FY20 ARMY PROGRAMS

M1158 7.62 mm Cartridge

Executive Summary

- Forces will use the M1158 cartridge, fired by the M240 series of machine guns, to defeat targets with improved lethality compared to the current M80A1 and M993 cartridges.
- The Army began M1158 low-rate initial production in 3QFY19 and completed the M1158 live fire lethality testing in 4QFY20.

System

- The 7.62-mm M1158 cartridge will replace the current M993 7.62-mm armor-piercing cartridge in the M993-linked configuration to provide improved lethality compared to the current M80A1 and M993 cartridges.
- The M1158 cartridge is compatible with the M240 series of machine guns; the Mk 48 machine gun; and the M110 series, Mk 17, Mk 14, and M14 series rifles.
- The M1158 utilizes a core and penetrator encapsulated in a reverse-drawn copper jacket.

Mission

Forces equipped with weapons that fire the M1158 will engage enemy combatants during tactical operations in accordance with applicable tactics, techniques, and procedures to accomplish assigned missions with greater lethality.



Major Contractors

- Picatinny Arsenal, New Jersey
- Olin Winchester Independence, Missouri

Activity

- The Army completed initial live fire testing of the M1158 in March 2019 to support urgent material release (UMR).
 The Army began low-rate initial production in May 2019 and approved UMR in October 2019.
- In 2QFY20, the Army approved the M1158 Milestone C and Type Classification Standard.
- The coronavirus (COVID-19) pandemic restrictions disrupted M1158 low-rate initial production and delayed live fire testing by 5 months. The Army completed live fire testing in 4QFY20.
- The Army used barrier-protected gelatin targets to enable credible computer modeling of M1158 performance.
 The Army conducted tests against various light material barriers and other targets to determine the projectile's ability

- to perforate operationally relevant targets. Testing was conducted in accordance with the DOT&E-approved LFT&E plan.
- The Army plans approval of M1158 for Full Material Release in 2QFY21.

Assessment

Analysis of M1158 lethality test results is ongoing. In FY21, DOT&E will report on the M1158 performance in a classified lethality report to support a Full-Rate Production decision in 3QFY22.

Recommendations

None.

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