

NATIONAL DEFENSE AUTHORIZATION ACT 2023 <u>WINS</u>

1) Light Tactical Wheeled Vehicle Acquisition Strategy and Investment Plan For Combat Vehicles

Directing the Assistant Secretary of the Army for Acquisition, Logistics & Technology (ASAALT), in coordination with the Commanding General of Army Futures Command, to provide a report to the congressional defense committees that details the U.S. Army's near and long-term strategy to meet the Army's current and future requirements for light tactical wheeled vehicles (TWV), specifically the High Mobility Multipurpose Wheeled Vehicle (HMMWV). The request also requires the Army to report how it will assess and manage risk in the light TWV industrial base, fully explain light TWV development and acquisition plans, and funding profiles through the future years defense program.

2) Analysis of Alternatives for Battlefield Circulation of Electricity

The Army should conduct an Analysis of Alternatives in order to develop a modern concept of logistics for the distribution of electricity on the battlefield.

3) U.S. Replacement of Foreign Engines for Aerial Targets

The committee recognizes the importance of the U.S. Defense Industrial Base and the need for U.S. sourced and manufactured turbine engines for use in aerial targets and weapon systems, reducing our dependence on foreign nations and protecting our national security. The Committee adds \$10.4M in PE 0604258A to develop and prototype a cost-competitive U.S. turbine engine and conduct flight testing and optimization.

4) Silent Watch Hydrogen Fuel Cell For Military Vehicles

Request an R&D Congressional Add to work with U.S. Army Future Command, Next Generation Combat Vehicle, NGCV. This would greatly extend the Silent Watch capability now very limited by batteries and high demands for electricity along with lower maintenance costs. The use of one product in multiple applications would greatly reduce the cost to the military.

5) R&D Funding for Metal Alloys Development For Hypersonic Weapons

This PE matures and demonstrates Long Range Precision Fires (LRPF) technologies to destroy, neutralize, or suppress the enemy by cannon artillery and missile fire and enable integration of fire support assets into combined arms operations. Major Focus Areas for LRPF Science and Technology include: Missiles, Cannon Artillery, and Supporting LRPF Technologies covering Strategic, Operational and Tactical Lines of Effort. LRPF Missiles Advanced Development matures and demonstrates a broad range of Missile technologies to enhance Army integrated LRPF capabilities at extended range. Cannon Artillery Advanced Development matures and demonstrates critical technologies to increase range, precision, and both point and area effects for cannon artillery. Supporting LRPF Technologies Advanced Development matures and demonstrates a broad range of component technologies to address weapon cost drivers and enhance performance of future LRPF munitions and systems.



6) 360 Situational Awareness System for M1 Abrams Tanks

Must integrate, test, and qualify a 360 situational awareness system for the M1 Abrams Main Battle Tank that will improve the safety and operational effectiveness of the Abrams tank.

7) M1 Abrams Predictive Maintenance

Authorize \$10 million to establish real-time engine analytics capability for vehicle crew and maintenance personnel through w implementation of Prognostic and Predictive Maintenance (PPMx) and Predictive Logistics.

8) Optionally Manned Fighting Vehicle

The committee believes the continued use of modular and open systems standards, as well as building a virtual prototype is beneficial to reducing cost and increasing speed of evaluating and integrating new technologies to enhance competition, innovation, and interoperability. As the Army continues its acquisition of the Optionally Manned Fighting Vehicle (OMFV) and modernization of legacy ground vehicles the committee directs the Army to ensure Modular Open Systems Approach (MOSA) standards, as required by Title 10 U.S.C. §4401, are built into the acquisition and system requirements.

The committee further believes that completely open competition with requirements built around capabilities and award cr'iteria centered around performance; size, weight, and power; and cost promotes competition, innovation, and best value. The committee believes the Army should avoid dictating specific components as program requirements when it unnecessarily eliminates competition and innovation allowing contractors to offer the best possible solution for the warfighter.

The committee directs the Secretary of the Army to provide a briefing to the congressional defense committees by December 1, 2023, on their adherence to MOSA standards on ground vehicle modernization programs and OMFV along with their intent to build a virtual prototype. Further, the committee directs that this briefing include justification for dictated and incentivized subsystems or components as part of the program rather than the use of an open competition for system capabilities that can drive innovation and best value.

9) Integrated Visual Augmentation System (IVAS) For Combat Intelligence

The program includes a Heads Up Display (HUD), a Squad Immersive Virtual Trainer (SiVT), Terrain and Intelligence services, and Hyper-scale Cloud services that combine navigation, targeting, situational awareness, communications, and advanced thermal and night vision capabilities.

10) DoD Microchip Supply Chain Security

Language requesting DoD ensures all new microchips have been structurally analyzed to ensure no nefarious hardware or software has been included by a foreign adversary (i.e. China)



11) Abrams Tank Modernization

Additional \$15 million in Abrams Tank Improvement (P.E. 203735A Project 330) to continue the accelerated development of the Next Generation Abrams tank advanced technologies.

12) Division of Hardware and Software Development through separate contracts for Optionally Manned Fighting Vehicle Program

Encourage the Army to split hardware and software development for Optionally Manned Fighting Vehicle program.

