



PM AAA PROGRAM OVERVIEW

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Modern Day Marine Brief

1 May 2024

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IT'S ALL ABOUT THE WARFIGHTER



ACV - Personnel (ACV-P)



Shoot

Stabilized Remote Weapon Station (RWS)

- M2 Heavy Machine Gun or MK-19 Automatic Grenade Launcher
- Capability to accept future weapons
- 360-degree Fields of Fire



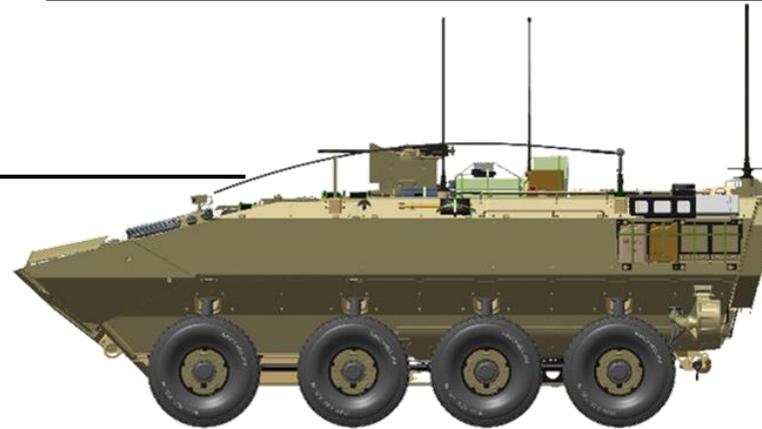
Move (Land Operations)

- Cross Country Performance
- Long Range / Fuel Efficient
- Negotiate 60% Slope [Front] & 30% Slope [Side]

The ACV provides Expeditionary, Protected Mobility and Lift for the Marine Corps Infantry. ACV is a full replacement for the legacy AAV.

Communicate / Modern Networked C4I Suite

- Intercom System: Internal ACV Communication
- (4) Radio Nets: VHF / UHF (LOS) / UHF (SATCOM)
- Spare Radio Rack Space to Mount an HF Radio (Infantry)
- Joint Battle Command-Platform (JBC-P)
- 110V AC Power accessible to the embarked Infantry for use to maintain organic electronic assets



Protect / Survivable

Provides MRAP + survivability against underbody Mines & Roadside IEDs

Capable of operating under degraded mobility and moving out of a kill zone



Crew: 3

Troops: 13 (Full Combat Load)

Carry 2 x Day Supply for 16 Marines (Food, Water, Ammo)



Move (Amphibious Operations)

- Integrates with Naval Shipping
- Ship-to-Shore Maneuver
- Capable of 12 Nautical Mile Swim
- Ability to operate in Sea State 4, 6ft Surf Conditions



Program Manager Advanced Amphibious Assault (PM AAA)



Mission

Provide and support amphibious combat capabilities that enable our Marines to win.

Program Description

- Full replacement for the legacy AAV in the Marine Division's Assault Amphibian Battalions
- Maneuvers the surface assault elements of the landing force and their equipment from assault shipping during amphibious operations
- Provides support to seven standing MEUs
- A Family of Vehicles program comprised of four variants

Program Status

Acquisition Phase: Production and Deployment Phase including design and development efforts

AAO/Fielded: 632/187

Capabilities:

- Ship-to-Shore from 12 nm
- Future variants include Command & Control, 30mm Cannon, and Recovery

Risks/Opportunities:

- Lower than anticipated readiness and long lead times for spares negatively impacting readiness

Key Events & Focus Areas

- ✓ **13 Nov 20:** Initial Operating Capability (IOC) – P Variant
- ✓ **8 Dec 20:** Full Rate Production Decision
- 2QFY24:** IOC – Command & Control Variant
- 3QFY26:** IOC – 30mm Cannon Variant
- 1QFY28:** IOC – Recovery Variant
- **4QFY24:** Fielding Driver's Training System
- New Equipment Training Team (NETT) 2.0
- Transition Training Unit (TTU)
- Proficiency
- Testing

