In late 2007, the Department of Defense (DOD) launched a major procurement initiative to replace most uparmored High Mobility, Multi-Wheeled Vehicles (HMMWVs) in Iraq with Mine-Resistant, Ambush-Protected (MRAP) vehicles by FY2009. MRAPs have been described as providing twice as much protection against Improvised Explosive Devices (IEDs) than uparmored HMMWVs. IEDs, at the height of their use, were responsible for about 70% of U.S. casualties in Iraq. The DOD’s accelerated MRAP program, decisions on the number of MRAPs procured, and MRAP’s performance in urban and counterinsurgency operations raise a number of potential policy issues for congressional consideration. This report will be updated.

MRAPs are a family of vehicles produced by a variety of domestic and international companies that generally incorporate a “V”-shaped hull and armor plating designed to provide protection against mines and IEDs. DOD is procuring three types of MRAPs. These include Category I vehicles, weighing about 7 tons and capable of carrying 6 passengers; Category II vehicles, weighing about 19 tons and capable of carrying 10 passengers; and Category III vehicles, intended to be used primarily to clear mines and IEDs, weighing about 22.5 tons and capable of carrying up to 12 passengers. The Army and Marines first employed MRAPs in limited numbers in Iraq and Afghanistan in 2003, primarily for route clearance and explosive ordnance disposal (EOD) operations. These route clearance MRAPs quickly gained a reputation for providing superior protection for their crews, and some suggested that MRAPs might be a better alternative for transporting troops in combat than uparmored HMMWVs.

**DOD Accelerates the MRAP Program.** Secretary of Defense Robert Gates directed that “the MRAP program should be considered the highest priority Department of Defense acquisition program.”2 The Secretary of Defense established the MRAP Task Force to speed production and fielding of MRAPs and has assigned the Marines to manage all MRAP procurement for DOD. The MRAP program was designated a “DX” program, giving it priority for resources.3

**The Evolving Requirement.** The Buffalo MRAP was originally intended to be fielded only to Army engineer units. Marine Corps leadership reportedly decided in February 2007 to replace all uparmored HMMWVs in Iraq with MRAPs, whereas Army leadership would continue to rely on its uparmored HMMWVs.4 In March 2007, the MRAP requirement for all services reportedly grew by 15% as the Navy, Air Force, and the U.S. Special Operations Command (USSOCOM) added requirements for MRAPs that stood at 7,774 DOD-wide as of March 26, 2007.5 In May 2007, reportedly because of the requests from Army commanders in Iraq, Army leadership reportedly began considering the possibility of replacing all uparmored HMMWVs in Iraq with MRAPs, thereby increasing the Army’s total requirement to approximately 17,700 MRAP vehicles.6 On June 28, 2007, the Joint Requirements Oversight Council (JROC)7 reportedly endorsed a requirement to replace every HMMWV in with a MRAP, potentially pushing the MRAP requirement to more than 23,000 vehicles.8 The JROC capped overall MRAP procurement at 15,374 vehicles in September 2007 but suggested that these numbers could change, based on the assessment of commanders.9

**Marines — Fewer MRAPs Required.** On November 30, 2007, the Marines reduced its MRAP requirement from 3,700 to approximately 2,300 vehicles.10 The Marines cited six factors in its decision:

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7 Chartered in 1984 (10 U.S.C. Sec 181), the JROC is tasked with examining potential joint military requirements; identifying, evaluating, and selecting candidates for joint developmental and acquisition programs; providing oversight of cross-service requirements and management issues; and resolving service concerns that arise after the initiation of a joint program.
• IED attacks were dramatically down over the preceding six months;

• the relatively heavy MRAP cannot operate or pursue the enemy off-road, in confined areas, or across most bridges;

• reduced need to put Marines on high-threat roads through the use of persistent surveillance and airlift of supplies;

• counterinsurgency focus requires Marines dismount and interact closely with the local populace;

• MRAPs associated with surge forces were no longer needed; and

• MRAP sustainment numbers were lower because of fewer than expected combat losses.

The Marines’ reduction in its MRAP requirement from 3,700 to 2,300 was anticipated to result in a potential cost savings of approximately $1.7 billion in FY2008 and FY2009.

**Army — Additional MRAPs Required.** 11 Counter to expectations, the Army has increased its MRAP requirement from approximately 10,000 in September 2007 to 11,953. This increase was within a JROC-agreed range of between 10,433 to 15,884 MRAPs for the Army. The JROC also approved a reduction in Air Force MRAPs from 697 to 558 vehicles, and the Navy’s MRAP requirement for 554 MRAPs and USSOCOM’s requirement for 333 of the vehicles remained unchanged. Reports suggest that the Army might increase its MRAP requirement to as many as 15,000 in the future. 12

**MRAPs Deployed.** 13 According to U.S. defense officials, 3,432 MRAPs had been deployed to Iraq and Afghanistan as of March 5, 2008, but only a few of these were in operation in Afghanistan. Reports maintain that the United States will ship an additional 500 MRAPs to Afghanistan in the near future to support the additional 3,200 U.S. troops that will be deployed to the region in the next few months. While DOD is making a significant effort to deploy as many MRAPs into theater as possible, some in Congress have noted the importance of also having MRAPs available at bases in the United States.

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so that troops can train with these vehicles before deploying into combat with them. Currently, the Army is unable to provide Congress with a date when sufficient MRAPs will be available in the United States for pre-deployment training.