13) Enhancement of M&S tools at the US Army Combat Capabilities Development Command (CCDC) Ground Vehicles Systems Center (GVSC) for rapid fielding of emerging technology

Enhance capabilities within Ground Vehicles Systems Center (GVSC) where operational effectiveness is determined early in the development process applying Digital Engineering (DE) and Modeling and Simulation (M&S) standards and methodologies.

14) Light Tactical Wheeled Vehicle Acquisition Strategy & Investment Plan

The committee understands the Army will continue divestment of many High Mobility Multipurpose Wheeled Vehicles (HMMWV) models as it continues to field modernized light tactical wheeled vehicle (TWV) programs, such as the Joint Light Tactical Vehicle (JLTV) and Infantry Squad Vehicle (ISV) programs. The committee directs the Assistant Secretary of the Army for Acquisition, Logistics & Technology (ASAALT), in coordination with the Commanding General of Army Futures Command to provide a report to the congressional defense committees by March 1, 2024, that details the Army's near and long-term strategy to meet the Army's current and future requirements for light TWVs, specifically the aging HMMWV. The report should address how the Army will assess and manage risk in the light TWV industrial base, provide details on current and future light TWV development, and outline the acquisition plans to include funding profiles through the future years defense program.

15) Active Protection System For Combat Vehicles

Spiral development for Trophy APS to address top attack.

16) Paladin Integrated Management (PIM) For Modernized Howitzers and Support Vehicles

The Paladin Integrated Management (PIM) program modernizes the combat-proven M109A6 Paladin Self-Propelled Howitzer and M992A2 Field Artillery Ammunition Support Vehicle (FAASV) to deliver M109A7 and M992A3 vehicles.

Add \$205M to increase total funding to \$688M to support buying 48 PIM sets to maintain current production levels and prevent the closure of the Elgin, OK facility. If the Army and Congress pass a FY23 Ukraine Supplemental, than this \$205M request can be reduced by 18 sets. This would reduce the request for Congress down to an additional \$29M for 3 PIM sets (6 total vehicles) to maintain current production levels.



17) P-8A Poseidon Aircraft Procurement

Increase procurement of P-8A Poseidon aircraft in to complete the U.S. Navy's warfighting requirement of 138 anti-submarine warfare / maritime patrol aircraft.

18) Adaptive Engine Transition Program For F-35

Support the United States Air Force's (USAF) decision to move forward with an Adaptive Engine for F-35 by funding the effort in FY24 without delay to ensure a successful start to the Engineering Manufacturing & Development (EMD) phase of the program.

19) Long-Range Reconnaissance Unmanned Aircraft System

This funding would allow an accelerated start of the Army's LRR program to meet current mission requirements by leveraging these sizable USMC and SOCOM investments and years of development on comparable platforms flying today by purchasing surrogate aircraft from these programs to develop a LRR unmanned system variant at significantly reduced cost on a much more compressed timeline.

20) Propane/Alternative Fuel Powered Vehicles

Aiming at reducing costs and emissions associated for DoD by expanding the use of alternative fuels, such as propane, for medium- and heavy-duty non-combat vehicles at domestic facilities.

21) U.S.-Israel Future of Warfare Act

Establishes the U.S.-Israel Future of Warfare Fund, which would authorize \$50,000,000 for collaborative R&D between the U.S.-Israel on emerging defense technologies. This funding would allow for adaptability and an ability to expand successful cooperation in the areas of anti-tunneling and C-UAS.

22) Helicopter Hoist Stabilization

Additional \$15M to Aircraft Procurement, Army, P-1 Line 26, Utility Helicopter Modifications specifically for the procurement and maintenance of "litter basket stabilization systems" for search and rescue and Army MEDEVAC (Medical Evacuation) operations.

23) Single-Vehicle Counter Small Unmanned Aircraft Systems (C-sUAS)

Report Language encouraging the Army to accelerate fielding of a single-vehicle Counter Small Unmanned Aircraft System (C-sUAS) capability.

24) Counter UAS Transition and Fielding Technology To Support Military Efforts

Require the Army to provide a briefing on the Army's plan to acquire and transition to production at scale proven counter-UAS systems for use by the Army and the joint force.

25) CH-47 Block II Program For Army Helicopters

Add funding for the CH-47F Block II program (CH-47F Block II and MH-47G Block II) to modernize the Army's Chinook fleet that will be in service into the 2060s.

26) Funding For US Army Heavy Dump Truck Procurement

Total funding of \$30 million for the U.S. Army M917A3 Heavy Dump Truck for the Active Army, the Army National Guard and Army Reserve.



27) F-35 Lightning II

This request supports Rate (min of 89 a/c for US services and any service UFR, including up to 6 DT test jets), Relevance (fully funds modernization and retrofit kits, as well as NRE and DT Flight science kits for DT jets), and Readiness (invests in depot stand up / material lay-in, spares, and reliability, maintainability improvement program).

28) B-21 Raider Stealth Bomber

Support the President's Budget request for the B-21 Raider, continuing development and procurement of the Air Force's next stealth, long-range, penetrating bomber.

29) DoD-Wide Internet Operations Management Capability

DoD currently leverages a capability called Xpanse to continuously monitor the DoD Information Network through the eyes of the adversary, but to date less than half of DoD's 45 Areas of Operation have been provisioned access to this tool - this request expands access DoD-wide.

30) HMMWV Rollover Mitigation-ABS/ESC For Combat Vehicles

Retrofit of new or like new HMMWVs with ABS/ESC rollover mitigation kits