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 5: System

Development & Demonstration (SDD)

R-1 Program Element (Number/Name)
PE 1206421F / Counterspace Systems

,	,											
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	-	64.208	20.242	29.037	0.000	29.037	27.588	23.454	23.897	62.695	Continuing	Continuing
65A001: Counter Satellite Communications System	-	55.561	11.254	19.808	0.000	19.808	18.227	13.894	14.162	52.785	Continuing	Continuing
65A005: Offensive Counterspace (OCS) C2	-	6.822	7.081	7.282	0.000	7.282	7.376	7.529	7.667	7.805	Continuing	Continuing
65A013: BOUNTY HUNTER	-	1.825	1.907	1.947	0.000	1.947	1.985	2.031	2.068	2.105	Continuing	Continuing

A. Mission Description and Budget Item Justification

Acquisition Decision Memorandum (ADM) April 24th 2009, directed all capabilities identified in the October 4th 2006, Counter Communications System (CCS) Block 20, Joint Requirements Oversight Council (JROC) approved Capability Development Document (CDD) shall be accomplished as Pre-planned Product Improvement Program (P3I) upgrades to the CCS Block 10. On April 11th 2016, Air Force Space Command (AFSPC) updated ADM adding additional responsibility for CCS Block 10.3.

CCS provides expeditionary, deployable, reversible offensive space control (OCS) effects applicable across the full spectrum of conflict. It prevents adversary Satellite Communications (SATCOM) in Area of Responsibility (AOR) including Command & Control (C2), Early Warning and Propaganda, and hosts Rapid Reaction Capabilities in response to Urgent Needs. This program effort includes architecture engineering and studies, system hardware design and development, software design and integration, and testing and demonstration of capabilities to provide disruption of satellite communications signals.

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 Counterspace weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 1206392F and 1206398F.

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.

PE 1206421F: Counterspace Systems

Air Force

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

Date: February 2019

Appropriation/Budget Activity

R-1 Program Element (Number/Name)
PE 1206421F / Counterspace Systems

3600: Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)

This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full rate production.

B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	66.370	20.676	29.037	0.000	29.037
Current President's Budget	64.208	20.242	29.037	0.000	29.037
Total Adjustments	-2.162	-0.434	0.000	0.000	0.000
 Congressional General Reductions 	0.000	-0.434			
 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	-2.162	0.000			
Other Adjustments	0.000	0.000	0.000	0.000	0.000

PE 1206421F: Counterspace Systems

Air Force Page 2 of 18

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2020 A	ir Force							Date: Febr	uary 2019	
Appropriation/Budget Activity 3600 / 5					R-1 Progra PE 120642		umber/Nan Counter Sate	ame) atellite Communications				
COST (\$ in Millions)	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost			
65A001: Counter Satellite - 55.561 11.254 Communications System					0.000	19.808	18.227	13.894	14.162	52.785	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-					

A. Mission Description and Budget Item Justification

Acquisition Decision Memorandum (ADM) April 24th 2009, directed all capabilities identified in the Oct 4th 2006 CCS Block 20, Joint Requirements Oversight Council (JROC) approved Capability Development Document (CDD) shall be accomplished as Pre-planned Product Improvement Program (P3I) upgrades to the Counter Communications System (CCS) Block 10. On April 11th 2016, Air Force Space Command (AFSPC) A5/A8/A9 signed and updated ADM adding additional responsibility for CCS Block 10.3.

CCS provides expeditionary, deployable, reversible offensive space control (OCS) effects applicable across the full spectrum of conflict. It prevents adversary Satellite Communications (SATCOM) in Area of Responsibility (AOR) including Command & Control (C2), Early Warning and Propaganda, and hosts Rapid Reaction Capabilities in response to Urgent Needs. This program effort includes architecture engineering and studies, system hardware design and development, software design and integration, and testing and demonstration of capabilities to provide disruption of satellite communications signals.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
Title: Counter Communications System (CCS) Pre-planned Product Improvement (P3I) Program	55.561	11.254	19.808
Description: Develop, integrate, test and field the CCS P3I program. This is an incremental approach to deliver Block 20 CCS capabilities.			
FY 2019 Plans: Begin development, integration and testing of increment 3 of Block 10 P3I program CCS Block 10.3. Include additional CCS Block 20 CDD capabilities in CCS Block 10.3, design forward garrison systems, mission techniques, mission specific emulators, and multi-range integration. Begin development planning and risk reduction activities for next generation electronic warfare capabilities. Continue rapid response to implement system resiliency and situational awareness necessary to operate in the contested space domain. Continue program office support and other related support activities that may include, but are not limited to studies, technical analysis, prototyping, etc.			
FY 2020 Plans: Continue development, integration and testing of increment 3 CCS Block 10.3. Include additional CCS Block 20 CDD capabilities in CCS Block 10.3, design forward garrison systems, mission techniques, mission specific emulators, and multi-range integration. Continue development planning and risk reduction activities for the next generation electronic warfare capabilities. Continue program office support and other related support activities. Rapidly respond to implement system resiliency and situational			