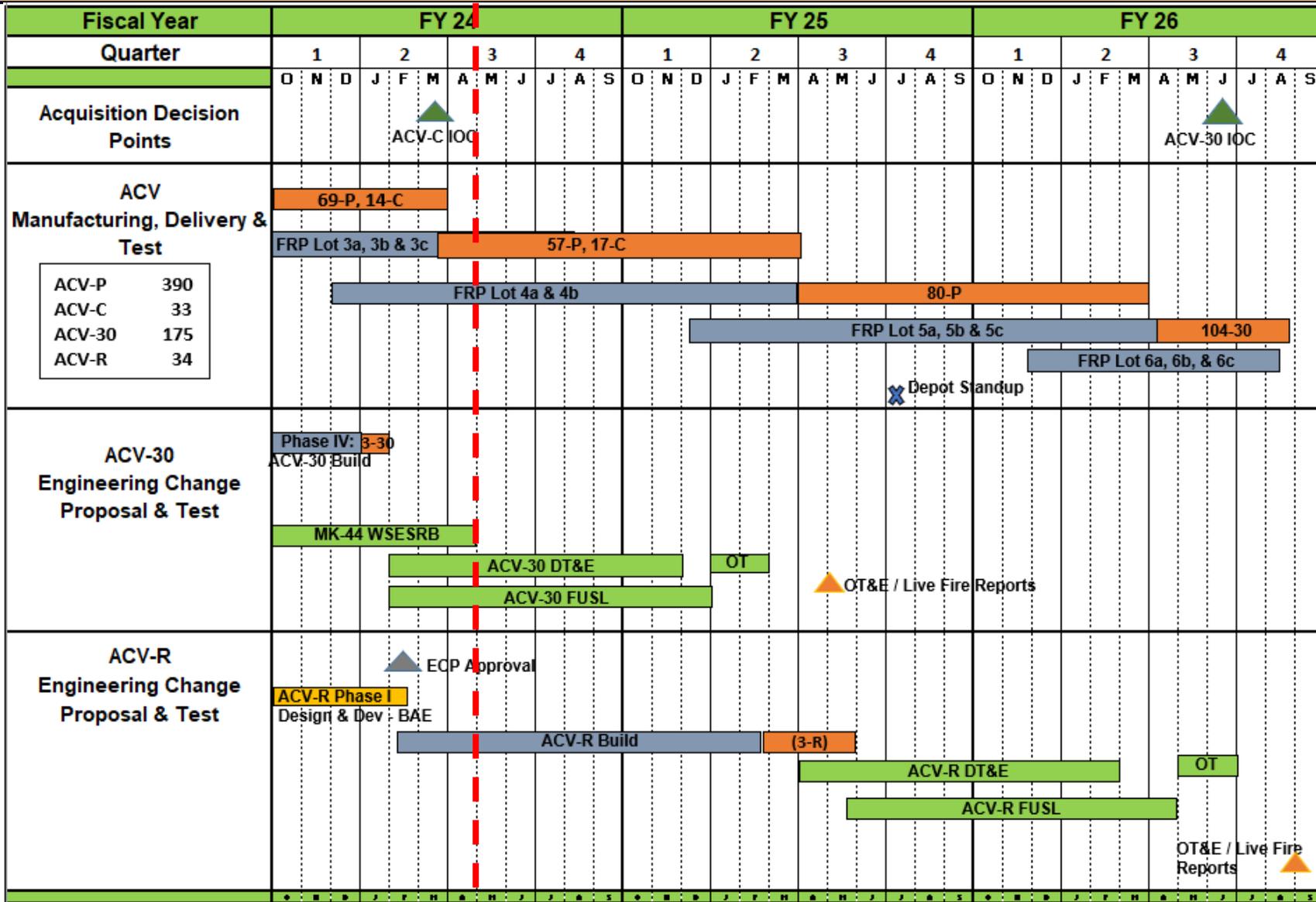


High Level Schedule



ACV FOV FYDP

Not based on PB-25 As
of 15 Mar 24





Fielding



Fielding To Date

- 184 ACV-Ps and 3 ACV-Cs are fielded to Fleet Marine Forces
 - 138 ACV-Ps and 2 ACV-Cs to 3d AABn
 - 46 ACV-Ps and 1 ACV-C to AAS

| Unit | Location | Mon/CY | Quantity |
|--------------------------------------|-------------|-----------------------------------|---------------------|
| Co C, 3d Assault Amphibian Bn | CPCA | Mar 24 | 2 ACV-Cs |
| AAS (ISO NETT's CNET Course) | CPCA | Mar 24 | 1 ACV-C |
| 4th Marine Regt, III MEF | CPCA JPN | Mar 24 (CA) Jun – Jul 24 (JPN) | 12 ACV-Ps |
| Co A, 3d Assault Amphibian Bn | CPCA | May 24 | 12 ACV-Ps |
| Co B & Co C, 3d Assault Amphibian Bn | CPCA | May 24 | 4 ACV- Cs (2/Co) |
| AVTB | CPCA | May 24 | 1 ACV-C |



ACV - Command (ACV-C)



