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Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

Selected Acquisition Report (SAR)



Armored Multi-Purpose Vehicle (AMPV)

FY 2024 President's Budget

**Defense Acquisition Visibility Environment
(DAVE)**

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Common Acronyms and Abbreviations

\$B - Billions of Dollars

\$K - Thousands of Dollars

\$M - Millions of Dollars

ACAT - Acquisition Category

Acq O&M - Acquisition-Related Operations and Maintenance

ADM - Acquisition Decision Memorandum

APB - Acquisition Program Baseline

APPN - Appropriation

APUC - Average Procurement Unit Cost

BA - Budget Authority/Budget Activity

Blk - Block

BY - Base Year

CAPE - Cost Assessment and Program Evaluation

CARD - Cost Analysis Requirements Description

CDD - Capability Development Document

CLIN - Contract Line Item Number

CPD - Capability Production Document

CY - Calendar Year

DAB - Defense Acquisition Board

DAE - Defense Acquisition Executive

DAMIR - Defense Acquisition Management Information Retrieval

DoD - Department of Defense

DSN - Defense Switched Network

EMD - Engineering and Manufacturing Development

EVM - Earned Value Management

FMS - Foreign Military Sales

FOC - Full Operational Capability

FRP - Full Rate Production

FY - Fiscal Year

FYDP - Future Years Defense Program

ICE - Independent Cost Estimate

Inc - Increment

IOC - Initial Operational Capability

JROC - Joint Requirements Oversight Council

KPP - Key Performance Parameter

LRIP - Low Rate Initial Production

MDA - Milestone Decision Authority

MDAP - Major Defense Acquisition Program

MILCON - Military Construction

N/A - Not Applicable

O&M - Operations and Maintenance

O&S - Operating and Support

ORD - Operational Requirements Document

OSD - Office of the Secretary of Defense

PAUC - Program Acquisition Unit Cost

PB - President's Budget

PE - Program Element
PEO - Program Executive Officer
PM - Program Manager
POE - Program Office Estimate
RDT&E - Research, Development, Test, and Evaluation
SAR - Selected Acquisition Report
SCP - Service Cost Position
TBD - To Be Determined
TY - Then Year
U.S. - United States
UCR - Unit Cost Reporting
USD(A&S) - Under Secretary of Defense (Acquisition and Sustainment)
USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

Program Information

Program Name

Armored Multi-Purpose Vehicle

DoD Component

Army

Responsible Office

Program Manager

Name: Mr. Bryan McVeigh

Phone: +1 (586) 282-6346

Email: bryan.j.mcveigh.civ@army.mil

Mission and Description

Intentionally left blank

Executive Summary

AMPV

Program Highlights Since Last Report

The PM recommends certifying the 2022 SAR. The AMPV requirement is stable and funding is adequate to meet cost, schedule, and performance objectives. To date, AMPV has executed within its threshold Acquisition Program Baseline (APB) cost, schedule, and performance parameters. As of December 2022, BAE has delivered 200 Low Rate Initial Production (LRIP) vehicles. The USG modified the LRIP delivery schedule contractually in November 2021 to align with the AMPV program schedule. To date, BAE has delivered to the revised schedule and the PM is closely watching BAE's ability to sustain vehicle delivery at the contractual rate of 11 vehicles/month. The program made considerable progress in test with successful completion of Full-up System (FUSL) Live Fire Testing in May 2022 and Initial Operational Test and Reliability, Availability, Maintainability Excursion in July 2022. The test events demonstrated that the AMPV meets all Key Performance Parameter (KPP) threshold requirements. Production Qualification and post FUSL events are ongoing. From a contractual standpoint, the program continues to oversee BAE's execution of the following contracts: Non-Recurring Engineering; LRIP; and AMPV/M113 System Technical Support (STS), Sustainment System Technical Support (SSTS) and Post-Production Technical Support (PPTS). Option Year 1 of the STS/STSS/PPTS contract was awarded in July 2022. For overall program system performance, the PM meets all APB KPP threshold requirements. There was no change to the Army Acquisition Objective or performance requirements since the last report. There were no marks against AMPV's FY 2023 funding lines, however the Army distributed \$867M in FY 2022 Emergency Ukraine Supplemental funding for the AMPV to support replacing M113s from the Ukraine-related Presidential Drawdown Directive. Funding is adequate to meet cost, schedule, and performance objectives. The PM recommends certifying the 2022 SAR. There are currently no significant software-related issues with this program.

