8779 testing for the refill flow rate.
PDFOV-6748	4	The fuel system shall include an automatic water separator.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-6752	4	A shutoff valve between the tanks, if more than one tank, shall be furnished.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-6759	4	Fuel tank(s) shall be provided with drain plug(s) and safety type tank filler caps, captive chained to filler neck strainers, which are accessible and removable by personnel wearing arctic mittens.		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-3560		**3.4.5.13 Hydraulic Reservoir**					**4.4.5.13**
PDFOV-8188	4	Bypasses shall be furnished for all hydraulic filters, to protect filters and ensure components are adequately lubricated during cold temperature operation.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3564	4	A visual means shall be provided to confirm hydraulic reservoir (if applicable) fluid level.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-8781	5	The hydraulic reservoir (if applicable) shall have a pressure vented type filler cap of no less than 5 psi (35 kPa).	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance to the Section 3 requirement.
PDFOV-3566	5	The hydraulic reservoir (if applicable) shall allow for maintenance without draining the systems. (O)		X			Testing shall be conducted for compliance with MIL-STD-1472F to verify Section 3 requirement.
PDFOV-3568		**3.4.5.14 Hydraulic Hoses and Fittings**					**4.4.5.14**
PDFOV-3569	4	Hydraulic hoses and fittings (if applicable) shall conform to the requirements of SAE J516 and SAE J517.				X	Certification shall be provided to verify compliance to the Section 3 requirement.
PDFOV-3574		**3.4.5.15 Hazardous Materials Usage**					**4.4.5.15**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-3576	2	The JLTV shall not be delivered with, or require the use in maintenance or sustainment of; asbestos, beryllium, Class I and Class II Ozone Depleting Substances (ODS), radioactive materials, hexavalent chromium, cadmium, mercury, lead or other highly toxic or carcinogenic materials, as defined in 29 CFR 1910.1200 (Appendix A). Lead-acid batteries, lead solder and beryllium-copper in electrical connectors may be used without prior approval from the Government.	X				Inspection shall be performed on the OM to verify compliance to the Section 3 requirement.
PDFOV-8189	3	The JLTV shall be designed in such a way that the use of benzene, N-butyl alcohol, toluene, dichloromethane, and xylene are not required during maintenance or sustainment of the vehicle.	X				The maintenance requirements and PMCS requirements contained in the OM shall be reviewed to ensure none of the Section 3 materials are specified for use with the JLTV either as individually-specified materials, or as ingredients in other products.
PDFOV-8279		**3.5 JLTV Base Vehicle Platform Requirements**					**4.5**
PDFOV-8280		**3.5.1 JLTV-GP**					**4.5.1**
PDFOV-8834		**3.5.1.1 Curb Weight**					**4.5.1.1**
PDFOV-8722	1	The JLTV-GP shall not exceed 14,000 lbs (6,350 kg) at CW. (T)		X			Testing shall be conducted IAW TOP 2-2-801 to verify compliance with Section 3 requirement.
PDFOV-8201	1	The JLTV-GP shall not exceed 12,660 lb (5743 kg) at CW. (O)		X			Testing shall be conducted IAW TOP 2-2-801 to verify compliance with Section 3 requirement.
PDFOV-8837		**3.5.1.2 Payload**					**4.5.1.2**
PDFOV-8208	1	The JLTV-GP shall be capable of transporting a payload of 3,500 lbs (1588 kg). (T)		X			Testing shall be conducted IAW TOP 2-2-801 (to obtain vehicle weight before payload and after payload), and contractor supplied load plan, to verify compliance with section 3 requirements from a static basis. Dynamic testing, to verify transportability of required payload, shall be conducted during RAM testing over the Operational Terrain as detailed in Annex H to verify no significant movement that would create damage to the vehicle or payload.
