

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2006

BUDGET ACTIVITY

PE NUMBER AND TITLE

4 - Advanced Component Development and Prototypes

0603619A - Landmine Warfare and Barrier - Adv Dev

COST (In Thousands)	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	11141	0	8439	39929	44475	19008	4213	0	146265
606 CNTRMN/BARRIER ADV DEV	11141	0	8439	39929	44475	19008	4213	0	146265

A. Mission Description and Budget Item Justification: This program element provides for component development of new mine, counter mine, demolition, non-lethal, and shoulder launched munitions/systems by prototyping modern munitions technology, logic networks, fuzes, power sources, warhead components and modules into complete systems. This Program Element provides for development of grenades, munition simulators, and pyrotechnic devices. Additionally, this Program Element (PE) provides for the Intelligent Munitions System (IMS). The IMS provides the Future Combat System (FCS) unit of action with capability of intelligent mines, both lethal and non-lethal, demolitions includes sensors/seekers used by the US Army. It will enhance the effectiveness of the unit of action by providing networked munitions and real time targeting data capabilities. The IMS will significantly enhance minefield effectiveness through coordinated attack/tactics and elimination of overwatch forces. This PE also provides for the initiation and/or continuation of component development of the Airborne Surveillance Target Acquisition, and Minefield Detection System (ASTAMIDS) a Future Combat System complementary system. GSTAMIDS and ASTAMIDS are FCS Complementary programs.

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	FY 2005	FY 2006	FY 2007
<u>B. Program Change Summary</u>			
Previous President's Budget (FY 2006)	15843	0	8311
Current BES/President's Budget (FY 2007)	11141	0	8439
Total Adjustments	-4702	0	128
Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings	-4702		
SBIR/STTR Transfer			
Adjustments to Budget Years			128

Change Summary Explanation: Funding:

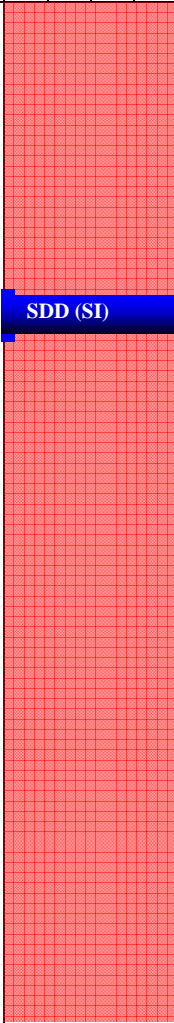





FY2005: Congressional increase was placed into incorrect PE. Funds were reprogrammed out of this PE to be executed in the correct PE.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)								February 2006	
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 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
606 CNTRMN/BARRIER ADV DEV	11141	0	8439	39929	44475	19008	4213	0	146265
A. Mission Description and Budget Item Justification: This project provides for component development of new countermines 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 Airborne Surveillance, Target Acquisition, and Minefield Detection System (ASTAMIDS) and Ground Standoff Mine Detection System Future Combat Systems (GSTAMIDS FCS). With the advent of the Army's Future Force Transformation, the GSTAMIDS Program has been restructured to meet the countermines requirements for the FCS. The April 2003 Joint Requirements Oversight Council (JROC) approved the FCS Operational Requirements Document (ORD) which includes countermines requirements. ASTAMIDS and GSTAMIDS have been identified in FCS Spinouts 2 and 3 respectively as part of the Chief of Staff of the Army's initiative to spiral future capabilities to the current force. The GSTAMIDS Ground Penetrating Radar (GPR) Sensor Upgrade will be integrated into the Husky Mine Destruction Vehicle which provides the capability to interrogate and neutralize mines.									
Accomplishments/Planned Program						<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	
ASTAMIDS - Conducted airborne data collection of imaginary at both Yuma Proving Grounds and AP Hill to facilitate the development of the minfield detection and target acquisition algorithms..						7481	0	0	
Test planning, preparation ,and support for ASTAMIDS.						2125	0	0	
ASTAMIDS Modeling, Analysis and Engineering support.						1535	0	0	
Initiate GSTAMIDS Ground Penetrating Radar Sensor (GPR) Upgrade Integration.						0	0	8439	
Total						11141	0	8439	
B. Other Program Funding Summary	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
PE 0604808A, Project 415, Mine Neutralization/Detection	14117	28909	36118	47165	65543	56352	21167	CONT	CONT
S11500, ASTAMIDS	0	0	0	11708	12860	12487	12631	CONT	CONT
R68102 GSTAMIDS/Interim capability	0	0	197061	272116	226063	219910	304123	CONT	CONT
C. Acquisition Strategy The Airborne Surveillance, Target Acquisition and Minefield Detection System (ASTAMIDS) prime contractor was competitively selected and awarded a System Development and Demonstration (SDD) contract after Milestone B approval. A sole source production contract with multiple options is anticipated. Program transitioned from 6.3 to 6.4 in FY06. GSTAMIDS FCS entered the SDD Phase in 3QFY04 with MDA approval and competitively selected SDD Cost Plus Fixed Fee (CPFF)									