PE 1206421F: Counterspace Systems Air Force

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force			Date: F	ebruary 2019	9
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / Counterspace Systems			Name) Satellite Com	munications
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2018	FY 2019	FY 2020
awareness necessary to operate in the contested space domain. Activities m support, studies, technical analysis, experimentation, prototyping, etc.	ay include, but are not limited to program offic	е			

FY 2019 to FY 2020 Increase/Decrease Statement:

FY 2020 increased compared to FY 2019 by \$8.554M. Justification for this increase is described above.

Accomplishments/Planned Programs Subtotals	55.561	11.254	19.808
---	--------	--------	--------

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

			FY 2020	FY 2020	FY 2020					Cost To	
Line Item	FY 2018	FY 2019	Base	000	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total Cost
 SPAF 01 Line Item CTRSPC: 	22.737	0.000	0.000	-	0.000	0.000	0.000	-	-	0.000	22.737
Counterspace Systems											

Remarks

D. Acquisition Strategy

All contracts in this program element will be awarded using competitive procedures to the maximum extent possible, to upgrade existing capabilities as well as to acquire next generation capabilities through incremental acquisitions.

E. 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.

PE 1206421F: Counterspace Systems Air Force

Page 4 of 18

Exhibit R-3, RDT&E P	roject C	ost Analysis: PB 2	2020 Air F	orce								Date:	February	2019	
Appropriation/Budge 3600 / 5	t Activity	1							umber/Na eace Syste				r/ Name) r Satellite	Commun	nications
Product Developmen	t (\$ in Mi	illions)		FY:	2018	FY 2	2019		2020 ise	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	Total Cost	Target Value of Contract
Block 10 P3I Development	Various	Various : El Segundo, CA	-	47.135	Feb 2018	3.815	Feb 2019	12.776	Feb 2020	-		12.776	Continuing	Continuing	-
Technical Mission Analysis	RO	Aerospace Corp : El Segundo, CA	-	0.578	Oct 2017	1.095	Oct 2018	0.724	Oct 2019	-		0.724	Continuing	Continuing	11.14
Enterprise Systems Engineering and Integration	C/FFP	AT&T : El Segundo, CA	-	0.151	May 2018	0.199	May 2019	0.199	May 2020	-		0.199	Continuing	Continuing	-
		Subtotal	-	47.864		5.109		13.699		-		13.699	Continuing	Continuing	N//
Support (\$ in Millions	s)			FY:	2018	FY 2	2019	FY 2 Ba	2020 ise	FY 2		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	Total Cost	Target Value of Contract
Security	C/CPAF	Mantech : El Segundo, CA	-	2.138	Nov 2017	2.177	Nov 2018	2.215	Nov 2019	-		2.215	Continuing	Continuing	-
Miscellaneous Support Services	Various	Various : TBD	-	0.000	Nov 2017	0.007	Nov 2018	0.008	Nov 2019	-		0.008	Continuing	Continuing	-
		Subtotal	-	2.138		2.184		2.223		-		2.223	Continuing	Continuing	N/A
Test and Evaluation (\$ in Milli	ons)		FY:	2018	FY 2	2019	FY 2 Ba	2020 ise	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	Total Cost	Target Value of Contract
Testing Support	MIPR	25 Space Range Squadron : Peterson AFB, CO	-	0.006	Apr 2018	0.060	Oct 2018	-		-		-	0.000	0.066	-
		l .		-			1					+	+		N/A

PE 1206421F: Counterspace Systems

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force			Date: February 2019
· · · · · · · · · · · · · · · · · · ·	R-1 Program Element (Number/Name) PE 1206421F / Counterspace Systems	, ,	umber/Name) Counter Satellite Communications

Management Servic	es (\$ in M	illions)		FY 2	2018	FY 2	2019	FY 2 Ba	2020 ise	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	Total Cost	Target Value of Contract
FFRDC	RO	Aerospace Corp : El Segundo, CA	-	0.807	Oct 2017	1.339	Oct 2018	0.759	Oct 2019	-		0.759	Continuing	Continuing	-
A&AS	Various	Various : El Segundo, CA	-	4.681	May 2018	2.475	May 2019	3.049	May 2020	-		3.049	Continuing	Continuing	-
Other Support	Various	Various : El Segundo, CA	-	0.065	Oct 2017	0.087	Oct 2018	0.078	Oct 2019	-		0.078	Continuing	Continuing	-
		Subtotal	-	5.553		3.901		3.886		-		3.886	Continuing	Continuing	N/A
															Target

