

UNCLASSIFIED

Committee Staff RDT&E Backup Book
FY 2008 Global War on Terror Budget Estimate
Submission Cost Adjustment – September 2007

DESCRIPTIVE SUMMARIES OF THE



**RESEARCH, DEVELOPMENT, TEST AND EVALUATION
ARMY APPROPRIATION**

Department of the Army
Office of the Secretary of the Army (Financial Management and Comptroller)

Persuasive in Peace, Invincible in War

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**DESCRIPTIVE SUMMARIES FOR PROGRAM ELEMENTS
OF THE
RESEARCH, DEVELOPMENT, TEST AND
EVALUATION, ARMY APPROPRIATION
FY 2008 GLOBAL WAR ON TERROR BUDGET ESTIMATE
SUBMISSION COST ADJUSTMENT
SEPTEMBER 2007**

**Department of the Army
Office of the Assistant Secretary of the Army (Financial Management and Comptroller)**

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 Department of the Army
 FY 2008 RDT&E GWOT Budget Estimate Cost Adjustment
 Summary

Exhibit R-1

September 2007

Summary Recap of Budget Activities	Thousands of Dollars			FY 2008 Total
	FY 2008 Base	FY 2008 GWOT Request	FY 2008 GWOT Request Cost Adjustment	
Basic research	0	0	0	0
Applied Research	34,869	0	40,000	74,869
Advanced Technology Development	0	0	0	0
Advanced Component Development and Prototypes	992	30,375	1,246	32,613
System Development and Demonstration	34,805	73,558	5,000	113,363
Management Support	5,800	20	0	5,820
Operational System Development	59,522	37,700	15,400	112,622
Total RDT&E, Army	135,988	141,653	61,646	339,287

UNCLASSIFIED
 Department of the Army
 FY 2008 RDT&E GWOT Budget Estimate Cost Adjustment
 Summary

Exhibit R-1

September 2007

					Thousands of Dollars			
Summary Recap of Budget Activities					FY 2008 Base	FY 2008 GWOT Request	FY 2008 GWOT Request Cost Adjustment	FY 2008 Total
Applied Research								
02	0602618A	Ballistics Technology	Project H80	Ballistics Technology	34,869	0	40,000	74,869
Total: Applied Research					34,869	0	40,000	74,869
Advanced Component Development and Prototypes								
04	0603747A	Soldier Support and Survivability	Project C08	Rapid Equipping Force	992	30,375	1,246	32,613
Total: Advanced Component Development and Prototypes					992	30,375	1,246	32,613
System Development and Demonstration								
05	0604601A	Infantry Support Weapons	Project S61	Aircrew Integrated Systems Engineering Development	2,542	8,158	0	10,700
05	0604642A	Light Tactical Vehicle	Project E46	Applied Vehicle Concepts	0	20,000	0	20,000
05	0604741A	Air Defense C2 and Intelligence Engineering Development	Project 149	Counter-Rockets, Artillery & Mortar (C-RAM) Development	9,923	38,900	0	48,823
05	0604746A	Automatic Test Equipment Development	Project L59	Diagnostic/Expert Systems Development	14,538	6,500	0	21,038
05	0605013A	Information Technology Development	Project 193	Medical Communications for Combat Casualty Care	7,802	0	5,000	12,802
Total: System Development and Demonstration					34,805	73,558	5,000	113,363
Management Support								
06	0605801A	Programwide Activities	Project M42	ARDEC CMD/CTR Support	5,800	20	0	5,820
Total: Management Support					5,800	20	0	5,820
Operational System Development								
07	0203764A	Tactical Wheeled Vehicle PIP	Project TW1	Tactical Wheeled Vehicle PIP	0	7,500	0	7,500
07	0303140A	Information Systems Security Program	Project 50B	Biometrics	13,330	23,300	0	36,630
07	0303150A	Army Global Command and Control System	Project C86	Army Global Command and Control System	24,836	3,800	0	28,636
07	0303158A	Joint Command and Control	Project 714	Joint Command and Control - Army	10,415	3,100	3,100	16,615
07	0305208A	Distributed Common Ground Systems	Project 956	Distributed Common Ground System (DCGS) (MIP)	10,941	0	12,300	23,241
Total: Operational System Development					59,522	37,700	15,400	112,622
RDT&E, Army					135,988	141,653	61,646	339,287

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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY
2 - Applied Research

PE NUMBER AND TITLE
0602618A - BALLISTICS TECHNOLOGY

COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
H80 BALLISTICS TECHNOLOGY			74869					

A. Mission Description and Budget Item Justification: FY 08 Base: The goal of this project is to provide key technologies required for armor and armaments that will enable US dominance in future conflicts across a full spectrum of threats. The program supports the Army vision by focusing on more lethal and more deployable weapons and on survivability technologies to lighten the Future Force and, where feasible, exploits opportunities to enhance Current Force capabilities. The challenge is to ensure combat overmatch and survivability while achieving rapid deployability in a lighter weight platform (less than 20 tons). Specific technology thrusts include: lightweight armors and structures to defeat existing and emerging ballistic threats; universal Active Protection to defeat/degrade threats before they reach the combat platform; crew and component protection from ballistic shock, mine-blast, and fuel or ammunition fires; insensitive high energy propellants/munitions to increase lethality of compact weapon systems and to reduce propellant/munition vulnerability to attack; novel kinetic energy penetrator concepts to maintain/improve lethality while reducing the size/mass of the penetrator; novel multi-function warhead concepts to enable defeat of full-spectrum of targets (anti-armor, bunker, helicopter, troops); affordable precision munitions technologies for launch, flight, and precision strike; physics-based techniques, methodologies, and models to analyze combat effectiveness of future technologies for improved ballistic lethality and survivability. The work is conducted at the Army Research Laboratory (ARL), Aberdeen Proving Ground, MD, and provides required technologies for advanced development programs at the Armaments Research, Development, and Engineering Center (ARDEC), Picatinny Arsenal, NJ; the Tank and Automotive Research, Development, and Engineering Center (TARDEC), Warren, MI; and the Aviation and Missile Research, Development, and Engineering Center (AMRDEC), Huntsville, AL. The cited work is consistent with Strategic Planning Guidance, the Army Science and Technology Master Plan (ASTMP), the Army Modernization Plan, and the Defense Technology Area Plan (DTAP). Work in this project is performed by ARL.

FY 08 GWOT Request: Survivability technologies to include armor, active protection, detection and neutralization technologies for Mine-Resistant Ambush-Protected (MRAP) vehicles will be developed, designed, and integrated onto various MRAP platforms by the Army Research Laboratory (ARL), Aberdeen Proving Ground, MD, the Tank and Automotive Research, Development, and Engineering Center (TARDEC), Warren, MI, the Armaments Research, Development, and Engineering Center (ARDEC), Picatinny Arsenal, NJ; the Communications and Electronics Research, Development, and Engineering Center (CERDEC) at Ft. Belvoir, VA and Ft. Monmouth, NJ, and the Aviation and Missile Research, Development, and Engineering Center (AMRDEC), Huntsville, AL. This GWOT request will enable spiral armor systems augmented with other protection, detection and neutralization technologies to provide future upgrades for MRAP vehicles. In addition, both vulnerability and automotive analyses will be conducted to optimize technology distribution to the platforms.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY
2 - Applied Research

PE NUMBER AND TITLE
0602618A - BALLISTICS TECHNOLOGY

<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			34869	
Current BES/President's Budget (FY 2008)			74869	
Total Adjustments			40000	
Congressional Program Reductions				
Congressional Rescissions				
FY 08 GWOT Request			40000	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base:
 34,869 Thousand
 FY 08 GWOT
 0 Thousand
 FY 08 GWOT Cost Adjustment
 40,000 Thousand
 FY 08 Total
 74,869 Thousand

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

September 2007

BUDGET ACTIVITY 2 - Applied Research		PE NUMBER AND TITLE 0602618A - BALLISTICS TECHNOLOGY					PROJECT H80		
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	
H80 BALLISTICS TECHNOLOGY			74869						

A. Mission Description and Budget Item Justification: FY 08 Base: The goal of this project is to provide key technologies required for armor and armaments that will enable US dominance in future conflicts across a full spectrum of threats. The program supports the Army vision by focusing on more lethal and more deployable weapons and on survivability technologies to lighten the Future Force and, where feasible, exploits opportunities to enhance Current Force capabilities. The challenge is to ensure combat overmatch and survivability while achieving rapid deployability in a lighter weight platform (less than 20 tons). Specific technology thrusts include: lightweight armors and structures to defeat existing and emerging ballistic threats; universal Active Protection to defeat/degrade threats before they reach the combat platform; crew and component protection from ballistic shock, mine-blast, and fuel or ammunition fires; insensitive high energy propellants/munitions to increase lethality of compact weapon systems and to reduce propellant/munition vulnerability to attack; novel kinetic energy penetrator concepts to maintain/improve lethality while reducing the size/mass of the penetrator; novel multi-function warhead concepts to enable defeat of full-spectrum of targets (anti-armor, bunker, helicopter, troops); affordable precision munitions technologies for launch, flight, and precision strike; physics-based techniques, methodologies, and models to analyze combat effectiveness of future technologies for improved ballistic lethality and survivability. The work is conducted at the Army Research Laboratory (ARL), Aberdeen Proving Ground, MD, and provides required technologies for advanced development programs at the Armaments Research, Development, and Engineering Center (ARDEC), Picatinny Arsenal, NJ; the Tank and Automotive Research, Development, and Engineering Center (TARDEC), Warren, MI; and the Aviation and Missile Research, Development, and Engineering Center (AMRDEC), Huntsville, AL. The cited work is consistent with Strategic Planning Guidance, the Army Science and Technology Master Plan (ASTMP), the Army Modernization Plan, and the Defense Technology Area Plan (DTAP). Work in this project is performed by ARL.

