



Ground Combat and Tactical Vehicle Strategy **QUICK LOOK**



**EXPEDITIONARY
FORCE 21**



*ACV Decision Background
and Strategy Video Enclosed*

United States Marine Corps
Ground Combat and Tactical Vehicle Strategy

DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380-1775

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FOREWORD

This publication is a snapshot of the 2015 United States Marine Corps Ground Combat and Tactical Vehicle Strategy (GCTVS) focusing on the FY15-40 timeframe and centered on the incremental modernization of Marine Corps assault amphibian capability within the context of the larger ground combat and tactical vehicle portfolio.



The GCTVS is informed by service defining concepts and changes in the operating environment, it provides the near- and long-range actions which drive planning, programming, and budgeting activities. The strategy is underpinned by an affordability assessment, conducted by DC, P&R, showing the overall portfolio is affordable.

The GCTVS is aligned with and guided by the Marine Corps' new capstone concept Expeditionary Force 21 and was approved by the MROC on 27 August 2014.

Semper Fidelis,

A handwritten signature in black ink, appearing to read "K. J. Glueck, Jr.".

K. J. GLUECK, JR.
Lieutenant General, U.S. Marine Corps
Deputy Commandant, Combat Development and
Integration; and Commanding General,
Marine Corps Combat Development Command

United States Marine Corps
Ground Combat and Tactical Vehicle Strategy

GCTVS Two Primary Priorities: Replace AAV & Procure JLTV

The top priority of this strategy is the modernization of assault amphibian capability and the replacement of the legacy AAV with modern armored personnel carriers through a combination of complementary systems. The second highest priority within the portfolio is the replacement of the portion of the HMMWV fleet that is most at risk.

The **central focus is modernization/upgrade of selected systems and sustainment of legacy systems** over modernization of legacy systems.

