Date: May 2017 Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

Appropriation/Budget Activity

R-1 Program Element (Number/Name) PE 1206308A I Army Space Systems Integration

2040: Research, Development, Test & Evaluation, Army I BA 4: Advanced

Component Development & Prototypes (ACD&P)

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	20.432	-	20.432	24.127	22.633	21.041	43.869	Continuing	Continuing
FE5: Space And Missile Defense Integration	-	0.000	0.000	15.966	-	15.966	18.165	17.551	20.680	21.187	0.000	93.549
FE6: Army Space System Enhancement/Integration	-	0.000	0.000	4.466	-	4.466	5.962	5.082	0.361	22.682	Continuing	Continuing

A. Mission Description and Budget Item Justification

- PE 0603308A project 990 transition to PE 1206308A project FE5 beginning in FY 2018.
- PE 0603308A project EB7 transition to PE 1206308A project FE6 and PE 1205117A project FG3 beginning in FY 2018.

This 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 (PEO IEW&S).

Project FE5 funds USASMDC/ARSTRAT to integrate warfighting concepts and technologies, validate concepts, and identify capabilities needed to implement the validated concepts, and develop DOTMLPF solutions to realize those space and high altitude related capabilities. Provide engineering support to the Joint Friendly Force Tracking (J-FFT) Mission Management Center (MMC) through an associated test-bed for both operational and developmental injection and integration of realtime J-FFT information into the Common Operating Picture (COP) for Combatant Commanders (COCOMs), Joint Task Forces (JTFs), and Coalition Partners. The MMC injects real-time J-FFT information into the COP 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 Force Modernization 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 Friendly Force Tracking (FFT).

Project FE6: Details of this program are reported in accordance with Title 10, United States Code, Section 119 (a)(1).

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

Date: May 2017

Appropriation/Budget Activity

2040: Research, Development, Test & Evaluation, Army I BA 4: Advanced

Component Development & Prototypes (ACD&P)

R-1 Program Element (Number/Name)

PE 1206308A I Army Space Systems Integration

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	20.432	-	20.432
Total Adjustments	0.000	0.000	20.432	-	20.432
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
 Adjustments to Budget Years 	0.000	0.000	20.432	-	20.432

Change Summary Explanation

PE 0603308A project 990 transition to PE 1206308A project FE5 beginning in FY 2018.

PE 0603308A project EB7 transition to PE 1206308A project FE6 and PE 1205117A project FG3 beginning in FY 2018.

Exhibit R-2A, RDT&E Project Ju		Date: May 2017										
Appropriation/Budget Activity 2040 / 4	_	08A <i>I Army</i> 3	t (Number / Space Syste		mber/Name) e And Missile Defense							
COST (\$ in Millions) Prior Years FY 2016 FY 2017 Base					FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
FE5: Space And Missile Defense Integration	-	0.000	0.000	15.966	-	15.966	18.165	17.551	20.680	21.187	0.000	93.549
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Army

PE 0603308A project 990 transition to PE 1206308A project FE5 beginning in FY 2018.

A. Mission Description and Budget Item Justification

- PE 0603308A project 990 transition to PE 1206308A project FE5 beginning in FY 2018.

USASMDC/ARSTRAT: Headquarters, Department of the Army General Order 37, dated 16 October 2006, designated USASMDC/ARSTRAT as the Army proponent for space and ground-based midcourse defense (GBMD), the Army integrator for global missile defense (GMD), and the Army Service Component Command (ASCC) of the U.S. Strategic Command (USSTRATCOM). Army Regulation (AR) 10-87, Army Commands, Army Service Component Commands, and Direct Reporting Units, dated 4 September 2007, and AR 5-22, The Army Force Modernization Proponent System, dated 19 August 2009, designate USASMDC/ARSTRAT as the Army specified proponent for Global Missile Defense and Space/High Altitude capabilities. As the Army proponent for space, high altitude and GBMD, USASMDC/ARSTRAT is responsible for developing warfighting concepts, conduct warfighting experiments to validate those concepts, identify capabilities needed to implement the validated concepts, and develop Doctrine, Organizations, Training, Material, Leadership & Education, Personnel, Facilities and Policy (DOTMLPF-P) solutions to realize the GMD capabilities. As the Army integrator for global missile defense, USASMDC/ARSTRAT is responsible for reviewing programs managed by the Army, other Services, Defense agencies and National agencies to ensure that they are correctly synchronized and will ultimately provide the capabilities required by USSTRATCOM to execute its global missile defense responsibilities.