PDFOV-8209	5	The JLTV-GP shall be capable of transporting a payload of 5,100 lbs (2313 kg). (O)		X			Testing shall be conducted IAW TOP 2-2-801 (to obtain vehicle weight before payload and after payload), and contractor supplied load plan, to verify compliance with section 3 requirements from a static basis. Dynamic testing, to verify transportability of required payload, shall be conducted during RAM testing over the Operational Terrain as detailed in Annex H to verify no significant movement that would create damage to the vehicle or payload.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8838		**3.5.1.3 Crew**					**4.5.1.3**
PDFOV-8224	2	The JLTV-GP shall provide the capability to accommodate and transport a total of four (4) crew.	X				Inspection shall be performed IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8823		**3.5.1.4 Stowage**					**4.5.1.4**
PDFOV-6548	2	In addition to the stowage of BII (Annex M) called out in this specification, the JLTV-GP shall have a single cargo stowage compartment, external to the crew compartment, with a minimum of 40 cubic ft (1.1 cubic m) of additional stowage that is weather protected and securable suitable for the stowage of non-mounted mission equipment and other supplies.		X			Testing shall be conducted IAW TOP 2-2-802 to verify compliance with Section 3 requirement.
PDFOV-9212		**3.5.1.5 Turret Ring Assembly with Hatch**					**4.5.1.5**
PDFOV-9213	3	The JLTV-GP shall integrate the turret ring assembly with hatch IAW with M1114 Turret Assembly Interface drawing 6433138.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 Requirement.
PDFOV-8289		**3.5.2 JLTV-CCWC**					**4.5.2**
PDFOV-8662		The JLTV-CCWC has the ability to carry, mount, and support the TOW ITAS. The JLTV-CCWC uses the same chassis as the JLTV-GP while the body structure may differ in order to accommodate weapon and ammunition stowage as well as missile backblast.					This is a definition and not verifiable separately.
PDFOV-8835		**3.5.2.1 Curb Weight**					**4.5.2.1**
PDFOV-8723	1	The JLTV-CCWC shall not exceed 14,000 lbs (6,350 kg) at CW. (T)		X			Testing shall be conducted IAW TOP 2-2-801 to verify compliance with Section 3 requirement.
PDFOV-8204	1	The JLTV-CCWC shall not exceed 12,660 lbs (5743 kg) at CW. (O)		X			Testing shall be conducted IAW TOP 2-2-801 to verify compliance with Section 3 requirement.
PDFOV-8839		**3.5.2.2 Payload**					**4.5.2.2**
PDFOV-8214	1	The JLTV-CCWC shall be capable of transporting a payload of 3,500 lbs (1588 kg). (T)		X			Testing shall be conducted IAW TOP 2-2-801 (to obtain vehicle weight before payload and after payload), and contractor supplied load plan, to verify compliance with section 3 requirements from a static basis. Dynamic testing, to verify transportability of required payload, shall be conducted during RAM testing over the Operational Terrain as detailed in Annex H to verify no significant movement that would create damage to the vehicle or payload.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8215	5	The JLTV-CCWC shall be capable of transporting a payload of 5,100 lbs (2313 kg). (O)		X			Testing shall be conducted IAW TOP 2-2-801 (to obtain vehicle weight before payload and after payload), and contractor supplied load plan, to verify compliance with section 3 requirements from a static basis. Dynamic testing, to verify transportability of required payload, shall be conducted during RAM testing over the Operational Terrain as detailed in Annex H to verify no significant movement that would create damage to the vehicle or payload.
PDFOV-8840		**3.5.2.3 Crew**					**4.5.2.3**
PDFOV-8227	2	The JLTV-CCWC shall provide the capability to accommodate and transport a total of four (4) crew.	X				Inspection shall be performed IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8292		**3.5.2.4 TOW ITAS/Saber Integration**					**4.5.2.4**
PDFOV-8293	3	The design of the JLTV-CCWC shall prevent injury to the crew and damage to the vehicle or missile/system damage due to missile launch, backblast area, fin deployment, and missile drop.		X			Testing shall be conducted by configuring the ITAS in vehicle-mounted operational configuration, and actual firing of the TOW missile, to verify compliance with Section 3 requirement.
PDFOV-8294	3	The JLTV-CCWC shall provide a means to safely fire the missile by warning the crew of vehicle related obstructions to the missile and missile backblast, or disable missile firing due to obstructions and to the missile backblast, or the vehicle shall be designed such that no obstructions to missile backblast or missile launch are present.		X			Testing shall be conducted by configuring the ITAS in vehicle-mounted operational configuration, and actual firing of the TOW missile, to verify compliance with Section 3 requirement.
