Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0603308A: Army Space Systems Integration

BA 4: Advanced Component Development & Prototypes (ACD&P)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	29.845	9.763	9.876	-	9.876	11.648	11.163	9.988	16.115	Continuing	Continuing
978: SPACE CONTROL	14.614	-	-	-	-	-	-	-	-	Continuing	Continuing
990: Space and Missile Defense Integration	15.231	9.763	9.876	-	9.876	11.648	11.163	9.988	16.115	Continuing	Continuing

Note

Army

Funds stated in the "Previous President's Budget (FY 2012)" row in column "Base FY 2013" should be 9868 rather than the 23336. Actual delta placed in "Adjustments to Budget Years" row in Column "Base FY 2013" should be amended to reflect -8 rather than -13460.

Funds realigned to higher priority requirements.

A. Mission Description and Budget Item Justification

The program element funds space systems integration efforts performed by the US Army Space and Missile Defense Command/ Army Forces Strategic Command (USASMDC/ARSTRAT) and the Program Executive Office for Intelligence, Electronic Warfare, and Sensors (PEO IEW&S).

USASMDC/ARSTRAT: Headquarters, Department of the Army General Order Number 37, dated 16 October 2006, designated USASMDC/ARSTRAT as the Army proponent for space and ground-based midcourse defense (GMD), the Army integrator for global missile defense, and the Army Service Component Command of U.S. Strategic Command (USSTRATCOM). As such, USASMDC/ARSTRAT is responsible to develop warfighting concepts, conduct warfighting experiments to validate those concepts, identify capabilities needed to implement the validated concepts, and develop Doctrine, Organization, Training, Material, Leadership & Education, Personnel and Facilities (DOTMLPF) solutions to realize those space related capabilities. Army Regulation (AR) 10-87 Army Commands, Army Service Component Commands, and the Direct Reporting Units, dated 4 September 2007 and AR 5-22 The Army Force Modernization Proponent System dated 19 August 2009 designates USASMDC/ARSTRAT as the Army specified proponent for Global Missile Defense and Space/High Altitude Capabilities.

Project #990 funds USASMDC/ARSTRAT to integrate warfighting concepts and technologies, validate concepts, and identify capabilities need to implement the validated concepts, and develop DOTMLPF solutions to realize those space and high altitude related capabilities. Sustains Joint Friendly Force Tracking (J-FFT) Mission Management Center and its associated testbed for both operations and spiral development for 24/7 Friendly Force Tracking integration into a real-time common operating picture for Combatant Commanders, Joint Task Force Commanders (JTF) and Coalition partners. The MMC injects real-time J-FFT information into the Common Operating Picture for COCOMs, JTFs and Coalition partners. USSTRATCOM, in accordance with CJCSI 3910.01 (reference V.4.) is designated one of three coordinating agencies for J-FFT within DoD. CJCSI 3910.01 directs eight specified tasks to USSTRATCOM. USSTRATCOM SI 534-5 (reference V.6.) and annually published USSTRATCOM operations orders have designated USASMDC/ARSTRAT as the lead USSTRATCOM component command for FFT.

PE 0603308A: Army Space Systems Integration UNCLASSIFIED

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DATE: February 2012

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APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0603308A: Army Space Systems Integration

BA 4: Advanced Component Development & Prototypes (ACD&P)

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	27.551	9.612	23.336	-	23.336
Current President's Budget	29.845	9.763	9.876	=	9.876
Total Adjustments	2.294	0.151	-13.460	=	-13.460
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	3.178	-			
SBIR/STTR Transfer	-0.641	-			
 Adjustments to Budget Years 	-	-	-13.460	-	-13.460
Other Adjustments 1	-0.243	0.151	-	-	-

DATE: February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army										DATE: February 2012			
APPROPRIATION/BUDGET ACTI	R-1 ITEM N	R-1 ITEM NOMENCLATURE PROJECT											
2040: Research, Development, Tes		PE 0603308A: Army Space Systems 978: SPACE CONTROL											
BA 4: Advanced Component Development & Prototypes (ACD&P)				Integration									
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To			
(4	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost		
978: SPACE CONTROL	14.614	-	-	-	-	-	-	-	-	Continuing	Continuing		
Quantity of RDT&E Articles													

Note

FY 2011-2015 funding for the Long Endurance Multi-Intelligence Vehicle (LEMV) was moved from program element (PE) 0603308A to 0305205A.

