

M10 Booker



In June 2024, the Army began live fire testing of the M10 Booker and expects completion by 2QFY25. The Army plans to conduct an IOT&E from 1Q – 2QFY25. DOT&E plans to publish a combined IOT&E and LFT&E report in 3QFY25 to support a full-rate production decision that quarter.

SYSTEM DESCRIPTION

The M10 Booker is a new capability that provides infantry brigade combat team (IBCTs)

with a mobile, protected, direct fire capability against light armored vehicles, hardened enemy fortifications, and dismounted personnel. The M10 Booker is a fully tracked armored combat assault vehicle that is

transportable on C-17 aircraft and manned by a crew of four soldiers. The M10 Booker is able to fire a broad spectrum of currently fielded munitions through use of its 105mm main gun and 7.62mm coaxial machine gun. The M10

Booker design includes a number of force protection features, such as armor, smoke grenade launchers, ammunition stowage blowoff panels, and automatic fire suppression, intended to enhance survivability against direct/indirect fire, rocket-propelled grenades, and underbody threats.

MISSION

The Army intends for IBCT commanders to employ the M10 Booker in direct support of dismounted light infantry units to engage and neutralize enemy personnel, bunkers, machine gun positions, fortifications, and strongpoints, as well as to defeat light armored threats during offensive and defensive operations. IBCTs will use M10 Booker across a range of military operations, including forced and early entry operations in high anti-access/area denial environments, and in direct support of infantry squads, platoons, and companies.

PROGRAM

The Mobile Protected Firepower (MPF) program transitioned from the Middle Tier of Acquisition pathway and entered Milestone C as an Acquisition Category IB program of record in June 2022. DOT&E approved the Milestone C TEMP in May 2022. In June 2023, the Army renamed the MPF program to M10 Booker.

The Army implemented recommendations from DOT&E's April 2022 MPF Operational Assessment report, which included

system design changes to reduce toxic fumes when firing the main gun and improvements to the vehicle's cooling system. These improvements will be validated in an operational environment during the IOT&E scheduled from 1Q – 2QFY25. DOT&E approved the Live Fire Test Design Plan and the IOT&E test plan in August 2024. The Army plans to complete LFT&E and IOT&E with a cyber adversarial assessment in 2QFY25 to support a full-rate production decision in 3QFY25.

» MAJOR CONTRACTORS

- Joint Systems Manufacturing Center, a government-owned, contractor-operated facility currently operated by General Dynamics Land System – Lima, Ohio (turret)
- Merrill Technologies Group, Inc. – Saginaw, Michigan (hulls)
- General Dynamics Land Systems – Anniston, Alabama (integration and final assembly)

TEST ADEQUACY

The Army began live fire testing in June 2024 in accordance with the DOT&E-approved Live Fire Test Design Plan and with observation by DOT&E personnel. LFT&E is scheduled for completion in 2QFY25.

The Army plans to conduct an IOT&E consisting of Phase I (gunnery) in 1QFY25, and Phase II (force-on-force; adversarial assessment) in 2QFY25. DOT&E

approved the IOT&E test plan in August 2024.

PERFORMANCE

» EFFECTIVENESS, SUITABILITY, AND SURVIVABILITY

DOT&E is unable to report on the operational effectiveness, suitability, or survivability as testing is ongoing. DOT&E will publish a combined IOT&E and LFT&E report in 3QFY25 to support a full-rate production decision.

RECOMMENDATIONS

The Army should:

1. Continue developing a Real-Time Casualty Assessment capability to replicate target effects against non-vehicle targets, such as bunkers, and walls to improve combat realism, and training feedback, as previously recommended in the MPF Operational Assessment report published in April 2022.
2. Complete the LFT&E and IOT&E in accordance with the approved test plans.