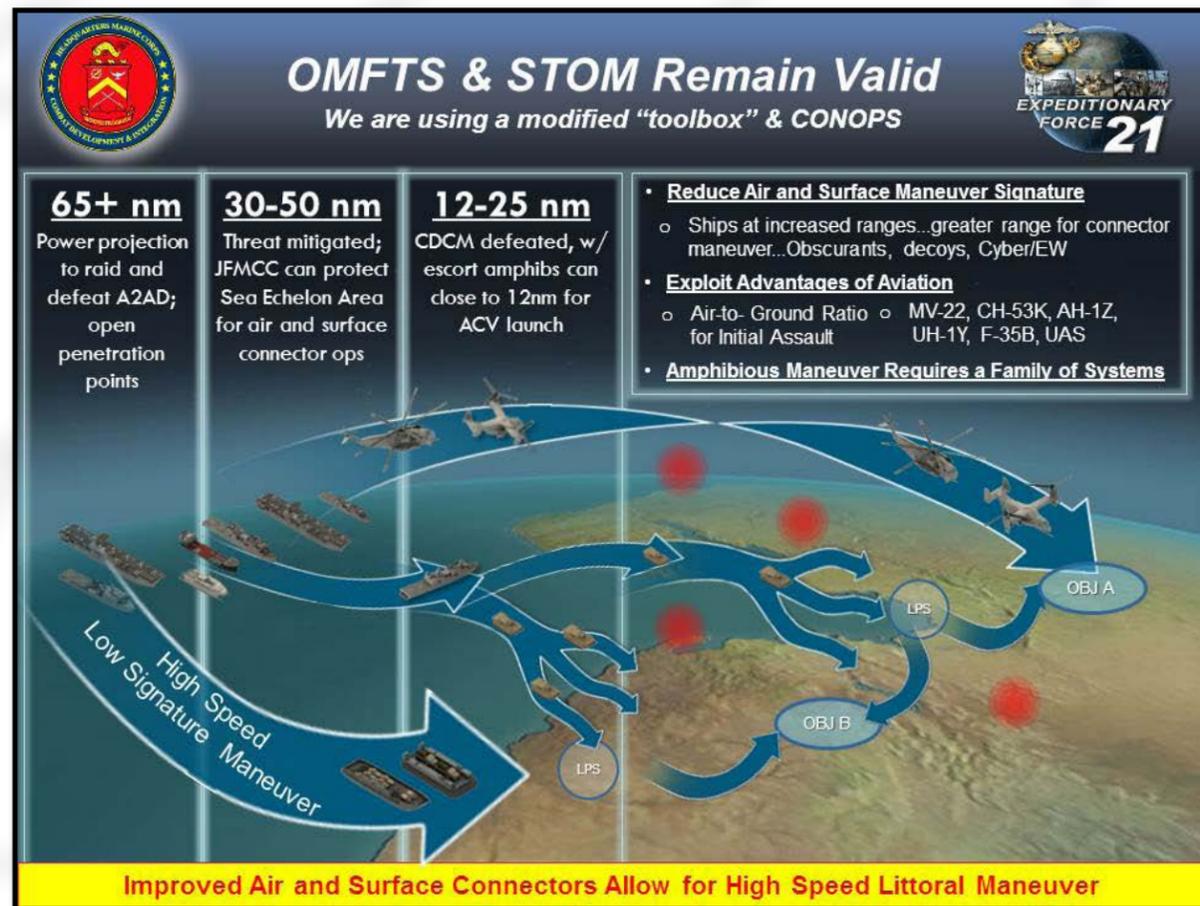


GCTVS Objective

The Marine Corps will field a GCTV portfolio structured to support and enable a 182,000 end-strength total force that projects forward presence, has the capacity for rapid crisis response and is capable of a two-MEB forceable entry operation.

GCTVS Follows Our Service Defining Concepts...

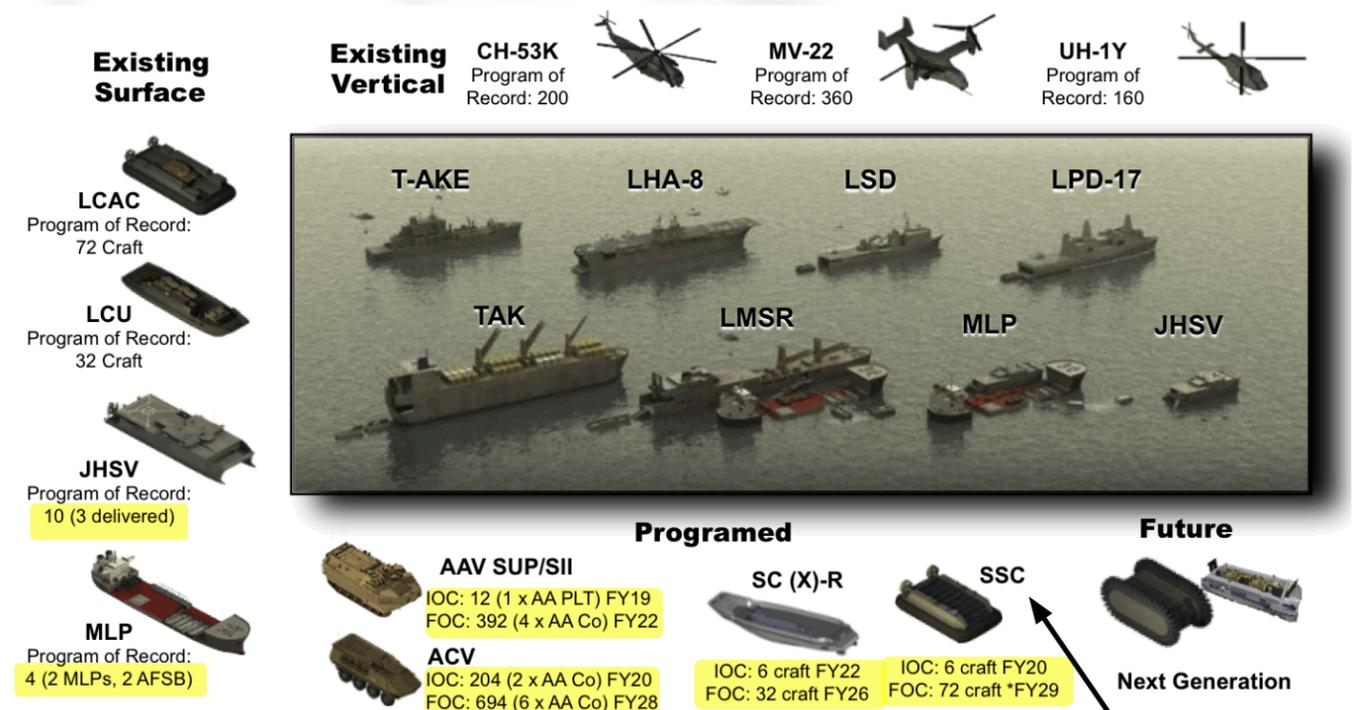
Strategic GCTV objectives align with Operational Maneuver From the Sea, Ship to Objective Maneuver, Seabasing and Expeditionary Force 21. **It is imperative that the Marine Corps maneuvers from the sea**, through the littorals, to positions of advantage at a time and place of our choosing. This service defining capability is a **significant asymmetric advantage** against the increasing range and precision of adversaries A2/AD systems that are pushing our sea base further from the shore.



