



Highlights of [GAO-10-155T](#), a testimony before the House Armed Services Committee, Defense Acquisition Reform Panel

Why GAO Did This Study

As of July 2008, about 75 percent of casualties in combat operations in Iraq and Afghanistan were attributed to improvised explosive devices. To mitigate the threat from these weapons, the Department of Defense (DOD) initiated the Mine Resistant Ambush Protected (MRAP) program in February 2007, which used a tailored acquisition approach to rapidly acquire and field the vehicles. In May 2007, the Secretary of Defense affirmed MRAP as DOD's most important acquisition program. To date, about \$22.7 billion has been appropriated for the procurement of more than 16,000 MRAP vehicles.

My testimony today describes the MRAP acquisition process, the results to date, lessons learned from that acquisition, and potential implications for improving the standard acquisition process. It is mostly based on the work we have conducted over the past few years on the MRAP program. Most prominently, in 2008, we reported on the processes followed by DOD for the acquisition of MRAP vehicles and identified challenges remaining in the program. To describe DOD's approach for and progress in implementing its strategy for rapidly acquiring and fielding MRAP vehicles, we reviewed DOD's plans to buy, test, and field the vehicles and discussed the plans with cognizant department and contractor officials. To identify the remaining challenges for the program, we reviewed the results of testing and DOD's plans to upgrade and sustain the vehicles.

[View GAO-10-155T or key components.](#)
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DEFENSE ACQUISITIONS

Rapid Acquisition of MRAP Vehicles

What GAO Found

DOD use of a tailored acquisition approach to rapidly acquire and field MRAP vehicles was successful. The program relied only on proven technologies and commercially available products; established minimal operational requirements; and undertook a concurrent approach to producing, testing, and fielding the vehicles. To expand limited production capacity, indefinite delivery, indefinite quantity contracts were awarded to nine commercial sources, with DOD agreeing to buy at least 4 vehicles from each. Subsequent orders were based on a concurrent testing approach with progressively more advanced vehicle test results and other assessments. To expedite fielding of the vehicles, the government retained the responsibility for final integration in them of mission equipment packages including radios and other equipment. DOD also made MRAP its highest priority acquisition, which helped contractors and others more rapidly respond to the need and meet production requirements, in part by early investing of their own capital to purchase steel and other critical components in advance of orders.

Schedule and performance results for MRAP were very good overall. In July 2008, nearly all testing was completed; the Marine Corps had placed orders for 14,173 MRAPs; and, as of May 2008, 9,121 vehicles had been delivered. As of July 2009, 16,204 vehicles have been produced and 13,848 vehicles fielded in two theaters of operation. Total MRAP production funding was about \$22.7 billion, mostly through supplemental appropriations.

In terms of lessons learned, MRAP's success was driven by several factors, including quick action to declare its acquisition DOD's highest priority and giving it a DX rating, which allowed access to more critical materials than was otherwise available. The availability of supplemental appropriations was also essential. However, while neither of these factors are practically transferable to other programs, decisions to 1) use only proven technologies, 2) keep requirements to a minimum, 3) infuse significant competition into contracting, and 4) keep final integration responsibility with the government all led to positive outcomes and may be transferable. Challenges to MRAP remain in its reliability, mobility, and safety, which required some modifying of designs and postproduction fixes, and adapting how vehicles were used. Also, long term sustainment costs are not understood and the services are only now deciding how MRAP fits them in the longer term.

GAO's multiple best practices reports have underscored the need for the use of mature technologies, well understood requirements, systems engineering knowledge, and incremental delivery of capabilities to enable quicker deliveries. Finally, a broader lesson learned is that it is time to invest the time, money, and management skills in the science and technology community to enable the effectiveness we expect from the acquisition community.