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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
4 - Advanced Component Development and Prototypes	0603619A - Landmine Warfare and Barrier - Adv Dev	606
contract.		

ARMY RDT&E COST ANALYSIS (R3)										February 2006		
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 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
ASTAMIDS	C-CPIF	Northrup Grumman, Melbourne, FL	25169	7481	1Q	0		0		0	32650	32650
GSTAMIDS GPR	TBD	TBD	0	0		0		7450	2Q	0	7450	Continue
Subtotal:			25169	7481		0		7450		0	40100	Continue
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
ASTAMIDS	MIPR	NVESD Ft Belvoir VA	2287	528	1Q	0		0		0	2815	0
ASTAMIDS	MIPR	Various	769	245	1-4Q	0		0		0	1014	0
GSTAMIDS FCS - Forward Looking	TBD	TBD	0	0		0		989	1Q	Continue	989	0
Subtotal:			3056	773		0		989		Continue	4818	0
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
ASTAMIDS	MIPR	DTC, MD	623	782	2Q	0		0		0	1405	0
Subtotal:			623	782		0		0		0	1405	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Program Management	In-house	PM-CCS Picatinny NJ /	697	570	1-4Q	0		0		0	1267	1267

ARMY RDT&E COST ANALYSIS (R3)									February 2006			
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes			PE NUMBER AND TITLE 0603619A - Landmine Warfare and Barrier - Adv Dev								PROJECT 606	
		Ft Belvoir VA										
Program Management Contractor Support	C-FP	BRTRC Farifax VA	1212	1535	1Q	0		0		0	2747	2765
Subtotal:			1909	2105		0		0		0	4014	4032
Project Total Cost:			30757	11141		0		8439		0	50337	36682

Schedule Profile (R4 Exhibit)																			February 2006																																		
BUDGET ACTIVITY										PE NUMBER AND TITLE																			PROJECT																								
4 - Advanced Component Development and Prototypes										0603619A - Landmine Warfare and Barrier - Adv Dev																			606																								
Event Name										FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				FY 11																			
										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																
(1) GSTAMIDS Ground Penetrating Sensor																		▲ ₁ MS B																																			
(2) IPD																																																					
Production																																																					
ASTAMIDS																																																					
System Integration																																										SDD (SI)											
System Demonstration																																										SDD (SD)											
(3) MS C																																														▲ ₃ MS C							
Production																																																		Production			
Autonomous Mine Detection																																																					
Development																																																					

Schedule Detail (R4a Exhibit)						February 2006	
BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes			PE NUMBER AND TITLE 0603619A - Landmine Warfare and Barrier - Adv Dev			PROJECT 606	
<u>Schedule Detail</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
ASTAMIDS Transition from SI to SD portion of SDD	4Q						
GSTAMIDS Ground Penetrating Radar (GPR) Sensor			2Q				