

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2008

BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes		PE NUMBER AND TITLE 0603653A - ADVANCED TANK ARMAMENT SYSTEM (ATAS)						PROJECT C03	
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
C03 INTERIM ARMORED VEHICLE (IAV) FAMILY	8391	143568	108012						259971

A. Mission Description and Budget Item Justification: This project supports the development of the Family of Stryker vehicles. A critical need exists to improve the deployability and operational effectiveness of rapid response/early entry forces. The Stryker equipped Brigade Combat Team (BCT) is capable of deployment to anywhere on the globe in a combat ready configuration. Immediate response by a lethal, versatile, tactically agile joint force capable of operational maneuver once in the Area of Operations has been essential in fulfilling the warfighting needs of the U. S. Army. The Stryker family includes: Infantry Carrier Vehicle (ICV), Reconnaissance Vehicle (RV), Mobile Gun System (MGS), Mortar Carrier (MC), Commander's Vehicle (CV), Fire Support Vehicle (FSV), Engineer Squad Vehicle (ESV), Medical Evacuation Vehicle (MEV), Anti-Tank Guided Missile Vehicle (ATGM), and Nuclear/Biological/Chemical Reconnaissance (NBC RV). The use of the common platform/common chassis design reduces requirements for repair parts and logistics support in the area of operations. RDTE funding is for integration of the mission equipment packages that make each platform unique and effective, and for vehicle testing to include developmental, production qualification, live fire and initial operational test and evaluation.

<u>Accomplishments/Planned Program:</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Completed Live Fire Test & Evaluation on the two remaining Stryker developmental vehicles, NBCRV and MGS, which included Coupon Testing, Ballistic Armor Characterization Testing (BAC), Control Damage Experiment (CDE) testing, Automatic Fire Extinguishing System (AFES) testing and Full Up System Level (FUSL) testing. Initial Operational Testing and Evaluation (IOT&E) is aslo complete for the NBCRV along with a 1QFY08 scheduled completion date set for the MGS as well as a 2QFY08 scheduled date for the upcoming MGS MS III full production rate decision.	4300	1000	
Sustained contractor support efforts for remaining government testing, i.e., Live Fire Test and Evalaution (LFT&E) and Initial Operational Test and Evaluation (IOTE) on the NBCRV and MGS.	526	350	
Undergo development and engineering for OIF (Operation Iraqi Freedom), Survivablity and ONS (Operational Needs Statements) issues on the Stryker Base vehicles, e.g., Hull Protection Kits, Tire Fire Kits, Improved Common Ballistic Shields, 360 Situational Awareness and Belly Armor efforts.		9600	5800
Begin activities to support MS B for the Stryker Product Improvement Program (SPIP). Target date is 2QFY09. Will develop system performance specifications, conduct trade studies, develop concept designs, undergo modeling and simulation activities and conduct technical demonstrations. Establishing a separate project code to capture and track those improved capabilities and activities associated with Stryker PIP.		124101	95962
Government Systems Engineering and Program Management.	315	2500	6250
Integration of M151E2 Protector on a Light Tactical Vehicle.	1450		
New technologies to include Open Architecture Electronic Enhancements in the area of Power and Data Management Architecture to increase the Strykers' capabilities on the battlefield.	1800		

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Weapons and Munitions Advanced Technology.		2000	
Small Business Innovative Research/Small Business Technology Transfer Program (SBIR/STTR)		4017	
Total	8391	143568	108012

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<u>B. Program Change Summary</u>	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)	8569	142486	108709
Current BES/President's Budget (FY 2009)	8391	143568	108012
Total Adjustments	-178	1082	-697
Congressional program reductions		-918	
Congressional rescissions			
Congressional increases		2000	
Reprogrammings	63		
SBIR/STTR Transfer	-241		
Adjustments to Budget Years			-697

Change Summary Explanation: Funding - FY 2008: A \$2 million Congressional plus-up for the Northern Ohio Integrated Command Operations Program was inadvertently placed in this PE. A revision to the DD 1414, Base for Reprogramming has been made to move this add to 0603004A, Weapons and munitions Advanced Technology for proper execution.

<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
PA, WTCV, G85100 Stryker	1430583	959730	1174947	1070308	1371519	840419	248976	938700	8035182

Comment: Expecting MS III decision for the MGS 2QFY08. Contract award for Full-Rate Production of that vehicle system will follow thereafter.

D. Acquisition Strategy FY07 funding supported remaining test efforts prior to MS III/full-rate production decisions for the NBCRV & MGS. Both vehicle systems will have completed all phases of the Live Fire program and IOTE testing through 1QFY08. FY08 and FY09 funding begins future enhancements and product improvements to the various configurations within the Stryker Family of vehicles as well as engineering and development efforts related to OIF, Survivability, and ONS issues. As the Stryker Family of vehicles continue to be deployed, we will explore, enhance and increase the survivability of the Stryker. This includes the vehicle's Hull Protection and Tire Fire Kits, Improved Common Ballistic Shields, 360 Situation Awareness and Belly Armor initiatives.