FY 08 GWOT Request: Survivability technologies to include armor, active protection, detection and neutralization technologies for Mine-Resistant Ambush-Protected (MRAP) vehicles will be developed, designed, and integrated onto various MRAP platforms by the Army Research Laboratory (ARL), Aberdeen Proving Ground, MD, the Tank and Automotive Research, Development, and Engineering Center (TARDEC), Warren, MI, the Armaments Research, Development, and Engineering Center (ARDEC), Picatinny Arsenal, NJ; the Communications and Electronics Research, Development, and Engineering Center (CERDEC) at Ft. Belvoir, VA and Ft. Monmouth, NJ, and the Aviation and Missile Research, Development, and Engineering Center (AMRDEC), Huntsville, AL. This GWOT request will enable spiral armor systems augmented with other protection, detection and neutralization technologies to provide future upgrades for MRAP vehicles. In addition, both vulnerability and automotive analyses will be conducted to optimize technology distribution to the platforms.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 Base: Optimize advanced lightweight structural, ceramic, and electromagnetic armor technologies for transition to Future Force vehicle designers, current, and Future Force platforms and tactical vehicles. In FY08, will mature hybrid armor designs with lower densities that defeat tactical vehicle threats; experimentally validate optimized third generation armor, and structure configurations for Future Force threats; explore novel electromagnetic armor mechanisms for full spectrum defeat.			9861	
FY 08 Base: Mature mine blast, ballistic shock mitigation, and crew protection technologies to enable survivability of current and Future Force platforms, ground tactical vehicles, and the individual Soldier. In FY08, will design lightweight, easily installed blast-penetrator protection (to include better seat designs) for occupants of tactical wheeled vehicles; experimentally prove response of an ammo event minimizing lethal effects within crew compartment.			3500	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

September 2007

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
2 - Applied Research	0602618A - BALLISTICS TECHNOLOGY	H80
FY 08 Base: Mature advanced technologies to enable a broad spectrum of affordable precision munitions. Mature a multi-disciplinary approach to munition system design by coupling physics-based models of interior ballistics, launch dynamics, flight mechanics, and high-G guidance, navigation, and control technologies to enable smaller, cheaper, and lighter low-collateral-damage precision munitions for future asymmetric operations in Military Operations on Urban Terrain. In FY08, will perform an integrated flight demonstration of a supersonic medium-caliber interceptor; experimentally validate smaller, lighter, cheaper munitions components and transition to development community.		4350
FY 08 Base: Mature propulsion and energetics technologies. Evaluate, select, and validate novel/nanostructural insensitive energetic materials concepts that exploit managed energy release and are required for improving the effectiveness and reducing the vulnerability of Future Force gun/missile systems and warheads. In FY08, will utilize reactive materials, novel energetics, and nano-structured materials to enhance propellant, igniter, explosive performance, reduce sensitivity, and provide increased multipurpose applications; formulate, evaluate, and characterize propulsion and detonation performance of common low-cost novel insensitive formulations; employ experiments, modeling, and simulation to reduce munition vulnerability and enhance performance and effectiveness.		4650
FY 08 Base: Mature active protection counter-munition and sensor technologies to effectively defeat all anti-armor munitions including kinetic energy projectiles, which is critical to enable survivability of Future Force platforms. In FY08, will mature enhanced explosive warhead technology and experimentally validate versus kinetic energy and shaped charge threats.		1600
FY 08 Base: Mature advanced ammunition and lethality technologies. Identify and model preferred options to reduce energy/mass required to defeat emerging armor threats and to provide multi-purpose capabilities for revolutionary Future Force lethality. In addition, investigate technology options for scaling warhead lethality to enhance Military Operations on Urban Terrain (MOUT) war fighting including control of collateral damage. In FY08, will perform end-to-end validation of multi-threat objective projectile (M-TOP) warhead; transition M-TOP technologies (including analytic and numerical models for weapons effects) to ARDEC and AMRDEC; mature scalable warhead component technologies and prepare for possible technology transitions.		4175
FY 08 Base: Devise state-of-the-art survivability/lethality/vulnerability methodologies to dynamically model the interaction of conventional ballistic threats versus Future Force systems. In FY08, will mature methodologies to analyze emerging technologies and survivability in a networked, system of systems context and will validate for production use.		6733
FY 08 GWOT Request: In FY08, explore proven expedient armor solutions at reduced weights against emerging threats using a combination of standard ballistic instrumented test protocols and high performance computing with goal of achieving a weight-neutral or an enhanced performance armor solutions relative to current armor being pursued; demonstrate and mature high-performing, reduced-weight/alternate-materials for armor designs. With improving armor designs, perform integration and automotive assessments of additional weight impacts to MRAP platforms. Continue threat characterization along with vulnerability analysis to support design decisions as well as address evolving threat. Evaluate current and enhanced seating technologies to provide enhanced blast crew survivability. Augment armor with emerging protection technologies to include detection and neutralization systems. Selected armor/non-armor solutions will undergo testing at ATEC on MRAP Platforms for the purpose of fulfilling Urgent Material Release (UMR) requirements/Safety Certification/Capabilities and Limitations Report (CLR).		27500
FY 08 GWOT Request: Funds will be transferred to the Marine Corps in support of joint MRAP efforts		12500
Total		74869

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes		PE NUMBER AND TITLE 0603747A - Soldier Support and Survivability							PROJECT C08	
COST (In Thousands)	FY 2006 Actual	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
C08 RAPID EQUIPPING FORCE			32613							32613

A. Mission Description and Budget Item Justification: The US Army Rapid Equipping Force (REF) was established to provide urgently needed state-of-the-art technology to soldiers in the field to meet immediate warfighter needs under operational conditions in the current theaters. The REF Forward Teams in Iraq and Afghanistan work with Combatant Commanders and the soldiers to identify warfighter needs while REF Rear formulates solutions and rapidly delivers/fields new equipment to the deployed units. REF solutions are rapid responses to evolving, adaptable and changing, mostly asymmetric threats, in any operational environment. Projects will be aimed at improving mission mobility/survivability including evaluating concepts and hardware/software that accomplish this with current platforms and possible new platforms and or non-platform (satellites) solutions. The REF was designed to bridge the gap between the lengthy acquisition process and warfighter equipping needs that should not be delayed. Specifically the REF is charged to: EQUIP operational commanders with off-the-shelf (government or commercial) solutions or near term developmental items that can be researched, developed and acquired quickly - ideally within 90 days. INSERT future force technology solutions that engaged and deploying forces require by developing, testing and evaluating key technologies and systems under operational conditions. ASSESS capabilities and advise Army stakeholders of findings that will enable forces to confront an adaptive enemy rapidly.

FY 08 GWOT funding will provide for safety confirmation, capabilities and limitation testing, GOTS/COTS and near term development, and science and technology development, as described below.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 Base: The REF was designed to bridge the gap between the lengthy acquisition process and warfighter equipping needs that should not be delayed. Specifically the Rapid Equipping Force is charged to: EQUIP operational commanders with off-the-shelf (government or commercial) solutions or near-term developmental items that can be researched, developed and acquired quickly - ideally, within 90 days. INSERT future force technology solutions that engaged and deploying forces require by developing, testing and evaluating key technologies and systems under operational conditions. ASSESS capabilities and advise Army stakeholders of findings that will enable forces to confront an adaptive enemy rapidly. The REF ensures safety testing of all equipment prior to release to the soldier. REF focuses on the development and testing of systems and mechanisms designed to detect, identify and defeat enemy equipment and actions designed to injure or kill and devices to help protect the warfighter.			992	
FY 08 GWOT: Safety confirmation, capabilities and limitation testing. Asymmetric Warfare Group (AWG) will conduct Combat Evaluation of vehicle modifications that provide increased survivability. Specifically, enhancements to turret systems and use of ballistic blankets to mitigate direct fire and blast effects. Provide RDTE flexibility for emerging research shortfalls to enhance force protection and soldier survivability. Effort will focus on emerging enhancements in body armor.			5000	
FY 08 GWOT: GOTS/COTS and near term developmental items to support Soldiers in OIF/OEF. Funding will cover an array of capabilities supporting our ability to see the enemy (both active and passive systems). The existing technologies and those currently under research and development are instrumental to the AWG's mission, specifically that of AW detection, mitigation, elimination, and defeat.			17375	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
4 - Advanced Component Development and Prototypes	0603747A - Soldier Support and Survivability	C08
<p>Categories within this line will seek capabilities that include Quick Reaction ISR technology solutions, rapid assessment of COTS as a potential solution to existing capability shortfalls, and next generation optics and counter optics. Enhanced capabilities in Intelligence Surveillance Reconnaissance (ISR) (to include ISR Distribution, Technical Surveillance Equipment, Tagging capabilities, and long range fused and infrared systems) will be fielded, assessed and recommended for transition to Army forces. Lifecycle costs are included for those applicable categories</p>		
<p>FY 08 GWOT: Science and Technology development. Provides RDTE funds to replicate enemy devices encountered during combat operations and allows for developing countermeasures to mitigate and defeat these threats through TTP and technology development. Funds allow for the internal evaluation of non standard systems that provide enhanced lethality over standard Army systems. Internal evaluation will focus on alternatives to standard systems ranging from small arms to enhanced explosives. Concepts include rifle fired grenades, obscuration, and modifications that provide user enhancement. Derived new/enhanced capabilities will provide basis for nomination and transition to the Army.</p>		
8000		
<p>FY 08 GWOT Cost Adjustment: Vanguard Sniper Defeat System (Vanguard). Integrated sniper defeat vehicle consisting of Kongsberg Protector Lite Remote Weapon Station, Doubleshot, and Boomerang. Allows vehicle crew to react to enemy fire, localize event, observe, and respond with force as required.</p>		
1246		
Total		
32613		

