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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force										Date: February 2018		
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	12.380	12.691	16.278	0.000	16.278	16.516	16.841	17.118	17.465	Continuing	Continuing
67A051: Space Superiority - Advanced Intelligence Systems	-	12.380	12.691	16.278	0.000	16.278	16.516	16.841	17.118	17.465	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Provides Electronic Support (ES) for key find, fix, track, target, engage and assess (F2T2EA) requirements supporting Space Superiority activities. Funds developmental intelligence collection to support new capability acquisition and development. This project also funds transportable intelligence collection and analysis capabilities that are modular (plug-and-play), 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. It also supports phased threat system analysis and studies (A&S), test support, lab equipment, and Material Acquisition and Exploitation (MAE) for system development and 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.

The current and future space domain demands that space systems be responsive to new and changing threats, and can rapidly integrate new capabilities to make our warfighting force more resilient in a contested battlespace. This agility, survivability, and rapid reconstitution must extend through the entire space warfighting enterprise, to include how we learn about the threat; develop solutions; acquire, test, deploy, train, operate and integrate new systems into the greater system of systems; and ensure our space mission force is ready to defeat a thinking adversary in a complex, multi-domain battlespace. The enterprise will use all of its elements to accelerate decision-making, prototype potential solutions, rapidly integrate decision-making tools and sustain a war-winning capability by delivering multi-domain effects in, from, and through space and cyberspace enabling battle management and resilience options to "fight through."

This program is in Budget Activity 7, Operational System Development, because it includes development efforts to upgrade systems that have been fielded.

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B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	13.880	12.691	12.900	0.000	12.900
Current President's Budget	12.380	12.691	16.278	0.000	16.278
Total Adjustments	-1.500	0.000	3.378	0.000	3.378
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	-1.500	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	3.378	0.000	3.378
Change Summary Explanation					
FY2017: -\$1.500M Congressional reduction for insufficient justification					
FY2019: +\$3.378M increase for program architecture changes in support of space control capabilities					
C. Accomplishments/Planned Programs (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Advanced Intelligence Systems for Space Superiority	12.380	12.691	16.278	0.000	16.278
Description: Develops transportable and fixed collection and analysis capability.					
FY 2018 Plans: Will begin 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.					
FY 2019 Base 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 2017	FY 2018	FY 2019 Base
<p>Provides the design, development and tools to support the SSI exploitation and analysis mission conducted at the NASIC.</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 OCO Plans: N/A</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: FY 2019 increased compared to FY 2018 by \$3.587M. Justification for this increase is described in plans above.</p>					
Accomplishments/Planned Programs Subtotals			12.380	12.691	16.278
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					
Testing and data collection: Multiple Delivery, CPFF production contract providing independent validation and verification of new capability development. Prime contractor is Booz-Allen Hamilton.					

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Arc Storm Antennae: Single delivery, CPFF development contract providing prototype and technology development, software integration and testing. Prime contractor is KYMETA Government Solutions.		
NASIC SSI: Single delivery, CPFF development contract providing technology development, software integration and testing. Source selection will be competitively bid.		
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 2019 Air Force												Date: February 2018			
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 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	-	2.761	Nov 2016	2.750	Nov 2017	2.800	Nov 2018	-		2.800	Continuing	Continuing	-
Architecture upgrades to SSA, SPP, and Space Superiority	Various	Various : TBD	-	4.300	Nov 2016	4.550	Nov 2017	6.058	Nov 2018	-		6.058	Continuing	Continuing	-
Data analysis and product development for R&D	Various	Various : TBD	-	4.000	Nov 2016	4.100	Nov 2017	5.800	Nov 2018	-		5.800	Continuing	Continuing	-
Intelligence systems testing and data collection	Various	Various : TBD	-	0.500	Nov 2016	0.500	Nov 2017	0.800	Nov 2018	-		0.800	Continuing	Continuing	-
Missile Defeat Enterprise Development	Various	Various : TBD	-	0.000		-		-		-		-	Continuing	Continuing	-
Subtotal			-	11.561		11.900		15.458		-		15.458	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	-	0.819	Nov 2016	0.791	Nov 2017	0.820	Nov 2017	-		0.820	Continuing	Continuing	-
Subtotal			-	0.819		0.791		0.820		-		0.820	Continuing	Continuing	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	12.380		12.691		16.278		-		16.278	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force												Date: February 2018			
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	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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 2019 Air Force			Date: February 2018
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	2017	4	2023
Data analysis and product development for R&D intelligence	1	2017	4	2023
Deployment for testing and data collection	1	2017	4	2023