History of Significant Developments Since Program Initiation

History of Significant Developments Since Program Initiation	
Date	Significant Development Description
Jul - 2022	AMPV Initial Operational Test & Evaluation (IOT&E) completed.
Jan - 2022	AMPV IOT&E Started.
Jul - 2021	AMPV System Technical Support (STS) contract awarded.
Feb - 2021	Low Rate Initial Production (LRIP) Live Fire Test & Evaluation started.
Jan - 2021	AMPV APB re-baseline approved.
Aug - 2020	First LRIP vehicle delivered.
Jan - 2020	LRIP Option Year 3 exercised to BAE Systems.
Jan - 2019	AMPV CPD approved.
Jan - 2019	Army Acquisition Executive signed the Milestone C ADM authorizing AMPV to enter LRIP. The ADM directs the Army to fund the AMPV program to the OSD CAPE ICE.
Jan - 2019	LRIP Option Year 1 and the first increment of LRIP Option Year 2 exercised to BAE Systems Land & Armaments to begin LRIP production.
Dec - 2018	AMPV Milestone C Army Systems Acquisition Review Council approved entrance into LRIP.
Oct - 2018	Production Readiness Review completed.
Sep - 2018	Limited User Test completed.
Aug - 2018	Functional Configuration Audit and System Verification Review completed.
Mar - 2018	Final Engineering and Manufacturing Development (EMD) Prototype delivered.
Sep - 2017	AMPV Milestone B ADM was amended to increase LRIP quantities from 289 to 551 vehicles.

Jul - 2017	Developmental Test started.
Jan - 2017	First AMPV Prototype delivered.
Dec - 2016	Roll-out ceremony for first AMPV prototype.
Oct - 2016	Capability Development Document (CDD) revised to incorporate changes to KPP 2 - Survivability.
Jun - 2016	Completed Critical Design Review demonstrating that the program was ready to proceed to prototype production. Performance risks were understood and will be characterized with prototype testing.
Jun - 2015	Completed the Preliminary Design Review ensuring the allocated baseline was properly documented, assessed to be consistent with Capability Development Document (CDD) requirements and under configuration control.
May - 2015	Development APB approved.
Mar - 2015	The System Requirements Review (SRR) was completed. The SRR deemed the program ready to proceed into preliminary design.
Dec - 2014	AMPV Milestone B Defense Acquisition Board (DAB).
Dec - 2014	BAE Systems Land & Armaments is awarded a Cost Plus Incentive Fee EMD contract.
Dec - 2014	The Defense Acquisition Executive (DAE) Acquisition Decision Memorandum (ADM) authorizes AMPV to enter the acquisition lifecycle at Milestone B. The ADM directs the Army to fund the AMPV program to the OSD Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE).
Jun - 2013	AMPV CDD approved.

Schedule

AMPV

Events	Milestone Baseline Objective	Current Baseline Objective/Threshold		Current Estimate/Actual	Deviation
Milestone B Complete	Dec 2014	Dec 2014	Dec 2014	Dec 2014	
Preliminary Design Review Complete	Jun 2015	Jun 2015	Jun 2015	Jun 2015	
Critical Design Review Complete	Jun 2016	Jun 2016	Jun 2016	Jun 2016	
Developmental Test Start Complete	Jul 2017	Jul 2017	Jul 2017	Jul 2017	
Limited User Test Complete	Aug 2018	Aug 2018	Aug 2018	Aug 2018	
Milestone C Complete	Jan 2019	Jan 2019	Jan 2019	Jan 2019	
LRIP LFT&E Start Complete	Aug 2020	Apr 2021	Oct 2021	Feb 2021	
IOT&E Start Complete	Feb 2021	Jan 2022	Jul 2022	Jan 2022	
Full Rate Production Complete	Oct 2021	Oct 2022	Apr 2023	Mar 2023	
First Unit Equipped Complete	Sep 2021	Feb 2023	Aug 2023	Mar 2023	
Initial Operational Capability Complete	Mar 2022	Apr 2023	Oct 2023	Apr 2023	