- ACV-C Command Systems Integration Lab (CSIL) at NIWC LANT fully operational to support vehicle integration efforts (CSIL reconfigurable to support ACV-P, ACV-30, and ACV-R communication configuration)
 - Delivery to PM AAA begins 1QFY24; NOTM ECP installed at NIWC LANT and fielding to FMF begins 2QFY24
- IOC: 3QFY24 (IOC is met when two command and control vehicles and their security/chase ACV-Ps are integrated into the AA company's headquarters platoon)





ACV - 30mm Cannon (ACV-30)



Project is executed using a phased approach

- ✓ Phase 3 Contractor Prototype Testing (Complete)
 - ✓ Static & OTM Firing; Toxic Fumes testing at ATC: Aug - Sep 21
 - ✓ Basin, Open Ocean & Surf Transits at AVTB: Oct 21
 - ✓ E3 and HSI Testing and Evals at NSWC Dahlgren: Nov 21
 - ✓ CDR: 17 May 22 (Closed out 8 Feb 2024)

- Phase 4 Design and Development (In Progress)
 - ✓ Contract awarded 15 Aug 22
 - ✓ Build and test three production representative test vehicles (PRTVs)
 - ✓ PRTV Deliveries 2QFY24
 - ✓ Developmental Test Begins 2QFY24
 - Fire Control Software (FCS) design complete 3QFY24
 - Follow-on Operational Test and Evaluation (FOT&E) complete 2QFY25
- Contract Award - Full Rate Production Lots 5 and 6 1QFY25
 - IOC 3QFY26 (IOC is met when six ACV-30 are integrated into an ACV equipped AA line platoon)



ACV - Recovery (ACV-R)



Project is executed using a phased approach

- ✓ Phase 1 Design and Development (Complete)
 - ✓ System Requirements Review: May 22
 - ✓ Preliminary Design Review: Feb 23
 - ✓ Critical Design Review: Sep 23

- Phase 2 PRTV Build and Test (In Progress)

- Long lead materials contract award: 4QFY23
- Phase 2 Contract award: 2QFY24
- PRTV deliveries: 2QFY25
- Developmental Test: 2QFY25
- Follow-on Operational Test and Evaluation (FOT&E): 2QFY26
- Full Rate Production Contract Award: 3QFY26

- IOC

- 1QFY28 (fielding two ACV-Rs and their ACV-P chase vehicles to the AA company's headquarters platoon)



Drivers Simulator



- Purpose: Procure and evaluate two prototype Driver Simulators in FY23 to inform requirements for Suite of Training Systems (STS) program of record in POM25
 - STS comprises driver training system, electronic classroom, procedural troubleshooting trainer, part task install/remove trainer
- Current Status:
 - Received 11 responses to the Request for White Papers (industry proposals) via an OTA on 27 Mar 23
 - Two vendors (both small biz) selected for Competitive Prototyping Phase offering both a desktop trainer solution & Mixed Reality Headset Trainer solution
 - Limited User Evaluation #1 3QFY23 at Contractors' facilities
 - Limited User Evaluation #2 4QFY23 at Contractors' facilities
 - Field User Evaluation at Camp Pendleton CA 1QFY24
- Awarded XR Training for VR Training Systems
- Procure and Deliver 81 Driver Simulators in 4QFY24