Project FE5 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. 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-P) for the Army. 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. 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 Force Modernization 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)	FY 2016	FY 2017	FY 2018
Title: : Architecture Development, Wargames and Demonstrations	-	-	13.016

PE 1206308A: Army Space Systems Integration

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Army			Date: N	1ay 2017				
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 1206308A I Army Space Systems Integration	FE5 / S	Project (Number/Name) FE5 I Space And Missile Defense Integration					
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018			
Description: Funding is provided for the following efforts								
Plan, develop, and execute architectures and combat development is capabilities, missile defense and high altitude systems. Represent A and high altitude domains in Joint/DoD and inter-Service activities; e Plan and execute wargames to evaluate emerging concepts within the and provide support to Army and Joint wargames and experiments we can be integrated and evaluated in the most realistic operating environce apability gaps are identified and capabilities are correctly represented and where possible, exploited. Develop space modernization strated warfighting concepts. USASMDC/ARSTRAT will continue efforts to based assets and JCIDS capability development activities for space and tactical launch systems. Products scheduled to be delivered in I Analysis of Alternatives and Cost -Benefit Analysis updates: Overhead Hostile use of Space Force Enhancement; and Position Navigation To and commence TAA 22-26 Capability Demand Analysis Phase. TAA required Army force structure within end strength and accounts for the necessary to comply with DOD guidance. Participate in the Army's Finderical development, capabilities determination, requirements approval, and new Rules of Allocation (ROA) will be developed to ensure SRC40 under the second strength and second support to the second support t	Army positions and defend Army equities relative to spate 1.g., Executive Agent for Space Program Assessments, the space and high altitude domains as well as participal where space and high altitude capabilities and technolo comment possible. Ensure that space, high altitude and the so that the Army's use of these capabilities is exploragies and sponsor exploration of future space and high a senhance the resiliency and effectiveness of critical space superiority, high altitude persistent platforms, nano-sate FY18 include Army Cyberspace Analysis; Space Superiority (OPIR) Analysis; Assessment of Fining (PNT) analysis. Support TAA 21-25 Resourcing A is a phased force structure analysis process that definite military and DA Civilian requirements and authorizate FDU process 19-2 and 20-1. FDUs Include capabilities is implementation decisions. Additionally during the TAA	etc. etc. ite gies cyber red altitude ce- ellites riority of Phase nes the ions A cycle			2.95			
Description: Funding is provided for the following efforts					2.00			
FY 2018 Plans: Support the full integration of Joint Friendly Force Tracking (J-FFT) in requirements. Continue to develop the J-FFT Testbed for its use in it to the field. Leverage network enabled command and control system Friendly Force Tracking (FFT) capabilities for deployed and coalition Management System (FTAMS) to FFT-Mission Management Center USSTRATCOM-directed FFT tasks in order to assure continuous 24	integrating hardware and software prior to its deployment on enhancements and continue to support development of forces. Continue to transition Force Tracking Advance (MMC). The J-FFT Division coordinates and executes	of ed						

PE 1206308A: *Army Space Systems Integration* Army

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Army	Date: May 2017		
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
2040 / 4	PE 1206308A I Army Space Systems	FE5 / Space	ce And Missile Defense
	Integration	Integration	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
the Combatant Commands, the Services, agencies, allies, and coalition partners in order to improve their situational awareness (SA), enhance command and control (C2) to reduce fratricide in combat, homeland defense, civil and contingency operations.			
Accomplishments/Planned Programs Subtotals	-	-	15.966

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

N/A

Remarks

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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R-1 Line #79

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Army	Date: May 2017	
	, ,	Project (Number/Name) FE5 / Space And Missile Defense
	Integration	Integration

Management Service	s (\$ in M	illions)		FY 2	2016	FY 2	2017	FY 2 Ba			2018 CO	FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item Name	TBD	TBD : TBD	0.000	-		-		15.966		-		15.966	0.000	15.966	0.000
	,	Subtotal	0.000	-		-		15.966		-		15.966	0.000	15.966	0.000

Remarks

N/A

	Prior Years	FY 2	2016	FY 2	2017	FY 2 Ba	018 se	FY 2	2018 CO	FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	-		0.000		15.966		-		15.966	0.000	15.966	-