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes	PE NUMBER AND TITLE 0603747A - Soldier Support and Survivability	PROJECT C08
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<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			992	
Current BES/President's Budget (FY 2008)			32613	
Total Adjustments			31621	
Congressional Program Reductions				
Congressional Program Rescissions				
FY 08 GWOT Request			31621	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base
 992 Thousand
 FY 08 GWOT
 30,375 Thousand
 FY 08 GWOT Cost Adjustment
 1,246 Thousand
 Total
 32,613 Thousand

C. Other Program Funding Summary Not applicable for this item.

D. Acquisition Strategy The REF provides urgently needed, state-of-the-art technology to soldiers in the field to meet immediate requirements. REF Rear evaluates, utilizes or adapts currently available military or civilian items (COTS/GOTS) which typically have not been type classified for Army-wide use but are available and adaptable to the current Combatant Operational Commander's needs. The REF solution is a rapid response to evolving, adaptable and changing asymmetric threats in any operational environment. The REF was designed to bridge the gap between the lengthy acquisition process and warfighter equipping needs that should not be delayed. Specifically the REF is charged to: EQUIP operational commanders with off-the-shelf (government or commercial) solutions or near-term developmental items that can be researched, developed and acquired quickly, ideally, within 90 days. INSERT future force technology solutions that engaged and deploying forces require by developing, testing and evaluating key technologies and systems under operational conditions. ASSESS capabilities and advise Army stakeholders of findings that will enable forces to confront an adaptive enemy rapidly.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
4 - Advanced Component Development and Prototypes			0603747A - Soldier Support and Survivability									C08		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
GOTS/COTS for Soldier Support								18367	1-4Q				18367	
Science and Tech Development								8000	1-4Q				8000	
Vanguard Sniper Defeat System								1246	1-4Q				1246	
Subtotal:								27613					27613	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
ATEC- Safety Testing	MIPR							5000	1Q				5000	
Subtotal:								5000					5000	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
Project Total Cost:								32613					32613	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604601A - Infantry Support Weapons					PROJECT S61	
COST (In Thousands)	FY 2006 Actual	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
S61 ACIS ENGINEERING DEVELOPMENT			10700							10700

A. Mission Description and Budget Item Justification: This project provides System Development programs with improved aviator safety, survivability, and human performance that amplify the warfighting effectiveness and facilitates full-spectrum dominance of the Army aircraft including the AH-64 Apache/Longbow, CH-47 Chinook, UH/HH-60 Blackhawk, Light Utility Helicopter, and Armed Reconnaissance Helicopter. These programs include soldier systems and equipment which are unique and necessary for the sustainment, survivability, and performance of Army aircrews and troops on the future integrated battlefield. The Air Warrior program will provide the aircrew with a systems approach to noise protection, three-dimensional audio and external audio capability, microclimate conditioning, crash and post-crash survivability, concealment and environmental protection, ballistic protection, night vision capability and heads-up display, directed energy eye protection and flame/heat protection. Air Warrior enables the Army Aviation Warfighter to meet the approved Operational Requirements Document mission length of 5.3 hours with aviators in full chemical/biological protective gear. Preplanned block improvements integrating new technologies into the Air Warrior system will continue to enhance and maximize aircrew mission performance, comfort, aircrew station interface, safety, and survivability. These funds also resource improved laser protection against emerging new threat systems and product improvement of existing helmets to improve performance and increased commonality. Maximum advantage will be taken of simulation to reduce program technical risk through early user evaluation and to reduce program design and test cost and schedules.

The FY 2008 GWOT funds are for the Landmark and the Aircrew Wireless Intercom System (AWIS) Encryption development programs. The Landmark development program is an urgent priority project involving the rapid development and/or procurement/issuing of equipment used to support Personnel Recovery operations and is executed at the direction of the VCSA/Army G3. The program currently consists of two distinct efforts: Guidepost - Personnel Locator Beacons and supporting architecture; Landmark - Blue Force Tracking Identification System. Additional funds will ensure the AWIS Encryption capability is developed to provide Army Medical Evacuation crews with a secure wireless communication capability within the immediate vicinity of the helicopter while on the ground and conducting high risk wounded Soldiers recovery and rescue hoist missions in Iraq and Afghanistan.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 Base: Continue the integration of preplanned Air Warrior Block 2 and 3 improvements			1191	
FY 08 Base: Aircrew wireless intercom system (AWIS) encryption certification			1351	
FY 08 GWOT: AWIS encryption development			2717	
FY 08 GWOT: Landmark development and integration with additional platforms			2960	
FY 08 GWOT: Landmark Selective Available Anti-Spoofing Module Compliant Personnel Locator Beacon development and testing			2481	
Total			10700	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604601A - Infantry Support Weapons

PROJECT
S61

<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			2542	
Current BES/President's Budget (FY 2008)			10700	
Total Adjustments			8158	
Congressional Program Reductions				
Congressional Program Rescissions				
FY 08 GWOT Request			8158	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding: FY 08 - Anticipated FY 08 GWOT increase.

FY 08 Base
 2,542 Thousand
 FY 08 GWOT
 8,158 Thousand
 FY 08 GWOT Cost Adjustment
 0 Thousand
 Total
 10,700 Thousand

C. Other Program Funding Summary Not applicable for this item.

D. Acquisition Strategy The Landmark program GWOT requirement provides continuing development efforts to integrate the Landmark system with required platforms and optimize performance. The Aircrew Wireless Intercom System Encryption program GWOT requirement provides a secure wireless communications capability within the immediate vicinity of the helicopter while aircrews conduct high risk wounded Soldier recovery and rescue hoist missions in Iraq and Afghanistan. These efforts are achieved through cost plus fixed fee contracts and MIPRs to other government agencies.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604601A - Infantry Support Weapons									S61		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Air Warrior Development	C-CPFF	Various						2347	1-2Q				2347	
GWOT: Landmark Development	MIPR	Various Government						1582	3Q				1582	
GWOT: Guidepost Development	C-CPFF	Various						250	3Q				250	
GWOT: Landmark Selective Avail Anti-Spoofing Module Compliant Personnel Locator Beacon Devop & Test	Various	Various						2481	3Q				2481	
GWOT: Aircrew Wireless Intercom System Encryption	C-CPFF	Various						2717	1-4Q				2717	
Subtotal:								9377					9377	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Matrix Support	MIPR and Project Order	Various Government						38	1-4Q				38	
GWOT: Landmark Matrix Support	MIPR	AMRDEC						145	3Q				145	
GWOT: Landmark Development Support	C-CPFF	Various						108	3Q				108	
GWOT: Landmark Development Support	MIPR	CERDEC						568	3Q				568	
Subtotal:								859					859	

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604601A - Infantry Support Weapons									S61		
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Developmental Testing	MIPR	Various						28	1-2Q				28	
Subtotal:								28					28	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: PM Administration	Allotment	Various Government						129	1-4Q				129	
GWOT: Landmark PM Administration	C-FFP	Various						307	3Q				307	
Subtotal:								436					436	
Project Total Cost:								10700					10700	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604642A - LIGHT TACTICAL WHEELED VEHICLES							PROJECT E46	
COST (In Thousands)	FY 2006 Actual	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
E46 HMMWV Recap			20000							20000

A. Mission Description and Budget Item Justification: GWOT: Based on VCSA requirement, a new tactical truck is needed immediately because of shortcomings in the HMMWV fleet. This truck will be a replacement for some but not all of the HMMWV fleet based on unit requirements. The requirements for current combat situations include protection from small arms, improvised explosive devices, movement over urban and off road terrain, attachment of heavier weapons systems like CROWS, and data interchange program needs. The HMMWV has been operating at or over its approved combat load, creating a lack of needed mobility, maintenance problems, safety issues, and an inability to meet the needs of the data interchange program.

