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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2021 Air Force **Date:** February 2020

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 1203400F / <i>Space Superiority Intelligence</i>
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COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	-	16.278	14.428	16.810	0.000	16.810	18.343	18.265	17.744	8.467	Continuing	Continuing
67A051: <i>Space Superiority - Advanced Intelligence Systems</i>	-	16.278	14.428	16.810	0.000	16.810	18.343	18.265	17.744	8.467	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 Space Domain Awareness (SDA) 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 SDA activities that provide the requisite current and predictive knowledge of space events and threat conditions and intelligence support to Space Security and Defense Programs (SSDP) 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 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.

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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	
Previous President's Budget	16.278	14.428	16.841	0.000	16.841	
Current President's Budget	16.278	14.428	16.810	0.000	16.810	
Total Adjustments	0.000	0.000	-0.031	0.000	-0.031	
• 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	-0.031	0.000	-0.031	
<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>				<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
<b>Title:</b> Advanced Intelligence Systems for Space Superiority				16.278	14.428	16.810
<b>Description:</b> Develops transportable and fixed PCPAD capabilities.						
<b>FY 2020 Plans:</b> Continue Space Superiority RDT&E through transformation of collection and production activities by developing and fielding fixed and transportable intelligence architectures 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.						
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.						
<b>FY 2021 Plans:</b> Continues Space Superiority RDT&E through transformation of collection and production activities by developing and fielding fixed and transportable intelligence architectures 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. ISR capabilities will be further developed and fielded to replace legacy systems, enhance automation and respond more quickly to ISR for Space needs.						

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
<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><b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> FY2021 increased compared to FY2020 by \$2.407M. FY20 was reduced for execution rephase into FY22 and FY23. FY21 funding represents normal baseline.</p>				
<b>Accomplishments/Planned Programs Subtotals</b>		16.278	14.428	16.810
<b>D. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>Remarks</b>				
<b>E. Acquisition Strategy</b>				
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 SDA, 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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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Air Force** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 1203400F / <i>Space Superiority Intelligence</i>	<b>Project (Number/Name)</b> 67A051 / <i>Space Superiority - Advanced Intelligence Systems</i>
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<b>Product Development (\$ in Millions)</b>				<b>FY 2019</b>		<b>FY 2020</b>		<b>FY 2021 Base</b>		<b>FY 2021 OCO</b>		<b>FY 2021 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Space Superiority and R&D intelligence Development	C/CPFF	Various : TBD	-	1.531	Nov 2018	0.406	Apr 2020	0.605	Nov 2020	-		0.605	Continuing	Continuing	-
Architecture upgrades to SDA, SSDP, and Space Superiority	C/CPFF	Various : TBD	-	9.087	Nov 2018	9.040	Jan 2020	10.028	Dec 2020	-		10.028	Continuing	Continuing	-
Data analysis and product development for R&D	C/CPFF	Various : TBD	-	3.157	Nov 2018	2.870	Nov 2019	3.828	Nov 2020	-		3.828	Continuing	Continuing	-
Intelligence systems testing and data collection	C/CPFF	Various : TBD	-	1.517	Nov 2018	1.662	Feb 2020	1.578	Feb 2021	-		1.578	Continuing	Continuing	-
<b>Subtotal</b>			-	15.292		13.978		16.039		-		16.039	Continuing	Continuing	N/A

<b>Management Services (\$ in Millions)</b>				<b>FY 2019</b>		<b>FY 2020</b>		<b>FY 2021 Base</b>		<b>FY 2021 OCO</b>		<b>FY 2021 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
A&AS	C/CPFF	Various : TBD	-	0.836	Nov 2018	0.300	Apr 2020	0.771	Nov 2020	-		0.771	Continuing	Continuing	-
Mission Support	Various	Not specified. : TBD	-	0.150		0.150		-		-		-	Continuing	Continuing	-
<b>Subtotal</b>			-	0.986		0.450		0.771		-		0.771	Continuing	Continuing	N/A

<b>Project Cost Totals</b>	<b>Prior Years</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
	-	16.278	14.428	16.810	-	16.810	Continuing	Continuing	N/A

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2021 Air Force		<b>Date:</b> February 2020
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 1203400F / <i>Space Superiority Intelligence</i>	<b>Project (Number/Name)</b> 67A051 / <i>Space Superiority - Advanced Intelligence Systems</i>

FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
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

<b><i>Space Superiority Intelligence</i></b>	
Architecture upgrade for SDA, SSDP, and Space Superiority	
Data analysis and product development for R&D intelligence	
Deployment for testing and data collection	

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2021 Air Force		<b>Date:</b> February 2020
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Space Superiority Intelligence</i></b>				
Architecture upgrade for SDA, SSDP, and Space Superiority	1	2019	4	2025
Data analysis and product development for R&D intelligence	1	2019	4	2025
Deployment for testing and data collection	1	2019	4	2025