PDFOV-8790	5	The gunner shall be able to lift the next missile to be loaded from underneath the missile tube's umbilical cap, which must be located within 24 in (61 cm) from the turret ring and no lower than 10 in (25.4 cm) below the JLTV roof.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.9.11.3 and IAW TOP 2-2-802 paragraph 5.1.1 to verify compliance with Section 3 requirement.
PDFOV-8791	4	The JLTV-CCWC shall allow the crew to return the missile and secure it back into the missile rack without exiting the vehicle.		X			Testing shall be conducted for compliance with MIL-STD-1472F section 5.9.11.3 and IAW TOP 2-2-802 paragraph 5.1.1 to verify compliance with Section 3 requirement.
PDFOV-8792	4	The JLTV-CCWC shall support the capability for the gunner to perform all TOW ITAS reload procedures without exiting the vehicle.		X			Testing shall be conducted IAW TOP 2-2-802 paragraph 5.1.1 to verify compliance with Section 3 requirement.
PDFOV-8793	4	The JLTV-CCWC shall power and recharge the TOW ITAS system.		X			Testing shall be conducted by configuring the ITAS in vehicle-mounted operational configuration, and confirming ITAS charging from the JLTV-CCWC, to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8295	3	The JLTV-CCWC shall provide a means to protect the antennas on the JLTV-CCWC so that the antennas are neither obstructions for missile firing nor damaged by the missile backblast.		X			Testing shall be conducted by configuring the ITAS in vehicle-mounted operational configuration, and actual firing of the TOW missile, to verify compliance with Section 3 requirement.
PDFOV-8794		**3.5.2.5 TOW Fire Safety Check**					**4.5.2.5**
PDFOV-8795	3	The JLTV-CCWC shall have a TOW Fire Safety Check (TFSC) which detects unsafe firing conditions.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8796	4	The unsafe firing conditions that the TFSC shall detect include at a minimum, door positioning, TOW-GPK rear armor panel positioning, antenna positioning, stowage hatch positioning, and unsafe TOW configurations.		X			Testing shall be conducted by individually cycling/adjusting items indicated in Section 3 and confirming detection of unsafe firing conditions by the TFSC, to verify compliance with Section 3 requirement.
PDFOV-8797	4	The TFSC shall have a GCB that will display all potential unsafe firing conditions at the gunner position.		X			Testing shall be conducted, concurrent with PDFOV-8796, to verify compliance with Section 3 requirement.
PDFOV-8799	5	The TFSC shall have a dedicated ON/OFF toggle switch to switch the power on and off to the TFSC. This power switch may also be a circuit breaker rated to the necessary power for the TFSC.		X			Testing shall be conducted to verify performance of ON/OFF toggles switch or circuit breaker (i.e. confirm power to TFSC is turned on/off with switch) to verify compliance with Section 3 requirement.
PDFOV-8800	4	The TFSC shall have a dedicated Indicator Test momentary switch. This switch will allow the user to check the TFSC indicators for functionality.		X			Testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-8296		**3.5.2.6 TOW ITAS/ Saber Traverse/Elevation/Depression**					**4.5.2.6**
PDFOV-8297	3	The TOW ITAS/Saber when mounted on the JLTV-CCWC shall permit +20 degrees elevation and -10 degrees depression. (T)		X			Testing shall be conducted IAW TOP 3-2-813 (Field of Fire) to verify compliance with Section 3 requirement.
PDFOV-8298	5	The TOW ITAS/Saber when mounted on the JLTV-CCWC shall permit +30 degrees elevation and -20 degrees depression. (O)		X			Testing shall be conducted IAW TOP 3-2-813 (Field of Fire) to verify compliance with Section 3 requirement.
PDFOV-8299		**3.5.2.7 TOW ITAS/Saber Service Functionality**					**4.5.2.7**
PDFOV-8300	3	The JLTV-CCWC with the TOW ITAS/Saber mounted, shall allow the crew to perform all crew service functions (e.g. loading, firing, immediate action, reloading, unloading) on the TOW ITAS/SABER.		X			Testing shall be conducted IAW TOP 2-2-802 to verify compliance with Section 3 requirement.