Supplemental: Since the Joint Light Tactical Vehicle program will not produce a vehicle until 2012, the Army will run a prototype competition during FY2007 with industry using commercial off the shelf (COTS) vehicles that meet some but perhaps not all of the Joint Light Tactical Vehicle (JLTV) requirements. Under a industry/government teaming concept, including manufacturers, vehicle customizers, government engineers and Soldiers, the COTS vehicles will be tested and modified and judged against the JLTV requirements. Modified HMMWVs will not be excluded from this competition. The results of this competition will be used to award a contract quickly and produce vehicles in a timely manner.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 GWOT: Combat Truck Development, Testing, & Integration			19000	
FY 08 GWOT: Support Costs (Engineering/Quality/Matrix Support)			1000	
Total			20000	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604642A - LIGHT TACTICAL WHEELED VEHICLES	PROJECT E46
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	FY 2006	FY 2007	FY 2008	FY 2009
<u>B. Program Change Summary</u>				
Previous President's Budget (FY 2008/2009)				
Current BES/President's Budget (FY 2008)			20000	
Total Adjustments			20000	
Congressional Program Reductions				
Congressional Program Rescissions				
FY 08 GWOT Request			20000	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding: FY 08 - anticipated FY 08 GWOT increase.

FY 08 Base
 0 Thousands
 FY 08 GWOT
 20,000 Thousands
 FY 08 GWOT Cost Adjustment
 0 Thousands
 FY 08 Total
 20,000 Thousands

C. Other Program Funding Summary Not applicable for this item.

D. Acquisition Strategy The Acquisition Strategy is to run a prototype competition with industry using commercial off the shelf (COTS) vehicles that meet some but perhaps not all of the Joint Light Tactical Vehicle (JLTV) requirements. The COTS vehicles will be tested and modified against the JLTV requirements. The result of this competition will be used to award a production contract for a limited amount of vehicles until the JLTV becomes available.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604642A - LIGHT TACTICAL WHEELED VEHICLES									E46		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Combat Truck Prototype	C/FP	TACOM, Warren, MI						15000	1Q				15000	
Subtotal:								15000					15000	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Combat Truck Testing	MIPR	ATC, Aberdeen, MD						4000	1Q				4000	
Subtotal:								4000					4000	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
PM Support Costs	N/A	Warren, MI						1000	1-2Q				1000	
Subtotal:								1000					1000	
Project Total Cost:								20000					20000	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604746A - Automatic Test Equipment Development							PROJECT L59	
COST (In Thousands)	FY 2006 Actual	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
L59 DIAGNOST/EXPERT SYS DE			21038							21038

A. Mission Description and Budget Item Justification: This project funds development of and system enhancements for the Next Generation Automatic Test System (NGATS). The NGATS, also known as the Base Shop Test Facility (BSTF) (V)6, is a general-purpose automatic test system that will provide test and diagnostic capabilities required to support current and future weapons and combat support systems and will facilitate retirement of aging and obsolete test equipment that is imposing increasing logistics and operations and support cost burdens. This project provides for continuing efforts to upgrade and improve general-purpose automatic test equipment to satisfy test and diagnostic requirements of the Army's new and upgraded weapon systems; development and adaptation of automatic test equipment required to overcome existing deficiencies and voids in organic test and diagnostic capabilities; development and testing of common procedures utilizing existing test program sets and software applications; and market surveys of commercially available test equipment, methods, and procedures to determine applicability to Army requirements. The test and diagnostic systems and procedures developed under this project are essential for ensuring the operational readiness, accuracy, and effectiveness of the Army's warfighting systems. This project also funds the Army's participation in a Defense initiative aimed at developing a common automatic test systems architecture that will enhance portability of all Services' test program sets and reduce expenditures for test equipment and personnel.

FY2008 Global War on Terrorism (GWOT) Request funds accelerated development of aviation and ground support test and diagnostic capability planned for spirals 2 and 3 to facilitate a faster replacement of obsolete automatic test equipment (ATE) essential to providing support required to maintain operational readiness of critical warfighting weapon systems.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY08 Base: Develop and test a Joint Services compliant, rapidly deployable, general-purpose automatic test system (ATS)			5000	
FY08 Base: Further develop and test system to implement planned spiral development and increase supported weapons platforms			5000	
FY08 Base: Develop and test new hardware and software required to consolidate all ATS support requirements in this single test system			3000	
FY08 Base: Develop and evaluate new software applications to increase Integrated Family of Test Equipment capability			1538	
FY 08 GWOT: Develop and integrate electro-optics testing capability in NGATS to support critical ground combat systems.			3000	
FY 08 GWOT: Test integration of test program sets for vital weapons platforms engaged in ongoing GWOT combat operations.			3500	
Total			21038	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604746A - Automatic Test Equipment Development	PROJECT L59
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<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			14538	
Current BES/President's Budget (FY 2008)			21038	
Total Adjustments			6500	
Congressional Program Reductions				
Congressional Program Rescissions				
FY 08 GWOT Request			6500	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base:
 14,538 Thousand
 FY 08 GWOT
 6,500 Thousand
 FY 08 GWOT Cost Adjustment
 0 Thousand
 FY 08 Total
 21,038 Thousand

C. Other Program Funding Summary Not applicable for this item.

D. Acquisition Strategy This developmental project consists of cooperative in-house and competitive and sole-source contractual actions. When the necessary expertise and capability are available within the Department of Defense, services required for the individual development projects are ordered from the government source; otherwise commercial contracts are used. Equipment required for developmental projects is obtained by contract from the commercial supplier. Developmental efforts for the Next Generation Automatic Test System (NGATS) are being completed under a sole-source contract awarded to the prime contractor for the Integrated Family of Test Equipment off-platform testers. NGATS will follow an evolutionary acquisition strategy using spiral development. The NGATS Increment 1 will replace the Direct Support Electrical Systems Test Set (DSESTS). Increments 2 and 3 will replace the BSTF (V) 3 and BSTF (V) 5 systems respectively.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604746A - Automatic Test Equipment Development									L59		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Hardware Development	Various	Various						4299	2-3Q				4299	
Base: Software Development/Verification/Validation	Various	Various						8414	2-3Q				8414	
GWOT: Prototype Development	SS/CPFF	Northrop Grumman, Rolling Meadows, IL						369	2Q				369	
GWOT: Prototype Development	SS/CPFF	Northrop Grumman, Rolling Meadows, IL						3192	4Q				3192	
GWOT: Hardware Development	Various	Various						468	2Q				468	
GWOT: Software Development - IFTE	Various	Various						468	2Q				468	
Subtotal:								17210					17210	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Project Management		Various						525	1-4Q				525	
Base: Other Direct		Various						500	1-4Q				500	
GWOT: Project Management		Various						761	1-4Q				761	
GWOT: Other Direct		Various						271	1-4Q				271	
Subtotal:								2057					2057	

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604746A - Automatic Test Equipment Development

PROJECT
L59

III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Operational Testing	Various	Various						800	1-4Q				800	
GWOT: Operational Testing	Various	Various						315	4Q				315	
GWOT: Developmental Testing	Various	Various						656	1Q				656	
Subtotal:								1771					1771	

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														

Project Total Cost:								21038					21038	
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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604741A - Air Defense Command, Control and Intel - Eng							PROJECT 149	
COST (In Thousands)	FY 2006 Actual	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
149 COUNTER-ROCKETS, ARTILLERY & MORTAR (C-RAM) DVPMT			48823							48823

A. Mission Description and Budget Item Justification: Counter-Rockets, Artillery and Mortar (C-RAM) is a spiral initiative non developmental program initiated by the Army Chief of Staff in response to Iraqi theatre threat and twice validated theater Operational Needs Statement (ONS). The primary mission of the C-RAM program is to develop, procure, field and maintain a system that can detect rocket, artillery or mortar launches; warn the defended area with sufficient time for personnel to take cover; intercept rounds in flight, thus preventing damage to ground forces or facilities; and enhance response to and defeat of enemy forces. C-RAM utilizes a system of systems (SoS) approach, and is comprised of a combination of multi-service fielded and non-developmental item (NDI) sensors, command and control (C2) systems and a modified U.S. Navy intercept system, with a low cost commercial off-the-shelf (COTS) warning system and wireless local area network. The system will be fielded to various echelons, fixed or semi-fixed-site, providing them correlated air and ground pictures and linking them to the Army Battle Command System (ABCS) and the Joint Defense Network (JDN), via various forms of communications to provide situational awareness and exchange of timely and accurate information to synchronize and optimize automated Shape, Sense, Warn, Intercept, Respond and Protect decisions.

The fielding of the C-RAM SoS will be accomplished through an incremental fielding approach that is driven by an urgent operational need, theater priorities and emerging capability requirements to provide counter-RAM capability to fielded forces. Increments depend on the readiness of future technologies, value to the operational concept, enemy threat, affordability and integration considerations at the element and SoS level.

Current development efforts include the implementation of improvements and upgrades to C-RAM Increment I and the initial development of Increment II capabilities. C-RAM is transitioning from an IED Task Force Initiative to a Program of Record and is currently in the process of creating a formal acquisition strategy documentation support package. It will be managed as an ACAT I program upon formal designation as a program of record.

FY 2008 GWOT funds will enhance C-RAM Response capability (digital clearance of fires, etc.), initiate consolidation of workstations and initiate improvements in the Shape function, and conduct system integration testing at Yuma Proving Ground (YPG).

