

XM1158 7.62-mm Cartridge

Executive Summary

- Forces will use the XM1158 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 authorized urgent materiel release in October 2019 to accelerate XM1158 fielding. The Army plans full materiel release in FY20.

System

- The 7.62-mm XM1158 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 XM1158 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 XM1158 utilizes a core and penetrator encapsulated in a reverse-drawn copper jacket.

Mission

Forces equipped with weapons that fire the XM1158 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
- Northrup Grumman Innovation Systems – Independence, Missouri

Activity

- The Army approved the XM1158 Materiel Development Decision in 3QFY15, and DOT&E placed the program on live fire oversight in 4QFY15. This is the first time DOT&E has included this program in its annual report.
- The Army completed initial live fire testing of the XM1158 in March 2019 to support urgent materiel release. Testing was conducted in accordance with the DOT&E-approved live fire strategy.
- The Army used barrier-protected gelatin targets to enable credible computer modeling of XM1158 performance with the Operational Requirements-based Casualty Assessment/Static Dynamic Framework model (ORCA/SDF). To support full materiel release, the Army plans additional testing against other light material barriers and targets to determine the

projectile's ability to perforate operationally relevant targets. The Army will accredit ORCA/SDF to support full materiel release.

- The Army approved fielding of the XM1158 as an urgent materiel release in October 2019. The Army plans full materiel release in FY20.

Assessment

DOT&E will report on XM1158 performance in a classified lethality report upon live fire test completion to support full materiel release in FY20.

Recommendations

None.

FY19 ARMY PROGRAMS