

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 0605223F I Advanced Pilot Training							
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	11.879	7.107	105.999	265.465	0.000	265.465	363.473	317.783	201.478	96.373	48.521	1,418.078
655340: Advanced Trainer Replacement T-X	11.879	7.107	105.999	265.465	0.000	265.465	363.473	317.783	201.478	96.373	48.521	1,418.078
Quantity of RDT&E Articles	-	-	3	2	-	2	-	-	-	-		

Program MDAP/MAIS Code: 436

Note

Prior Years Funding \$4.994M was executed in PE 0604233F.

A. Mission Description and Budget Item Justification

The Advanced Pilot Training (APT) program will replace the Air Education Training Command's (AETC) aging T-38C fleet with new aircraft, Ground Based Training System (simulators, training devices, computer based training systems, academics, etc.), Maintenance Training System, and support infrastructure currently used in the fighter/bomber advanced Specialized Undergraduate Pilot Training track as well as in the Introduction to Fighter Fundamentals program. The APT program acquisition strategy was approved by OSD (AT&L) in early FY 2017 (December 2016). At the same time, the APT Team completed their Development Request for Proposal (RFP) Release Defense Acquisition Board and subsequently released the RFP to industry on 30 Dec 16. The Program began source selection evaluations in mid 2017 and seeks Milestone B entry in FY 2018.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver the APT weapon system capabilities. 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.

Funding contained in this platform's documentation directly aids AETC flying training enterprise to continue its overall Future Years Defense Program pilot production increase starting in FY 2020, thus reducing the USAF Pilot Shortage.

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

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 0605223F I Advanced Pilot Training					
B. Program Change Summary (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
Previous President's Budget		12.377	105.999	323.463	0.000	323.463	
Current President's Budget		7.107	105.999	265.465	0.000	265.465	
Total Adjustments		-5.270	0.000	-57.998	0.000	-57.998	
• Congressional General Reductions		0.000	0.000				
• Congressional Directed Reductions		-5.000	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		-0.270	0.000				
• Other Adjustments		0.000	0.000	-57.998	0.000	-57.998	
Change Summary Explanation							
FY17 -\$5.000M due to Congressional reduction							
FY17 -\$0.270M due to Small Business Innovative Research Transfer							
FY19 -\$57.998M due to source selection delay							
C. Accomplishments/Planned Programs (\$ in Millions)					FY 2017	FY 2018	FY 2019
Title: Advanced Pilot Training (APT) Program					7.107	105.999	265.465
Description: The Advanced Pilot Training program office is developing an acquisition strategy and related documentation to meet the requirements of the Capabilities Development Document for Milestone B entry. This includes studies, analysis, acquisition documentation, and market research activities to reduce risk and support the acquisition strategy and engineering and manufacturing development. Includes Program Management Administration (PMA) such as travel, Other Government Costs (OGC), and Advisory and Assistance Services (A&AS).							
FY 2018 Plans: Program plans to complete Milestone B, Contract award completion and contract kickoff activities to include System Requirements Review/System Functional Review, and documentation updates post Milestone B. Plans also includes APT PMA costs such as travel, OGC, and A&AS.							
FY 2019 Plans:							

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 0605223F I Advanced Pilot Training							
C. Accomplishments/Planned Programs (\$ in Millions)										FY 2017	FY 2018	FY 2019
Program plans to conduct a Preliminary Design Review (PDR), a Post-PDR, Aircraft and Ground Based Training System Critical Design Reviews, along with completion of the first operational assessment. The Maintenance Training System Request for Proposal will also be released. Plans also include Advanced Pilot Training PMA costs such as travel, OGC, and A&AS.												
FY 2018 to FY 2019 Increase/Decrease Statement: See above for details.												
Accomplishments/Planned Programs Subtotals										7.107	105.999	265.465
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	
• APAF 03 APT000: T-X (Advanced Pilot Trainer) Procurement	-	-	-	-	-	-	-	538.644	601.486	13,680.196	14,820.326	
• APAF 03 APT000 Adv Proc: T-X (Advanced Pilot Trainer) Procurement	-	-	-	-	-	-	63.500	71.046	100.848	1,945.911	2,181.305	
• APAF 06 APT000: T-X (Advanced Pilot Trainer) Procurement	-	-	-	-	-	-	-	29.908	28.537	817.180	875.625	
• APAF 07 ATP000: T-X (Advanced Pilot Trainer) Procurement	-	-	-	-	-	-	-	-	21.415	312.922	334.337	
Remarks												
E. Acquisition Strategy												
This Advanced Pilot Training (APT) Program will develop, test, acquire, and sustain an affordable, agile, and integrated APT System consisting of 350 aircraft, Ground Based Training System, Maintenance Training System, support, infrastructure, and personnel to meet Air Education and Training Command's initial need date of FY 2024.												
The APT Program has conducted extensive market research, concluding multiple interested and capable offerors exist supporting a vigorous competition. The program's acquisition strategy leverages market conditions by competing and awarding development, production, and initial sustainment in a single contract award. A single award Indefinite Delivery Indefinite Quantity contract will be awarded to provide for development, integration, and testing needed to meet existing APT requirements. Additional contract options are available for Low Rate Initial Production, Full Rate Production and initial sustainment transition.												

