

UNCLASSIFIED

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 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605458F I Air & Space Ops Center 10.2 RDT&E							
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	141.787	21.109	119.745	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	282.641
654945: AOC 10.2 Development	141.787	21.109	119.745	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	282.641
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Program MDAP/MAIS Code: N42												
Note In FY 2019, PE 0605458F, Air & Space Ops Center 10.2 RDT&E, Project 654945, AOC 10.2 Development, terminated 16 Jan 18.												
A. Mission Description and Budget Item Justification The Air Operations Center Weapon System (AOC WS), AN/USQ-163 Falconer, the senior element of the Theater Air Control System (TACS), is the weapon system the Commander, Air Force Forces (COMAFFOR) provides the Combined/Joint Force Air Component Commander (C/JFACC) for planning, executing, and assessing theater-wide air and space operations. The C/JFACC provides air, space and cyber support to the Combined/Joint Forces Commander (C/JFC) by coordinating, deconflicting and assessing the progress of various weapon systems to advance the C/JFC's campaign. The AOC WS develops operations strategy and planning documents. The weapon system also disseminates tasking orders; executes day-to-day peacetime and combat air, space and cyber operations; and provides rapid reaction to immediate situations by exercising positive control of friendly forces. The AOC WS Increment 10.2 set of requirements keeps the AOC interoperable, certified, supportable, and compliant through the integration, testing and fielding of new capabilities and upgrades to the AOC WS baseline. The program supports mission requirements at Geographic and Global (formerly known as Functional) AOCs, as well as Support and Manpower Augmentation units. To keep the AOC current and interoperable with the Combatant Commands (CCMD), cyber requirements, and fifth generation weapon system/weapons, the AOC WS program plans to evolve the AOC through the integration and test of progressively improving capabilities by incremental and rapid delivery of requirements using commercial software development best practices. These activities ensure a system of systems engineering perspective for the AOC WS, and include weapon system standardization activities as defined by AOC WS requirements documents. AOC WS Increment 10.2 received a Milestone B decision 11 October 2013. This project intended to provide for design, development, integration of 3rd Party capabilities, and testing; as well as, build-up and fielding of the Help Desk (HD), Formal Training Unit (FTU), Combined Air Operations Center-experimental (CAOC-X) suite, and one geographic site. The use of lengthy legacy acquisition methodologies resulting in multi-year period before delivery drove the AF to change acquisition approaches and terminate the Prime Contract in July 2017 in order to pursue evolutionary industry best-practiced approaches. In FY 2019, no funding is requested and no funding is required due to AOC WS Increment 10.2 contract termination and Program of Record cancellation. BA5 - This program is in Budget Activity 5, System Development and Demonstration (SDD) because the program passed Milestone B and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full fielding decision.												

UNCLASSIFIED

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 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0605458F I Air & Space Ops Center 10.2 RDT&E			
B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	28.911	119.745	103.441	0.000	103.441
Current President's Budget	21.109	119.745	0.000	0.000	0.000
Total Adjustments	-7.802	0.000	-103.441	0.000	-103.441
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	-7.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.802	0.000			
• Other Adjustments	0.000	0.000	-103.441	0.000	-103.441
Change Summary Explanation					
FY 2017 funding decreased \$7.0M due to AOC 10.2 program delays.					
FY 2019 funding decreased \$103.411M due to AOC WS Increment 10.2 contract termination and Program of Record cancellation.					
C. Accomplishments/Planned Programs (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: AOC WS Inc 10.2 Development	20.420	119.745	0.000	0.000	0.000
Description: AOC 10.2 infrastructure development and mission capability integration. Development of a robust, open, Net-Centric infrastructure with a Service Oriented Architecture (SOA). Conduct system maintenance and interoperability updates.					
FY 2018 Plans: - Continue work on termination closing out of 10.2 Prime Contract.					
FY 2019 Base Plans: N/A					
FY 2019 OCO Plans: N/A					
FY 2018 to FY 2019 Increase/Decrease Statement:					

