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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 1203400F I Space Superiority Intelligence							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	10.691	16.278	14.428	0.000	14.428	16.841	18.371	18.301	17.779	Continuing	Continuing
67A051: Space Superiority - Advanced Intelligence Systems	-	10.691	16.278	14.428	0.000	14.428	16.841	18.371	18.301	17.779	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Space Superiority Intelligence program provides Intelligence, Surveillance, and Reconnaissance (ISR) and Electronic Support (ES) for key find, fix, track, target, engage and assess (F2T2EA) requirements supporting Space Superiority activities meeting Combatant Command (CCMD) needs. SSI funds developmental intelligence activities to support new space superiority capability acquisition and development. Funds associated developmental ISR planning and direction, collection, processing and exploitation, analysis and production, dissemination and integration (PCPAD) capabilities providing Battlespace Awareness and SSA in support of Space Superiority and Space Control. This includes funding for fixed and transportable intelligence collection, processing/exploitation and dissemination (PED), analysis and production capabilities that are modular (plug-and-play), meet Risk Management Framework Accreditation requirements and can keep pace with technological advances and emerging threats. It provides intelligence support systems for Space Situational Awareness activities that provide the requisite current and predictive knowledge of space events and threat conditions and intelligence support to Space Protection Programs by providing architectural survivability analysis of critical mission assets for mission assurance, as well as network analysis. It also supports specialized/tailored, phased threat system analysis and studies (A&S), test support, lab equipment, and Material Acquisition and Exploitation (MAE) for system development, vulnerability, susceptibility assessments to support tactics, techniques and procedures (TTP) development and future threat technology studies necessary for mission area success and achievement of space superiority, and to preserve the US space advantage across all domains.

Space acquisition must respond with speed and agility to emerging adversary threats. Space & Missile Systems Center (SMC) is transforming the organization and implementation of space acquisition to an enterprise approach, maximizing innovation and resiliency, leveraging international, commercial, and mission partnerships, and managing program/project priorities according to an integrated unclassified/classified enterprise space architecture. Expanding the appropriate acquisition authorities and contract mechanisms to deliver capability sooner, SMC will strategically execute experimentation, prototyping, risk reduction, and other efforts to develop new or repurpose capabilities.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver SSI capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 1206392F and 1206398F.

The FY 2020 funding request was reduced by \$2.088 million to account for the availability of prior year execution balances.

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As directed in the FY 2018 NDAA, Sec 825, amendment to PL 114-92 FY 2016 NDAA, Sec 828 Penalty for Cost Overruns, the FY 2018 Air Force penalty total is \$14.373M. The calculated percentage reduction to each research, development, test and evaluation and procurement account will be allocated proportionally from all programs, projects, or activities under such account.						
This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.						
B. Program Change Summary (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget		12.691	16.278	16.516	0.000	16.516
Current President's Budget		10.691	16.278	14.428	0.000	14.428
Total Adjustments		-2.000	0.000	-2.088	0.000	-2.088
• Congressional General Reductions		0.000	0.000			
• Congressional Directed Reductions		-2.000	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	-2.088	0.000	-2.088
Change Summary Explanation						
FY 2018: -\$2.000M Congressional reduction for insufficient justification						
FY 2020: -\$2.088M reduction for execution rephase						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2018	FY 2019	FY 2020
Title: Advanced Intelligence Systems for Space Superiority				10.691	16.278	14.428
Description: Develops transportable and fixed PCPAD capabilities.						
FY 2019 Plans:						
Continue Space Superiority RDT&E through transformation of collection and production activities by developing an intelligence architecture capable of front-end collection and analysis of new technologies in near real-time. This capability will be expanded across the Special Missions Enterprise to allow access to sensitive information from each point of presence providing production analysts the ability to rapidly exploit known vulnerabilities and develop new capabilities to counter adversary technological advances.						