	Prior Years	FY 2	018 FY	2019	FY 2020 Base	FY 20 OCC		Cost To	Total Cost	Target Value of Contract
Project Cost Totals	-	55.561	11.25	·	19.808	-	19.808	Continuing	Continuing	N/A

Remarks

PE 1206421F: Counterspace Systems

Exhibit R-4, RDT&E Schedule Profile: PB 2020	Air F	orce																			Dat	e: Fe	ebru	ary 2	2019		
Appropriation/Budget Activity 3600 / 5														i mbe ice S				65/	-	Ì C		er/N ter S		•	Comn	nuni	icatior
		FY 2	2018		F	Y 20	019		F	Y 20	20		FY	' 202'	1		FY:	2022	2		FY :	2023	<u> </u>		FY 20)24	
	1	2	3	4	1	2	3	4 1	1	2 :	3 4	•	1 2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CCS B10.3																											
10.2 System Deliveries : #3-16																											
10.3 Authority To Proceed (ATP)																											
10.3. Development																											
10.3 System Deliveries #1-4																											
10.3 Development Test/Operational Test																											
10.3 Sustainment																											

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
· · · · · · · · · · · · · · · · · · ·	,	- , (umber/Name) Counter Satellite Communications

Schedule Details

	Si	tart	End			
Events by Sub Project	Quarter	Year	Quarter	Year		
CCS B10.3						
10.2 System Deliveries : #3-16	3	2018	4	2020		
10.3 Authority To Proceed (ATP)	2	2019	2	2019		
10.3. Development	2	2019	3	2022		
10.3 System Deliveries #1-4	4	2021	4	2021		
10.3 Development Test/Operational Test	3	2022	1	2023		
10.3 Sustainment	1	2023	4	2024		

Note

For CCS B10.2, 14 systems delivered plus 2 trainers.

PE 1206421F: Counterspace Systems

Exhibit R-2A, RDT&E Project Ju	ıstification	: PB 2020 A	Air Force							Date: Febr	ruary 2019	
Appropriation/Budget Activity 3600 / 5					, , , , ,					lumber/Name) Offensive Counterspace (OCS) C2		
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
65A005: Offensive Counterspace (OCS) C2	-	6.822	7.081	7.282	0.000	7.282	7.376	7.529	7.667	7.805	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This effort supports the evolution of command and control (C2) and mission planning capabilities in support of the fielding and employment of Counterspace Systems. It provides for the integration and upgrade of collaborative tools to link deployable counterspace systems with Joint Warfighting C2 systems and to enable integrated planning and execution of the counterspace mission. Upgraded capabilities will be integrated into current and future command and control systems. This program will leverage the Joint Execution and Tasking System for Space (JETSS) effort in C2 for future space control and counterspace mission capabilities. Requirements for this program are derived from AFSPC prioritized requirements, in accordance with AFSPC 63-104.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
Title: Joint Execution and Tasking System for Space (JETSS)	6.822	7.081	7.282
Description: Evolve with upgrades the counterspace mission planning and C2 capability to support counterspace systems space control warfighter activities.			
FY 2019 Plans: Begin Spiral 6 development of higher protection level to support multiple classification levels and risk reduction efforts to support C2 initiatives for various programs.			
Continue program office support and other related support activities that may include, but are not limited to studies, technical analysis, prototyping, etc.			
FY 2020 Plans: Continue Spiral 6 development of higher protection level to support multiple classification levels and risk reduction efforts to support C2 initiatives for various programs.			
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.			
FY 2019 to FY 2020 Increase/Decrease Statement: FY 2020 increased compared to FY 2019 by \$0.201M. Justification for this increase is described in plans above.			
Accomplishments/Planned Programs Subtotals	6.822	7.081	7.282

PE 1206421F: Counterspace Systems Air Force

UNCLASSIFIED

Page 9 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / Counterspace Systems	Project (Number/Name) 65A005 / Offensive Counterspace (OCS) C2
	· ·	

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

N/A

Remarks

_

D. Acquisition Strategy

All contracts will be awarded using competitive procedures to the maximum extent possible to acquire next generation capabilities through incremental acquisitions.

