

United States Special Operations Command



USSOCOM Ground Mobility Acquisition Overview

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Family of Special Operations Vehicles (FOSOV)

SOF AT&L / PEO-SOF Warrior



Acquisition at the Speed of War!



Agenda

- **Active FOSOV Programs & Lifecycle Phase**
- **Program Overviews**
- **Technology Insertion**



Vehicle Lifecycle Overview

Vehicles in Concept



V-22 Internally Transportable



Purpose Built Non-Standard Commercial Vehicle



Next-Gen Armored Ground Mobility System (AGMS)

Vehicles In Production



Ground Mobility Vehicle (GMV) 1.1



Non-Standard Commercial Vehicle



Light Tactical All Terrain Vehicle- Diesel

Vehicles in Sustainment



GMV 1.0



MRAP-ATV (M-ATV)

Vehicles in Sustainment



MRAP - RG33 A1



MRAP - RG33 AUV



Light Tactical All Terrain Vehicle (LTATV)



- The LTATV is a SOF modified commercial off the shelf (COTS) lightweight vehicle that is internally air transportable via V-22, H-53 and H-47 aircraft. It consists of two and four seat variants with the ability to change configuration based upon mission and/or threat. It's intended to perform a variety of missions to include offset infiltration, reconnaissance and medical evacuation.
- Areas of Interest:
 - Hybrid/Electric
 - Autonomous Capabilities
 - Increased Payload
 - Lifecycle Improvement
 - Modular Kit Capabilities (weapons, tracks, litters, etc.)



ACQUISITION STRATEGY

- Non Developmental Item (NDI)
- Follow-On Contract: Full & Open Competition

PERIOD OF PERFORMANCE

- Sustainment ongoing
- Follow-On Contract: FY20 – TBD

MILESTONES

- Pure Fleet Diesel Variant: 4QFY18 (achieved in July 2018)

POINT OF CONTACT

- TILO (tilo@socom.mil)

FUNDING

- ~\$6.5M/year

CURRENT CONTRACT/OEM

- Polaris Defense (Medina, MN)
- 5 Year IDIQ: July 2015 – July 2020

Non Standard Commercial Vehicle (NSCV)



- The current NSCV is based on commercial vehicle platforms that are enhanced with mission-specific modifications to increase protection, mobility performance, and durability.
- Areas of Interest:
 - Lightweight Armor Materials
 - Lightweight Vehicle Components/Mods
 - C4ISR Integration Cost Reductions
 - Suspension Technology
 - Lifecycle Improvement



ACQUISITION STRATEGY

- NSCV2: Full & Open Competition
- P-Built: Competitive OTA for Prototype (NAMC Consortium), w/ Follow-on Production

PERIOD OF PERFORMANCE

- Sustainment Ongoing
- Purpose Built NSCV: FY20 Award

MILESTONES

- NSCV1 Production End: July 18
- NSCV2 IOT&E: March 18
- NSCV2 PQT Completion: 3QFY19

POINT OF CONTACT

- TILO (tilo@socom.mil)

FUNDING

- ~\$36M/year (average)

CURRENT CONTRACT/OEM

- Battelle Memorial Institute (Columbus, OH)
- 7 Year IDIQ: July 2016 – July 2023



Current NSCV Platforms



Hilux Pickup

- 4 crew
- Payload 2,200 lbs
- CH-47 Internal Air Transport
- New generation of proven NSCV Hilux



Land Cruiser 76 SUV

- 4 crew
- Payload 2,000 lbs
- New generation of proven SOF LC76

- A Family of Vehicles that provides SOF with low-visibility armored and unarmored vehicles to conduct operations in politically or operationally constrained permissive, semi-permissive, or in denied areas.
- Based on commercial vehicle platforms. Upgraded suspension, brakes, skid plates, drive train, wheels and tires. added blackout/IR, frame reinforcements.
- NSCV2 Program of Record: July 2016 – July 2023
- NSCV2 Program adds vehicle types:
 - Pickup Trucks: Toyota Hilux and Land Cruiser 79, Ford Ranger
 - Sport-Utility Vehicles: Toyota Land Cruiser 76, 78, 200
- Configurations and options:
 - Left-hand or Right-hand drive
 - Diesel or Gasoline engine
 - Automatic or Manual transmission
 - Single or Dual Alternator
 - Standard or Lightweight Armor, or unarmored
 - Standard or Reduced Physical Signature
 - Standard or Reduced Signature C4ISR, or no C4ISR
 - Weapons Mount (pickups only)
 - Low Velocity Air Drop (LVAD) (pickups only)
- SOCOM's NSCVs provide protection, mobility, and communications in the toughest on and off road environments.