We must be able to **employ disaggregated and distributed forces** from extended ranges to entry points that allow rapidly build our combat power ashore to maintain momentum and expand the area of operation. We must do this with limitations on our resources while developing a **complementary portfolio** of connectors, landing craft, amphibious vehicles and boats, as well as the ships that project them.

...Thus Leverages Seabasing Littoral Maneuver Capabilities

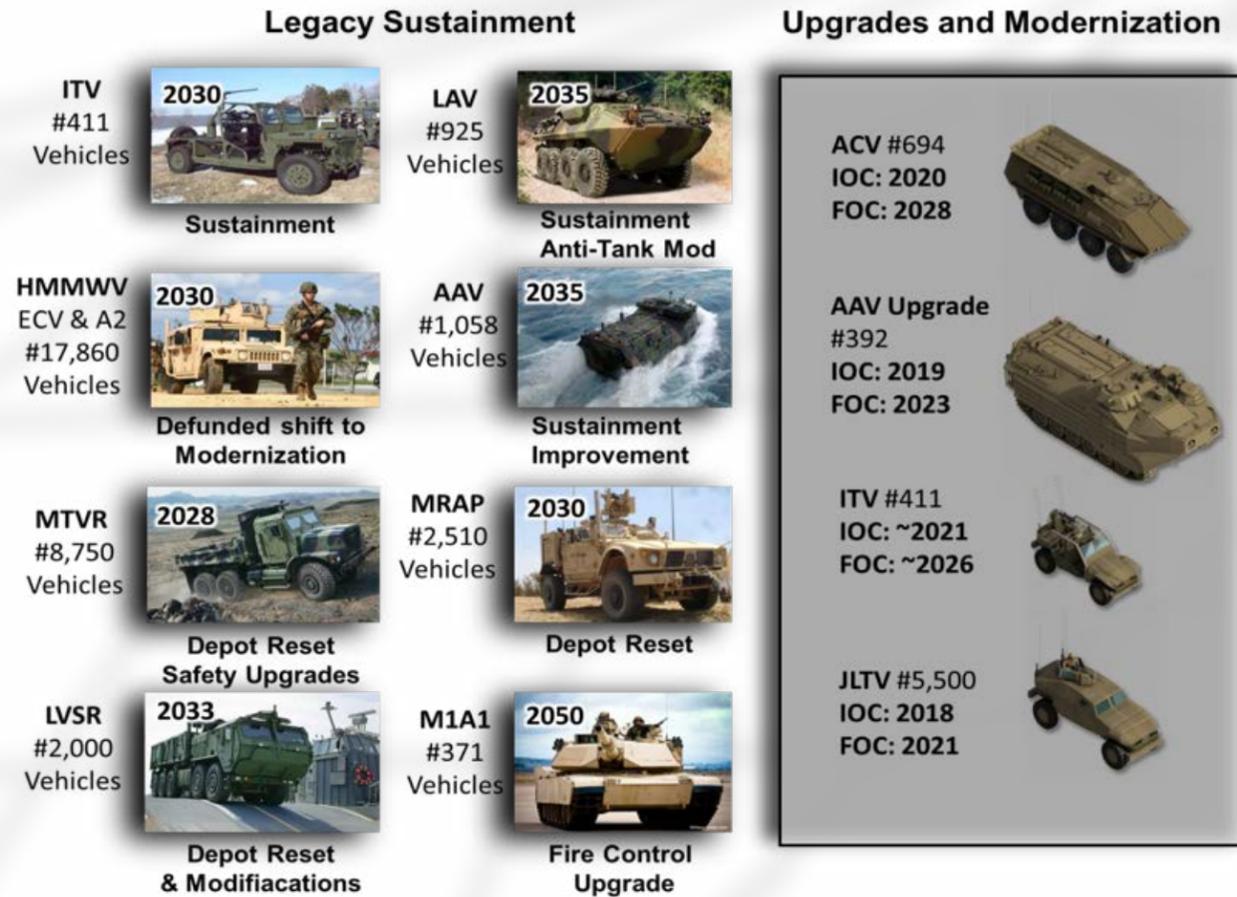
The combination of Marine Corps and Navy connectors, both surface and air, provide the lift required to **maneuver the Marine Corps' GCTVs from the sea through the littorals**. LCU and the LCAC, our heavy lift and over-the-beach capability, are being maintained through service-life extension and sustainment programs.