PDFOV-8301		**3.5.2.8 TOW ITAS/Saber Stowage**					**4.5.2.8**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8302	3	The JLTV-CCWC shall provide a designated stowage location, shock, vibration and weather protected, and secure, for the TOW ITAS components when not in operational use including; TOW ITAS/Saber Target Acquisition System (TAS), TOW ITAS/Saber Position Attitude Determining System (PADS), TOW ITAS/Saber Fire Control System (FCS), TOW ITAS/Saber Traversing Unit (TU), TOW ITAS/Saber Lithium-Ion Battery Box, TOW ITAS/SABER Vehicle Mounted Charger (VMC), TOW ITAS/SABER Launch Tube and TOW ITAS/Saber Display. (T)		X			Testing shall be conducted IAW TOP 2-2-802 to verify compliance with Section 3 requirement.
PDFOV-8342	3	The JLTV-CCWC shall provide a designated stowage location for the TOW ITAS/Saber Tripod (27 lbs) when not in operational use.		X			Testing shall be conducted IAW TOP 2-2-802 to verify compliance with Section 3 requirement.
PDFOV-8536	5	The JLTV-CCWC shall provide a designated stowage location, ballistic, IED and blast protected to the same level of protection as the rest of the vehicle, for the TOW ITAS components when not in operational use including; TOW ITAS/Saber TAS, TOW ITAS/Saber PADS, TOW ITAS/Saber FCS, TOW ITAS/Saber TU, TOW ITAS/Saber Lithium-Ion Battery Box, TOW ITAS/SABER VMC, TOW ITAS/SABER Launch Tube, TOW ITAS/Saber Display and TOW ITAS/Saber Tripod. (O)		X			Testing shall be conducted IAW TOP 2-2-802 to verify compliance with Section 3 requirement.
PDFOV-8801	3	Missile stowage shall accept TOW 2B-RF and USMC 2B extended end cap versions.		X			Testing shall be conducted by IAW TOP 2-2-802 and physically stowing a TOW 2B-RF and USMC 2B to verify compliance with Section 3 requirement.
PDFOV-8802	2	Missiles shall not be stowed in a vertical orientation.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify missile stowage locations are horizontal to conform to Section 3 requirement.
PDFOV-9214		**3.5.2.9 Turret Ring Assembly with Hatch**					**4.5.2.9**
PDFOV-9215	3	The JLTV-CCWC shall integrate the turret ring assembly with hatch IAW with M1114 Turret Assembly Interface drawing 6433138.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 Requirement.
PDFOV-8321		**3.5.3 JLTV-UTL**					**4.5.3**
PDFOV-8836		**3.5.3.1 Curb Weight**					**4.5.3.1**
PDFOV-8724	1	The JLTV-UTL shall not exceed 14,000 lbs (6,350 kg) at CW. (T)		X			Testing shall be conducted IAW TOP 2-2-801 to verify compliance with Section 3 requirement.
PDFOV-8207	1	The JLTV-UTL shall not exceed 12,660 lbs (5743 kg) at CW. (O)		X			Testing shall be conducted IAW TOP 2-2-801 to verify compliance with Section 3 requirement.
PDFOV-8841		**3.5.3.2 Payload**					**4.5.3.2**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8220	1	The JLTV-UTL shall be capable of transporting a payload of 5,100 lbs (2313 kg). (T)		X			Testing shall be conducted IAW TOP 2-2-801 (to obtain vehicle weight before payload and after payload), and contractor supplied load plan, to verify compliance with section 3 requirements from a static basis. Dynamic testing, to verify transportability of required payload, shall be conducted during RAM testing over the Operational Terrain as detailed in Annex H to verify no significant movement that would create damage to the vehicle or payload.
PDFOV-8221	5	The JLTV-UTL shall be capable of transporting a payload of 11,000 lbs (5000 kg). (O)		X			Testing shall be conducted IAW TOP 2-2-801 (to obtain vehicle weight before payload and after payload), and contractor supplied load plan, to verify compliance with section 3 requirements from a static basis. Dynamic testing, to verify transportability of required payload, shall be conducted during RAM testing over the Operational Terrain as detailed in Annex H to verify no significant movement that would create damage to the vehicle or payload.