FY12-16 funding for Space Control Project 978 moved to PE 0604131, Project DT1

A. Mission Description and Budget Item Justification

Tactical Data Terminals (Space), a Program Office assigned to the PEO for Intelligence, Electronic Warfare, and Sensors (PEO IEW&S) is developing a mobile, ground-based, tactically-centric space information superiority capability to meet Joint Requirements and validated Training and Doctrine Command (TRADOC) capability gaps. The system is a forward-deployed platform to generate, receive, monitor, analyze and store satellite communications in direct support of the ground force Commander. The system is centered on a Modular and Open System Approach (MOSA) that will enhance (less time, less cost) future upgrades to meet emerging space capabilities. System mobility (using government-off-the-shelf (GOTS) tactical vehicles such as the potential Joint Light Tactical Vehicle (JLTV) or the Mine Resistant Ambush Protected (MRAP)) will enable the system to move to positions of geographical advantage to establish and maintain assured space data access and information superiority in support of Brigade tactical operations.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Space Control - Technology Development	14.614	-	-
Articles:	0		
Description: Funding is provided for the following effort			
FY 2011 Accomplishments:			
Performed risk reduction and technology maturation of competitive system prototypes to Technology Readiness Level 6.			
Completed Request for Proposal and prepare to openly compete the Engineering and Manufacturing Development Phase			
contract. Funds also were used for Program Management Office support and Security.			
Accomplishments/Planned Programs Subtotals	14.614	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Army

PE 0603308A: Army Space Systems Integration

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army	DATE : February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0603308A: Army Space Systems	978: SPACE CONTROL
BA 4: Advanced Component Development & Prototypes (ACD&P)	Integration	

D. Acquisition Strategy

The Product entered the Technology Development (TD) Phase in 3QFY09 following a successful Material Development Decision and Milestone A. The Program Office leveraged a Small Business Set Aside Competition to award two competitive prototype contracts. The Program is managing the competitive prototype contracts and leveraging Army and Other Government Agency Science & Technology efforts to retire maximum risk (cost, schedule, and performance) prior to competing and awarding a contract in support of the Engineering and Manufacturing Development (EMD) Phase.

	awarding a contract in support of the Engineering and Manufacturing Development (EMD) Phase.
	In FY12, the Product Office will complete Developmental Testing for the TD Phase (proving Technology is at TRL 6) and finalize documentation and entry criteria to support a subsequent Milestone B decision. Intent of the Acquisition Strategy is to capitalize on Open competition for the EMD contract with a goal of maximizing fixed price incentive firm (FPIF) contracts for post Milestone B efforts and firm-fixed-pricing (FFP) for production.
E	. Performance Metrics
	Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

PE 0603308A: *Army Space Systems Integration* Army

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603308A: Army Space Systems

Integration

DATE: February 2012

PROJECT

978: SPACE CONTROL

Management Services (\$ in Millio	ons)	FY 2	2012		2013 Ise			FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Space Control - Program and Security Management	Various	Program Management and Security Oversight:AL	8.271	-		-		-		-	Continuing	Continuing	Continuing
	Subtotal 8.271			-		-		-		-			

Product Development (S	Product Development (\$ in Millions)				2012		2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Space Control - Perform design, Development and subsystem integration	C/CPIF	Competitive Prototypes:CO, FL, PA	18.723	-		-		-		-	Continuing	Continuing	Continuing
Space Control - Perform sub- sytem risk reduction, testing, and validation	C/CPIF	2 X Competitive:Prototypes: CO, FL, PA	1.277	-		-		-		-	Continuing	Continuing	Continuing
Subtotal 20.000			-		-		-		-				

Support (\$ in Millions)				FY 2	2012		2013 se	FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Space Control - Government support and support contracts	C/FFPI OF	Program Management Office Functions:AL, CO	10.562	-		-		-		-	Continuing	Continuing	Continuing
	•	Subtotal	10.562	-		-		-		-			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603308A: Army Space Systems

Integration

DATE: February 2012

PROJECT

978: SPACE CONTROL

Test and Evaluation (\$	est and Evaluation (\$ in Millions)						2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Space Control - Test & Evaluation Support	Various	Developmental and Operational Testing:Various	4.809	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	4.809	-		-		-		-			
Total Prior Years Cost		FY 2	2012		2013 ise		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract		
		Project Cost Totals	43.642	-		-		-		-	-		