The SSC and SC (X)-R, pictured above, are on track to modernize the LCAC and the LCU. The Joint High Speed Vessel (JHSV), with several currently fielded to the fleet, provides an additional 20,000 square feet of heavy lift, shallow-draft/austere port capacity to support our in-theater requirements.

The Marine Corps' light, medium and heavy lift assault support aircraft provide the basis for vertical maneuver of forces. The utility helicopter (UH-1Y), multi-mission vertical (MV-22B) aircraft and cargo helicopter (CH-53K) fill the light, medium and heavy assault support roles respectively.

GCTVS Vision Snapshot



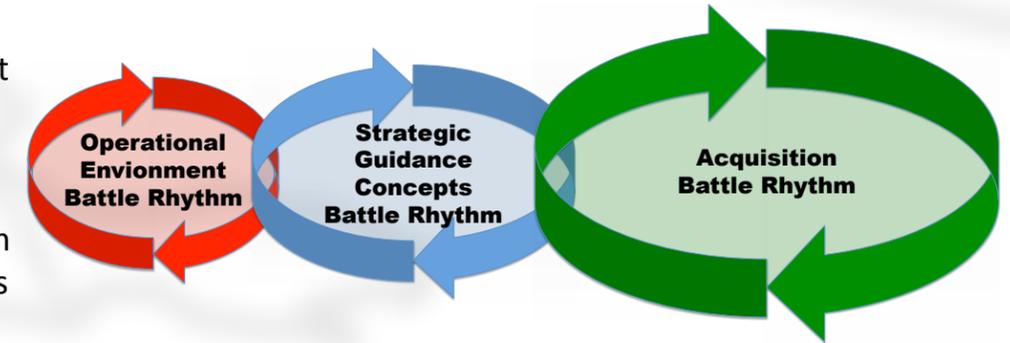
STRATEGY: Favors modernization of key programs such as ACV and JLTV with balanced sustainment and attrition of legacy systems

Above illustration depicts the sustainment of most legacy vehicles through 2030, the number of vehicles on hand and type of sustainment. POM 16 HMMWV Sustainment Modification Initiative (SMI) was defunded and shifted to modernization vice sustainment efforts. On the right are selected modernization and upgrades.

GCTVS is informed by changes in operating concepts and provides the near- and long-range actions which drive planning, programming and budgeting activities. The strategy guides planning for the right mix of vehicles capable of supporting the spectrum of operations that the Marine Corps operating forces will encounter.

GCTVS Provides Decision Space

The pace of the operating environment and strategic and conceptual guidance battle rhythms is significantly faster than the acquisition process



To better synchronize the acquisition process with the faster moving front-end battle rhythms, decision points are strategically placed before final decisions are required. This approach allows Marine Corps leadership to assess changes in the strategic and operational environment, balance risk and fiscal requirements within the portfolio and revalidate the strategy.