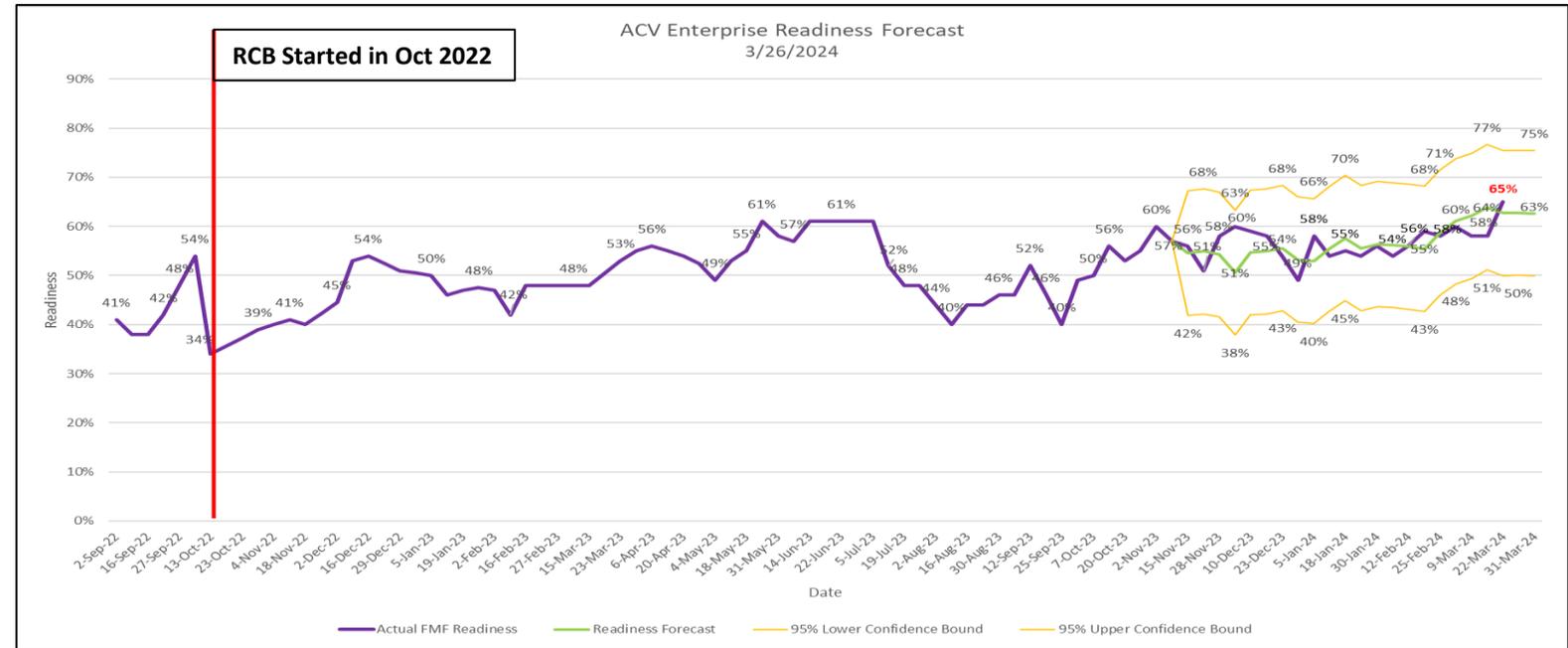




Readiness – Lessons Learned



- ACV experienced poor readiness
 - Vendor long lead time on parts
 - Supply Chain issues
 - Receiving critical technical information in a timely manner to facilitate transition of maintenance to DLA
 - Accepted parts failing during testing and were not provisioned with the initial ICS spares order
- Lessons Learned (Keys to Success)
 - Surge of BAE FSRs at critical times
 - ICS Contract to bridge
 - Surge of parts (i.e. pulling forward from production or second sources of supply)
 - Maintenance Stand Downs allow available parts to be installed





Readiness Control Board Process

- RCB is designed to identify, prioritize, execute, and measure the effectiveness of improvements to system readiness



RCB provides a mechanism to drive accountability across functions for actions to improve readiness.



Top Readiness Drivers



- Propellor Shaft
- Hydraulic Solenoid Valve
- Brake Calipers
- Shock/Strut Assembly
- CTIS Manifold/Final Reduction/Wheel End Valve
- Engine Access/Upper & Lower Cooling Box Gaskets
- EFT Transmitter
- Wheel End Half/Lateral Gearbox Oil Plugs
- Kit Overhaul (Outer CV Boot)
- Limit Switch
- Engine Starter



PM AAA Opportunities



| Title | Planned RFP |
|---|-------------|
| New Equipment Training (recompete via Navy SeaPort-NXG) | 2QFY25 |
| ACV Suite of Training Systems including maintenance trainers, operator trainers, digital classrooms, and an increment 2 of the driver training system | 1QFY25 |
| AAV FoV FMS support, spare parts / support equipment, and new equipment training | 1QFY25 |

- Initial Modernization Strategy developed
 - Develop and field solutions for readiness drivers, improve performance, leverage advancing technology, and counter evolving threat that range across all ACV essential functions
 - Prioritization and project scoping underway
 - FY24&25 – Anticipate focused RFI's supporting market surveys on specific items and capabilities that range across all ACV essential functions
 - Define acquisition approach informed by RFI responses and S&T developments leading to initial RFPs in FY26
 - Development and production starting in FY27



PM AAA Modernization Plan



- Areas where industry can assist PM AAA efforts
 - Shoot
 - Increase lethality support to infantry with increased accuracy for call-for-fire missions.
 - Improved fire control system autonomous tracking algorithm to improve target tracking and engagement performance.
 - Increased sensing and processing for threat awareness, target prioritization, and engagement.
 - Move
 - Water propulsion and control – provide directional thrust control to increase water mode maneuverability, responsiveness, and speed.
 - Increase driver proficiency in surf zone environments.
 - Driver aides and crew situational awareness for both land and water operations – increase vehicle safety in challenging terrain.
 - Increased automation of driver tasks.
 - Communicate
 - Intercom capability improvements for the crew.
 - Carry
 - Environmental control system improvement.
 - Noise reduction.
 - Protect
 - Counter UAS and overhead protection



Questions

