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

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 5: System

PE 1203940F I Space Situation Awareness Operations

Development & Demonstration (SDD)

	/											
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	10.029	0.000	10.029	50.020	100.045	30.003	5.013	Continuing	Continuing
65A037: Space Surveillance Telescope	-	0.000	0.000	10.029	0.000	10.029	50.020	100.045	30.003	5.013	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This program, BA 05 PE 1203940F, project 65A037, Space Surveillance Telescope(SST), is a new start.

A. Mission Description and Budget Item Justification

Space Situational Awareness (SSA) is knowledge of all aspects of space related to operations. As the foundation for space control, SSA encompasses surveillance of all space objects and activities; detailed surveillance of specific space assets; monitoring space environmental conditions; monitoring cooperative space assets; gathering indications and warning on adversary space operations; and conducting integrated command, control, communications, processing, analysis, dissemination, and archiving activities. This program element fields, upgrades, operationalizes, operates and maintains Air Force sensors and information integration capabilities within the SSA network while companion program element 1206425F, Space Situational Awareness Systems, develops new network sensors and improved information integration capabilities across the network. Funds also support efforts such as engineering studies and analysis, architectural engineering studies, trade studies, technology needs forecasting, modernization initiatives, systems engineering, system development, and test & evaluation. Activities funded in this program element (1203940F) focus on surveillance of objects in earth orbit to aid tasks including satellite tracking; space object identification; tracking and cataloging; satellite attack warning; notification of satellite flyovers to U.S. forces; space treaty monitoring; and technical intelligence gathering.

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	0.000
Current President's Budget	0.000	0.000	10.029	0.000	10.029
Total Adjustments	0.000	0.000	10.029	0.000	10.029
 Congressional General Reductions 	0.000	0.000			
 Congressional Directed Reductions 	0.000	0.000			
 Congressional Rescissions 	0.000	0.000			
Congressional Adds	0.000	0.000			
 Congressional Directed Transfers 	0.000	0.000			
 Reprogrammings 	0.000	0.000			
SBIR/STTR Transfer	0.000	0.000			
Other Adjustments	0.000	0.000	10.029	0.000	10.029

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Air Force

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

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 5: System

PE 1203940F / Space Situation Awareness Operations

Development & Demonstration (SDD)

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Space Surveillance Telescope(SST)	-	-	10.029
Description: This capability provides global SST-like/equivalent performance for sensitivity, search rate, track of non-cooperative launches, precise tagging of clustered objects, and detection of closely space dim objects. This effort includes locating SST-like capabilities in optimal global locations, upgrading existing SSAO sensors to improve sensitivity and search rates, and may acquire new advanced technology sensor(s) to improve global electro-optical sensor resilience and persistence. The effort will coordinate with the Joint Space Operations Center (JSpOC) Mission System (JMS) program to ensure integration with enterprise data fusion and dissemination to support space battle management and command, control and communications (BMC3).			
FY 2018 Plans: Starts with locating SST-like capabilities in optimal global locations; initiate design activity to improve sensitivity on existing SSAO sensors; initiate design for the advanced technology sensor. Continue program office and other related support activities that may include, but are not limited to studies, technical analysis, etc. Continue prototyping efforts to develop tools to fill capability gaps uncovered in experimentation.			
Accomplishments/Planned Programs Subtotals	-	-	10.029

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

			FY 2018	<u>FY 2018</u>	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
• N/A: <i>N/A</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-

Remarks

E. Acquisition Strategy

SST - Acquisition strategy TBD

F. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

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Air Force

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Exhibit R-3, RDT&E	Project C	ost Analysis: FY 2	018 Air F	orce			-	-				Date:	May 201	7		
Appropriation/Budget Activity 3600 / 5									umber/Na uation Awa	Project (Number/Name) 65A037 / Space Surveillance Telescope						
Product Developmen	nt (\$ in M	illions)		FY 2	2016	FY 2	017	FY 2 Ba	018 se		2018 CO	FY 2018 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Award t Date Cost Date Cost		Cost	Award Date	Cost	Cost To	Total Cost	Target Value o Contrac		
SST design, development and life extension	SS/CPIF	Harris : Colorado Springs, CO	-	0.000		0.000		9.629	Mar 2018	0.000		9.629	Continuing	Continuing	-	
		Subtotal	-	0.000		0.000		9.629		0.000		9.629	-	-	-	
Support (\$ in Million	s)			FY 2	2016	FY 2	017	FY 2 Ba	018 se		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	Total Cost	Target Value of Contract	
		Subtotal	-	-		-		-		-		-	-	-	-	
Test and Evaluation	(\$ in Milli	ions)		FY 2	2016	FY 2	017	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 o Contrac	
	_	Subtotal	-	-		-		-		-		-	-	-		
Management Service	es (\$ in M	lillions)		FY 2	2016	FY 2	017	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	Total Cost	Target Value of Contrac	
A&AS	Various	Various: Various: TBD	-	0.000		0.000		0.400	Mar 2018	0.000		0.400	Continuing	Continuing	-	
		Subtotal	-	0.000		0.000		0.400		0.000		0.400	-	-	-	
			Prior Years	FY 2	2016	FY 2	017	FY 2 Ba			2018 CO	FY 2018 Total	Cost To	Total Cost	Target Value o Contrac	
		Project Cost Totals	-	0.000		0.000		10.029		0.000		10.029	_		_	

Remarks

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Air Force		Date : May 2017
Appropriation/Budget Activity 3600 / 5	,	Project (Number/Name) 65A037 / Space Surveillance Telescope

		FY	2016	5		FY	2017	7		FY	2018	3		FY 2	2019)		FY 2	2020)		FY:	2021	l		FY 2	2022	
	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
SST Phase I Development																												

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity 3600 / 5	, ,	- , ,	umber/Name) Space Surveillance Telescope

Schedule Details

	St	art	End			
Events	Quarter	Year	Quarter	Year		
SST Phase I Development	3	2018	1	2019		

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