ARMY RDT&E COST ANALYSIS (R3)

February 2008

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
4 - Advanced Component Development and Prototypes			0603653A - ADVANCED TANK ARMAMENT SYSTEM (ATAS)							C03		
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
Stryker Development/Engineering	CPAF	GDLS Sterling Heights, MI	334546	3250	2-4Q	9600	2-3Q	5800	1-3Q		353196	353196
Stryker PIP Development/Engineering/Pre-MS-B Activities						124101	2-3Q	95962	1-3Q		220063	220063
GFE	Requisitions	Various	851								851	851
Prototype Development (8)	Firm Fixed Price	GM GDLS DG L.L.C. Shelby, MI	29215								29215	29215
Training Devices	MIPR	PEO-STRI, Orlando, FL	11420								11420	11420
Miscellaneous Contractor Support			1246								1246	1246
Small Business Innovative Research/Small Business Technology Transfer Program			9687			4017					13704	13704
Subtotal:			386965	3250		137718		101762			629695	629695
Remarks: Stryker development/engineering supports the Stryker Family of Vehicles future enhancements efforts.												
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
Other Gov't Agencies	MIPR	TACOM, Warren, MI / Various	18346			2000	1-3Q	4875	1-3Q		25221	25221
Source Selection Board		MIPR	2300								2300	2300
Subtotal:			20646			2000		4875			27521	27521
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

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Developmental System Testing	MIPR	ATEC, APG, MD/Various	104659	1754							106413	106413
Fort Lewis Concept Prove Out	MIPR	BCT Materiel Dev Cell, Ft Lewis, WA	1118								1118	1118
Procure Test/Evaluation Vehicles	Competitive / CPAF	General Motors/General Dynamics Land Systems Defense Group L.L.C. Shelby, MI	3735								3735	3735
Live Fire Test & Evaluation	MIPR	Army Test Center, Army Research Lab, Army Evaluation Center	26706	2078							28784	28784
Initial Operational Test & Evaluation	MIPR	OTC, Ft. Knox, KY	83837	468	2-3Q	1000	1Q				85305	85305
Contractor Support to Test	CPFF	GM GDLS DG L.L.C. Shelby, MI	20998	253	2Q	350	2Q				21601	21601
Weapons and Munitions Advanced Technology		Northern Ohio, Toledo Integrated Command Ops				2000					2000	2000
Subtotal:			241053	4553		3350					248956	248956
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
PMO	N/A	TACOM, Warren, MI	9795	315	1-2Q	319	1Q	875	1Q		11304	11304
PM Support (Contractor)	Competitive / Various	Warren, MI	2147	273		181	1-2Q	500	1-2Q		3101	3101
Subtotal:			11942	588		500		1375			14405	14405
Project Total Cost:			660606	8391		143568		108012			920577	920577

Schedule Profile (R4 Exhibit)

February 2008

BUDGET ACTIVITY		PE NUMBER AND TITLE																PROJECT											
4 - Advanced Component Development and Prototypes		0603653A - ADVANCED TANK ARMAMENT SYSTEM (ATAS)																C03											
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
Full Production - Stryker 8		Full Production - Stryker 8																											
NBCRV IOT&E	NBCRV IOTE																												
(1) NBCRV Extended LRIP	NBCRV Extended LRIP																												
NBCRV Extended Reliability Growth Test	NBCRV Extended RGT																												
(2) NBCRV MS III	NBCRV MS III																												
MGS IOT&E	MGS IOTE																												
(3) MGS MS III	MGS MS III																												
MGS Full Production	MGS Full Production																												
(4) Stryker Product Improvement Program MS B (T)	Stryker PIP MS B (T)																												
(5) Stryker Product Improvement Program MS C (T)	Stryker PIP MS C (T)																												

Schedule Detail (R4a Exhibit)

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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>	
MS II								
Stryker Initial Production								
IOC								
IOT&E								
MS III								
Full Production - Stryker 8	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
NBCRV								
NBCRV IPR								
NBCRV Initial Production								
NBCRV IOT&E	1Q							
NBCRV Extended LRIP		1Q						
NBCRV Extended Reliability Growth Test		3Q - 4Q	1Q - 4Q	1Q				
NBCRV MS III				3Q				
MGS Development								
MGS IPR (14)								
MGS Initial Production								
MGS IPR (58)								
MGS IOT&E		1Q						
MGS MS III		2Q						
MGS Full Production		2Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q	
Stryker Product Improvement Program MS B (T)			2Q					
Stryker Product Improvement Program MS C (T)						3Q		