PDFOV-8842		**3.5.3.3 Crew**					**4.5.3.3**
PDFOV-8230	2	The JLTV-UTL shall provide the capability to accommodate two (2) crew.	X				Inspection shall be performed IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8671		**3.5.3.4 Power Connector/Interfaces**					**4.5.3.4**
PDFOV-8495	2	The JLTV-UTL shall include a dedicated, secured for shock and vibration, weather protected, located near the right rear of the cabin and accessible for use by an attached shelter; 250A MIL-STD-1275 28 VDC power connector that meets the requirements of IEC 60309.		X			Testing shall be conducted to demonstrate compliance with the spec for form, fit and function and the criteria for shock, vibration and weather have been met the connector can draw 250 amps while meeting the voltage quality requirements of MIL-STD-1275 to verify compliance with Section 3 requirement.
PDFOV-8498	5	The second 120VAC power convenience outlet described in PDFOV-7851 provided on the JLTV-UTL shall be a dedicated, secured for shock and vibration, weather protected, and accessible for an attached shelter, 15A 120VAC power connector (located in the same mounting location as the DC power connector for the shelter).		X			Testing shall demonstrate per PDFOV-8497 methodology. Compliance shall be verified during RAM and performance testing (at periodic intervals) with the required criteria in the specification (Shock, Vibration, Weather-protected and Location) to verify compliance with Section 3 requirement. Outlet location accessibility shall be confirmed with shelter installed (simultaneous with shelter PD line item verification activities).
PDFOV-8825		**3.5.3.5 Towed Load Capacity**					**4.5.3.5**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8257	3	The JLTV-UTL shall be able to tow the fully loaded M200A1 in a degraded manner, which is defined as towing that legacy trailer at the safe operating limit of the legacy trailer.		X	X		Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement. The legacy trailers shall not be loaded to exceed the towing capacity of the JLTV.
PDFOV-8258	3	The JLTV-UTL shall be able to tow the M119A2 Howitzer in a degraded manner, which is defined as towing that howitzer at the safe operating limit of the howitzer. (T)		X	X		Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement.
PDFOV-8259	5	The JLTV-UTL shall be able to tow the M777 Howitzer in a degraded manner, which is defined as towing that howitzer at the safe operating limit of the howitzer. (O)		X			Testing shall be conducted IAW with TOP 2-2-021, paragraph 4.2, and 5.2 to verify compliance with Section 3 requirement.
PDFOV-8325		**3.5.3.6 Cargo Bed**					**4.5.3.6**
PDFOV-8326	4	The JLTV-UTL cargo bed shall have sidewalls, headboard and a fold down tailgate.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8327	4	The JLTV-UTL cargo bed sidewalls, headboard, or tailgate panels that are hinged shall not detach from the vehicle while operating the hinge mechanism.		X			Testing shall be conducted by lowering and raising the sidewalls, headboard and tailgate panels to ensure the panels do not detach to verify compliance with Section 3 requirement.
PDFOV-8328	5	The JLTV-UTL cargo bed sidewalls and tailgate shall be removable without use of tools.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8329	5	The removable components shall have specific recesses or handles to facilitate their removal.		X			Testing shall be conducted to verify compliance with Section 3 requirement.
PDFOV-8330		**3.5.3.7 Shelter Transport**					**4.5.3.7**
PDFOV-8782	2	The JLTV-UTL shall be capable of transporting the shelters specified in Annex K by use of an interface kit. (T)		X			Testing shall be conducted by physically fitting the shelter identified in Annex K onto the vehicle and driving the vehicle with shelter to verify compliance with Section 3 requirement.
PDFOV-8783	5	The JLTV-UTL shall be capable of transporting the shelters specified in Annex K by directly mounting the shelters to the vehicle. (O)		X			Testing shall be conducted by physically fitting the shelter identified in Annex K onto the vehicle and driving the vehicle with shelter to verify compliance with Section 3 requirement.
PDFOV-8393		**3.5.4 JLTV-T**					**4.5.4**
PDFOV-8576	3	The JLTV-T shall be capable of being recovered and lift towed by MTVR, LVSR, FMTV, and HEMTT wreckers, with no alteration to the JLTV-T required.		X	X		Testing shall be conducted by the JLTV-T being recovered and lift towed by the vehicles indicated in section 3 to verify compliance. Recovery shall be demonstrated during RAM testing on an as required basis, with no further operational damage.