**MRAP Contract Activity**

**MRAP Vehicle Orders Surpass 11,900.** On December 18, 2007, DOD reported that it had awarded four manufacturers a contract just under $2.66 billion for an additional 3,126 MRAPs to be delivered by the end of July 2008. This award, combined with previous contract awards, totals 11,941 MRAPs out of the current 15,374 requirement. The December 18, 2007, contracts included the following:

- Stewart and Stevenson Tactical Vehicle (Sealy, TX), a Division of Armor Holdings that was recently acquired by BAE Land Systems, was awarded a contract to produce 668 Category II MRAPs.
- BAE Land Systems and Armaments (Santa Clara, CA) was awarded a contract for 600 additional Category II MRAPs, bringing its total to more than 1,730 vehicles.
- Force Protection Industries, Inc. (Ladson, SC), was awarded a contract for 178 Category I and 180 Category II MRAPS.
- International Military and Government LLC (Warrenville, IL) received the largest single deliver order for 1,5000 Category I MRAPs.

Reports suggest that the Pentagon is expected order potentially thousands of MRAPs toward the middle to end of March 2008, “bringing it close to wrapping up orders” for the vehicle.

**MRAP Deliveries.** Of the 1,266 MRAPs that were scheduled to have been delivered by multiple companies in January 2008, only 941 were produced, reportedly because of a problem with an armor subcontractor. Because of an unidentified problem with an armor subcontractor, International Military and Government LLC had to obtain an additional source of armor. Defense officials expect that International Military and Government LLC will be caught up by mid-March and that the overall program will produce approximately 9,400 MRAPs by May 2008.

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MRAP II Contract. On July 31, 2007, the Marines issued a request for proposal for the MRAP II Enhanced Vehicle Competition. The MRAP II is intended to better address the threat of Explosively-Formed Penetrators (EFPs), a type of stand-off improvised explosive device that employs a shaped charge against the sides of vehicles. In December 2007, MRAP program officials announced that only two companies — BAE Systems and a team led by Ideal Innovations, a consultant based in Alexandria, Virginia — were selected to provide six test vehicles each to be evaluated by DOD. Depending on the results of testing, a production decision on MRAP II vehicles could be made from the end of March to May 2008.

MRAP Concerns

In addition to the aforementioned Marine Corps observation that the MRAP cannot operate or pursue the enemy off-road, in confined areas, or across most bridges, there are other concerns that have arisen from MRAP use in Iraq. According to reports, DOD’s MRAP Acquisition Executive, John Young, stated that in certain terrain types, MRAPs were not proving to be as effective and some units wanted to keep their uparmored HMMWVs in lieu of MRAPs because of their superior speed and mobility. Service chiefs have also continued to express their concerns that MRAPs are too large and too heavy for expeditionary operations and can not be deployed by helicopter or by amphibious ships.

Recent Congressional Action

PL 11-92, FY2008 Appropriations Continuing Resolution, appropriated $5.2 billion for MRAP procurement, and PL-110-16, FY2008 Defense Appropriations Act, appropriated an additional $11.6 billion for MRAP procurement. H.R. 4986 (P.L. 110-181), FY2008 Defense Authorizations Act, authorizes $17.6 billion for MRAP procurement and associated MRAP transportation, contractor logistics, and research and development costs. For FY2009, the Administration did not include a budget request for MRAPs, but instead will likely request additional funds for MRAP acquisition in anticipated forthcoming supplemental budget requests.

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20 The Ideal Innovations Team consists of Oskosh Truck from Oskosh, WI and Ceradyne from Costa Mesa, CA.


22 Ibid.

Potential Issues for Congress

Investigation of the Marine’s Delayed MRAP Procurement. On January 22, 2008, a science advisor to the Plans, Policies, and Operations Department of Headquarters, Marine Corps, published a comprehensive study alleging “gross mismanagement” by the Marines in procuring the MRAP, despite urgent requests from Marine commanders in the field as far back as 2005. The report suggests that if these urgent needs statements had been acted upon sooner, “hundreds of deaths and injuries could have been prevented.” Marine leadership maintains that the Marine Corps civilian employee had overstepped his bounds and under pressure; the Marine Corps has asked the DOD Inspector General to investigate these allegations. Some in Congress have asked that “whistle blower protection” be extended to the report’s author. The severity of the report’s allegations might warrant additional congressional scrutiny.

What Are DOD’s Long-Term Plans for MRAP? Senior Army officials have stressed that MRAPs are only “an interim strategy” and that the Army was still “dedicated to the future of the Joint Light Tactical Vehicle — the HMMWV’s replacement.” Will MRAP production quotas be decreased in the event of large-scale troop reductions? Will MRAPs be permanently integrated into force structures, or will they be placed in a reduced readiness status after Iraq? One MRAP program official recently noted that it is difficult to budget for MRAPs for the FY2010-FY2015 Program Objective Memorandum (POM) because “the services have not settled on their long-term plans for the vehicles.” Given questions about the MRAP’s future, Congress might require DOD to define its long-term plans for the MRAP fleet.

How Will MRAP Acquisition Affect Other DOD Programs? Given MRAP’s anticipated level of funding, the MRAP program is DOD’s third-largest acquisition program, behind missile defense and the Joint Strike Fighter. There are concerns about how MRAP procurement will affect the Joint Light Tactical Vehicle (JTLV) program. The Army-led joint program, which is expected to launch a 27-month development competition in June 2008, could result in over 50,000 JTLVs being produced for the Services starting as early as 2015. With war-related and equipment repair and replacement costs continuing to grow at a substantial rate, there could be funding conflicts between MRAP and other DOD programs.

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27 DOD Transcript, DOD News Briefing with John Young, MRAP Task Force Chairman, July 18, 2007.