Full Operational Capability Complete	Dec 2042	Dec 2042	Jun 2043	Dec 2042	
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Notes

Deviation Explanation

No deviations for this program/subprogram

Performance

AMPV

Performance Characteristics				
Milestone Baseline	Current Baseline Objective/Threshold	Demonstrated Performance	Current Estimate/Actual	Deviation
(KPP) - KPP 1 Net Ready				
	<p>The AMPV will enable a net-centric military capability by providing sufficient SWaP capacity to integrate information and communication systems ensuring C2 and SA. The capability, system, and/or service must be able to enter and be managed in the network, and exchange data in a secure manner to enhance mission effectiveness. The capability, system, and/or service must continuously provide survivable, interoperable, secure, and operationally effective information exchanges to enable a net-centric military capability. This capability is achieved through hosting and or integrating Joint and Service C4I systems installed or mounted on the platform. The AMPV will be scalable across the family of vehicles based on individual mission roles' respective mission equipment package</p>	<p>(T=O) The AMPV will enable a net-centric military capability by providing sufficient SWaP capacity to integrate information and communication systems ensuring C2 and SA. The capability, system, and/or service must be able to enter and be managed in the network, and exchange data in a secure manner to enhance mission effectiveness. The capability, system, and/or service must continuously provide survivable, interoperable, secure, and operationally effective information exchanges to enable a net-centric military capability. This capability is achieved through hosting and or integrating Joint and Service C4I systems installed or mounted on the platform. The AMPV will be</p>	<p>MET - The AMPV enabled a Net-Centric military capability by providing sufficient SWaP capacity to integrate information and communication systems ensuring command and control (C2) and situational awareness (SA).</p>	<p>Will Meet Threshold</p>

<p>needs and support execution of joint information and system exchanges identified in Table 5.1.</p>	<p>scalable across the family of vehicles based on individual mission roles' respective mission equipment package needs and support execution of joint information and system exchanges identified in Table 5.1.</p>			
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(KPP) - KPP 3 Force Protection

<p>The AMPV will provide a coordinated suite of preemptive, active, reactive, passive, or a combination thereof, protection capabilities against identified, emerging, and future threats, and will provide for spall reducing floor material or spall blanket.</p>	<p>AMPV will protect the crew and vehicle occupants (non-supine) from the threats outlined in the classified appendix. The most recent injury criteria thresholds provided by the ARL SLAD determine the protection level from ballistic engagements. At a minimum, the AMPV will provide protection for the crew and occupants from serious or greater injuries due to on-board fires, various blast, shock, overpressure, fragments, and accelerative effects of attack by the threshold threats. The AMPV will minimize spall from overmatching threats.</p>	<p>MET - AMPV is capable of surviving the required classified threats</p>	<p>Will Meet Threshold</p>	
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(KPP) - KPP 4 Sustainment

	<p>Ao - 93.3%; Am - 83%</p>	<p>Ao - The AMPV, at full combat configuration (excluding failures and maintenance of the Government directed GFE/GFM MEP), will achieve an A_o of at least 91.8% when measured continuously over a three day mission (consistent with the General Purpose Mission Profile defined in the AMPV OMS/MP) with only system abort (SA) failures factored into the A_o assessment. Availability of the MEP is not reduced (degraded or lessened) beyond that of its current performance because of integration into the host AMPV chassis. Am - The AMPV at full combat configuration (excluding directed Government Furnished Equipment [GFE/GFM] Mission Equipment Package) will achieve an Am of not less than 80% when assessed at the Army fleet level.</p>	<p>Ao-94%, Am-80.2%</p>	<p>Will Meet Threshold</p>	
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(KPP) - KPP 5 Energy

