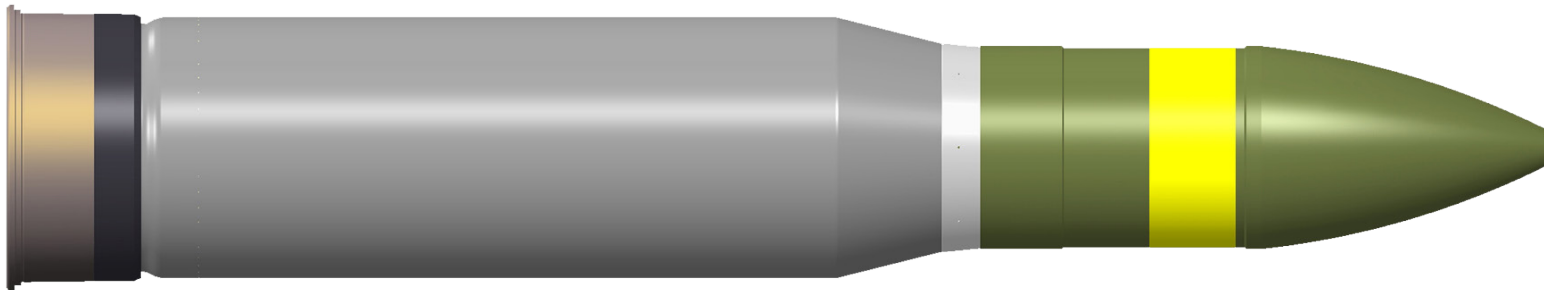


# 120mm Advanced Multi-Purpose (AMP) Cartridge, High Explosive Multi-Purpose with Tracer, M1147



In 3QFY23, the Army completed an investigation that included component-level testing that identified the root cause of failure from First Article Acceptance Testing conducted in September 2021. The Army is planning to conduct a tactical ballistic validation test in 1QFY24 to verify final design configuration changes. DOT&E published a classified M1147 120mm Advanced Multi-Purpose (AMP) combined IOT&E and LFT&E report in December 2022 assessing the cartridge's operational effectiveness, lethality, suitability, and survivability.

## SYSTEM DESCRIPTION

The M1147 AMP cartridge is a line of sight, full-bore multipurpose munition employed by Abrams tanks. The AMP cartridge consolidates the capabilities of four cartridges: the M830 High Explosive Anti-Tank cartridge, M830A1 Multi-Purpose Anti-Tank cartridge, M1028 Canister cartridge, and M908 Obstacle Reduction cartridge, into one cartridge. The AMP cartridge is intended to add new capabilities for breaching walls and defeating

dismounted Anti-Tank Guided Missile teams at extended ranges.

## MISSION

Commanders employ units equipped with the M1147 120mm AMP cartridge to close with and destroy the enemy by direct fire across the full range of military operations.

## PROGRAM

The 120mm AMP cartridge is an Acquisition Category III program which entered Milestone C in December 2020. DOT&E approved

the M1147 120mm AMP Test and Evaluation Master Plan, to include the LFT&E Strategy, in December 2020, and the IOT&E plan in August 2021. After the publication of the DOT&E combined IOT&E and LFT&E report, the full-rate production decision planned for FY23 was delayed due to an investigation to identify the root cause of failure from the First Article Acceptance Test conducted in September 2021. Army efforts are underway to re-baseline the program schedule to account for delays. Tactical ballistic validation testing is planned for 1QFY24 followed by First Article Acceptance Testing. The full-rate

production decision is planned for 4QFY24.

## » **MAJOR CONTRACTOR**

- Northrop Grumman Defense Systems – Plymouth, Minnesota

## **TEST ADEQUACY**

The Army completed IOT&E in September 2021, and LFT&E in April 2022. Testing was completed in accordance with DOT&E-approved test plans and DOT&E observed the IOT&E. DOT&E did not observe the lethality demonstration shots fired in April 2022, but had access to all data and video from the shots. DOT&E published a classified combined IOT&E and LFT&E report in December 2022.

## **PERFORMANCE**

### » **EFFECTIVENESS, LETHALITY, SUITABILITY, AND SURVIVABILITY**

DOT&E published a classified combined IOT&E and LFT&E report in December 2022 providing assessments of M1147 120mm AMP cartridge's operational effectiveness, lethality, suitability, and survivability.

## **RECOMMENDATION**

The Army should:

1. Continue to address recommendations found in the classified combined IOT&E and LFT&E report published in December 2022.