Vehicle Replacement/Sustainment Decision Points:

- o DP FY15-16: Replace ITV
- o DP FY17-19: Replace AVLB
- o DP FY17-19: Develop and procure ACV 1.2
- o DP FY20-22: Develop LAV replacement strategy
- o DP FY22-28: Replace MTRV and LVSr
- o DP FY25: Evaluate ACV 2.0 HWS Options
- o DP FY25+: Continue JLTV procurement
- o DP FY30+: Replace LAV
- o DP FY40+: Replace M1A1, M88 and ABV

The modernization horizon is shaped by a complex acquisition environment, fiscal uncertainty, shifting requirements, rapidly adapting threat capabilities and a dynamic operating environment

Strategy Near-Term Actions

Near term actions are fully funded and prioritized to deliver capability to the operating forces as early as 2018. This portfolio approach to modernization and sustainment is affordable without accepting great risk in other investment areas.

Develop and Procure the JLTV



AM General



Lockheed-Martin



Oshkosh

Fund a modern wheeled ACV (1.1 & 1.2)

as a complementary capability to a survivability upgraded AAV



AAV upgrade meets surface assault echelon capacity requirements for two MEBs while mitigating a force protection gap in capability

Refine AAV Upgrade and ACV Acquisition Objectives

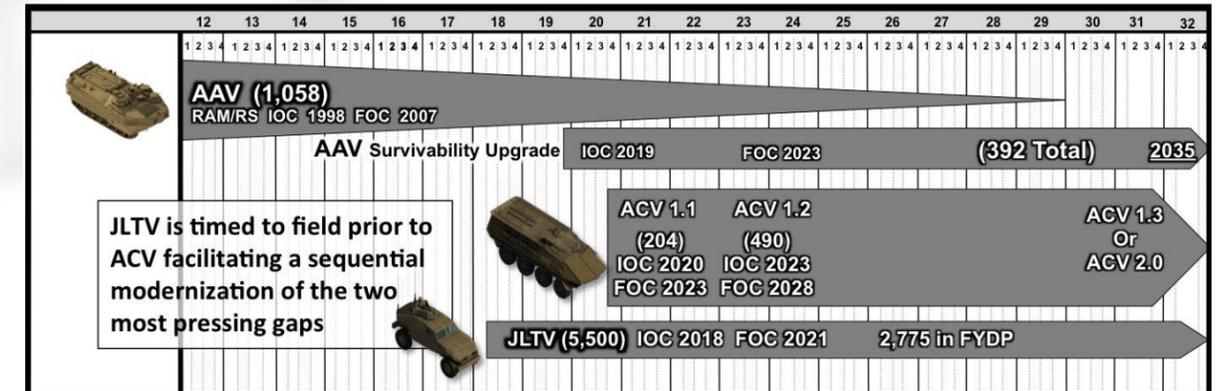
Annually assess retaining and sustaining MRAP vehicle

Retain science and technology funding for further exploration of high water speed amphibious capabilities (ACV 1.3 or 2.0)



GCTV Modernization

The overarching modernization within the strategy is the augmentation and eventual complete replacement of legacy AAVs by new ACVs (1.1, 1.2, 1.3 and/or 2.0) and the HMMWV replacement by the JLTV program.



