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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/Name) PE 0804743F I Other Flight Training							
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	-	1.998	2.022	2.057	0.000	2.057	2.093	2.137	2.177	2.216	Continuing	Continuing
675304: Aviation Resource Management System (ARMS)	-	1.998	2.022	2.057	0.000	2.057	2.093	2.137	2.177	2.216	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Aviation Resource Management System (ARMS) is the authoritative data source for recording and managing aircrew training information, aircrew/parachutist management, flying hour tracking, flight pay management, and flying gate tracking for 57,000 Air Force members. The Air Force uses this information to enhance safety of-flight operations and to determine eligibility to perform aviation related events. ARMS interfaces with the Military Personnel Data System (MilPDS) and multiple operations and flight scheduling systems such as Patriot Excalibur (PEX), Graduate Training Integration Management System (GTIMS), Center Operations On-Line (COOL), Global Decision Support System (GDSS), and Automated Aircrew Management System (AAMS) and is used to determine whom to select for flying operations, assignment actions, and promotion of aircrew members.

New development work is required to provide additional flying operations information which will aid in better portraying Air Force readiness and to feed this data into Defense Readiness Reporting System Strategic (DRRS-S). These enhanced capabilities, to be developed incrementally, include the following: electronic flight record, flying hour management/execution, simulator and RPA management/utilization, full career logbook, training look-back, aircrew member man-month allocation, enhanced resource and jump module management, and additional interfaces.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver ARMS capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F.

Funds will be used to perform studies and innovative integration efforts for common technology capabilities such as cloud migration, technology development and mobile application.

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.

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B. Program Change Summary (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total		
Previous President's Budget		2.074	2.022	2.057	0.000	2.057		
Current President's Budget		1.998	2.022	2.057	0.000	2.057		
Total Adjustments		-0.076	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		-0.076	0.000					
• Other Adjustments		0.000	0.000	0.000	0.000	0.000		
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Aviation Resource Management System (ARMS)				1.998	2.022	2.057	0.000	2.057
Description: Hardware/software development to update ARMS, adding functionality and system interfaces.								
FY 2019 Plans:								
- Finalize Development Activities/Testing for Inc I, Build 2A (Training Data Module)								
- Continue Development Activities for Inc I Build 2B (Simulator Utilization Module)								
FY 2020 Base Plans:								
- Continue Development Activities for ARMS Missile Management module build.								
FY 2020 OCO Plans:								
N/A.								
FY 2019 to FY 2020 Increase/Decrease Statement:								
- ARMS PMO is building a different system module from previous year, with different functional/financial requirements.								
Accomplishments/Planned Programs Subtotals				1.998	2.022	2.057	0.000	2.057

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D. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2020</u>	<u>FY 2020</u>	<u>FY 2020</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>Complete</u>	<u>Total Cost</u>
• RDTE 07 0804743F: <i>Other Flight Training</i>	1.998	2.240	2.281	-	2.281	2.324	2.371	2.413	2.456	Continuing	Continuing
Remarks											
E. Acquisition Strategy											
ARMS will incrementally develop enhancements to the existing system. The acquisition will be accomplished organically or with Firm Fixed Price (FFP) contracts awarded under Section 8(a) as small business set aside.											
F. 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.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0804743F / Other Flight Training				Project (Number/Name) 675304 / Aviation Resource Management System (ARMS)					
Product Development (\$ in Millions)				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 Complete	Total Cost	Target Value of Contract
ARMS Increment 1, Build 1 and Build 2 contract	SS/FFP	581ST SMXS ROBINS AFB : Warner Robins, GA	-	-		-		-		-		-	Continuing	Continuing	3.400
ARMS BUILD I	SS/FFP	581ST SNXS ROBINS AFB : Warner Robins, GA	-	-		-		-		-		-	Continuing	Continuing	-
ARMS BUILD II	SS/FFP	581ST SMXS ROBINS AFB : Warner Robins, GA	-	-		-		-		-		-	Continuing	Continuing	-
ARMS Increment 2 Development	SS/FFP	581ST SMXS ROBINS AFB : Warner Robins, GA	-	0.711	Mar 2019	0.810	Mar 2020	0.810	Mar 2020	-		0.810	Continuing	Continuing	10.000
Subtotal			-	0.711		0.810		0.810		-		0.810	Continuing	Continuing	N/A
Remarks ARMS INCREMENT I INCLUDES BUILDS I AND II. ARMS BUILD I AND II ARE NOW LISTED SEPARATELY.															
Support (\$ in Millions)				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 Complete	Total Cost	Target Value of Contract
ARMS Architecture Contract Support	C/FFP	Copper River Information Technology, LLC : Anchorage, AK	-	0.065	Sep 2018	0.065	Sep 2019	0.067	Sep 2020	-		0.067	Continuing	Continuing	-
ARMS TECHNICAL & RISK SME	C/FFP	DDC IT SERVICES : Albuquerque, NM	-	-		-		-		-		-	Continuing	Continuing	-
ARMS C&A SUPPORT III	C/FFP	OASIS : Lexington, MA	-	0.154	Apr 2018	0.154	Apr 2019	0.159	Apr 2020	-		0.159	Continuing	Continuing	-
ARMS CONFIGURATION MANAGER	C/FFP	OASIS : Lexington, MA	-	0.126	Apr 2018	0.126	Apr 2019	0.130	Apr 2020	-		0.130	Continuing	Continuing	-
ARMS AGILE TOOLS	C/TBD	TBD : TBD	-	0.051	Apr 2018	-		-		-		-	Continuing	Continuing	-