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 Base: Develop advanced user interface/capabilities			4923	
FY 08 Base: Test/demonstration support for new C-RAM capabilities			5000	
FY 08 GWOT: Enhance C-RAM Response capability (digital clearance of fires, etc.), initiate consolidation of workstations and initiate improvements in the Shape function, and conduct system integration testing at Yuma Proving Ground (YPG).			38900	
Total			48823	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604741A - Air Defense Command, Control and Intel - Eng	PROJECT 149
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<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			9923	
Current BES/President's Budget (FY 2008)			48823	
Total Adjustments			38900	
Congressional Program Reductions				
Congressional Rescissions				
FY 08 GWOT Request			38900	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base
 9,923 Thousand
 FY 08 GWOT
 38,900 Thousand
 FY 08 GWOT Cost Adjustment
 0 Thousand
 Total
 48,823 Thousand

C. Other Program Funding Summary Not applicable for this item.

D. Acquisition Strategy The C-RAM program is following an evolutionary acquisition strategy for rapid acquisition of mature technology to the user. The approach will deliver capabilities in increments, recognizing up front the need for future improvements. The objective of the strategy is to balance needs and available capability with resources and put a robust capability to engage rockets, artillery, and mortars into the hands of the user quickly. Success will depend on continuous user feedback, consistent definition of capability needs, maturation of technology, and allocation of required resources. To achieve the evolutionary acquisition of C-RAM, the program director will collaborate and coordinate with the user, combat developer, tester, logistician, PEO C3T, and resource provider (e.g., G8). The program will follow the Spiral Development process (per DoDI 5000.2), where the desired capability is identified, but the end state requirements are not fully known at program initiation. Those end state C-RAM requirements will be refined through demonstration and risk management. Each fielded increment provides the user with the best possible capability over time. The requirements for future increments depend on feedback from users and technology maturation.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604741A - Air Defense Command, Control and Intel - Eng									149		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Northrop Grumman	ID/IQ CPFF	Carson, CA						2125	4Q				2125	
Base: Northrop Grumman	CPFF	Carson, CA						6298	2Q				6298	
Base: Program Management	MIPR	Various						1500	2Q				1500	
GWOT: C-RAM Sense, Warn, & Intercept	Various	Various						38900	1Q				38900	
Subtotal:								48823					48823	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
Project Total Cost:								48823					48823	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0605013A - Information Technology Development							
COST (In Thousands)	FY 2006 Actual	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
193 MEDICAL COMMUNICATIONS FOR COMBAT CASUALTY CARE			12802							12802

A. Mission Description and Budget Item Justification: Supports efforts to plan, design, develop, and test information technology solutions to fulfill the Army's Warfighter Support Mission and accommodate changing Army requirements while fulfilling future Army needs. Provides for development and acquisition of Combat Service Support (CSS) and business information technology solutions to help arm, sustain, fix, move, train and man the force. Completed development/acquisition efforts will also enhance sustaining base functions and power projection capabilities and facilitate global messaging and electronic data interchange (EDI). Ongoing development efforts support multiple functional areas including logistics, personnel, transportation, training, medical/health protection, and sustaining base.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0605013A - Information Technology Development

<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			7802	
Current BES/President's Budget (FY 2008)			12802	
Total Adjustments			5000	
Congressional Program Reductions				
Congressional Rescissions				
FY 08 GWOT Request			5000	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base:
 7,802 Thousand
 FY 08 GWOT
 0 Thousand
 FY 08 GWOT Cost Adjustment
 5,000 Thousand
 FY 08 Total
 12,802 Thousand

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration			PE NUMBER AND TITLE 0605013A - Information Technology Development						PROJECT 193	
COST (In Thousands)	FY 2006 Actual	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
193 MEDICAL COMMUNICATIONS FOR COMBAT CASUALTY CARE			12802							12802

A. Mission Description and Budget Item Justification: The Medical Communications for Combat Casualty Care (MC4) System provides multipliers to the medical force structure through the acquisition of digital communications and information technology solutions for the deployable medical forces. The MC4 System will also fulfill the requirements highlighted in United States Code; Title 10; Subtitle A; Part II; Chapter 55; Section 1074f; mandating the proper documentation of deployed service members to include pre and post deployment screening and its associated medical surveillance. The MC4 System will also interface Force Health Protection and medical surveillance information with Army Battle Command and Combat Service Support information technology systems as they evolve to support the Army Transformation. Current MC4 Program efforts are focused on system engineering, testing and integration, and fielding automation infrastructure for Army users of the Joint Theater Medical Information Program (TMIP) suite of software. FY 2008 core program funding provides support system engineering, integration and developmental testing of information management/information technology to better support Force Health Protection in the Army Campaign Plan and Global War On Terrorism units. This funding will also support the integration of MC4 onto the Future Combat System vehicle.

Additional FY08 supplemental funding will provide test, evaluation and integration resources for the rapid deployment of enhanced medical software to the MC4 Baseline. It will provide enhanced critical capabilities to units deployed to OIF/OEF and ensures this capability remains technically sustained in theater throughout unit rotations. The Army needs this enhanced automated capability to support casualty health care delivery and support the longitudinal medical record for deployed forces. This capability supports the Wounded Warrior Accountability System, and secondarily, the Virtual Soldier Family Assistance System.

Accomplishments/Planned Program:	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 Base: Logistics Support Planning for Block I			135	
FY 08 Base: Logistics Support Planning for P3I and System Upgrades			363	
FY 08 Base: Logistics Support Planning for Block 2 TMIP and subsequent releases			376	
FY 08 Base: Engineering and Technical Support for P3I and System Upgrades			856	
FY 08 Base: Engineering and Technical Support for Block 2 and subsequent releases TMIP			3300	
FY 08 Base: MC4 Testing for P3I and System Upgrades			1285	
FY 08 Base: MC4/TMIP Integration and Testing for Block 2 and subsequent releases TMIP			782	
FY 08 Base: Engineering, Technical Support, and Testing to support and interface MC4 onto Future Combat Systems vehicle			705	
FY 08 GWOT Cost Adjustment Request: Engineering, Technical Support, Integration and Testing to support rapid deployment of enhanced medical software to theater			5000	
Total			12802	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0605013A - Information Technology Development	PROJECT 193
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<u>B. Other Program Funding Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
OPA SSN MA8046 (MC4)			21954							21954
OMA APE 432612			13831							13831

Comment: FY08 OPA supports initial fielding and training of MC4 systems (to include TMIP software) to Army units with medical capability. FY08 OMA supports help desk, hardware/software maintenance and systems administration to fielded systems.

C. Acquisition Strategy The MC4 Program supports a number of Army Medical Information Technology/Communications initiatives. The near and mid-term focus of the MC4 program is to engineer, design, test, acquire and field the Army specific automation/communications infrastructure capabilities supporting the Joint Theater Medical Information Program (TMIP) integrated software application suite and other Army requirements. The hardware being procured is Commercial-off-the-Shelf (COTS). Since TMIP software is a major component of the MC4 System, the MC4 Program will deliver capabilities in increments, recognizing the need for future system upgrades and Preplanned Product Improvements (P3Is). The MC4 Program will continue to work with the user community to continually define and refine additional requirements and match them with available technologies to provide the user enhanced capabilities. These enhanced capabilities will be provided to the user at the earliest possible date. This approach yields the most operationally useful and supportable capability in the shortest time possible with Cost As an Independent Variable. Moreover, this approach provides an initial capability with the explicit intent of delivering improved and updated capability in subsequent upgrades and P3Is. This spiral development approach will be accomplished through a rapid prototyping process that will progress the system from its current functional capabilities to fully integrated objective capabilities. Appropriate commercial technology enhancements (e.g. advances in operating systems, voice activated technology, etc) will be incorporated into MC4 products and systems as they become available. Each MC4 System component will undergo a full range of developmental testing to include software unit testing, integration testing, interoperability testing and software qualification testing. The MC4 system upgrades and improvements will continue to undergo follow-on operational testing.

In FY08 emphasis is placed on rapid deployment of enhanced medical software to the MC4 Baseline in deployed forces in theater. Additional effort is required to provide and maintain an enhanced critical capability to units deployed to OIF/OEF and ensures that the capability remains technically sustained in theater throughout unit rotations. This enhanced capability also support the Wounded Warrior Accountability System.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0605013A - Information Technology Development									193		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Logistics Planning	In House	PMO, Ft. Detrick, MD					1-4Q	874	1-4Q				874	
Subtotal:								874					874	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
MC4 Integration and Testing	C/CPFF	Titan, Reston, VA					1Q	4067	1Q				4067	
MC4/TMIP System Engineering	C/CPFF	John Hopkins University (JHU) Applied Physics Lab, Laurel, MD					1Q	7861	1Q				7861	
Subtotal:								11928					11928	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
Project Total Cost:								12802					12802	

Schedule Profile (R4 Exhibit)

September 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0605013A - Information Technology Development

PROJECT
193

Event Name	FY 06				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	1	2	3	4
P3Is																																

Schedule Detail (R4a Exhibit)

September 2007

BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0605013A - Information Technology Development					PROJECT 193	
<u>Schedule Detail</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>	<u>FY 2012</u>	<u>FY 2013</u>
P3Is		1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q			
MC4 P3Is development, test, and integration	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q			

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 6 - Management support	PE NUMBER AND TITLE 0605801A - Programwide Activities						PROJECT M42		
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	
M42 ARDEC CMD/CTR Support			5820						