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020
<p>Rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain. Activities may include, but are not limited to program office support, studies, technical analysis, prototyping, etc.</p> <p>FY 2020 Plans: Continue Space Superiority RDT&E through transformation of collection and production activities by developing an intelligence architecture capable of front-end collection and analysis of new technologies in near real-time. This capability will be expanded across the Special Missions Enterprise to allow access to sensitive information from each point of presence providing production analysts the ability to rapidly exploit known vulnerabilities and develop new capabilities to counter adversary technological advances. Intelligence, Surveillance, and Reconnaissance (ISR) capabilities will be further developed to enhance automation and respond more quickly to ISR for Space needs.</p> <p>Rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain. Activities may include, but are not limited to program office support, studies, technical analysis, prototyping, etc.</p> <p>FY 2019 to FY 2020 Increase/Decrease Statement: FY 2020 decreased compared to FY 2019 by \$1.85M. Justification for this decrease is an execution rephrase in FY 2020.</p>				
Accomplishments/Planned Programs Subtotals		10.691	16.278	14.428
D. Other Program Funding Summary (\$ in Millions) N/A				
Remarks				
E. Acquisition Strategy All contracts funded in this program will be awarded using competitive procedures to the maximum extent possible.				
Space Superiority and R&D Intelligence Development: Single Delivery, CPFF, advisory and assistance contractor supporting development efforts. Prime contractor is Macaulay-Brown.				
Architecture upgrades to SSA, SSDP, and Space Superiority: Multiple Delivery, CPFF integration contract. Prime contractor is BITSYSTEMS Data Analysis				
Production development for R&D: Multiple Delivery, CPFF production contract supporting vulnerabilities analysis. Prime Contractor is Booz-Allen Hamilton Intelligence systems				

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Testing and data collection: Multiple Delivery, CPFF production contract providing independent validation and verification of new capability development. Prime contractor is Booz-Allen Hamilton.		
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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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 1203400F / Space Superiority Intelligence				Project (Number/Name) 67A051 / Space Superiority - Advanced Intelligence Systems					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Space Superiority and R&D intelligence Development	Various	Various : TBD	-	2.541	Nov 2017	2.800	Nov 2018	2.840	Nov 2019	-		2.840	Continuing	Continuing	-
Architecture upgrades to SSA, SPP, and Space Superiority	Various	Various : TBD	-	3.550	Nov 2017	6.058	Nov 2018	5.100	Nov 2019	-		5.100	Continuing	Continuing	-
Data analysis and product development for R&D	Various	Various : TBD	-	4.100	Nov 2017	5.800	Nov 2018	4.838	Nov 2019	-		4.838	Continuing	Continuing	-
Intelligence systems testing and data collection	Various	Various : TBD	-	0.500	Nov 2017	0.800	Nov 2018	0.810	Nov 2019	-		0.810	Continuing	Continuing	-
Missile Defeat Enterprise Development	Various	Various : TBD	-	-		-		-		-		-	Continuing	Continuing	-
Subtotal			-	10.691		15.458		13.588		-		13.588	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
A&AS	Various	Various : TBD	-	0.000		0.820	Nov 2017	0.840	Nov 2018	-		0.840	Continuing	Continuing	-
Subtotal			-	0.000		0.820		0.840		-		0.840	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	10.691		16.278		14.428		-		14.428	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force												Date: February 2019			
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	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Space Superiority Intelligence																												
Architecture upgrade for SSA, SPP, and Space Superiority																												
Data analysis and product development for R&D intelligence																												
Deployment for testing and data collection																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 1203400F / <i>Space Superiority Intelligence</i>	Project (Number/Name) 67A051 / <i>Space Superiority - Advanced Intelligence Systems</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Space Superiority Intelligence</i>				
Architecture upgrade for SSA, SPP, and Space Superiority	1	2018	4	2024
Data analysis and product development for R&D intelligence	1	2018	4	2024
Deployment for testing and data collection	1	2018	4	2024