UNCLASSIFIED

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 5: System Development & Demonstration (SDD)			R-1 Program Element (Number/Name) PE 0605458F I Air & Space Ops Center 10.2 RDT&E								
C. Accomplishments/Planned Programs (\$ in Millions)			FY 2017	FY 2018	FY 2019 Base						
Funding decreased due to program no longer requiring RDTE funds starting in FY 2019 due to program termination/cancellation.											
Title: AOC WS Inc 10.2 Test and Evaluation Description: Test and Evaluation FY 2018 Plans: N/A FY 2019 Base Plans: N/A FY 2019 OCO Plans: N/A FY 2018 to FY 2019 Increase/Decrease Statement: N/A			0.689	0.000	0.000						
Accomplishments/Planned Programs Subtotals			21.109	119.745	0.000						
D. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• OPAF 03 Line Item 834560: Air Operations Center (AOC) 10.2	8.180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.180
Remarks											
E. Acquisition Strategy											
The acquisition strategy builds on existing capabilities using evolutionary acquisition to standardize, modernize and sustain the AOC. With the termination of the AOC 10.2 Prime Contract on 13 Jul 17 and official cancellation on 16 Jan 18, the Air Force is undergoing the orderly shutdown to cancel the AOC 10.2 Program of Record. Additionally, Raytheon was awarded the Long-Term Modification and Sustainment (LTM&S) contract for the AOC WS on 24 Apr 17, with official hand-off as of 30 Jun 17. This means the Air Force will leverage Raytheon for sustainment of the existent AOC 10.1 baseline as well as modifications to that baseline in pursuit of a modernized AOC. The Air Force is also pursuing the AOC Pathfinder effort designed to mirror commercial software best practices to incrementally deliver capability to the warfighter at a rapid and efficient pace using Agile DevOps. Partnered with Defense Digital Service (DDS) and Defense Innovation Unit Experimental (DIUx),											

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force</i> / BA 5: <i>System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605458F / <i>Air & Space Ops Center 10.2 RDT&E</i>	
<p>and using the AOC 10.1 baseline as the starting point, the Air Force will leverage AOC 10.2 components piecemeal as applicable to agile software develop the existing backlog.</p> <p><u>F. Performance Metrics</u></p> <p>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.</p>		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force												Date: February 2018			
Appropriation/Budget Activity 3600 / 5						R-1 Program Element (Number/Name) PE 0605458F / Air & Space Ops Center 10.2 RDT&E				Project (Number/Name) 654945 / AOC 10.2 Development					
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
AOC 10.2 Modernization Government Furnished Equipment	Various	Various : Various	2.027	0.000		0.000		-		-		-	0.000	2.027	-
AOC 10.2 Modernization Contract	C/CPIF	Northrop Grumman : Herndon, VA	114.387	15.560	Nov 2016	119.345	Mar 2018	-		-		-	0.000	249.292	212.958
AOC 10.2 Training	C/Various	Various : Various	2.936	0.000		0.000		-		-		-	0.000	2.936	-
Subtotal			119.350	15.560		119.345		-		-		-	0.000	254.255	N/A
Test and Evaluation (\$ 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
Test	Various	Various : Various	4.673	0.212	Apr 2017	0.000		-		-		-	0.000	4.885	-
Subtotal			4.673	0.212		0.000		-		-		-	0.000	4.885	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
System Engineering	C/Various	MITRE : Bedford, MA	9.436	3.720	Oct 2016	0.000		-		-		-	0.000	13.156	-
Program Management Adminstration	C/Various	Various : Hanscom AFB, MA	8.328	1.617	Dec 2016	0.400	Nov 2017	-		-		-	0.000	10.345	-
Subtotal			17.764	5.337		0.400		-		-		-	0.000	23.501	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			141.787	21.109		119.745		-		-		-	0.000	282.641	N/A
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force			Date: February 2018		
Appropriation/Budget Activity 3600 / 5			R-1 Program Element (Number/Name) PE 0605458F / Air & Space Ops Center 10.2 RDT&E		
			Project (Number/Name) 654945 / AOC 10.2 Development		

	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
AOC 10.2																												
AOC Increment 10.2 Termination/ Cancellation																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0605458F / Air & Space Ops Center 10.2 RDT&E	Project (Number/Name) 654945 / AOC 10.2 Development

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
AOC 10.2				
AOC Increment 10.2 Termination/Cancellation	1	2018	4	2018