PDFOV-8367	3	The JLTV-T shall have a blackout lighting capability that is controlled by the JLTV.		X			Testing shall be conducted by connecting the JLTV-T to the JLTV and turning on the blackout lights and observe if blackout lights on the JLTV-T come on to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8843		**3.5.4.1 Payload**					**4.5.4.1**
PDFOV-8222	1	The JLTV-T shall be capable of transporting a payload of 5,100 lbs (2,313 kg). (T)		X			Dynamic testing, to verify transportability of required payload, shall be conducted during RAM testing over the Operational Terrain as detailed in Annex H to verify no significant movement that would create damage to the trailer or the cargo during vehicle operation.
PDFOV-9187	5	The JLTV-T shall be capable of transporting a payload of 6,000 lbs (2,700 kg). (O)		X			Dynamic testing, to verify transportability of required payload, shall be conducted during RAM testing over OMS/MP (Annex H) to verify no significant movement that would create damage to the trailer or the cargo during vehicle operation.
PDFOV-8681		**3.5.4.2 Departure Angle**					**4.5.4.2**
PDFOV-8350	4	The JLTV-T angle of departure shall not be less than 45 degrees.		X			Testing shall be conducted IAW TOP 2-2-500 paragraph 5.2.1 to verify compliance with Section 3 requirement.
PDFOV-8682		**3.5.4.3 Lunette**					**4.5.4.3**
PDFOV-8385	3	The JLTV-T shall provide a lunette which permits a single crew to hook-up to the pintle of the JLTV.		X			Testing shall be conducted with crew physically attaching JLTV-T to JLTV, without assistance, to verify compliance with Section 3 requirement.
PDFOV-8683		**3.5.4.4 Power Connector/Interfaces**					**4.5.4.4**
PDFOV-8362	5	The JLTV-T electrical system shall be fully compatible with both 28-volt and 12-volt JLTV electrical systems.		X			Testing shall verify the JLTV-T electrical functions when supplied with 12VDC and with 28VDC to verify compliance with Section 3 requirement. The 12VDC compatibility will be tested in PDFOV-8365.
PDFOV-8364	5	The JLTV-T 28-volt/12 pin interconnecting coil-type electrical cable shall be hard wired on the trailer side.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8784	5	If equipped with air brakes, the JLTV-T shall have quick connect couplers (gladhands) at the front of the JLTV-T that meet the requirements of SAE J318 and ISO 4009.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8363	5	The JLTV-T electrical system shall be fully compatible with, and be fully operational, when connected to the appropriate intra-vehicular cable receptacles of legacy prime movers equipped NATO twelve-pin electrical connectors (ref: STANAG 4007).		X			Testing shall verify complete functionality when connected using the 12 pin electrical connector to verify compliance with Section 3 requirement.
PDFOV-1033	4	If equipped with air brakes, the JLTV-T shall be provided with two (2) connecting coil-type air hoses (color-coded) equipped with coiled spring hose guards and "glad hand" quick connector on trailer end of hoses.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement
PDFOV-8822		**3.5.4.5 Speed**					**4.5.4.5**

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8349	2	The JLTV-T at all permissible loads shall be capable of operating at speeds specified for the JLTV in all on/off road conditions without damage or interference.		X			Testing shall be conducted IAW TOP 2-2-506 to verify compliance with section 3 requirement. This will be verified in concurrence with the RAM requirements.
PDFOV-8785		**3.5.4.6 Brakes**					**4.5.4.6**
PDFOV-8786	5	The JLTV-T shall have a hand-brake release that disengages the brakes so it can be moved on flat paved surfaces without being connected to an external power source.		X			Testing shall be conducted by releasing the hand brake and attempt to move the JLTV-T and IAW TOP 2-2-608 to verify compliance with Section 3 requirement.
PDFOV-8358		**3.5.4.7 Breakaway**					**4.5.4.7**
PDFOV-8359	2	The JLTV-T shall be equipped with a breakaway safety feature to apply JLTV-T brakes which conform to FMCSR 393.43.		X			Testing shall be conducted IAW TOP 2-2-608 paragraph 4.2.5 to verify compliance with Section 3 requirement.