Land Cruiser 79 Pickup

- 4 crew
- Payload 2,200 lbs
- CH-47 Internal Air Transport
- Optional automatic transmission



Land Cruiser 200 SUV

- 4 crew
- Payload 2,000 lbs
- New generation of proven NSCV LC200



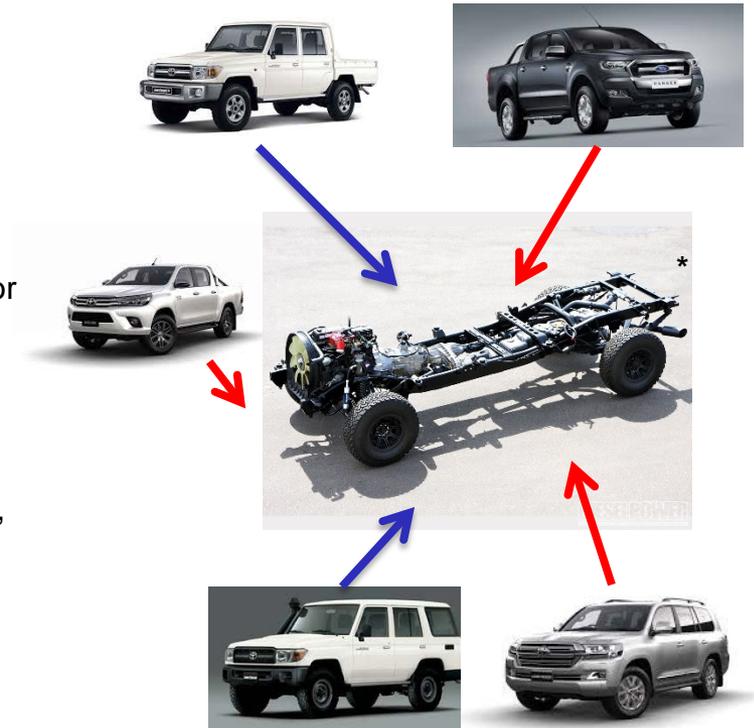
Purpose Built Non Standard Commercial Vehicle (PB-NSCV)

■ Current NSCV – Modifications to OEM Commercial Vehicles

- 6 Variants with different engines, transmissions, axles, suspension, etc.
- Reliant on OEM vehicle – model year changes
- 150% overloaded based on OEM vehicle
- 3 year OCONUS lifecycle

■ Purpose Built Concept

- Joint Development Effort to provide a Common Base Platform for SOF
- Common Chassis/Drivetrain not reliant on OEM
- Interchangeable skins to mimic target vehicles
- 10-15 year lifecycle with 1-2 Reset(s)
- Built from the ground up (no OEM vehicle reliance) for durability, payload, and rugged terrain
- Transition away from continual investment costs – utilize O&M funds for P-Built Reset



* Chassis does not represent material solution



Ground Mobility Vehicle 1.1 (GMV 1.1)

- The GMV 1.1 is a highly mobile CH-47 internally transportable Special Operations combat vehicle with the operational flexibility to support a wide range of lethal and non-lethal Special Operations missions and core activities.
- Areas of Interest:
 - Lightweight Armor Materials
 - Hybrid/Electric Powertrain
 - Vehicle Weight Reduction
 - Terrain Specific Tire Alternatives
 - C4ISR Integration Cost Reductions



ACQUISITION STRATEGY

- Full and Open Competition
- Single Vendor Award
- Produce & Evaluate Test Vehicles
- Full-Rate Production Decision

PERIOD OF PERFORMANCE

- PoP: Aug 13 - Aug 20
- 5 Years Production

MILESTONES

- IOT&E: November 2015
- First Unit Equipped: April 2016
- Full Rate Production Decision: March 17
- Initial Operational Capability: September 2020

POINT OF CONTACT

- TILO (tilo@socom.mil)

FUNDING

- FY20 is last year of investment funding
- \$16M sustainment funding through FYDP

CURRENT CONTRACT/OEM

- General Dynamics Ordnance and Tactical Systems (St. Petersburg, FL)
- 7 Year IDIQ: August 2013 – August 2020



Mine Resistant Ambush Protected Vehicle (MRAP)



- The Mine Resistant Ambush Protected (MRAP) family of vehicles currently consists primarily of the MRAP All Terrain Vehicle (M-ATV), and RG-33-A1. Vehicles are modified to meet SOF unique requirements.
- Areas of Interest:
 - Active Reset Operations
 - Obsolescence Management
 - Sustainment Cost Reductions
 - C4ISR Integration Cost Reductions



