

DEPARTMENT OF DEFENSE
FY 2008 BUDGET AMENDMENT
FOR
GLOBAL WAR ON TERROR (GWOT) REQUEST
BUDGET JUSTIFICATION

Mine Resistant Ambush Protected (MRAP) Vehicles



July 31, 2007

Department of Defense

Budget Amendment for FY 2008 Global War on Terror Request

Mine Resistant Ambush Protected Vehicles

Overview

Defense Secretary Gates designated the Mine Resistant Ambush Protected (MRAP) vehicle program as the Department of Defense's highest priority acquisition program and formed a senior level Task Force to specifically manage its aggressive procurement and integrate all issues with the Military Services, industry, and commanders on the ground. The Department is accelerating production of the MRAP vehicle in order to maximize production capacity and rapidly field this capability to Iraq and Afghanistan. To do this, the Department needs to increase its FY 2008 Global War on Terror budget request by \$5.340 billion to procure 1,520 additional MRAP vehicles, Government Furnished Equipment (GFE), spiral development and upgrades, support and transportation for the Military Services and U.S. Special Operations Command (USSOCOM).

The nation's operating forces in Iraq and Afghanistan specifically identified a need to increase survivability by expanding the use of vehicles offering better underbody protection. The MRAP vehicle provides operating forces with an effective blast protected platform capable of missions such as transporting soldiers for combat operations in urban environments. The need for forces to operate on the ground makes the United States and Coalition Forces susceptible to attacks from improvised explosive devices (IEDs) and rocket propelled grenades. The MRAP vehicles are designed to provide operating forces platforms capable of mitigating some of the risk from these threats. In addition, MRAP vehicles are designed to mitigate explosive hazards by identifying and clearing suspected explosive hazards while reducing the vulnerability of troops. The MRAP vehicles also support other critical missions such as patrolling, leading convoys, transporting troops, and providing ambulatory services.

In May 2007, the Joint Requirements Oversight Council (JROC) validated additional MRAP vehicle requirements, which increased the original Joint Operational Needs Statement of 1,185 vehicles to 7,774 vehicles (+6,589). The Secretary of Defense directed a near-term maximum production acquisition strategy beyond 7,774 vehicles to get as many MRAP vehicles to the field as quickly as possible. This budget amendment is based on an MRAP objective of delivering about 8,000 vehicles to the troops in Central Command's theater by May 2008. The Secretary will make subsequent decisions beyond this point based on feedback from theater operational assessments taking place this summer and expected manufacturing capacity updates.

Department of Defense

Budget Amendment for FY 2008 Global War on Terror Request

Mine Resistant Ambush Protected Vehicles

Cost Breakdown

The following table identifies the budget amendment request by cost category:

<u>Category</u>	<u>(Dollars in Billions)</u>					<u>Total</u>
	<u>Army</u>	<u>Navy</u>	<u>USMC</u>	<u>Air Force</u>	<u>USSOCOM</u>	
MRAP Vehicles	0.418	-	0.588	0.200	-	1.206
<i>(Vehicle Quantities)</i>	<i>(627)</i>	<i>(-)</i>	<i>(632)</i>	<i>(261)</i>	<i>(-)</i>	<i>(1,520)</i>
Government Furnished Equipment	0.186	-	0.364	0.141	0.030	0.721
Spiral Upgrade Development	0.020	-	0.010	-	-	0.030
Spiral Upgrade Kits	0.348	0.051	0.744	0.140	0.067	1.350
Fielding Support/Facilitization	0.060	-	-	-	-	0.060
Contractor Logistics Support	0.147	0.004	0.675	0.087	0.034	0.947
Battle Damage Assessment & Repair						
Spare Parts	0.278	-	-	-	-	0.278
Labor Support	0.065	-	-	-	-	0.065
Transportation	<u>0.242</u>	<u>0.038</u>	<u>0.313</u>	<u>0.062</u>	<u>0.028</u>	<u>0.683</u>
Total	1.764	0.093	2.694	0.630	0.159	5.340

- The MRAP is family of vehicles that can be configured for a wide range of tasks. This \$5.340 billion budget amendment will procure an additional 1,520 MRAP vehicles.

Category I vehicles are used for small unit combat operations in urban or confined areas for missions such as mounted patrols and reconnaissance. The average unit price is about **\$528,000**

Category II vehicles are used for convoy escort, combat engineering, ambulance, troop and cargo transportation. The average unit price is about **\$664,000**.

Category III vehicles are the largest and are used to clear IEDs and mines from roads. The average unit price is about **\$858,000**.