	<p>30 MPH on primary roads. The AMPV must be able to use alternative energy and/or fuels (future fuel types) and will complete an entire 72-hour mission cycle IAW AMPV OMS/MP without allocated refuels.</p>	<p>The AMPV, at full combat configuration, will consume fuel at a level necessary to complete 225 miles without refueling, when evaluated at sustained speeds of 25 MPH on primary roads.</p>	<p>249.2 miles without refueling at an average sustained speed of 29.6 MPH.</p>	<p>Will Meet Threshold</p>	
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(KPP) - KPP 6 Mobility

	<p>The AMPV will be capable of traversing the terrains, objects, and obstacles typical in primary roads, cross-country and urban terrain required to maintain mobility thresholds as outlined in the AMPV OMS/MP and successfully fulfill its role in the BCT by maintaining its doctrinal positioning within the formation.</p>	<p>(T=O) The AMPV will be capable of traversing the terrains, objects, and obstacles typical in primary roads, cross-country and urban terrain required to maintain mobility thresholds as outlined in the AMPV OMS/MP and successfully fulfill its role in the BCT by maintaining its doctrinal positioning within the formation.</p>	<p>1) Hard level surface road speed = MET- Achieved a speed range of 39.4 mph to 41.2 mph (across the 5 variants. 2) Ascend and Descend 60% grades = MET. 3) Laterally traversing 30% grade = MET. 4) Dash speed = MET- Achieved a time range of 20.3 seconds to 23.6 seconds to reach 30mph (across the 5 variants). 5) Traverse 24 inch obstacle forward = MET. 6) Traverse an 18 inch obstacle in reverse = MET.</p>	<p>Will Meet Threshold</p>	
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Requirement Reference

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Validated:
AMPV CPD dated January 23, 2019

Deviation Explanation

No deviations for this program/subprogram

Notes

Detailed KPP information is available in the AMPV CPD, including Table 5.1 referenced in the Performance Characteristics above. KPPs are operational requirements that are expected to be assessed during Initial Operational Test & Evaluation, currently slated to start in January 2022. The PM conducted several performance tests on the AMPV technical requirements (Performance Specification (PSPEC)) during EMD. This KPP assessment is based on verification of PSPECs to date that trace to the KPPs. These requirements will be retested on LRIP vehicles. To date, some PSPECs are still pending verification in LRIP (not tested in

EMD).

Acquisition Budget Estimate

AMPV

Total Acquisition Cost

		Milestone APB	Current Baseline		Budget Estimate PB 2024		
Category	Base Year	Objective (BY\$M)	Objective (BY\$M)	Threshold (BY\$M)	BY\$M	TY\$M	Deviation
RDT&E	2019	1,031	1,031	1,134.1	1,030.2	1,027.8	
Procurement	2019	11,579.6	11,579.6	12,737.6	11,871.6	15,866.8	
MILCON	2019	0	0	0	0	0	
Acq. O&M	2019	151.3	151.3	166.4	155.8	206	
Total		12,761.9	12,761.9		13,057.6	17,100.6	
PAUC	2019	4.347	4.347	4.782	4.447	5.824	
APUC	2019	3.997	3.997	4.397	4.098	5.477	

Appropriation Category Deviation Explanations

PAUC Deviation Explanation

APUC Deviation Explanation

Budget Notes

Overall the Program Office Estimate cost has increased. This occurred as the estimate was aligned to the FY 2024 Budget position that decreased the number of AMPVs to be purchased in the FY 2023-2028 timeframe vs the previous FY 2023 PB. Estimating - Revised estimate to align with the FY 2024 PB. Schedule - Schedule variance due to shifting quantities in FY 2022 thru FY 2028 and FY 2041, to align with the FY 2024 PB. The total AMPV AAO quantity of 2,897 remains the same.

Total End Item Quantity

Quantity Category	Current APB Quantity	Current Estimate Quantity
Development	39	39
Procurement	2897	2897
O&M-Acquired		

Quantity Notes

To support the development phase, 39 AMPVs are required: 29 AMPV prototype vehicles for EMD and ten production representative AMPVs for Full-Up System Level live fire tests; the live fire test assets are RDT&E-funded in LRIP.