Remarks

PE 0603308A: Army Space Systems Integration Army

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Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Army	•						DATE: February 2012				
					R-1 ITEM NOMENCLATURE PE 0603308A: Army Space Systems Integration PROJECT 990: Space and Missile Defense Inte						egration		
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
990: Space and Missile Defense Integration	15.231	9.763	9.876	-	9.876	11.648	11.163	9.988	16.115	Continuing	Continuing		
Quantity of RDT&E Articles													

A. Mission Description and Budget Item Justification

Accomplishments/Planned Programs (\$ in Millians, Article Quantities in Each)

Project 990 funds United States Army Space and Missile Command/Army Strategic Command (USASMDC/ARSTRAT) efforts to develop, analyze and mature warfighting concepts, and conduct warfighting experiments for space and high altitude capabilities. The program also funds development and integration of new data sources and data services into the Joint Friendly Force Tracking Mission Management Center. The Mission Management Center (MMC) injects real-time Joint Friendly Force Tracking (J-FFT) information into the Common Operating Picture for Combatant Commands (COCOMs), Joint Task Forces (JTFs) and Coalition partners. USASMDC/ARSTRAT is the proponent for space / high altitude capabilities and is responsible for determining and integrating Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel and Facilities (DOTMLPF) for the Army.

USSTRATCOM, in accordance with CJCSI 3910.01 (reference V.4.) is designated one of three coordinating agencies for J-FFT within DOD. CJCSI 3910.01 directs eight specified tasks to USSTRATCOM. USSTRATCOM SI 534-5 (reference V.6.) and annually published USSTRATCOM operations orders have designated USASMDC/ARSTRAT as the lead USSTRATCOM component command for J-FFT.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Architecture Development, Wargames and Demonstrations	-	-	5.723
Description: Funding is provided for the following effort			
FY 2013 Plans: Continue to plan, develop, and execute architectures and combat development solutions for Army integration of space systems, space control capabilities, missile defense and high altitude systems. Represent Army positions and defend Army equities relative in Joint/DoD and inter-Service activities; e.g., Executive Agent for Space Program Assessments, etc. Participate and provide support to wargames and experiments where space, high altitude, and missile defense capabilities and technologies can be integrated and evaluated in the most realistic operating environment possible. This is necessary to ensure that space and high altitude capabilities gaps are identified and capabilities are correctly represented, so that the Army uses of these capabilities are explored. Develop space modernization strategies and sponsor exploration of future space, high altitude, and missile defense warfighting concepts. The Future Warfare Center (FWC) will continue efforts to enhance the resiliency and effectiveness of critical space-based assets.			
Title: Space and High Altitude System Integration and Experimentation Articles:	-	2.421 0	-

PE 0603308A: Army Space Systems Integration

Army

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army			DATE: Fel	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)		ROJEC 90: <i>Spac</i>	T ce and Missile	e Defense Int	egration
B. Accomplishments/Planned Programs (\$ in Millions, Article Qu	antities in Each)		FY 2011	FY 2012	FY 2013
Description: Funding is provided for the following effort.					
FY 2012 Plans: Continue experimentation in support of operational responsive space capabilities to both classified and unclassified Distributed Common G Warfare Center will continue efforts to enhance the resiliency and effects.	round System - Army (DCGS-A) variants. The Future				
Title: Concept Development, Wargames and Demonstrations		4:-1	15.231	4.240	-
Description: Funding is provided for the following effort	Al	ticles:	0	U	
Participated in updates to Army Capstone, Operational and Functional Participated and provided support to all Unified Quest wargames and capabilities are correctly represented, and those issues with the Army FY 2012 Plans: Continue to plan, develop, and execute concepts and combat develop control capabilities, missile defense and high altitude systems. Represented provide support to all Unified Quest and other wargames and expering are identified and capabilities are correctly represented, so that the A modernization strategies and sponsor exploration of future space, high	experiments to ensure that Space and High Altitude 's use of these capabilities are explored. pment solutions for Army integration of space systems, esent Army positions and defend Army equities relative architect (NSSA) Program Assessments, etc. Participations to ensure that space and high altitude capabilities rmy use of these capabilities are explored. Develop space	in te and s gaps			
Title: High Energy Laser Technolgy Program Support			-	-	0.78
			1		
Description: Funding is provided for the following effort. FY 2013 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0603308A: Army Space Systems	990: <i>Space</i>	and Missile Defense Integration
BA 4: Advanced Component Development & Prototypes (ACD&P)	Integration		