ACQUISITION STRATEGY

- JPO MRAP Contracts

PERIOD OF PERFORMANCE

- Sustainment ongoing
- Reset kicks off in FY19

MILESTONES

- Post Milestone C
- Sustainment/Disposal Phase

POINT OF CONTACT

- TILO (tilo@socom.mil)

FUNDING

- ~\$85M/year in O&M

CURRENT CONTRACT/OEM

- No Active OEM Contracts
- FSR Support: ManTech / Lockheed Martin

Ground Mobility Vehicle 1.0 (GMV 1.0)



- The Ground Mobility Vehicle 1.0 (GMV 1.0) is a medium class High Mobility Multipurpose Wheeled Vehicle (HMMWV) with Special Operations - Peculiar (SO-P) modifications. Several variants have supported Special Operations Operators reliably for over 12 years in contingency and combat operations.
- Areas of Interest:
 - Active Reset Operations
 - Lightweight Armor Materials
 - Suspension & Payload Improvements



ACQUISITION STRATEGY

- Modified Service Common (MFP-2)

PERIOD OF PERFORMANCE

- Sustainment / Divestiture
- Reset as necessary
- IROAN as necessary

MILESTONES

- Production ended in FY06
- Vehicle Reset has been continuous since FY09

POINT OF CONTACT

- TILO (tilo@socom.mil)

FUNDING

- \$2M for FY 19 reset
- Annual Prioritization Process for Reset
- Continue sustainment through OCO

CURRENT CONTRACT/OEM

- No Active Contracts
- Reset: Letterkenney Army Depot (LEAD)



Joint Light Tactical Vehicle (JLTV)

- JPO JLTV managed out of TACOM
- To be fielded to SOF Units by Services



M1279 Utility (UTL)

M1278 Heavy Guns Carrier (HGC)

Being Evaluated for SOF Adoption – limited SOF modifications



Heavy Guns Carrier (HGC)
M1278: 2320-01-652-5250 P/N: 87T0207 ZLIN: Z05304
M1278A1: 2320-01-653-6495 P/N: 87T0212 ZLIN: Z05737



Next Generation Armored Ground Mobility System (AGMS)

- The AGMS is a rapidly-deployable armored personnel carrier, providing heavy weapons capability, ballistic protection, and increased transportability options for SOF.
- Key Requirements (anticipated):
 - Blast & Ballistic Protection
 - Seating for 9-10 passengers
 - C-130 Transportable
 - 4,500+lb Payload Capacity
 - Increased Situational Awareness
 - Heavy Weapons Capability (RWS)



ACQUISITION STRATEGY

- TBD (Market Research)

PERIOD OF PERFORMANCE

- FY22/23 kickoff (estimated)

MILESTONES

- Requirements Generation – FY19/20
- Market Research – FY19/20

POINT OF CONTACT

- TILO (tilo@socom.mil)

FUNDING

- TBD

CURRENT CONTRACT/OEM

- No Active Contracts



PM FOSOV Technology Insertion



Active Production

- NSCV
- GMV 1.1
- LTATV

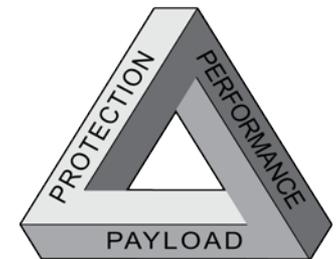
Active Sustainment

- LTATV (Lifecycle Replacement every 3-4 yrs)
- M-ATV
- GMV 1.0 (SOF HMMWV)

Vehicles in Concept

- Purpose Built NSCV
- Next Gen AGMS

- Lightweight Armor for Ground Mobility Platforms
 - Current armor solutions are heavy, limit available payload options and decrease vehicle durability.
 - Lightweight and cost effective technologies that can replace current armor solutions.
- Lightweight Vehicle Components/Mods
- Advanced Tires for all platforms
- Low SWAP / High Output Alternators
- Hybrid/Electric Vehicle Capabilities
- Alternative Fuel Sources
- Autonomous / Semi-Autonomous Vehicle Capabilities
- Semi-Active Suspension Capabilities
- Advanced Situational Awareness (M-ATV/AGMS) – Battlefield Awareness
- Telepresence for remote vehicle operation and/or Situational Awareness (SA)



The Iron Triangle

POC Contact: TILO, 813-826-9482, TILO@socom.mil



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Questions?



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