Unit Cost**AMPV**

Current UCR Baseline and Current Estimate (Base-Year Dollars)			
Category (\$M) Base Year:2019	Current UCR Baseline	Current Estimate	% Change

Program Acquisition Unit Cost

Cost	12,761.9	13,057.6	
Quantity	2,936	2936	
Unit Cost	4.347	4.447	2.31%

Average Procurement Unit Cost

Cost	11,579.6	11,871.6	
Quantity	2,897	2,897	
Unit Cost	3.997	4.098	2.52%

Original UCR Baseline and Current Estimate (Base-Year Dollars)			
Category (\$M) Base Year:2015	Original UCR Baseline	Current Estimate	% Change

Program Acquisition Unit Cost

Cost	10,724.8	12,425.6	
Quantity	2,936	2936	
Unit Cost	3.653	4.232	15.85%

Average Procurement Unit Cost

Cost	9,736.6	11,297.0	
Quantity	2,897	2,897	
Unit Cost	3.361	3.900	16.04%

Cost Growth Details**Current Baseline PAUC Breach Explanation****Current Baseline APUC Breach Explanation****Original Baseline PAUC Breach Explanation****Original Baseline APUC Breach Explanation****Impacts of Schedule Changes on Unit Cost**

The schedule had a minimal impact on the overall Unit cost for the AMPV program.

Impacts of Performance Changes on Unit Cost**Actions Taken or Proposed to Control Future Cost Growth**

Risk and Sensitivity Analysis**AMPV**

Risk and Sensitivity Analysis
Current Procurement Cost(December - 2022)
The Current Procurement Cost risk and sensitivity is the same as the Current Baseline Estimate. Please refer to the Current Baseline Estimate for additional information.
Original Baseline Estimate (May - 2015)
<p>The AMPV ICE generated in support of the Milestone B in December 2014 was used to establish the Development APB. It is difficult to calculate mathematically the precise confidence levels associated with cost estimates prepared for MDAP programs. Based on the rigor in methods used in building the estimate, the strong adherence to the collection and use of historical cost information and the review of applied assumptions CAPE projects that it is about equally likely that the estimate will prove too low or too high for execution of the program. The most significant cost driver in the AMPV cost estimate is the recurring manufacturing cost for vehicles. This recurring manufacturing cost estimate assumes high component design maturity and reflects the usage of Optional Exchange Vehicles (OEV) (i.e., excess Bradley Fighting Vehicles and M113s in inventory). Selected parts are planned to be recovered from these existing exchange vehicles and used on the program, thereby reducing the number of new parts that must be procured during AMPV production. The cost estimate would increase if changes in the planned design result in less mature components or if the assumed quantity of OEVs is not available for harvest of common components. The AMPV Family of Vehicles (FoV) is comprised of five vehicle configurations with unique unit prices. The AMPV APUC and PAUC values reflected in the APB are calculated as the weighted average values based on the planned densities of each of the five vehicle configurations across the Army. Accordingly, the APUC and PAUC are sensitive to the configuration mix within an Armored Brigade Combat Team.</p>
Current Baseline Estimate (January - 2021)

Schedule Risk		
Technical Risks		
MS B	October 08, 2014	Risk: If a contractor is selected for the AMPV that did not previously integrate the M121 Mortar system on their Military Vehicle Derivative additional integration risks may occur. Risk is mitigated by evaluating design maturity during source selection. The contractor will conduct early structural analysis to inform prototype development. Mortar Carrier firing will be conducted during early testing to validate firing tables and structural analysis.
MS B	October 08, 2014	Risk: If adequate powertrain cooling is not provided, then the vehicle will experience automotive performance degradation. Risk is mitigated by using modeling and simulation to evaluate the proposed solutions during source selection. At each phase in the design process the powertrain cooling model will be refined based on test data from components, subsystem and system level evaluation. Simulation will be used to reduce the test-fix-test cycle to ensure adequate cooling performance within the SWaP-C envelope.
MS B	October 08, 2014	Risk: If there is insufficient electrical growth margins for Size, Weight and Power-Cooling (SWaP-C), then the AMPV will be unable to accommodate future power demand of Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) equipment and mobility growth. Risk is mitigated by PM engineers performing a high-level power study prior to source selection to ensure that an appropriate solution which meets the 20% growth requirement is available. PM estimated a minimum power growth of 15% is required.