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 / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605223F / <i>Advanced Pilot Training</i>	
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.		

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 0605223F / Advanced Pilot Training				Project (Number/Name) 655340 / Advanced Trainer Replacement T-X					
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
Advanced Pilot Training Future Contracts	Various	TBD : TBD	0.000	-		88.161	Jul 2018	251.133	Nov 2018	-		251.133	731.331	1,070.625	-
Subtotal			0.000	-		88.161		251.133		-		251.133	731.331	1,070.625	N/A
Remarks															
As the acquisition strategy is developed and cost estimates mature, the amount in cost to complete will be allocated to the appropriate categories.															
Support (\$ 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
Advanced Pilot Training Studies and Analysis	Various	Various : Various	2.799	0.000	Jan 2017	4.090	Jan 2018	0.158	Jan 2019	-		0.158	64.313	71.360	-
Subtotal			2.799	0.000		4.090		0.158		-		0.158	64.313	71.360	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
Advanced Pilot Training Test Support	MIPR	Edwards AFB : Edwards AFB, CA	0.233	0.209	May 2017	0.855	Nov 2017	1.172	Nov 2018	-		1.172	206.379	208.848	-
Subtotal			0.233	0.209		0.855		1.172		-		1.172	206.379	208.848	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
Advanced Pilot Training PMA Other Government Costs	Various	AFLCMC : Dayton, OH	1.888	2.015	Jan 2017	3.837	Oct 2017	4.188	Oct 2018	-		4.188	6.537	18.465	-

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 0605223F / Advanced Pilot Training				Project (Number/Name) 655340 / Advanced Trainer Replacement T-X					
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
Advanced Pilot Training A&AS	Various	AFLCMC : Dayton, OH	6.959	4.883	Feb 2017	9.056	Mar 2018	8.814	Mar 2019	-		8.814	26.494	56.206	-
Subtotal			8.847	6.898		12.893		13.002		-		13.002	33.031	74.671	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			11.879	7.107		105.999		265.465		-		265.465	1,035.054	1,425.504	N/A
Remarks Prior years amounts under Program 0604233F, Specialized Undergraduate Flight Training. Advanced Pilot Training Studies and Analysis: \$0.935M Advanced Pilot Training PMA Government Costs: \$1.383M Advanced Pilot Training A&AS: \$2.676M															

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 0605223F / <i>Advanced Pilot Training</i>			Project (Number/Name) 655340 / <i>Advanced Trainer Replacement T-X</i>

	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
Advanced Pilot Training																												
Pre Milestone B (RFP Release) Decision Point																												
RFP Release																												
Source Selection																												
Milestone B																												
Engineering and Manufacturing Development Phase																												
Government Preliminary Design Review (PDR)																												
Post PDR Review																												
Government Critical Design Review (CDR)																												
Development, Test and Evaluation																												
Milestone C																												
Operational Test Readiness Review (OTRR)																												
Initial Operational Test & Evaluation (IOT&E)																												

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 0605223F / <i>Advanced Pilot Training</i>	Project (Number/Name) 655340 / <i>Advanced Trainer Replacement T-X</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Advanced Pilot Training</i>				
Pre Milestone B (RFP Release) Decision Point	1	2017	1	2017
RFP Release	1	2017	1	2017
Source Selection	2	2017	4	2018
Milestone B	4	2018	4	2018
Engineering and Manufacturing Development Phase	4	2018	3	2022
Government Preliminary Design Review (PDR)	1	2019	1	2019
Post PDR Review	2	2019	2	2019
Government Critical Design Review (CDR)	3	2019	3	2019
Development, Test and Evaluation	2	2020	2	2022
Milestone C	3	2022	3	2022
Operational Test Readiness Review (OTRR)	1	2023	4	2023
Initial Operational Test & Evaluation (IOT&E)	3	2023	4	2023