

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2008

BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes		PE NUMBER AND TITLE 0603619A - Landmine Warfare and Barrier - Adv Dev						PROJECT 606	
COST (In Thousands)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
606 CNTRMN/BARRIER ADV DEV	1022	24580	29234	18873	19077	19666	20172	Continuing	Continuing

A. Mission Description and Budget Item Justification: This project provides for component development of new countermine systems for neutralizing, clearing, breaching and detection concepts that will enhance the effectiveness of the Future Force to maintain freedom of maneuver. The program includes the Ground Standoff Mine Detection System (GSTAMIDS) and the Autonomous Mine Detector (AMD). The GSTAMIDS forward looking effort will transition advanced technologies from the Army's S&T program into development to further enhance vehicle mounted mine detection capabilities for FCS. Autonomous Mine Detection System (AMDS) consist of three payloads for a robotic platform. The payloads are for remote mine detection and marking, Unexploded Ordnance (UXO) detection and marking, and neutralization. AMDS provides stand off detection for the dismounted soldier. Next Generation Mine Detection and Neutralization (FY11-13) will lever technologies currently in the Tech Base. The Next Generation Standoff Detection Systems (NGSOS) is a suite of advanced forward looking sensors designed to detect and confirm mines and Improvised Explosive Devices (IED) at far greater stand off distances than are achieved today. NGSOS will be designed as a payload on several vehicle platforms and robotic systems.

<u>Accomplishments/Planned Program:</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Initiate GSTAMIDS GPR sensor block upgrade to Husky mine detection vehicle		9720	
Complete prototype and test of new GPR for route clearance vehicles	1022		
Initiate Autonomous Mine Detection Sensors (AMDS) program		14172	
Build and test AMDS Brassboards (2)			29234
Small Business Innovative Research/Small Business Technology Transfer Program		688	
Total	1022	24580	29234

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<u>B. Program Change Summary</u>	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)	8346	24737	29423
Current BES/President's Budget (FY 2009)	1022	24580	29234
Total Adjustments	-7324	-157	-189
Congressional Program Reductions		-157	
Congressional Recissions			
Congressional Increases			
Reprogrammings	-7089		
SBIR/STTR Transfer	-235		
Adjustments to Budget Years			-189

Change Summary Explanation: Funding - FY 2007: \$7.089 million reprogrammed out of this PE in support of higher priority Army programs.

<u>C. Other Program Funding Summary</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
0604808A D415 - Landmine Warfare and Barrier - Engineering Development	42185	46807	52475	43427	21405	20129	18534	Continuing	Continuing

Comment:

D. Acquisition Strategy Autonomous Mine Detection Sensors(AMDS) - The acquisition strategy for Component Advanced Development supports a competitive effort with one or more contractors/technology approaches. MS B is scheduled for 3rd QTR FY10. Risk Reduction and Broad Agency Announcement contract award(s) will begin in 2QFY08. If applicable, AMDS will downselect to one contractor when it transitions from Concept Development (6.4) to System Development (6.5) in FY 2011.

ARMY RDT&E COST ANALYSIS (R3)

February 2008

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
4 - Advanced Component Development and Prototypes			0603619A - Landmine Warfare and Barrier - Adv Dev							606		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Ground Penetrating Radar Sensor blk upgrade	C-CPFF	BAE Systems - Austin TX			2Q	10000			2Q		10000	
Adv Mine Detection Sensors	C/CPFF	To Be Selected (1)				7320	2Q	15076	2Q	8627	31023	
Other Component Development	C/FP, T&M	Various				2830	2Q	2940	2Q	3015	8785	
Subtotal:						20150		18016		11642	49808	
Remarks: Acquisition Strategy is to award one or more Broad Agency Announcements and to downselect to one System Development contract, if applicable, in FY2011.												
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Adv Mine Detection Sensors	MIPR	Various OGAs				2264	1Q	2761		3313	8338	
Subtotal:						2264		2761		3313	8338	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
AMDS	MIPR	Various OGA				59	2Q	6500	2Q	2300	8859	
Subtotal:						59		6500		2300	8859	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Program Management	IN-House	PM Close Combat Systems Picatinny NJ/ Ft Belvoir VA		900		925	1Q	1414		1154	4393	

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February 2008

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4 - Advanced Component Development and Prototypes			0603619A - Landmine Warfare and Barrier - Adv Dev							606	
Program Management Contractor Support	C/FP	BRTRC Fairfax VA		122		494	2Q	543		598	1757
SBIR/STTR						688					688
Subtotal:				1022		2107		1957		1752	6838
Project Total Cost:				1022		24580		29234		19007	73843

Schedule Profile (R4 Exhibit)

February 2008

Event Name	FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
	Risk Reduction Effort - Broad Agency Announcement	[Red Grid]				[Blue Bar]																										
Advanced Mine Detection Sensors Concept Development	[Blue Bar]																															
Build Two Brassboards						[Blue Bar]																										
Test Brassboards	[Blue Bar]																													[Blue Bar]		
(1) Downselect						[Blue Bar]																										
(2) AMDS Milestone B	[Blue Bar]																													[Blue Bar]		
(3) AMDS Preliminary Design Review						[Blue Bar]																										
(4) AMDS Critical Design Review	[Blue Bar]				[Blue Bar]																									[Blue Bar]		
AMDS Prototype Deliveries									[Blue Bar]																							
	[Blue Bar]				[Blue Bar]																											

Schedule Detail (R4a Exhibit)

February 2008

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<u>Schedule Detail</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	
Risk Reduction Effort - Broad Agency Announcement		2Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 2Q			
Advanced Mine Detection Sensors Concept Development			2Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Build Two Brassboards		2Q - 4Q	1Q - 2Q					
Test Brassboards			3Q - 4Q	1Q				
Downselect				2Q				
AMDS Milestone B				3Q				
AMDS Preliminary Design Review					4Q			
AMDS Critical Design Review						2Q		
AMDS Prototype Deliveries							4Q	
AMDS DT/OT								
AMDS DT/OT Milestone C								