MS B	October 09, 2014	Risk: The Handheld, Manpack and Small Form Fit (HMS) Acquisition Strategy increases competition but may cause additional delays in deliveries for AMPV EMD which increases the likelihood of this risk. Risk mitigated through PM AMPV creating a "Revert to Single Channel Ground and Airborne Radio System (SINGARS) Strategy" that will change the vehicle design to accept the SINGARS in place of the new HMS Radio. Any future Engineering Change Proposals to modify the vehicle to accept HMS Radios would be fully funded by PM HMS.
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Low Rate Initial Production

AMPV

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	12/23/2014	09/26/2017
Approved Quantity	289	551
Reference	Milestone B ADM	Milestone B ADM Amendment
Start Year	2018	2018
End Year	2022	2022

Rationale if quantity exceeds 10% of the total number of articles to be procured:

The Current Total LRIP Quantity is more than 10% of the total production quantity due to an amendment to the AMPV Milestone B ADM on September 26, 2017. This amendment increased the LRIP quantity from 289 to 551 vehicles. The increased AMPV LRIP quantity is in support of the European Deterrence Initiative and in response to an U.S. Army Europe (USAREUR) Operational Needs Statement (ONS). In response to the ONS, the Army approved a Directed Requirement for AMPV to replace the M113 family of vehicles in the Armored Brigade Combat Teams aligned with USAREUR. The Directed Requirement requires initial fielding of AMPV by the end of CY 2019, with a maximum of 262 combat platforms acquired and integrated into the European Activity Set and Army Prepositioned Stock-2.

Notes

Contracts & Efforts

Contract Data	
Contract Number	W56HZV-15-C-A001
Effort Number	2
Modification Number	P00151
Award Date	12/23/2014
Definitization Date	12/23/2014
Order Number	2
CAGE Code/CAGE Legal Name	7B726/BAE Systems Land & Armaments, L.P.
Contract Title	AMPV LRIP Options
Contract Address	Sterling Heights, MI
Contracting Office	ACC-DTA; DCMA Detroit
Supported Phase	Production
Contract Strategy	FAR 15 (Negotiated)
Contract Type	Firm-Fixed-Price
Modification Date	November 18, 2022
Work Start Date	January 25, 2019
Technical Data Rights	Limited Rights to Technical Data--Non-Commercial Items Only
Work Completed	46.84%

Contracts/Effort Price, Quantity, and Performance (TY\$M)

Initial Target Price	Current Target Price	
\$1,277	\$1,345	
Initial Ceiling Price	Current Ceiling Price	
\$0	\$1,402.3	
Contractor EAC	PM EAC	
\$1,615.7	\$1,610	
Initial Quantity	Current Quantity	Delivered Quantity
297	467	200
BAC	BCWP	ACWP
\$1,582.9	\$741.5	\$771.1

BCWS	Cost Variance	Schedule Variance
\$775.4	-\$29.6	-\$33.9

Contract Notes:

No singular Technical Data Rights category applies.

Factors Contributing to Cost Variance and Projected Effects on Program Costs

The unfavorable cost variance is due to vehicles costing more than planned due to rework and expending more effort to recoup schedule. While the cost overrun is not ideal the program's obligation is limited to the contract ceiling of \$1402.3M which is within the program budget.

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule

The unfavorable schedule variance is due to BAE's inability to produce vehicles on time. The contract was modified in November 2021 in order to align the deliveries with the overall program schedule. BAE is executing to the new contractual delivery schedule, the schedule variance in the data is based on the old delivery schedule.

External Government Activities

Activity Title		Government Entity		Supported Phase
AMPV/M113 System Technical Support (STS), Sustainment System Technical Support (SSTS), and Post Production Sustainment Support (PPSS)		BAE Systems Land & Armaments, L.P.		Production
CAGE	7B726	Work Start Date	41987	
City	Sterling Heights	State/Province:	MI	
Notes				
The execution of this activity supports both production and sustainment phases.				

Activity Title		Government Entity		Supported Phase
AMPV EMD/LRIP		BAE Systems Land & Armaments, L.P.		Development
CAGE	7B726	Work Start Date	41987	
City	Sterling Heights	State/Province:	MI	
Notes				
The execution of this activity supports both production and sustainment phases.				