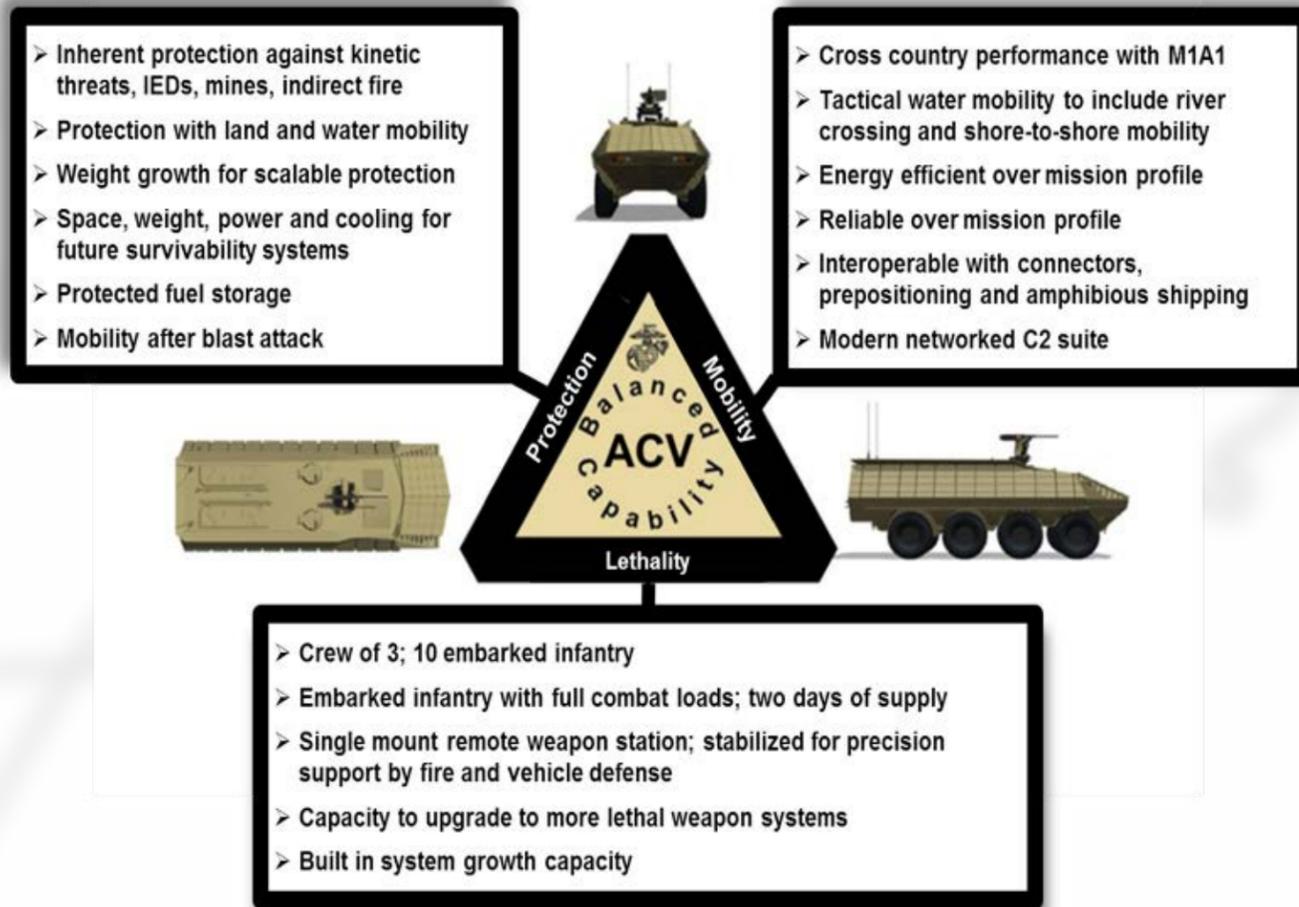
GCTV Modernization: JLTV

JLTV provides the operating forces a modern truck that combines the force protection capacity of the M-ATV with the high mobility, payload and transportability of the original A2 HMMWV while restoring payload lost to HMMWV armoring.