E. 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.

PE 1206421F: Counterspace Systems Air Force

					•	IOLAGO									
Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2020 Air F	orce								Date:	February	2019	
Appropriation/Budge 3600 / 5	et Activity	1				` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `						Project (Number/Name) 65A005 / Offensive Counterspace (OC			
Product Developme	nt (\$ in M	illions)		FY 2	2018	FY:	2019	FY 2020 Base		FY 2		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	Total Cost	Target Value o Contrac
Develop Counterspace Planning and C2 System (JETSS)	C/CPAF	General Dynamics : Santa Clara, CA	-	4.886	Dec 2017	5.014	Aug 2019	5.258	Aug 2020	-		5.258	Continuing	Continuing	-
Counterspace Architecture Development	C/CPFF	NGMS : Redondo Beach, CA	-	0.649	Jun 2018	0.650	Jun 2019	0.668	Jun 2020	-		0.668	Continuing	Continuing	-
Technical Mission Analysis	RO	Aerospace : VAFB, CA	-	0.115	Oct 2017	0.054	Oct 2018	0.056	Oct 2019	-		0.056	Continuing	Continuing	-
		Subtotal	-	5.650		5.718		5.982		-		5.982	Continuing	Continuing	N/
Support (\$ in Million	s)			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	Total Cost	Target Value of Contract
Civilian Support	RO	SMC : LAAFB, CA	-	0.170	May 2018	-		-		-		-	0.000	0.170	0.00
		Subtotal	-	0.170		-		-		-		-	0.000	0.170	N/
Management Service	es (\$ in M	lillions)		FY 2	2018	FY 2019		FY 2020 Base			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 o Contrac
A&AS	C/CPAF	Various : TBD	-	0.822	Oct 2017	1.211		1.143	Oct 2019	-		1.143	Continuing	Continuing	-
Other Support	C/Various	Various : TBD	-	0.180	Oct 2017	0.152	Oct 2018	0.157	Oct 2019	-		0.157	_	Continuing	
		Subtotal	-	1.002		1.363		1.300		-		1.300	Continuing	Continuing	N/
												1			Target
			Prior Years	FY 2	2018	FY:	2019	FY 2 Ba	2020 ise		2020 CO	FY 2020 Total	Cost To Complete	Total Cost	Value of Contrac

PE 1206421F: Counterspace Systems

Air Force

UNCLASSIFIED
Page 11 of 18

Exhibit R-4, RDT&E Schedule Profile: P	chibit R-4, RDT&E Schedule Profile: PB 2020 Air Force													Date	e: Fe	∍bru	ary	201	9									
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 1206421F / Counterspace Systems								Project (Number/Name) 65A005 / Offensive Counterspace (OCS)							OCS) C								
		FY	201	8		FY	2019	9		FY	2020)		FY 2	2021			FY 2	2022	2		FY 2	2023	}		FY	202	4
	1	l 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
JETSS		·		·				,				,														·		
C2 Spiral #6 Development																												
C2 Spiral #6 Test																												
C2 Spiral #6 Delivery																												

PE 1206421F: Counterspace Systems

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 / 5	PE 1206421F I Counterspace Systems	65A005 / C	Offensive Counterspace (OCS) C2

Schedule Details

	St	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
JETSS					
C2 Spiral #6 Development	1	2019	4	2023	
C2 Spiral #6 Test	3	2022	3	2022	
C2 Spiral #6 Delivery	4	2023	4	2023	

PE 1206421F: Counterspace Systems Air Force

Page 13 of 18 R-1 Line #112

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019			
Appropriation/Budget Activity 3600 / 5					R-1 Progra PE 120642		t (Number / erspace Sys	Project (Number/Name) 65A013 / BOUNTY HUNTER					
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	
65A013: BOUNTY HUNTER	-	1.825	1.907	1.947	0.000	1.947	1.985	2.031	2.068	2.105	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

A. Mission Description and Budget Item Justification

Bounty Hunter (BH) supports the Defensive Space Control of US systems in a specific AOR and provides the capacity to prevent effective adversary use of Command, Control, Communications, Computers, and Intelligence (C4I). Continuing yearly spiral development is needed to meet new user needs in an ever changing threat environment.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
Title: Bounty Hunter	1.825	1.907	1.947
Description: Develop new capabilities for the Bounty Hunter program to maintain operational capability. Specific accomplishments are classified.			
FY 2019 Plans: Continue R&D for obsolescence challenges in component replace for new system deliveries. Continue EMI upgrade integration. Begin new UHF band capability integration requested on AFSPC 1067			
FY 2020 Plans: Complete development and integration of UHF capability. Resolve any new tech obsolescence HW ad SW challenges with new system component purchases for additional new system delivery to a new AOR. Prepare R&D plan for new total system upgrade to BH 3.0 to allow for system component consolidation and consideration for remote operation. 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, experimentation, prototyping, etc.			
FY 2019 to FY 2020 Increase/Decrease Statement: FY2020 increased compared to FY2019 by \$0.040M. Increase supports additional MITRE STE to support BH 3.0 future developmental efforts.			
Accomplishments/Planned Programs Subtotals	1.825	1.907	1.947