Deliveries and Expenditures

AMPV

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	39	39	39	100.00%
Production	185	190	2,897	6.56%
Total Program Quantity Delivered	224	229	2936	7.80%

Expended and Appropriated (TY \$M)

Years Appropriated to date: 12

Total Years Appropriated Funding (Current Baseline): 32

Percent Years Appropriated: 37.50%

Then-Year Funding Appropriated as Percentage of Total Acquisition Estimate: 15.55%

Then-Year Funding Expended as Percentage of Total Acquisition Estimate: 11.10%

Total Acquisition Cost: 17,100.6

Deliveries & Expenditures Notes:

Operating and Support Costs

AMPV

O&S Cost Breakdown:

Category (BY\$ Million)	AMPV
Unit-Level Manpower	14,553.3
Unit Operations	2,756.6
Maintenance	5,562.0
Sustaining Support	1,241.0
Continued System Improvements	2,307.5
Other	3,496.9
Total	29,917.3

Cost Estimate Source: ICE dated December 19, 2018

O&S Cost Notes:

Program was baselined to the OSD CAPE ICE approved at the MS C decision for AMPV.

Total Program O&S Cost Compared with Baseline					
	Current Baseline				
	Objective (BY\$M)	Threshold (BY\$M)	Current Estimate (BY\$M)	Current Estimate (TY\$M)	Deviation
Total O&S	29,917.3	32,909	29,917.3	49,819.7	

Note:

OSD CAPE removed the O&S category "Indirect Support" from the SAR so this line item is now being accounted for under "Other". O&S current estimate TY\$M = \$49,819.7M Total Cost numbers were set to match the new Milestone C APB Objective values. Total Cost = #of systems x service life per system x average annual cost \$29,917,290.117 = 2897 x 26 x \$397.192 (BY 2019 \$K)

		AMPV		M113 (Antecedent)	1.0
Unit Manpower Total	\$193.215		\$165.292	2.0	Unit Operations Total
\$36.598	\$41.597	3.0			Maintenance Total
\$73.844	\$53.303	4.0			Sustaining Support Total
\$16.476	\$20.046	5.0			Continuing System Improvements
\$30.636	\$4.968	6.0			Indirect Support
N/A			\$46.424		
N/A					\$66.366
cost per vehicle per year	\$397.192		\$351.572	BY2019\$K	Total O&S

O&S Cost Deviation Explanation

Operating and Support Costs - Disposal and Unitized Costs**AMPV****Annual Unitized O&S Cost Definition and Calculation Relative to Total O&S Cost:**

Estimate is in BY19.

Sustainment Factors	System Name: AMPV	Antecedent System Name: M113
Quantity to Sustain	2897	2897
Unit of Measure	Vehicle	Vehicle
Unit Expected Service Life	26	26

Base Year:

Annual Unitized O&S Cost by Category Base Year \$ Unit:(\$K)	System Name: AMPV	Antecedent System Name: M113
Unit-Level Manpower	193.2	165.3
Unit Operations	36.6	41.6
Maintenance	73.8	53.3
Sustaining Support	16.5	20.0
Continued System Improvements	30.6	5.0
Other	46.4	66.4
Total O&S	397.2	351.6

Disposal/Demilitarization Cost Estimate

(Base Year \$Millions)	System Name: AMPV	Antecedent System Name: M113
Total Disposal	105.7	

Cost Estimate Source - Disposal	
Type:	Independent Cost Estimate
Approval Authority and Date:	Army Acquisition Executive 12/19/2018
Note:	
Estimates are in BY19	
Disposal Cost Notes:	
Additional O&S Estimate Assumptions:	
Sustainment Strategy:	

The AMPV uses the two-level maintenance concept. Existing repair and supply support capability for common components will be used. Operator and Field Maintenance New Equipment Training will be provided to each gaining unit. Mission equipment package training will be provided by the applicable PM Office. Organic Depot Repair will be in place within four years of IOC.

Antecedent Estimate Assumptions:

The Antecedent system is the M113 FoV. Antecedent estimate is based on data from O&S Management Information System and Army Manpower Cost System.