PDFOV-8394		**3.5.4.8 Tailgate**					**4.5.4.8**
PDFOV-8395	3	The JLTV-T shall be equipped with a fold down, removable tailgate.		X			Testing shall be conducted by lowering and removing the tailgate to verify compliance with Section 3 requirement.
PDFOV-8787	4	The JLTV-T tailgate shall not detach inadvertently from the trailer while operating the hinge mechanism.		X			Testing shall be conducted by lowering and raising the tailgate to verify compliance with Section 3 requirement.
PDFOV-8396	4	The JLTV-T tailgate shall be the full width across the rear of the cargo opening.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8397	4	If the JLTV-T tailgate has a horizontal open position, it shall support an evenly distributed minimum load of 1,000 lb (454 kg) (static).		X			Testing shall be conducted by placing 1000 lbs (454 kg) evenly distributed across the tailgate and confirming no tailgate or trailer damage to verify compliance with Section 3 requirement.
PDFOV-8398	4	Chains or other hardware used in the JLTV-T tailgate assembly shall have noise dampening material.	X				Inspection shall be conducted IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8399		**3.5.4.9 Cargo Bed**					**4.5.4.9**
PDFOV-8400	3	The JLTV-T shall meet all performance requirements of this specification both with and without the cargo bed attached.		X			Testing shall be conducted IAW TOP 2-2-506 with and without the cargo bed attached to verify compliance with Section 3 requirement.
PDFOV-8401	5	The JLTV-T cargo bed shall be secured to the chassis using four (4) ISO container locks.	X				Inspection shall be conducted IAW TOP 2-2-505, to verify compliance with Section 3 requirement.
PDFOV-8402	5	The JLTV-T shall be capable of securing cargo to the chassis, which includes a tactical quiet 10 kW generator sets with dimensions: 62 in (157 cm) x 32 in (81 cm) x 37 in (93 cm) (L x W x H).		X	X		Testing shall be conducted by loading and securing cargo, which includes tactical quiet 10 kW generator sets to the chassis to verify compliance with Section 3 requirement.

ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8403	4	For the purposes of sizing the trailer, the JLTV-T (trailer) shall be capable of carrying two Joint Modular Intermodal Containers (JMIC) fore and aft on the floor of the trailer bed. The JMIC dimensions are 43.75 in (111 cm) x 51.75 in (131 cm) x 43 in (109 cm) (L x W x H).		X	X		Testing shall be conducted by loading and securing two (2) JMIC on the floor of the trailer bed to verify compliance with Section 3 requirement.
PDFOV-8522	5	The JLTV-T shall be capable of carrying the same shelters as the JLTV-UTL. (O)		X			Testing shall be conducted by installing shelters on JLTV-UTL and JLTV-T to confirm the same installability on each platform, to verify compliance with Section 3 requirement.
PDFOV-8826		**3.5.4.10 Trailer Brakes**					**4.5.4.10**
PDFOV-8354	2	The JLTV-T service brakes shall meet the requirements of FMVSS 121.		X			Testing shall be conducted IAW TOP 2-2-608 and DOT-TP-121V-05 to verify compliance to the Section 3 requirement.
PDFOV-8355	5	The JLTV-T shall be equipped with service brakes as specified per ADR 38/03 Trailer Brake Systems for TB Class Trailer (Light Trailer) or TC Class Trailer (Medium Trailer).		X			Testing shall be conducted IAW TOP 2-2-608 to verify compliance to the Section 3 requirement.
PDFOV-8357	4	The JLTV-T parking brakes shall hold the trailer stationary on a 10 percent grade, on a dry, paved surface, with the trailer facing in either direction, when disconnected from the prime mover.		X			Testing shall be conducted IAW TOP 2-2-610, section 4.1.1, at grade specified in section 3, to verify compliance with Section 3 requirement.
PDFOV-8404		**3.5.4.11 Sidewalls and Endwalls**					**4.5.4.11**
PDFOV-8405	5	The JLTV-T shall be equipped with sidewalls and endwalls that have a minimum height of 18 in (46 cm).		X			Testing shall be conducted IAW TOP 1-2-504 to verify compliance with Section 3 requirement.