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

			FY 2020	FY 2020	FY 2020					Cost To	
<u>Line Item</u>	FY 2018	FY 2019	Base	OCO	<u>Total</u>	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total Cost
• SPAF 01 CTRSPC:	6.061	1.121	-	-	-	-	-	-	-	0.000	7.182

Counterspace Systems

PE 1206421F: Counterspace Systems Air Force

UNCLASSIFIED
Page 14 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 / 5	PE 1206421F / Counterspace Systems	65A013 / E	BOUNTY HUNTER

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

 FY 2020
 FY 2020
 FY 2020
 FY 2020
 FY 2020
 FY 2021
 FY 2022
 FY 2023
 FY 2024
 Complete
 Total Cost

Remarks

BH was established as a new start in FY16 when decision was made to begin efforts to bring BH online as a Program of Record having been initiated as a JCTD project in response to a JUON in 2010.

D. Acquisition Strategy

Contracts funded for this program shall be awarded to the MITRE Federally Funded Research and Development Center (FFRDC).

E. 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.

PE 1206421F: Counterspace Systems

Air Force Page 15 of 18

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force			Date: February 2019
11	,	- 3 (lumber/Name) BOUNTY HUNTER
	, ,		

Product Developme	nt (\$ in Mi	illions)		FY 2	2018	FY 2	2019	FY 2 Ba	2020 ise	FY 2		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	Total Cost	Target Value of Contract
Bounty Hunter Spiral Development	MIPR	MITRE : Colorado Springs, CO	-	1.825	Oct 2017	1.907	Oct 2017	1.947	Sep 2019	-		1.947	Continuing	Continuing	-
		Subtotal	-	1.825		1.907		1.947		-		1.947	Continuing	Continuing	N/A

Remarks

Bounty Hunter program was a new start in FY 2016.

Test and Evaluation	(\$ in Milli	ons)		FY :	2018	FY 2	2019		2020 ise	FY 2		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	Total Cost	Target Value of Contract
BOUNTY HUNTER SPIRAL DEVELOPMENT	MIPR	Not specified. : TBD	-	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	-	-		-		-		-		-	Continuing	Continuing	N/A

	Prior Years	FY 20	18 FY 2	FY 202 2019 Base		FY 2020 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	ı	1.825	1.907	1.947	-	1.947	Continuing	Continuing	N/A

Remarks

PE 1206421F: Counterspace Systems Air Force UNCLASSIFIED
Page 16 of 18

thibit R-4, RDT&E Schedule Profile: PB 202																				1_							2019		
propriation/Budget Activity											am E													er/Na			_		
00 / 5	PE 1206421F / Counterspace Systems 65A013 / BOUNTY HUNTER																												
																		1											
	FY 2018				FY 2019				FY 2020				FY 2021				FY 2	2022	F	FY 2023			FY 202						
	1	2	3	4	1	2	3	3 4	1 1	1 2	2 3	3 4	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BOUNTY HUNTER																													
Bounty Hunter Development Spiral 3																													
Spiral # 3 Delivery																													
Bounty Hunter Development Spiral 4																													
Spiral #4 Delivery																													
Bounty Hunter Development Spiral 5																													
Spiral #5 Delivery																													
Bounty Hunter Development Spiral 6																													
Spiral #6 Delivery																													
Bounty Hunter Development Spiral 7																													
Spiral #7 Delivery																													

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 / 5	PE 1206421F I Counterspace Systems	65A013 / E	BOUNTY HUNTER

Schedule Details

	St	Start							
Events by Sub Project	Quarter	Year	Quarter	Year					
BOUNTY HUNTER									
Bounty Hunter Development Spiral 3	1	2018	3	2018					
Spiral # 3 Delivery	4	2018	4	2018					
Bounty Hunter Development Spiral 4	1	2019	3	2019					
Spiral #4 Delivery	4	2019	4	2019					
Bounty Hunter Development Spiral 5	1	2020	3	2020					
Spiral #5 Delivery	4	2020	4	2020					
Bounty Hunter Development Spiral 6	1	2021	3	2021					
Spiral #6 Delivery	4	2021	4	2021					
Bounty Hunter Development Spiral 7	1	2022	3	2022					
Spiral #7 Delivery	4	2022	4	2022					

PE 1206421F: Counterspace Systems