

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force	Date: May 2021
--	-----------------------

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>
---	---

COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	-	26.246	0.000	0.000	0.000	0.000	-	-	-	-	-	-
65A001: <i>Counter Satellite Communications System</i>	-	19.228	0.000	0.000	0.000	0.000	-	-	-	-	-	-
65A005: <i>Offensive Counterspace (OCS) C2</i>	-	5.127	0.000	0.000	0.000	0.000	-	-	-	-	-	-
65A013: <i>BOUNTY HUNTER</i>	-	1.891	0.000	0.000	0.000	0.000	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

In FY 2021, PE 1206421F, Counterspace Systems efforts were transferred to Appropriation 3620, Research, Development, Test & Evaluation, Space Force, PE 1206421SF Counterspace Systems from Appropriation 3600, Budget Activity 05 due to the creation of a new Appropriation for Space Force.

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 Meadowlands.

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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force	Date: May 2021
--	-----------------------

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>
---	---

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 annual agile development is needed to meet new user needs in an ever changing threat environment.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Bounty Hunter weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605831F.

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)	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022 Base</u>	<u>FY 2022 OCO</u>	<u>FY 2022 Total</u>
Previous President's Budget	27.037	0.000	0.000	0.000	0.000
Current President's Budget	26.246	0.000	0.000	0.000	0.000
Total Adjustments	-0.791	0.000	0.000	0.000	0.000
• 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	-0.791	0.000			
• Other Adjustments	0.000	0.000	0.000	0.000	0.000

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force										Date: May 2021		
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>				Project (Number/Name) 65A001 / <i>Counter Satellite Communications System</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
65A001: <i>Counter Satellite Communications System</i>	-	19.228	0.000	0.000	0.000	0.000	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

In FY 2021, PE 1206421F, Counter Satellite Communications System efforts were transferred to Appropriation 3620, Research, Development, Test & Evaluation, Space Force, PE 1206421SF Counter Satellite Communications System from Appropriation 3600, Budget Activity [05] due to the creation of a new Appropriation for Space Force.

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 Meadowlands.

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.

JETSS is the Counterspace Command and Control (C2) system for mission planning and execution monitoring currently in use at the Combined Space operations Center (CSpOC) Special Technical Operations (STO) Cell.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2020	FY 2021	FY 2022
Title: Counter Communications System (CCS) Pre-planned Product Improvement (P3I) Program	19.228	0.000	0.000
Description: Develop, integrate, test and field the CCS P3I program. This is an incremental approach to deliver Block 20 CCS capabilities.			
FY 2021 Plans: N/A			
FY 2022 Plans: N/A			
Accomplishments/Planned Programs Subtotals	19.228	0.000	0.000

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>	Project (Number/Name) 65A001 / <i>Counter Satellite Communications System</i>

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

<u>Line Item</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u> <u>Base</u>	<u>FY 2022</u> <u>OCO</u>	<u>FY 2022</u> <u>Total</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• SPAF 01 1206421F: <i>Counterspace Systems</i>	5.700	0.000	0.000	-	0.000	-	-	-	-	-	-

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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force **Date: May 2021**

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>	Project (Number/Name) 65A001 / <i>Counter Satellite Communications System</i>
--	---	---

Product Development (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Block 10 P3I Development	Various	Various : El Segundo, CA	-	12.110	Feb 2020	-		-		-		-	-	-	-
Technical Mission Analysis	RO	Aerospace Corp : El Segundo, CA	-	0.724	Oct 2019	-		-		-		-	-	-	11.144
Enterprise Systems Engineering and Integration	C/FFP	AT&T : El Segundo, CA	-	0.199	May 2020	-		-		-		-	-	-	-
Counterspace Architecture Development	C/CPFF	NGMS : Redondo Beach, CA	-	0.000		-		-		-		-	-	-	-
Subtotal			-	13.033		-		-		-		-	-	-	N/A

Support (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Security	C/CPAF	Mantech : El Segundo, CA	-	2.157	Nov 2019	-		-		-		-	-	-	-
Miscellaneous Support Services	Various	Various : TBD	-	0.008	Nov 2019	-		-		-		-	-	-	-
Subtotal			-	2.165		-		-		-		-	-	-	N/A