The state of the s			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Option 1 phase (25-50 kW hardware fabrication and test) of Robust Electric Laser Initiative (RELI) for integration onboard the High Energy Laser Mobile Demonstrator (HELMD) vehicle.			
Title: Joint Friendly Force Tracking (J-FFT) Testbed Articles:	-	3.102 0	3.368
Description: Funding is provided for the following effort			
FY 2012 Plans: The J-FFT Testbed will support specific task as directed by STRATCOM. These tasks include integrating new data sources, hardware and software devices, and data services into the J-FFT Mission Management Center (MMC). Continue to develop Friendly Force Tracking FFT capabilities for deployed and collation forces including Afghan National Forces. The Joint Friendly Force Tracking Division coordinates and executes USSTRATCOM-directed FFT tasks in order to assure continuous 24/7 FFT data services support to authorized users to include the Combatant Commands, the Services, agencies, allies, and coalition partners in order to improve their situational awareness (SA), enhance command and control (C2), and reduce fratricide in combat, homeland defense, civil and contingency operations. Additionally the J-FFT will be used to provide special tracking capabilities.			
FY 2013 Plans: As enhancements are made to network-enabled command and control systems and other systems are integrated into Combat Commanders friendly force tracking requirements the J-FFT Testbed will be used to integrate hardware and software prior to its deployment to the field. The FWC will continue to support development of FFT capabilities for deployed and collation forces. The Joint Friendly Force Tracking Division coordinates and executes USSTRATCOM-directed FFT tasks in order to assure continuous 24/7 FFT data services support to authorized users to include the Combatant Commands, the Services, agencies, allies, and coalition partners in order to improve their situational awareness (SA), enhance command and control (C2), and reduce fratricide in combat, homeland defense, civil and contingency operations.			
Accomplishments/Planned Programs Subtotals	15.231	9.763	9.876

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

Not applicable for this effort.

E. Performance Metrics

PE 0603308A: *Army Space Systems Integration* Army

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army								
R-1 ITEM NOMENCLATURE	PROJECT							
PE 0603308A: Army Space Systems	990: Space and Missile Defense Integration							
Integration								
	PE 0603308A: Army Space Systems							

Basic research projects lined to operations concepts or needs. SMDC/ARSTRAT is developing critical enabling technologies. Legacy or emerging systems have interoperability solutions identified.

F. Major Performer

BAE is under contract to develop software to support integration of new tracking data services into the J-FFT and support special tracking capabilities. This ensures 24/7 J-FFT data is available to support Combatant Commanders as coalition forces and technology change.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603308A: Army Space Systems

Integration

DATE: February 2012

PROJECT

990: Space and Missile Defense Integration

Product Development (\$ in Millio	ns)		FY 2	012		:013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Enhancement of J-FFT	C/CPFF	Colorado Springs:Colorado	17.029	3.100		3.400		-		3.400	0.000	23.529	0.000
		Subtotal	17.029	3.100		3.400		-		3.400	0.000	23.529	0.000

Support (\$ in Millions)				FY 2	012		2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
GOVT SUPPORT & SUPPORT CONTRACTS	C/CPFF	Various in Colorado Springs CO, Washington DC, and Huntsville AL:Various	92.940	6.663		6.476		-		6.476	Continuing	Continuing	Continuing
		Subtotal	92.940	6.663		6.476		-		6.476			

_								
	Total Prior							Target
	Years		FY 2013	FY 2013	FY 2013	Cost To		Value of
	Cost	FY 2012	Base	oco	Total	Complete	Total Cost	Contract
Project Cost Totals	109.969	9.763	9.876	-	9.876			

Remarks

PE 0603308A: Army Space Systems Integration Army

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army
BA 4: Advanced Component Development & Prototypes (ACD&P)

PROJECT

PE 0603308A: Army Space Systems
Integration

Integration

		FY 2011			FY 2012					FY 2013				FY 2014			FY 2015				FY 2016				FY 2017			
	1	2	3	4	1	2	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Development/synchronization of Army space and BMD DOTMLPF solutions.																												
Provide 24/7 support to Friendly Force Tracking.																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Army

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

2040: Research, Development, Test & Evaluation, Army PE 0603308A: Army Space Systems 990: Space and Missile Defense Integration

BA 4: Advanced Component Development & Prototypes (ACD&P) Integration

Schedule Details

	St	art	End			
Events	Quarter	Year	Quarter	Year		
Development/synchronization of Army space and BMD DOTMLPF solutions.	1	2012	4	2017		
Provide 24/7 support to Friendly Force Tracking.	1	2012	4	2017		