



#### Overarching Purchase Description Changes



- All 6 seat variants removed from FoV
- 4 pax variants are: GP / SP / HGC / CCWC / Recon / C2OTM (3500 # payload)
- 2 pax variants remain: UTL-PM / SC (5100 # payload)
- "Payload Category" vernacular abandoned
- Trailers are still a part of the JLTV FoV
- Vehicle specific Annexes (A/B/C/D) folded back into main body of PD
- Tables were converted to PD textual requirements (tool issues, traceability)
- Multiple "shall" statements were parsed into separate requirements
- Combined Threshold and Objective requirements were separated into single requirements
- Many wording changes to make the PD more clear, understandable and testable
- •Tailored many Standards that were previous general callouts
- The JLTV trailer is now a single common trailer
- Right Hand Drive and Operation was changed to a Threshold from Objective
- Added ADR reqts to FMVSS callouts (many places)



#### Australian Unique Changes – PD Annex L



- Right Hand Operation shall include provisions in driver station and instrument panel layout, spare tyre placement, headlight lamp bias, DVE lamp placement, turn stalk placement and side mirror vision.
- RHO configuration shall have markings as specified per ADR 61/02 Vehicle Markings for NB Class Vehicles (Medium Goods Vehicles).
- Centreline of the steering control must not be to the left of the centreline of the vehicle.
- No passenger seat shall be to the right hand side of the driver.
- headlamps shall be as specified per FMVSS 108 however aligned for RHO as per Australian Design Rules (ADR) 46/00
- shall be equipped with a device for illumination of rear registration plate as specified per ADR 48/00
- shall be equipped with headlamps as specified per ADR 46/01
- shall be equipped with a device for illumination of rear registration plate as specified per ADR 48/00 Devices for Illumination of Rear Registration Plates for NB Class Vehicles (Medium Goods Vehicles), TB Class Trailer (Light Trailer) and TC Class Trailers (Medium Trailer)



#### Specific Purchase Description Changes – 1 of 4



- Curb Weights are required to be 13,600 and 14,100 respectively for the 4 & 2 Pax
- Added a requirement for Reference Cone Index (RCI) of 25 and 28 for 4 & 2 Pax
- Added an 30% Sand Slope ascension requirement (longitudinal)
- FoV High Operating Temperature change from 130 F to 120 F (with solar loading)
- Reverse top speed changed from 10 mph to 8 mph
- Added brake force requirement (Mil-Std 1472...)
- Added Trailer braking reqt to meet FMVSS 121 and ADR 38/03 (light or medium class)
- Parking Brake hold reqt changed from 40% to 60% (longitudinal)
- Added a parking brake hold reqt for Trailers on 30% slope (longitudinal) uncoupled
- Added a regt section on ABS (standards, fallbacks, indicators, diagnostics, etc...)
- Removed reqts for ISO 2631-1 and ISO 2631-5 (comfort, perception and motion sickness) (kept 1472 reqt for same)
- FoV Range changed to 300 miles @ 35mph over flat paved roads (was 400 miles)



#### Specific Purchase Description Changes – 2 of 4



- Added ability to mount mudflaps on JTLV FoV
- Added reqt for weapon BII to stored in close proximity to the mounted weapon
- C130 Transportability reqt amended to exclude GPK
- Added an exposure limit requirement for fire extinguishing agent (2001 NFPA Std)
- Back Up Battery for AFES was eliminated in favor of keep alive current (10 minutes)
- FM 3-5 & 3-11 now called out for decon levels ("Operational" Level call out)
- C-130 / C-17 / C5 Transport requirements now prohibits articulation of suspension during loading
- C130 Transport Requirement increased to Two JLTV at CW + B-Kit (no GPK)
- New requirement to negotiate 15 degree ramps at GCVW (coupled)
- CH-47 Lift for high/hot/30 Km range changed to 15,639 lbs including sling
- Changed the time requirement from 1 minute to 2 minutes for Suspension height