PDFOV-8407		**3.5.4.12 Stowage Compartment**					**4.5.4.12**
PDFOV-8408	4	The JLTV-T shall provide a weather-resistant stowage compartment for JLTV-T accessories.	X				Inspection shall be conducted IAW TOP 2-2-505, to verify compliance with Section 3 requirement.
PDFOV-8409		**3.5.4.13 Wheel Splash and Stone Throw Protection**					**4.5.4.13**
PDFOV-8410	2	The JLTV-T shall provide rigid fenders.	X				Inspection shall be conducted IAW TOP 2-2-505, to verify compliance with Section 3 requirement.
PDFOV-8411		**3.5.4.14 Pedestal/Retractable Landing Device**					**4.5.4.14**
PDFOV-8412	4	An adjustable leg shall be provided to allow a JLTV-T without JLTV to be leveled on longitudinal slopes from zero to plus or minus 10 percent.		X			Testing shall be conducted IAW TOP 2-2-021 to verify compliance with Section 3 requirement.
PDFOV-8413	4	The landing device shall possess a combination wheel and ground pad.	X				Inspection shall be performed IAW TOP 2-2-505 to verify compliance with Section 3 requirement.
PDFOV-8415		**3.5.4.15 Rear Stabilizer Legs**					**4.5.4.15**
PDFOV-8416	4	Rear stabilizer legs shall be provided which stabilize the JLTV-T on longitudinal slopes from zero to plus or minus 10 percent.		X			Testing shall be conducted IAW TOP 2-2-021 to verify compliance with Section 3 requirement.

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ID	Tier	Section 3 - Requirement	I	T	A	C	Section 4 - Verification
PDFOV-8417	4	The capacity of each stabilizer leg shall be a minimum of 50 percent of the JLTV-T payload.		X			Testing shall be conducted IAW TOP 2-2-021 to verify compliance with Section 3 requirement.
PDFOV-8685		**3.5.4.16 Mechanical Connections**					**4.5.4.16**
PDFOV-8370	2	To protect from loss of JLTV-T control in the event of pintle or lunette failure, safety chains shall be provided on all JLTV-T's which conform to SAE J684, Class 4.		X			Testing shall be conducted with a tensile strength test on the safety chains. A load equivalent to the trailer GVWR shall be applied in a direction parallel to the trailers longitudinal axis via the safety chains and maintained for one (1) minute as required by SAE J684.
PDFOV-8387	2	The JLTV-T shall have mechanical connections as specified per ADR 62/02 Mechanical Connections Between Vehicles for TB Class Trailer (Light Trailer) or TC Class Trailers (Medium Trailer).		X			Testing shall be conducted IAW ADR 62/02 to verify compliance with Section 3 requirement.
PDFOV-8686		**3.5.4.17 Legacy Vehicle Pintles**					**4.5.4.17**
PDFOV-8389	5	The JLTV-T shall be compatible with HMMWV pintle. The ground to lunette height for the HMMWV is 20 3/8 in (52 cm) to 29 in (74 cm). (O)		X			Testing shall be conducted by physically attaching the JLTV-T to the HMMWV pintle to verify compliance with Section 3 requirement.
PDFOV-8390	5	The JLTV-T shall be compatible with FMTV pintles. The ground to lunette height for the FMTV it is 32.6 in (83 cm) to 39 in (99 cm). (O)		X			Testing shall be conducted by physically attaching the JLTV-T to the FMTV pintle to verify compliance with Section 3 requirement.
PDFOV-8391	5	The JLTV-T shall be compatible with HEMTT-LHS pintles. The ground to lunette height for the HEMTT-LHS is 32.6 in (83 cm) to 39 in (99 cm). (O)		X			Testing shall be conducted by physically attaching the JLTV-T to the HEMTT-LHS pintle to verify compliance with Section 3 requirement.
PDFOV-8392	5	The JLTV-T shall be compatible with M939 pintles. The ground to lunette height for the M939 is 32.6 in (83 cm) to 39 in (99cm). (O)		X			Testing shall be conducted by physically attaching the JLTV-T to the M939 pintle to verify compliance with Section 3 requirement.

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