- Government Furnished Equipment (GFE) items include IED jammers, intra-vehicle communication systems, radios, and tracking systems. The GFE items vary among the Services, which affects the overall unit price of the vehicle.

Department of Defense

Budget Amendment for FY 2008 Global War on Terror Request

Mine Resistant Ambush Protected Vehicles

- Army will remove some GFE such as radio's, tracking and surveillance systems from High Mobility Multipurpose Wheeled Vehicle's (HMMWV) being replaced in theater and install that GFE into the MRAP, which decreases the Army's GFE cost per vehicle.
- The Army and Marine Corps agreed to standardize GFE turret and intra-vehicle communication systems while also adopting radio and jammer installation kits that will allow interchangeability.
- Only USSOCOM is installing a Remote Weapon Station (RWS), which is \$235 thousand per vehicle and greatly increases the GFE per vehicle compared to the Services.
- The following table provides an estimated unit cost of the GFE by Service:

<u>Estimated GFE Unit Cost Per Vehicle</u>	
<u>Service</u>	<u>(Dollars in Thousands)</u>
Army	\$171
Navy	\$300
Marine Corps	\$280
Air Force	\$297
USSOCOM	\$522

- Spiral upgrade development and kits enhance force protection of troops while they conduct missions.
 - It is necessary to research and develop armor technology for additional force protection. Emerging armor technology will be further matured and integrated into vehicle designs.
 - Robust threat characterization and performance studies will be performed to understand further the survivability impacts of armor solutions.
 - Automotive analysis will be conducted to optimize the armor placement on the vehicle.
 - Spiral upgrades increase force protection by defeating or mitigating evolving threats, which include enhanced armor, energy absorbing seats, upgraded suspension, and enhanced power train to increase force protection by defeating or mitigating evolving threats.

Department of Defense

Budget Amendment for FY 2008 Global War on Terror Request

Mine Resistant Ambush Protected Vehicles

- The differences in the amounts requested for spiral upgrade kits for each Service reflect differences in each Service's currently validated vehicle requirement.
- Fielding Support/Facilitization allows the MRAP vehicles to be repaired in the field.
 - Four Forward Operating Bases (FOB) require a covered work area for receiving and shipping, storing supplies, repairing vehicles, and training personnel.
 - Support equipment such as tool sets, materiel handling equipment, and repair stations are required for field maintenance checks, services, and repair.
- Contractor Logistics Support (CLS) will be used to provide the initial logistical support for the fielded MRAP vehicles.
 - Government personnel will augment and manage the contractor personnel providing the support.
 - The initial CLS based support will transition to a largely organic capability over the next 12 – 24 months.
 - The CLS will include a set of initial spares such as consumable components, system assemblies, and subassemblies.
 - The differences in the amounts requested for CLS for each Service reflect differences in each Service's currently validated vehicle requirement.
- Battle Damage Assessment and Repair (BDAR) is designed for battlefield environments to rapidly recover and assess battle-damaged equipment and restore it to fully mission-capable. It is used where standard maintenance procedures are not practical.
 - The BDAR parts include axles, tires, wheels, engines and will provide operators and maintenance crews with rapid battle damage repair.
 - Contractors and government personnel will jointly provide the labor support for repairing and replacing the BDAR kits.
 - Transportation of the MRAP vehicles will be mostly by airlift to provide vehicles to theater quickly and will cost around \$134,000 per vehicle while less than half of the vehicles will use sealift, which costs about \$18,000 per vehicle.
 - The Department seeks to optimize airlift expediency with the lower cost of sealift.

Department of Defense

Budget Amendment for FY 2008 Global War on Terror Request

Mine Resistant Ambush Protected Vehicles

- All MRAP vehicles except the largest Category III vehicles are currently being shipped to Iraq by aircraft.

Acquisition Strategy

The MRAP acquisition strategy was developed to equal the urgency and flexibility of the program. In November 2006, there was only one vendor who was contracted to produce MRAP vehicles. The Marine Corps Systems Command awarded a limited sole source contract to that vendor for up to 280 vehicles to sustain its production base and bring an immediate capability to the force as quickly as possible. In May 2007, the vehicle requirement increased from 1,185 to 7,774 (+6,589), which created an immediate need to expand the production base. In January 2007, nine vendors competed in open competition for Category I and II vehicles. There are currently five primary vendors awarded contracts for about 5,500 vehicles. Three additional vendors were awarded contracts to produce vehicles for testing which has not yet started.