#### Specific Purchase Description Changes – 3 of 4



- New reqt to only use BII for transport Prep (excl. GPK & Shelters)
- New reqt to store all removed transport prep items on board (excl. GPK & Shelters)
- IETMs changed from Threshold to Objective requirement
- NATO litter was removed in favor of the litter with foldable handles for being able to transport a wounded soldier in the vehicle
- Corrosion life of vehicle changed from 25 to 20 years
- Fuel efficiency specified as Payload-Ton-Miles per Gallon (10) instead of 60 GVW Ton-Miles per Gallon.
- A new Idle consumption rate of 1.6 Gallon/Hour while generating 10kw of 28 VDC power is now included
- Tactical idle is now defined as 1800 rpm or less
- New reqt for a 2WD drive setting if a t-case is employed
- ECC no longer specified, CW however was derived from 2000 partial payload in CDD



#### Specific Purchase Description Changes – 4 of 4



- Automotive glass is removed
- escape hatch has been removed
- CWS, RDS, removed
- Crane Removed
- Work Lamps Removed
- Winch on Front and Rear removed, now front only
- Removed Surviving INWE (initial nuclear weapons effects)

The Draft EMD JLTV Purchase Description is posted at: http://contracting.tacom.army.mil/majorsys/jltv\_emd/jltv\_emd.ht m



#### Potential Purchase Description Changes



- Higher level of Underbelly protection
- Possible new requirement for self leveling ups to 15-20% laterally and or longitudnally for lessening door swing forces for ingress/egress.
- CTIS to have independent controls (from Suspension height or T-Case)
- GPK is no longer required on the 2 seat utility vehicles
- GPK shall be GFE
- Fording Mode actuated by single button press, and allows "tip-toe" height
- GPK Overhead Protection Kit may no longer be required, but GFE handles this
- Gunner's restraint to have automatic device to pull gunner inside vehicle upon rollover event
- A single operational ride height is likely to be required (except for transport and fording)
- installation time regts may be added for all allowable kit types
- Ride Limiting speeds will increase the regts significantly based on test data
- Considering Prioritizing the PD requirements





# C4I PD Changes

Chris Brouwer



#### Scalable Architecture



- Scalable family of displays and processing architectures
  - Base Architecture includes Drivers Smart Display Unit (DSDU) only
  - Commanders Smart Display Unit (CSDU) added
  - Rear seat Auxiliary Smart Display Unit (ASDU) added
    - 1-2 ASDUs may be added based on display/processing needs
  - Enhanced Modular Computing Unit (EMCU) added
    - Chassis based vehicle computer added when processing needs exceed smart display capabilities
  - Auxiliary Display Unit (ADU) added
    - ADUs can utilize either smart display or EMCU processing resources



### Electrical/C4I Kits



- Commanders Smart Display Unit (CSDU)
- Rear seat Auxiliary Smart Display Unit (ASDU)
- Auxiliary Display Unit (ADU)
- Enhanced Modular Computing Unit (EMCU)
- Cross Domain Access and/or Transfer
- Exportable Power
- Silent Watch Energy Storage
- Power Management Expansion
- MIL-STD-704 Power



## Other C4I PD changes



- Drivers display has been physically separated from the C4I architecture to reduce IA burden and allow for lower cost smart display options
- Display sizes have been reduced to allow for lower cost smart display options
- Many Smart Display requirements added to define scalable architecture
- Many Health Management System (HMS) requirements added, providing more detail for diagnostics and CBM
- On board power generation has been reduced to 15kW
- Power on the move, vehicle will cut back mobility to maintain electrical generation
  - Driver is made aware when mobility is degraded and given the option to shed electrical load to maintain vehicle mobility performance
- Only MIL-STD-1275 power on base vehicle
  - MIL-STD-704 power has been moved to an add on kit
- New, more stringent battery safety requirements
- Vehicle Battery(s) must fit into the standard 6T form factor IAW NATO STANAG 4015
- DC Power for shelters JLTV-UTL will provide 250A DC power connect for shelters
- High Altitude Electromagnetic Pulse and Nuclear Survivability Requirements For Military Equipment requirements have been deleted
- Many IA requirements deleted from PD, but still required to meet DISCAP certification
- Panic zeroes deleted
- Central key fill deleted
- Short range wireless deleted, however open architecture should allow for the addition of short range wireless in the future.