

# HERCULES M88 Upgrade Recapitalization (M88A3)



The Heavy Equipment Recovery Combat Utility Lift and Evaluation System (HERCULES) M88 Upgrade Recapitalization (M88A3) upgrades powerpack, suspension, hoist, and winch of the existing M88A2 to recover the heaviest systems across the Army. In July 2024, the Army's M88A3 equipped crew executed a Soldier Touchpoint, demonstrating single vehicle recovery, and turret lift and carry, of an 80-ton Abrams main battle tank. In August 2024, the Army began full-up system-level (FUSL) live fire events, which are expected to complete in 3QFY25. Upgrades will be applied to the initial run of production vehicles in 3QFY25. FOT&E is scheduled for 2QFY27.



## SYSTEM DESCRIPTION

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The M88A3 is an upgrade to the existing M88A2, which supports units performing armored vehicle repair and recovery. The Army's support battalions require an organic recovery vehicle with mobility, survivability, lift, winch, and tow capabilities necessary to effectively recover the heaviest tracked vehicles in the Army. The M88A3 will fill the M88A2's capability gap of Single Vehicle Recovery of 80-ton vehicles with upgrades applied primarily to the powerpack, suspension, hoist, and winch.

## MISSION

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Commanders employ the M88A3 to provide single vehicle towing, winching, and hoisting operations and evacuation of heavy tanks and other tracked combat vehicles. The M88A3-equipped units will operate as part of the brigade support battalion in both the field maintenance company and forward support company, service and recovery sections providing field-level maintenance and recovery support to maneuver battalions. M88A3-equipped units will perform recovery operations in support of combat-equipped M1, M1A1, and M1A2 Abrams Main Battle Tank platforms and future heavy combat vehicles. Recovery operations will also cover lighter systems across the armored brigade combat team (e.g., Armored Multi-Purpose

Vehicle, Bradley Fighting Vehicle, Joint Assault Bridge, Armored Vehicle-Launch Bridge, and Composite Joint Assault Bridge). Disabled combat vehicle recovery will be conducted if the disabled vehicle cannot be repaired on the spot. The M88A3 will tow the disabled vehicle to a maintenance collection point based on mission, enemy, terrain, troops, time, and commander's intent.

## PROGRAM

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The M88A3 is an Acquisition Category IC program using an Other Transaction Authority to complete the engineering change proposal. DOT&E approved a TEMP in September 2023. A TEMP update is planned for FY25 to capture production verification test and FOT&E scope. The Army intends to conduct an FOT&E in 2QFY27 and plans to equip the first unit in 1QFY28.

### » MAJOR CONTRACTOR

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- BAE Systems, Inc. – Anniston, Alabama

## TEST ADEQUACY

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In FY24, the Army conducted a Soldier Touchpoint in July 2024. DOT&E did not approve this test plan but provided input to the Army. FUSL live fire testing began August 2024 in accordance with a DOT&E-approved test plan. DOT&E personnel observed both

the Soldier Touchpoint and FUSL testing.

The Army conducted the Soldier Touchpoint in July 2024 with three soldiers from 1-35 Armor Battalion, 1st Armored Division. The crew performed mobility, towing, pick and carry, and recovery operations using the M88A3 on test courses at Aberdeen Test Center, Maryland. Soldiers provided system performance and usability feedback, which should be implemented prior to first unit equipped in FY27.

The Army began FUSL testing in August 2024, with completion expected in 3QFY25, to compare crew survivability, system survivability, and system functionality restoration of a combat-loaded M88A3 against the current M88A2, using realistic threats. The Army conducted underbody blast events in FY17 to demonstrate the M88A2 performance.

### » EFFECTIVENESS, SUITABILITY, AND SURVIVABILITY

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Soldier Touchpoint and FUSL data analyses are ongoing, precluding a DOT&E evaluation of the M88A3's operational effectiveness, suitability, and survivability. Details from those events will be incorporated in DOT&E's combined FOT&E and LFT&E report to be published in 1QFY28.

## RECOMMENDATIONS

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The Army should:

1. Implement soldier feedback recommendations provided during the Soldier Touchpoint to maximize operational effectiveness and survivability.
2. Submit a TEMP update for DOT&E approval, capturing production verification testing in an FOT&E.