Management Services (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
FFRDC	RO	Aerospace Corp : El Segundo, CA	-	0.759	Oct 2019	-		-		-		-	-	-	-
A&AS	Various	Various : El Segundo, CA	-	3.193	May 2020	-		-		-		-	-	-	-
Other Support	Various	Various : El Segundo, CA	-	0.078	Oct 2019	-		-		-		-	-	-	-

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>	Project (Number/Name) 65A001 / <i>Counter Satellite Communications System</i>

FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
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

CCS B10.3	
10.2 System Deliveries : #3-16	██████████
10.3. Development	██████████

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>	Project (Number/Name) 65A001 / <i>Counter Satellite Communications System</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
CCS B10.3				
10.2 System Deliveries : #3-16	1	2020	4	2020
10.3. Development	2	2020	4	2020

Note

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

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>	Project (Number/Name) 65A005 / <i>Offensive Counterspace (OCS) C2</i>
--	---	---

COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
65A005: <i>Offensive Counterspace (OCS) C2</i>	-	5.127	0.000	0.000	0.000	0.000	-	-	-	-	-	-
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 2020	FY 2021	FY 2022
Title: Joint Execution and Tasking System for Space (JETSS)	5.127	0.000	-
Description: Evolve with upgrades the counterspace mission planning and C2 capability to support counterspace systems space control warfighter activities.			
FY 2021 Plans: N/A			
FY 2021 to FY 2022 Increase/Decrease Statement: N/A			
Accomplishments/Planned Programs Subtotals	5.127	0.000	-

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.

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force			Date: May 2021				
Appropriation/Budget Activity 3600 / 5		R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>			Project (Number/Name) 65A005 / <i>Offensive Counterspace (OCS) C2</i>		

	FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
	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

JETSS																												
C2 Spiral #6 Development	■																											
C2 Spiral #6 Delivery	■																											

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>	Project (Number/Name) 65A005 / <i>Offensive Counterspace (OCS) C2</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
JETSS				
C2 Spiral #6 Development	1	2020	1	2020
C2 Spiral #6 Delivery	1	2020	1	2020

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>				Project (Number/Name) 65A013 / <i>BOUNTY HUNTER</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
65A013: <i>BOUNTY HUNTER</i>	-	1.891	0.000	0.000	0.000	0.000	-	-	-	-	-	-
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 annual agile development is needed to meet new user needs in an ever changing threat environment.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Bounty Hunter weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2020	FY 2021	FY 2022
Title: Bounty Hunter	1.891	0.000	0.000
Description: Develop new capabilities for the Bounty Hunter program to maintain operational capability. Specific accomplishments are classified.			
FY 2021 Plans: N/A			
FY 2022 Plans: N/A			
Accomplishments/Planned Programs Subtotals			
	1.891	0.000	0.000

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

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• SPAF 01 CTRSPC: <i>Counterspace Systems</i>	-	-	-	-	-	-	-	-	-		

Remarks

BH was established as a new start in FY16 as a JCTD project in response to a JUON in 2010. BH was established as a Program of Record (PoR) in March 2019.

D. Acquisition Strategy

Contracts funded for this program shall be awarded to MITRE, a Federally Funded Research and Development Center (FFRDC). The establishment of a commercial vendor has yet to be determined.

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>	Project (Number/Name) 65A013 / <i>BOUNTY HUNTER</i>
--	---	---

FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
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

<i>BOUNTY HUNTER</i>	
2019 Continuous Delivery	
Bounty Hunter Agile Development 2020	
2020 Continuous Delivery	

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 1206421F / <i>Counterspace Systems</i>	Project (Number/Name) 65A013 / <i>BOUNTY HUNTER</i>
--	---	---

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>BOUNTY HUNTER</i>				
2019 Continuous Delivery	1	2020	1	2020
Bounty Hunter Agile Development 2020	1	2020	4	2020
2020 Continuous Delivery	2	2020	1	2021