Remarks

PE 1206308A: Army Space Systems Integration Army

Appropriation/Budget Activity 2040 / 4							R-1 Program Element (Number/Name) PE 1206308A I Army Space Systems Integration											Project (Number/Name) FE5 / Space And Missile Defense Integration								
Event Name		FY 20	16		FY	20	17		F١	7 20	18		F	Y 2	019		F	Y 20	20		F'	Y 20	21		FY 2	022
			1 2 3 4		2	3	3 4	1	2	2 ;	3 4	4	1 2 3 4		4	1 2 3		2 3 4		:	2 3	4	1	2	3 4	
Provide 24/7 support to Friendly Force Tracking.																										
Jericho Thunder Analysis Support																			L	ABEI						
SMDC NanoSat Analysis (SNAP, KE)																										
Space Superiority Joint Architecture Analysis																										
Force Design Assessment of Army Forces																										
NAVWAR/PNT in a Denied Environment																										
Implications of the Emerging "Third" Offset Strategy for SMDC Space																										
Space Simulation Support to TRADOC ARCIC Experimentation																										
Common Ground Station Operating Concept and Requirement Docume	r																									
NAVWAR Characterization Operating Concept and Requirements Docu	ır																									
JFFT Capability Development Document																										
High Altitude Persistent Platform Initial or Capability Development Docu	117																									
												\perp														

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Army	Date: May 2017					
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)			
2040 / 4	PE 1206308A I Army Space Systems	FE5 / Space	ce And Missile Defense			
	Integration	Integration				

Schedule Details

	Start		Er	nd
Events	Quarter	Year	Quarter	Year
Provide 24/7 support to Friendly Force Tracking.	1	2019	4	2022
Jericho Thunder Analysis Support	1	2019	4	2022
SMDC NanoSat Analysis (SNAP, KE)	1	2019	4	2022
Space Superiority Joint Architecture Analysis	1	2019	4	2022
Force Design Assessment of Army Forces	1	2019	4	2022
NAVWAR/PNT in a Denied Environment	1	2019	2	2022
Implications of the Emerging "Third" Offset Strategy for SMDC Space	1	2019	2	2019
Space Simulation Support to TRADOC ARCIC Experimentation	1	2019	4	2022
Common Ground Station Operating Concept and Requirement Document	1	2019	3	2019
NAVWAR Characterization Operating Concept and Requirements Document	1	2017	2	2020
JFFT Capability Development Document	1	2019	2	2019
High Altitude Persistent Platform Initial or Capability Development Document	1	2019	3	2019

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army								Date: May 2017				
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 1206308A I Army Space Systems Integration				Project (Number/Name) FE6 I Army Space System Enhancement/ Integration			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
FE6: Army Space System Enhancement/Integration	-	0.000	0.000	4.466	-	4.466	5.962	5.082	0.361	22.682	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Funding transferred from PE 0603308A project EB7 transition to PE 1206308A project FE6 and PE 1205117A project FG3 beginning in FY 2018.

A. Mission Description and Budget Item Justification

The details of this program are reported in accordance with Title 10, United States Code, Section 119(a)(1).

Funding line is shared between USA Space and Missile Defense Command (SMDC) and Program Executive Office Intelligence, Electronic Warfare and Sensors (PEO IEW&S) starting in FY2018. Funding transferred from PE 0603308A project EB7 transition to PE 1206308A project FE6 and PE 1205117A project FG3 beginning in FY 2018.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Details of this program are reported in accordance with Title 10	-	-	4.466
Description: Details of this program are reported in accordance with Title 10, United States Code, Section 119 (a)(1).			
FY 2018 Plans:			
Details of this program are reported in accordance with Title 10, United States Code, Section 119 (a)(1).			
Accomplishments/Planned Programs Subtotals	-	-	4.466

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

			FY 2018	FY 2018	FY 2018					Cost To	
Line Item	FY 2016	FY 2017	Base	<u>000</u>	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost
TBD: start	-	-	-	-	_	-	-	-	-	0	0.000

Remarks

Army

Details of this program are reported in accordance with Title 10, United States Code, Section 119 (a)(1).

D. Acquisition Strategy

Details of this program are reported in accordance with Title 10, United States Code, Section 119 (a)(1).

PE 1206308A: Army Space Systems Integration

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Exhibit R-2A, RDT&E Project Justification: FY 2018 A	Date: May 2017			
propriation/Budget Activity 40 / 4 R-1 Program Element (Number/Name) PE 1206308A / Army Space Systems Integration				
E. Performance Metrics	,	,		
N/A				

PE 1206308A: *Army Space Systems Integration* Army