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Support (\$ in Millions)				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 Complete	Total Cost	Target Value of Contract
ARMS SYSTEM ADMIN III	C/FFP	OASIS : Lexington, MA	-	0.156	Apr 2018	0.156	Apr 2019	0.161	Apr 2020	-		0.161	Continuing	Continuing	-
ARMS CIE SUPPORT	C/FFP	TBD : TBD	-	0.207	Mar 2019	0.220	Mar 2020	0.227	Apr 2020	-		0.227	Continuing	Continuing	-
ARMS CIE SUPPORT ADDENDUM	C/FFP	GSA : Atlanta, GA	-	-		-		-		-		-	Continuing	Continuing	-
ARMS INTEGRATION SUPPORT	C/FFP	Not specified. : TBD	-	0.195	Apr 2019	0.158	Apr 2020	0.163	Apr 2020	-		0.163	Continuing	Continuing	-
ARMS PLURALSIGHT	C/TBD	TBD : TBD	-	-		-		-		-		-	Continuing	Continuing	-
ARMS Financial Improvement Audit Readiness Support	SS/FFP	TM Capture : Maxwell AFB-Gunter Annex, AL	-	0.065	Feb 2019	0.065	Feb 2020	0.065	Feb 2020	-		0.065	Continuing	Continuing	0.325
Subtotal			-	1.019		0.944		0.972		-		0.972	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				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 Complete	Total Cost	Target Value of Contract
ARMS Test Support	C/FFP	GSA : Maxwell AFB-Gunter Annex, AL	-	0.054	Apr 2019	0.054	Apr 2020	0.056	Apr 2020	-		0.056	Continuing	Continuing	0.260
ARMS TEST MANAGER	C/CPAF	OASIS : Lexington, MA	-	0.154	Mar 2018	0.154	Mar 2019	0.159	Apr 2020	-		0.159	Continuing	Continuing	-
Subtotal			-	0.208		0.208		0.215		-		0.215	Continuing	Continuing	N/A
Management Services (\$ in Millions)				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 Complete	Total Cost	Target Value of Contract
ARMS PMA Other Govt Costs	C/TBD	TBD : TBD	-	0.060	Apr 2018	0.060	Apr 2019	0.060	Apr 2020	-		0.060	Continuing	Continuing	-
Subtotal			-	0.060		0.060		0.060		-		0.060	Continuing	Continuing	N/A

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	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	1.998		2.022		2.057		-		2.057	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force			Date: February 2019		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0804743F / <i>Other Flight Training</i>			Project (Number/Name) 675304 / <i>Aviation Resource Management System (ARMS)</i>

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
ARMS EXHIBIT R-4																												
Advisory and Assistance Services Contract																												
ARMS Financial Improvement Audit Readiness Contract																												
Increment I Build 1 Contract																												
Development - Increment I Build 1 Complete																												
Testing - Increment I Build 1																												
Development - Increment I Build 2 Start																												
Architecture Support																												
Field - Increment I Build 1																												
Testing - Increment I Build 2																												
ARMS 7.0 Increment II Build 1 Contract																												
Development - Increment II Build 1 Start																												
Field - Increment I Build 2																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
ARMS EXHIBIT R-4				
Advisory and Assistance Services Contract	1	2018	4	2024
ARMS Financial Improvement Audit Readiness Contract	1	2018	4	2024
Increment I Build 1 Contract	1	2018	2	2018
Development - Increment I Build 1 Complete	1	2018	2	2018
Testing - Increment I Build 1	2	2018	2	2019
Development - Increment I Build 2 Start	2	2018	3	2018
Architecture Support	1	2018	4	2024
Field - Increment I Build 1	3	2019	4	2019
Testing - Increment I Build 2	1	2020	4	2020
ARMS 7.0 Increment II Build 1 Contract	1	2020	4	2020
Development - Increment II Build 1 Start	1	2020	1	2020
Field - Increment I Build 2	4	2020	1	2021