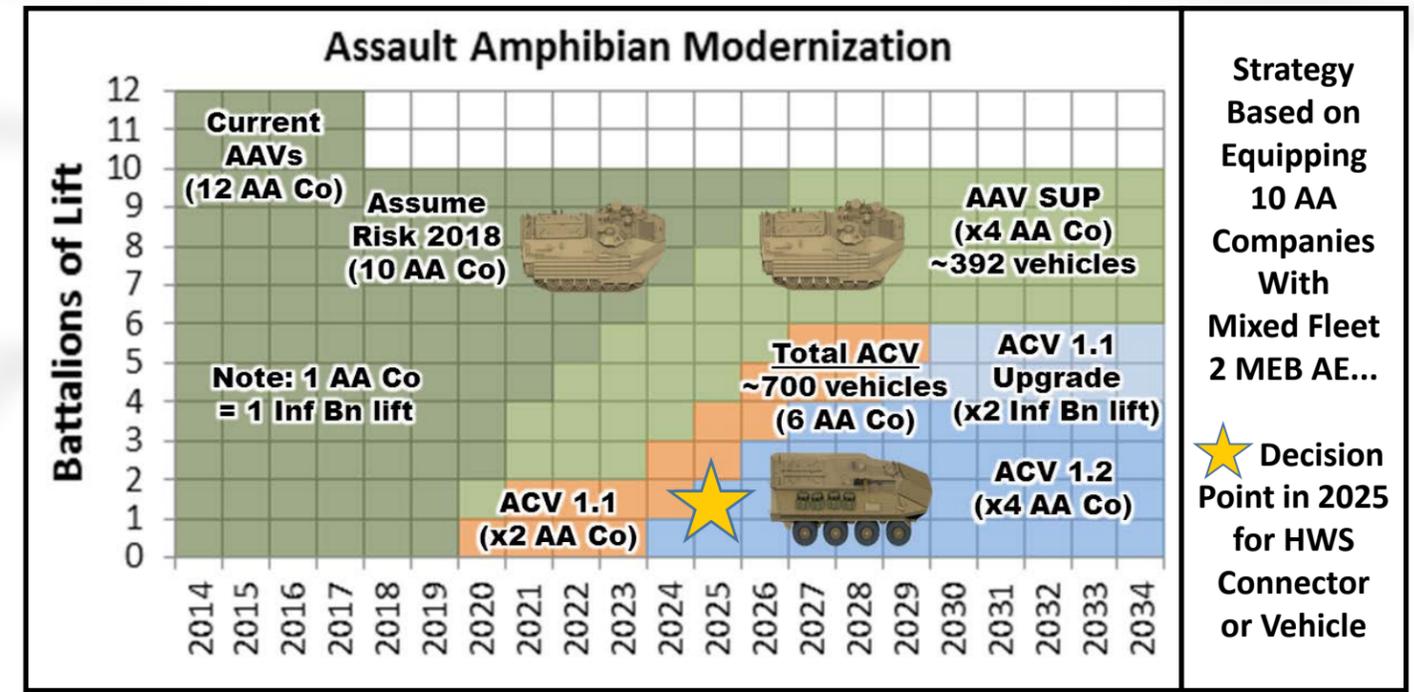
- At a minimum JLTV replaces the armored portion of the current HMMWV fleet
- Configured to support multiple mission packages from two base vehicles
 - o 4-door Combat Tactical Vehicle and 2-door Combat Support Vehicle
- Modular armor enables transportability and future armor upgrades

ACV 1.1 Closes Gaps in Assault Amphibian Capability



- Partial and complementary replacement for the legacy AAV AA battalions
- Closes protected land mobility performance shortfall
 - o Greater tactical reach: 300 mile Threshold (T), 400 Mile Objective (O)
- Mitigates shortfall in tactical water mobility
 - o 3NM ship-to-shore (T), 12NM ship-to-shore (O)
 - o 5 knots water speed (T), 8 knots water speed (O)
 - o Negotiates 4 ft. Wave Height (T), 6 ft. Wave Height (O)
- High levels of force protection and survivability
 - o MRAP-like underbody and roadside protection
 - o Direct and indirect fire similar to other USMC combat vehicles
- Closes network gap via a modern C4I suite
- Mitigates lethality gap for precision fire capable weapon system

ACV Phased and Incremental Modernization



- Two increments, ACV 1.1 and ACV 1.2 until 2025 Decision Point for HWS
- Increment **1.1 will field 204** personnel carriers with an **IOC 4th QTR FY20**
- Increment **1.2 will field 490** improved personnel carriers and command and control (C2) and recovery and maintenance variants with an **FOC FY28**
- **ACV 1.2 will build upon ACV 1.1**...e.g. self-deploy and recover from amphibs
- **ACV 1.1 and 1.2 will provide six of ten infantry battalion lift equivalents** remaining four infantry battalion lift equivalents will be fulfilled through survivability upgraded AAVs that have had service life extended to 2035 and potential replacement by ACV 1.3 or wW2.0
- ACV 2.0 serves as a planning construct--conceptual placeholder--for a future decision point (~2025). At which time, knowledge gained from exploring vehicle and connector technologies will support an informed decision on future high water speed capabilities

A steady unified Marine Corps position, as articulated in the GCTVS, is critical to realizing modern capabilities. We need to be unwavering in stating what we need and consistent in our prioritization of those needs in order to weather the five to ten year acquisition window that leads to a modern fielded capability

Video on the Background and Strategy Behind the Amphibious Combat Vehicle Acquisition Decision