A. Mission Description and Budget Item Justification: Supports the non-Army Management Headquarters Activity (AMHA) management and administrative functions at the U.S. Army Armament Research, Development and Engineering Center (ARDEC), Picatinny Arsenal, NJ.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 Base: Provide continued operation of management and administrative functions at a level consistent with mission requirements and support needs at ARDEC.			5800	
FY 08 GWOT: Conduct vulnerability reviews and analyzes current and potential domestic/foreign enemy threats. Coordinate and provide threat support to materiel developers and the scientific/technical community. Maintain complete database of current intelligence information for ARDEC and insures all source intelligence is applied and included early in development and throughout lifecycle of Army Technology Objectives (ATO), Advanced Concept Technology Demonstrations (ACTD), Advanced Technology Demonstrations (ATD) and other efforts. Conduct and report pre/post briefings for Iraq deployment initiatives.			20	
Total			5820	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 6 - Management support	PE NUMBER AND TITLE 0605801A - Programwide Activities	PROJECT M42
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<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			5800	
Current BES/President's Budget (FY 2008)			5820	
Total Adjustments			20	
Congressional Program Reductions				
Congressional Program Rescissions				
FY 08 GWOT Request			20	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base
5,800 Thousand
FY 08 GWOT
20 Thousand
FY 08 GWOT Cost Adjustment
0 Thousand
FY 08 Total
5,820 Thousand

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY		PE NUMBER AND TITLE							PROJECT	
7 - Operational system development		0203764A - Tactical Wheeled Vehicle Improvement Program							TW1	
COST (In Thousands)	FY 2006 Actual	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
TW1 TWV PRODUCT IMPROVEMENT PROGRAM			7500							7500

A. Mission Description and Budget Item Justification: The Hardwire initiative is to provide improved vehicle protection at significantly reduced weight compared to existing armor systems, particularly for light tactical vehicles such as the High-Mobility Multipurpose Wheeled Vehicle (HMMWV) at a cost comparable to traditional steel and fiberglass compositions. The key feature of the Hardwire armor system is a steel wire-polymer composite that provides support to and significantly increases the strength of ceramic and metal layers without incurring the high costs of traditional composite materials. The goals of the program is to transition the armor production paradigm from a boutique, small-throughput operation to one similar to precision, high-throughput automotive manufacturing. By decreasing the weight of the protection system, it can possibly allow for larger cargo capacity, increased passenger weight, etc.

FY 08 GWOT funding in this program will continue the development and testing of the composite material solutions to provide armor vehicle protection at a reduced vehicle weight capability. The main supplemental will allow for additional development and testing.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Performance and responsibilities for the manufacturing technology development of Hardwire armor technology, Phase I.			7500	
Total			7500	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0203764A - Tactical Wheeled Vehicle Improvement Program	PROJECT TW1
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	FY 2006	FY 2007	FY 2008	FY 2009
<u>B. Program Change Summary</u>				
Previous President's Budget (FY 2008/2009)				
Current BES/President's Budget (FY 2008)			7500	
Total Adjustments			7500	
Congressional Program Reductions				
Congressional Rescissions				
FY 08 GWOT Request			7500	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding: FY 08 - Anticipated FY 08 GWOT increase.

FY 08 Base
 0 Thousands
 FY 08 GWOT
 7,500 Thousands
 FY 08 GWOT Cost Adjustment
 0 Thousands
 FY 08 Total
 7,500 Thousands

C. Other Program Funding Summary Not applicable for this item.

D. Acquisition Strategy Not applicable for this item.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0203764A - Tactical Wheeled Vehicle Improvement Program									PROJECT TW1		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Product Development	CPIF	Hardwire, Pocomoke, MD						6173	2Q				6173	
Subtotal:								6173					6173	

Remarks: Effort will integrate Hardwire Armor into Army vehicles by developing materials and manufacturing capabilities to perform vehicle integration and scale up production.

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
REF Support	Direct	REF, Ft Belvoir, MD						600					600	
Subtotal:								600					600	

Remarks: Remarks: Hardwire LLC, Pocomoke, MD

III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
APG, MD	MIPR	APG, MD						727	2Q				727	
Subtotal:								727					727	

Remarks: DARPA-developed Hardwire armor technology, Phase I. Materials and manufacturing research and development to scale-up production and improve performance of manufacturing technology for reduced weight armor vehicle protection systems. Coupon characterization testing, Live fire test of full up vehicle configuration, 3,000 mile vehicle performance test. 152-94-2 test standard for armor - note this is RDT&E phase not procurement. Testing will continue as materials are produced and installed on test vehicles

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0203764A - Tactical Wheeled Vehicle Improvement Program	PROJECT TW1
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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														

Project Total Cost:								7500					7500	
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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0303140A - Information Systems Security Program							PROJECT 50B	
COST (In Thousands)	FY 2006 Actual	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
50B BIOMETRICS			36630							36630

A. Mission Description and Budget Item Justification: Secretary of the Army (SA) is the Executive Agent for the DoD Biometrics (automated methods of human recognition) Program. The DoD Biometrics program consists of the DOD Biometric Management Office (BMO), DoD Biometric Fusion Center (BFC), and Product Director (PD)-Biometrics, supports biometric research, testing, evaluation, and related activities. The BMO provides oversight, guidance, policy and standards support. The BFC provides technical expertise, early assessment of biometric capabilities, as well as industry and academia interface. PD-Biometrics provides acquisition support, repository management, DoD Automated Biometric Identification Support (ABIS) operations and maintenance, lifecycle management, and material development. The DoD Biometric program focuses on an enterprise approach, emphasizing interoperability and utilizing tested biometric technologies for incorporation into DoD business processes.

FY 2008 GWOT funds will move the biometrics program towards an enterprise solution, providing a multi-modal biometric capability to include local watch list synchronization, secure web portal access, and service-oriented architecture. This would also include:
 Developing a common biometrically enabled watch list for DoD. Entailing both the technical means to implement the watch list and the organizational challenges of a common product.
 Developing the technical solution to address the untethered operation of biometric collection devices. This "last tactical mile" provides the ability to give the operator immediate feedback on the status of a biometric request.
 Identifying the shortfalls in current communications architecture to increase the efficiency and speed of biometric match results. The authoritative data source is the heart of the biometric process. The connections, protocols, and technology needed to provide a result in less than one minute will be defined within this effort.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 2008 Base: Conduct test and evaluation of biometric commercial hardware and software to determine suitability for use within DoD. Conduct modeling and simulation efforts to support operational evaluation. Conduct DoD-wide working groups to synthesize enterprise biometric requirements and abilities into biometrics technology demonstrations and pilot activities. Support biometric integration in existing command and control and MIS systems.			13330	
FY 2008 GWOT: Develop a common biometrically enabled watch list for DoD.			11000	
FY 2008 GWOT: Develop untethered operation of biometric collection devices.			9300	
FY 2008 GWOT: Identify the shortfalls in current communications architecture to increase the efficiency and speed of biometric match results.			3000	
Total			36630	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0303140A - Information Systems Security Program	PROJECT 50B
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<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			13330	
Current BES/President's Budget (FY 2008)			36630	
Total Adjustments			23300	
Congressional Program Reductions				
Congressional Program Rescissions				
FY 08 GWOT Request			23300	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base
13,330 Thousand
FY 08 GWOT
23,300 Thousand
FY 08 GWOT Cost Adjustment
0 Thousand
Total
36,630 Thousand

<u>C. Other Program Funding Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
TA0600 - Information Systems Security Program			3006							3006
432144 - Operations and Maintenance Army			11977							11977

D. Acquisition Strategy The objective of this project is to develop the DoD Automated Biometrics Identification System (ABIS) and biometric capability that will be managed at the enterprise level. ABIS currently provides a biometric matching capability that can identify national security threats in support of the Global War on Terrorism for a variety of functions. Primary focus for FY06 was to establish the biometrics program of record and develop a framework for leveraging technologies and processes to facilitate better sharing of biometric data on persons of interest collected and forwarded to other DoD agencies and to develop a biometric implementation strategy for Homeland Security Presidential Directive (HSPD)-12. The program will also continue to support the testing and evaluation of products and other analysis and evaluation of applicable technologies as well as finalize and synthesize an interoperable biometric enterprise approach. FY07 and beyond will continue to support technology, pilot test and evaluation activities and the

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0303140A - Information Systems Security Program

PROJECT

50B

deployment of biometric devices and systems used for biometric data collection and processing, physical access, logical access, identity proofing, intelligence exploitation, and law enforcement. A board selected Program Manager will be appointed at PEO EIS to ensure that biometric activities continue to serve the DoD communities that use biometric technology.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
7 - Operational system development			0303140A - Information Systems Security Program									50B		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Enterprise Development	Various	Various						13330	1-4Q				13330	
GWOT: Enterprise Development	Various	Various						23300	1-4Q				23300	
Subtotal:								36630					36630	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Subtotal:														
Project Total Cost:								36630					36630	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0303150A - WWMCCS/Global Command and Control System							PROJECT C86	
COST (In Thousands)	FY 2006 Actual	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
C86 ARMY GLOBAL C2 SYSTEM			28636							28636

A. Mission Description and Budget Item Justification: Global Command and Control System-Army (GCCS-A): This project is the Army component system that directly supports the implementation of the Global Command and Control System-Joint (GCCS-J). GCCS-A provides automated command and control tools for Army Strategic and Operational Theater Commanders to enhance warfighter capabilities throughout the spectrum of conflict during joint and combined operations in support of the National Command Authority (NCA). The GCCS-A developed software systems will dramatically improve the Army's ability to analyze courses of action; develop and manage Army Forces; and ensure feasibility of war plans. GCCS-A will provide a client-server layered architecture and functional best-of-breed software applications to develop a totally integrated component of the Global Command and Control System-Joint (GCCS-J).

