Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force Date: February 2019

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development

PE 0301401F I Air Force Space and Cyber Non-Traditional ISR for Battlespace

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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	-	3.721	6.633	3.575	0.000	3.575	2.908	3.185	3.243	3.301	0.000	26.566
67A051: Space Superiority - Advanced Intelligence Systems	-	3.721	6.633	3.575	0.000	3.575	2.908	3.185	3.243	3.301	0.000	26.566
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This program, BA 07 PE 0301401F, project 67A051, Cross Domain Tactical OPIR Processing, is a new start.

Air Force Space and Cyber Non-Traditional Intelligence, Surveillance & Reconnaissance (ISR) for Battlespace Awareness PE 0301401F - P-40A Cross Domain Overhead Persistent Infrared (OPIR): Cross Domain Tactical OPIR Processing delivers a mechanism providing reach-back support for battlespace awareness functions and manages the timely transfer of newly developed tools to operational users.

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.

FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
3.721	6.633	3.575	0.000	3.575
3.721	6.633	3.575	0.000	3.575
0.000	0.000	0.000	0.000	0.000
0.000	0.000			
0.000	0.000			
0.000	0.000			
0.000	0.000			
0.000	0.000			
0.000	0.000			
0.000	0.000			
0.000	0.000	0.000	0.000	0.000
	3.721 3.721 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.721 6.633 3.721 6.633 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.721 6.633 3.575 3.721 6.633 3.575 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	3.721 6.633 3.575 0.000 3.721 6.633 3.575 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000

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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force	Date: F	February 2019
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	
3600: Research, Development, Test & Evaluation, Air Force I BA 7:	PE 0301401F I Air Force Space and Cyber Non-Traditional ISR t	for Battlespace
Operational Systems Development	Awareness	

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
Title: Cross Domain OPIR	2.400	1.350	-
Description: Develop Cross Domain OPIR that delivers a mechanism to provide reach-back support for battlespace awareness functions and manages the timely transfer of newly developed tools to operational users. specifically by developing tools & tradecraft on a flexible architecture allowing easy integration.			
FY 2019 Plans: Continue development of tools & tradecraft on a flexible architecture that allows easy integration of new capabilities into air component operations by providing advanced "state of art" algorithms and tools for the warfighter.			
FY 2019 to FY 2020 Increase/Decrease Statement: N/A			
Title: TAC OPIR Processing	1.321	5.283	3.575
Description: Develop tactical OPIR processing comprised of software development, controlled multi-level security interface that provides data access and processing services for a robust and flexible network architecture.			
FY 2019 Plans: Develop software for a controlled multi-level security interface.			
FY 2020 Plans: N/A			
FY 2019 to FY 2020 Increase/Decrease Statement: N/A			
Accomplishments/Planned Programs Subtotals	3.721	6.633	3.575

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

PE 0301401F: Air Force Space and Cyber Non-Traditiona...

N/A

Remarks

E. Acquisition Strategy

All contracts funded in this program will be awarded using competitive procedures to the maximum extent possible.

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Air Force

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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/ PE 0301401F / Air Force Space a Awareness	Name) and Cyber Non-Traditional ISR for Battlespace
F. Performance Metrics Please refer to the Performance Base Budget Overview Book for information Force performance goals and most importantly, how they contribute to our performance goals and most importantly.		olied and how those resources are contributing to Air

PE 0301401F: *Air Force Space and Cyber Non-Traditiona...*Air Force

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 7	PE 0301401F I Air Force Space and	, ,	umber/Name) Space Superiority - Advanced e Systems

Product Developmen	nt (\$ in Mi	illions)		FY 2	2018	FY :	2019	FY 2 Ba		FY 2	2020 CO	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
Cross Domain OPIR	C/CPFF	NASIC : Dayton, OH	-	2.400	May 2018	1.350	May 2019	3.575		-		3.575	Continuing	Continuing	-
Tactical OPIR Processing	C/CPFF	NASIC : Dayton, OH	-	1.321	May 2018	5.283	May 2019	-		-		-	Continuing	Continuing	-
		Subtotal	-	3.721		6.633		3.575		-		3.575	Continuing	Continuing	N/A
												1			

	Prior Years	FY 2	2018	FY 2	019	FY 20 Bas	 FY 2020 OCO	FY 2020 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	-	3.721		6.633		3.575	-	3.575	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2020 A	ir Fo	rce																				Date	∍: F∈	ebru:	ary	2019)	
Appropriation/Budget Activity 3600 / 7			R-1 Program Element (Number/Name) PE 0301401F I Air Force Space and Cyber Non-Traditional ISR for Battlespace Awareness Project (Number/N 67A051 I Space Su Intelligence System									e Su _l	iperiority - Advanced															
		FY 20	18		F	FY 2	019			FY 2	2020			FY	2021			FY 2	2022			FY 2	2023	,		FY 2	2024	1
	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
Cross Domain OPIR			,		,						<u> </u>			,														
Algorithm Development																												•
Tactical OPIR Processing																												
Hardware Purchases, Software Development																												

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 / 7	PE 0301401F I Air Force Space and	67A051 / S	Space Superiority - Advanced
	Cyber Non-Traditional ISR for Battlespace	Intelligence	e Systems
	Awareness		

Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Cross Domain OPIR				
Algorithm Development	3	2018	3	2023
Tactical OPIR Processing				
Hardware Purchases, Software Development	3	2018	3	2023