In July 2007, the JROC validated the need to maximize the MRAP procurement based on reports from field Commanders. This budget amendment will provide resources that will maximize the production rate and procure an additional 1,520 vehicles, with the goal of delivering a total of 8,000 vehicles to the field by May 2008. The following table identifies the vehicle requirements by Service and for USSOCOM:

Service	<u>Number of MRAP Vehicles</u>		
	<u>Funded</u>	<u>Amendment</u>	<u>Requirement</u>
Army	2,099	+627	2,726
Navy	544	-	544
Marine Corps	3,068	+632	3,700
Air Force	436	+261	697
USSOCOM	<u>333</u>	<u>-</u>	<u>333</u>
Total MRAP Vehicles	6,480	+1,520	8,000

Funding Summary

To date, the Congress has provided \$5.6 billion to procure and support MRAP vehicles for the U.S. military fighting in Iraq and Afghanistan. The intent of this budget amendment is to maximize the production capacity in FY 2008 and produce as many MRAP vehicles in order to field them to troops in theater as soon as possible. The following table provides summary of the funding that the Congress has provided to date:

Department of Defense

Budget Amendment for FY 2008 Global War on Terror Request

Mine Resistant Ambush Protected Vehicles

<u>FY 2007 and Prior MRAP Funding</u>	<u>(Dollars in Billions)</u>
FY 2006 and prior	0.173
FY 2007 Title IX (P.L. 109-289)	0.742
FY 2007 Supplemental (P.L. 110-28)	3.032
FY 2007 Reprogramming Actions*	<u>1.637</u>
Total Available to date	5.584

*Reprogramming actions approved by the Congress are FY 07-08 PA, FY 07-27 PA, FY 07-34.

Budget Amendment Request

The following table provides a summary of the FY 2008 GWOT \$5.340 billion budget amendment request by appropriation and budget line item to support military operations in Iraq (OPERATION IRAQI FREEDOM) and Afghanistan (OPERATION ENDURING FREEDOM)

<u>Appropriation</u>	<u>Budget Line Item</u>	<u>(Dollars in Billions)</u>		
		<u>Feb 5 Request*</u>	<u>July Amendment</u>	<u>Revised Request</u>
<u>Army</u>				
RDT&E, Army **	Ballistics Technology	-	+0.020	0.020
Other Procurement, Army	Mine Protection Veh Family	0.174	+1.437	1.611
Operation and Maintenance, Army	Transportation/Labor Support	<u>1.953</u>	<u>+0.307</u>	<u>2.260</u>
Total Army		2.127	+1.764	3.891
<u>Navy</u>				
Other Procurement, Navy	Tactical Vehicles	0.291	+0.055	0.346
Operation and Maintenance, Navy	Service Wide Transportation	<u>0.113</u>	<u>+0.038</u>	<u>0.151</u>
Total Navy		0.404	+0.093	0.497
<u>Marine Corps</u>				
RDT&E, Navy **	MC Combat Services Support	0.020	+0.010	0.030
Procurement, Marine Corps	EOD Systems	0.051	+2.371	2.422
Operation and Maintenance, MC	Service Wide Transportation	<u>0.299</u>	<u>+0.313</u>	<u>0.612</u>
Total Marine Corps		0.370	+2.694	3.064
<u>Air Force</u>				
Other Procurement, Air Force (AF)	Medium Tactical Vehicles	0.008	+0.568	0.576
Operation and Maintenance, AF	Service Wide Transportation	<u>0.116</u>	<u>+0.062</u>	<u>0.178</u>
Total Air Force		0.124	+0.630	0.754

Department of Defense

Budget Amendment for FY 2008 Global War on Terror Request

Mine Resistant Ambush Protected Vehicles

		<u>(Dollars in Billions)</u>		
<u>Appropriation</u>	<u>Budget Line Item</u>	<u>Feb 5 Request*</u>	<u>July Amendment</u>	<u>Revised Request</u>
<u>US Special Operations Command (USSOCOM)</u>				
Procurement, Defense Wide (DW)	Tactical Vehicles (USSOCOM)	-	+0.131	0.131
Operation and Maintenance, DW	USSOCOM	<u>1.660</u>	<u>+0.028</u>	<u>1.688</u>
Total USSOCOM		1.660	+0.159	1.819
Total		4.685	+5.340	10.025
(Total for MRAP Only)		(0441)	(+5.340)	(5.761)

* Total budget line item amount includes the MRAP and other tactical vehicles. The FY 2008 GWOT request only for MRAP is \$441 million (Procurement \$329 million and O&M \$112 million).

** RDT&E = Research, Development, Test, and Evaluation