Justification for FY08 GWOT Dollars:
 Supplemental funding will support the Army's efforts to implement Oracle database applications ensuring continued interoperability between Global Command and Control System - Joint (GCCS-J) and Global Command and Control System - Army (GCCS-A). Interoperability between GCCS-J and GCCS-A is critical in providing Situational Awareness to OIF/OEF units and Commanders. Lack of interoperability will break the interface with GCCS-J and OIF/OEF deployed units, and Commanders will not be provided with Situational Awareness received from the joint level nor will joint Commanders receive critical data needed from GCCS-A to lead OIF/OEF operations.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 Base: Perform Systems Engineering			1798	
FY 08 Base: Software Development			20084	
FY 08 Base: Perform Data Engineering			486	
FY 08 Base: Conduct Test and Evaluation			973	
FY 08 Base: Perform Program Support and Management Efforts			1495	
FY 08 GWOT: Perform Systems Engineering			1140	
FY 08 GWOT: Software Development			2660	
Total			28636	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0303150A - WWMCCS/Global Command and Control System	PROJECT C86
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<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			24836	
Current BES/President's Budget (FY 2008)			28636	
Total Adjustments			3800	
Congressional Program Reductions				
Congressional Rescissions				
FY 08 GWOT Request			3800	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base:
 24,836 Thousand
 FY 08 GWOT
 3,800 Thousand
 FY 08 GWOT Cost Adjustment
 0 Thousand
 FY 08 Total
 28,636 Thousand

C. Other Program Funding Summary Not applicable for this item.

D. Acquisition Strategy The GCCS-A Acquisition Decision Memorandum (ADM) dated 28 May 2002 directed development of a Block Implementation Plan (BIP), which identifies the Block 4-Operational requirements that will be developed from the GCCS-A unblocked 16 November 2000 Operational Requirement Document (ORD). GCCS-A Strategic Block 4 and the Operational Block 4 will coincide with the GCCS-J Block 4 [which begins the transition to Global Information Grid (GIG) Enterprise Services (GES)] Common Operating Environment (COE) 4.X, and Army Battle Command System (ABCS) 6.4 (Army Software Block 1). GCCS-A utilizes Commercial-Off-The-Shelf (COTS) and Government-Off-The-Shelf (GOTS) software products, in addition to developed software. Common Hardware (HW) platforms will be used within the Army to implement GCCS-A/GCCS-J, and include products from the Army's Common Hardware/Software-2 (CHS-2) contract. Follow-on development of GCCS-A 4.1 and 4.2 releases maintains concurrency with GCCS-J and begins implementation of NET-CENTRIC Web Based services. The next GCCS-A increment will be Increment 1 of Net-Enabled Command Capability (NECC) scheduled for FY10.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
7 - Operational system development			0303150A - WWMCCS/Global Command and Control System									C86		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Software Development	Competitive/H YBRID	Lockheed Martin Corp, Springfield, VA						6250	1-2Q				6250	
Base: Software Development	Competitive/H YBRID	Follow-on Contract TBD						5134	1-2Q				5134	
Base: Developmental Hardware/Licensing	Competitive	Various						1382	1-4Q				1382	
Base: Matrix	Government	CECOM, NJ & Ft Belvoir, VA						531	1-2Q				531	
Base: Technical Management	Government	PM Battle Command, Fort Monmouth, NJ						6787	1-4Q				6787	
Base: System Engineering	Competitive/T ime and Materials	Various						1798	2-4Q				1798	
GWOT: Software Development	Competitive/H YBRID	Lockheed Martin Corp, Springfield, VA						2470	2-3Q				2470	
GWOT: Technical Management	Government	PM Battle Command, Fort Monmouth, NJ						190	1-4Q				190	
GWOT: System Engineering	Competitive/C PAF	Lockheed Martin, Springfield, VA						1140	2-4Q				1140	
Subtotal:								25682					25682	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Support Contractors	Competitive/T ime and Materials	Various						486	2Q				486	
Subtotal:								486					486	

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0303150A - WWMCCS/Global Command and Control System	PROJECT C86
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III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Government	Government	PM Battle Command, NJ and VA						573	2Q				573	
Base: AEC	Government	Aberdeen Proving Ground, MD						400	1Q				400	
Subtotal:								973					973	

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Program Office Management	Government	PM Battle Command, NJ						1495	1-4Q				1495	
Subtotal:								1495					1495	

Project Total Cost:								28636					28636	
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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0303158A - Joint Command and Control - Army					PROJECT 714	
COST (In Thousands)	FY 2006 Actual	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
714 JOINT COMMAND AND CONTROL - ARMY			16615							16615

A. Mission Description and Budget Item Justification: The Joint Requirements Oversight Council Memorandum 163-03 (JROCM 163-03 established a need for, and directed evolving the current Global Command and Control System (GCCS) Family of Systems into a single joint command and control (C2) architecture and capabilities-based implementation. This implementation will be based on Global Information Grid (GIG) Enterprise Services (GES) and consists of joint mission capability packages. The Net-Enabled Command Capability, formerly known as Joint Command and Control (JC2), will provide a net-centric transformation of the Joint Force Commander's current C2 capabilities via a top-driven, capability-based approach that emphasizes jointness and is inclusive of our coalition partners.

Justification for FY08 GWOT Dollars:
 FY 2008 GWOT funding will support the Army's development of Phase IV of the Defense Readiness Reporting System -Army (DRRS-A). Phase IV requires additional development efforts for DRRS-A to maintain interoperability with DRRS Global. DRRS-A provides the critical unit readiness reporting capability that supports the Army's ability to plan and project forces into deployment rotation cycles. Phase IV adds key enhancements for security, medical information, installations, and expands the capability to plan forces and materiel in support of OIF/OEF.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 Base: System Engineering			1255	
FY 08 Base: Software Development			5211	
FY 08 Base: Data Engineering			1000	
FY 08 Base: Test and Evaluation			200	
FY 08 Base: Program Management			2749	
FY 08 GWOT: Software Development			3100	
FY 08 GWOT: Systems Engineering and Integration			3100	
Total			16615	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0303158A - Joint Command and Control - Army	PROJECT 714
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<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			10415	
Current BES/President's Budget (FY 2008)			16615	
Total Adjustments			6200	
Congressional program reductions				
Congressional rescissions				
FY 08 GWOT Request			6200	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base:
10,415 Thousand
FY 08 GWOT
3,100 Thousand
FY 08 GWOT Cost Adjustment
3,100 Thousand
FY 08 Total
16,615 Thousand

C. Other Program Funding Summary Not applicable for this item.

D. Acquisition Strategy Net-Enabled Command Capability (NECC) was formerly known as Joint Command and Control (JC2). Formal analysis was initiated to refine the NECC concept. The Assistant Secretary of Defense (ASD) approved NECC for entry into the Concept Refinement phase. The Assistant Secretary of Defense (ASD) directed the Deputy Assistant Secretary of Defense (DASD), C3, Space, and IT Programs to initiate and lead the completion of a successful NECC Capability Analysis of Alternatives (AoA) conducted in accordance with the approved guidance.

During the NECC Technology Development Phase, required acquisition documentation for milestone decision is being prepared and/or updated, as necessary.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
7 - Operational system development			0303158A - Joint Command and Control - Army									714		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: System Engineering	Competitive/Time and Materials	Various						1255	1Q				1255	
Base: Software Development	Competitive/TBD	TBD						5011	1-4Q				5011	
Base: Software Development	Government Matrix	AEC, Alexandria, VA						200	1-4Q				200	
GWOT: Software Development	Competitive/Time and Materials	Gestalt, King of Prussia, PA						3100	2-3Q				3100	
GWOT: Systems Engineering and Integration	Competitive/Time and Materials	Gestalt, King of Prussia, PA						1390	2-3Q				1390	
GWOT: Systems Engineering and Integration	Government	PM, Battle Command, Fort Monmouth, NJ						630	1-2Q				630	
GWOT: Systems Engineering and Integration	Competitive/PAF	Lockheed Martin, Springfield, VA						1080	2-3Q				1080	
Subtotal:								12666					12666	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Data Engineering	Competitive/Time and Materials	Various						1000	2Q				1000	
Subtotal:								1000					1000	

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
7 - Operational system development			0303158A - Joint Command and Control - Army									714		
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Government (AEC)	Government Matrix	Aberdeen Proving Ground, Aberdeen, MD						200	2Q				200	
Subtotal:								200					200	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Base: Program Management	Government	Various						774	1-2Q				774	
Base: Program Management	Competitive/Time and Materials	Various						1975	1-2Q				1975	
Subtotal:								2749					2749	
Project Total Cost:								16615					16615	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)								
COST (In Thousands)	FY 2006 Actual	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
956 Distributed Common Ground System (DCGS) (JMIP)			23241							23241

A. Mission Description and Budget Item Justification: Distributed Common Ground System - Army (DCGS-A) will serve as the primary ground system of systems for airborne and ground sensor platforms. DCGS-A enables the commander to achieve situational understanding by leveraging multiple sources of data, information and intelligence to synchronize the elements of Joint and Combined Arms combat power to See First, Understand First, Act First and Finish Decisively. The core functions of DCGS-A are: receipt and processing of space, airborne, ground and maritime ISR sensor data; control of select Army and joint ISR sensor systems; intelligence synchronization; ISR planning, reconnaissance and surveillance (R&S) integration; fusion of sensor information, and direction and distribution/dissemination of sensor information. DCGS-A draws information from a wide variety of automated and manual sources; on-board sensors, space platforms, unattended air and ground vehicles, existing and new ISR capabilities, and an assortment of databases to enable the land component commander to execute battle command, synchronize fires and effects, rapidly shift battle focus, achieve situational understanding, protect the force, and employ his forces more effectively. DCGS-A allows commanders at all levels to visualize and understand the threat and environment, predict threat intentions, execute targeting through targeting support, conduct ISR integration and support Information Operations.

