

AUTONOMOUS MULTI-DOMAIN LAUNCHER (AML)

AML is a Long Range Precision Fires Cross Function Team, DEVCOM Aviation & Missile Center, and DEVCOM Ground Vehicle Systems Center Science and Technology initiative to develop and demonstrate an autonomous, unmanned, highly mobile, C-130 transportable launcher. The prototype launcher will be capable of leader-follower autonomy, autonomous way point navigation, drive-by-wire, and remote launcher turret and fire control operation. It will be capable of launching longer munitions while remaining compatible with the current munitions.

JUNE 2021 AML SURROGATE LAUNCHER DEMONSTRATION

DEVCOM AvMC, DEVCOM GVSC and 18th Field Artillery Brigade (FA BDE), in support of the LRPF CFT conducted a live fire demonstration of the initial technology capability that AML can leverage. The surrogated AML system is a HIMARS remotely operated (wireless remote firing and driving) using noninvasive remote driving and remote fire control kits developed to allow demonstration of the concept without permanent alteration to the original vehicle. This surrogate launcher was used to demonstrate the semi-autonomous launcher driving and launcher control capability and gather Soldier/Leader feedback. The demonstration was conducted at Fort Sill, OK, and culminated in a multi-round live fire demonstration.

Field Artillery Soldiers from the 18th FA BDE conducted all operations of the technology demonstration, supervised by subject matter experts from DEVCOM AvMC and DEVCOM GVSC.

Objectives of the demonstration included: (1) generating Soldier feedback on the concept to guide future design considerations; (2) identifying physical and cyber security challenges for unmanned launchers; and (3) evaluating communication needs for manned-unmanned teaming.



OPERATIONAL PAYOFF

An AML would thicken the force by providing Fires Forces with additional launcher platforms to mass fires with minimal impact on force structure manning. The AML would also provide the Army a force multiplier increasing capacity (3X increase in fire power/ magazine depth) and force projection in support of Joint Operations.

FOR FURTHER INFORMATION:

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