Project 956 provides the DCGS-A enterprise system level design, net-centric architecture and infrastructure, to include integration of the U.S. Air Force developed DCGS Integrated Backbone (DIB).

DCGS-A includes hardware for Fixed and Mobile configurations and common software that is interoperable with sensors, other Battlefield Operating Systems (BOS), and the DoD Distributed Common Ground/Surface System (DCG/SS) Family of Systems (FoS). The DCGS-A hardware and software are scaleable and tailored by echelon and to the requirements of each mission, task, and purpose. Within the Brigade Combat Teams (BCTs), DCGS-A provides the Mobile ISR capability as well as an embedded software application on the Future Combat System (FCS) System of Systems (SoS) and other select platforms. At the Corps, Division and Echelons Above Corps (EAC), DCGS-A is composed of hardware and software in Mobile and Fixed site configurations. As a system of systems, DCGS-A will consolidate and replace the capabilities found in the following Current Force systems: All Source Analysis System (ASAS), CI/HUMINT Single Source Workstation, Tactical Exploitation System (TES), Guardrail Common Sensor (GRCS) Intelligence Processing Facility (IPF), Prophet Control, Common Ground Station (CGS), Digital Topographic Support System (DTSS) and Integrated Meteorological System (IMETS), sensor control and processing of select UAVs and Enhanced Trackwolf processing capabilities. DCGS-A will also integrate the capabilities currently developed and deployed by the Joint Intelligence Operations Capability-Iraq (JIOC-I) as a Quick Reaction Capability (QRC) in support of Operation Iraqi Freedom (OIF). DCGS-A is a key component of Transformation and a top Army priority.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

September 2007

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0305208A - Distributed Common Ground/Surface Systems (JMIP)

<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)			10941	
Current BES/President's Budget (FY 2008)			23241	
Total Adjustments			12300	
Congressional Program Reductions				
Congressional Rescissions				
FY 08 GWOT Request			12300	
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years				

Change Summary Explanation: Funding - FY 2008: Anticipated FY 08 GWOT increase.

FY 08 Base:

10,941 Thousand

FY 08 GWOT

0 Thousand

FY 08 GWOT Cost Adjustment

12,300 Thousand

FY 08 Total

23,241 Thousand

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

September 2007

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0305208A - Distributed Common Ground/Surface Systems (JMIP)							PROJECT 956	
COST (In Thousands)	FY 2006 Actual	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
956 Distributed Common Ground System (DCGS) (JMIP)			23241							23241

A. Mission Description and Budget Item Justification: Distributed Common Ground System - Army (DCGS-A) will serve as the primary ground system of systems for Army airborne and ground sensor platforms defined as Future Force systems. DCGS-A enables the commander to achieve situational understanding by leveraging multiple sources of data, information, and intelligence to synchronize the elements of Joint and Combined Arms combat power (maneuver, maneuver support and maneuver sustainment support). The core functions of DCGS-A are: receipt and processing of space, airborne, ground and maritime ISR sensor data; control of select Army and joint ISR sensor systems; intelligence synchronization; ISR planning, reconnaissance and surveillance (R&S) integration; fusion of sensor information, and direction and distribution/dissemination of sensor information. It draws information from a wide variety of automated and manual sources; on-board sensors, space platforms, unattended air and ground vehicles, existing and new ISR capabilities, and an assortment of databases to enable the land component commander to execute battle command, synchronize fires and effects, rapidly shift battle focus, achieve situational understanding, protect the force, and employ forces more effectively. DCGS-A allows commanders at all levels to visualize, analyze and understand the threat and environment, predict threat intentions, execute targeting through targeting support, conduct ISR integration and support Information Operations.

This project establishes the DCGS-A Federated Network Centric Enterprise, facilitating system integration and network-enabled capability of existing and future intelligence, surveillance and reconnaissance (ISR) ground stations, eventually consolidating these capabilities into a single system of systems. An enterprise level approach based on a Service Oriented Architecture (SOA) will provide Commanders' and Staffs' access to various ISR ground station information from any ground station, and data exchange between Army ISR ground stations for improved intelligence sharing and understanding. DCGS-A will achieve joint, allied and coalition interoperability through implementation of the 10.2 DCGS Integration Backbone (DIB) to access other Services data and information that is critical to the Land Component Commander.

FY08 base funds design, development and test of the DCGS-A enterprise level architecture and V4 Mobile Brigade Combat Team (BCT) test articles.

FY08 Global War on Terrorism (GWOT) Cost Adjustment request: Design and build V4 Mobile Brigade Combat Team (BCT) test article to support V4 Limited User Test (LUT).

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 08 Base: Joint interoperability test and evaluation to include Version 3 CTSF testing and FCS 1.1.			3050	
FY 08 Base: Design and development of DCGS-A enterprise level net-centric architecture in support of Current and Future Force systems.			6706	
FY 08 Base: Evaluate, integrate and test JIOC-I and other existing and new software applications and components for incorporation into the DCGS-A baseline.			1185	
FY 08 GWOT: Design and build V4 Mobile Brigade Combat Team (BCT) test article to support V4 Limited User Test (LUT).			12300	
Total			23241	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

September 2007

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0305208A - Distributed Common Ground/Surface Systems (JMIP)

PROJECT

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B. Other Program Funding Summary Not applicable for this item.

C. Acquisition Strategy DCGS-A will be executed via an evolutionary acquisition approach, providing incremental capability through Technology Insertion of Current Force systems and system development and demonstration (SDD) of CDD requirements. Each increment will incorporate and validate select DCGS-A capabilities into the overall DCGS-A system baseline, emphasizing migration of current force capabilities through integrated testing and continuous evaluation opportunities.

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
7 - Operational system development			0305208A - Distributed Common Ground/Surface Systems (JMIP)									956		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
SETA Support to Visualization/Data Sharing, Models, Simulation & Prototypes	T&M	Booz-Allen, Eatontown, NJ						1850	2Q				1850	
DCGS-A Product Selection and Integration	CP	CERDEC/Battle Labs						2265	1-2Q				2265	
SIL Software Integration	MIPR	CERDEC/RDCOM Ft. Monmouth, NJ						1366	1-4Q				1366	
Metadata Catalog	T&M							2460	2Q				2460	
V4 Mobile BCT Test Article	CP							12300	1Q				12300	
National Defense Imagery Processing Program	MIPR	Battle Labs												
Subtotal:								20241					20241	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Objective Doctrine/TTP Development To Support a Milestone B for ODCGS-A	MIPR	Ft. Huachuca, AZ						100	2Q				100	
Matrix Support	MIPR	CECOM, Fort Monmouth NJ						600	1Q				600	
Subtotal:								700					700	

ARMY RDT&E COST ANALYSIS (R3)

September 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE										PROJECT	
7 - Operational system development			0305208A - Distributed Common Ground/Surface Systems (JMIP)										956	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Joint Interoperability Test and Evaluation	MIPR	INSCOM						250	2Q				250	
Test support for DCGS-A development	MIPR	CTSF, Ft. Hood						1450	2Q				1450	
Subtotal:								1700					1700	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Project Management	In-House	PM, DCGS-A						600	1Q				600	
Subtotal:								600					600	
Project Total Cost:								23241					23241	

Schedule Profile (R4 Exhibit)

September 2007

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground/Surface Systems (JMIP)

PROJECT
956

Event Name	FY 06				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	1	2	3	4
(1) Limited User Test													<div style="text-align: center;">▲₁ LUT</div>																			
(2) Low Rate Initial Production													<div style="text-align: center;">▲₂ LRIP</div>																			

Schedule Detail (R4a Exhibit)

September 2007

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0305208A - Distributed Common Ground/Surface Systems (JMIP)

PROJECT
956

<u>Schedule Detail</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>	<u>FY 2012</u>	<u>FY 2013</u>
Fixed Site Initial Operational Capability (IOC)	4Q							
DCGS-A Version 3.0 Release	4Q							
DCGS-A Transit Case Configuration IOC		2Q						
DCGS-A Participation in FCS Ex 1.1		2Q						
Version 4 BCT IOC		2Q						
Version 4 Corps/Div IOC		4Q						
Milestone B		4Q						
Limited User Test				3Q				
Low Rate Initial Production				4Q				
DCGS-A IOT&E					4Q			
Full Rate Production Decision						1Q		
DCGS-A Transit Case Configuration IOC	2Q							
DCGS-A Participation in FCS Ex 1.1	2Q - 3Q							
Version 4 BCT IOC	2Q							
Version 4 Corps/Div IOC	4Q							
Milestone B	4Q							
Limited User Test			3Q					
Low Rate Initial Production			4Q					
DCGS-A IOT&E				4Q				
Full Rate Production Decision					1Q			