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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Air Force **Date:** February 2016

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 0605223F / <i>Advanced Pilot Training</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	0.000	8.201	10.395	12.377	0.000	12.377	105.699	263.274	272.973	277.816	670.087	1,620.822
655340: <i>Advanced Trainer Replacement T-X</i>	0.000	8.201	10.395	12.377	0.000	12.377	105.689	252.140	243.166	247.479	490.953	1,370.400
655361: <i>Stores-Aircraft Interface*</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.010	11.134	29.807	30.337	179.134	250.422

Program MDAP/MAIS Code: 436

*This project's R-2a exhibit has been suppressed due to funding not beginning until after FY 2017

Note

Prior Years Funding \$5.100M was executed in PE 0604233F.

A. Mission Description and Budget Item Justification

Advanced Pilot Training (APT) program will deliver the capabilities needed to successfully train USAF pilots beyond 2024. The APT program will replace AETC's aging T-38C fleet with new aircraft, Ground Based Training Systems (GBTS) (simulators, training devices, computer based training systems, academics, etc.), and support infrastructure currently used in the fighter/bomber advanced Specialized Undergraduate Pilot Training (SUPT) track as well as in the Introduction to Fighter Fundamentals (IFF) program. The APT program will close training gaps in the current advanced pilot training system and will provide student pilots with the foundational flying skills and core competencies required to transition into current and future fighter/bomber aircraft.

The Stores-Aircraft Interface project provides funding for development planning efforts in support of future capabilities.

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.

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B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	8.201	11.395	12.152	0.000	12.152
Current President's Budget	8.201	10.395	12.377	0.000	12.377
Total Adjustments	0.000	-1.000	0.225	0.000	0.225
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	-1.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	0.225	0.000	0.225

Change Summary Explanation

The FY2016 funding was reduced by \$1 million due to a Congressionally directed reduction for T-X to restrain growth in S&A and A&AS.

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force										Date: February 2016		
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>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
655340: <i>Advanced Trainer Replacement T-X</i>	0.000	8.201	10.395	12.377	0.000	12.377	105.689	252.140	243.166	247.479	490.953	1,370.400
Quantity of RDT&E Articles	-	-	-	-	-	-	3	2	-	-		

Note

Prior Years Funding \$5.100M was executed in PE 0604233F.

A. Mission Description and Budget Item Justification

The APT program will replace the AETC aging T-38C fleet with new aircraft, Ground Based Training Systems (GBTS) (simulators, training devices, computer based training systems, academics, etc.), and support infrastructure currently used in the fighter/bomber advanced Specialized Undergraduate Pilot Training (SUPT) track as well as in the Introduction to Fighter Fundamentals (IFF) program. The APT program office is developing an acquisition strategy and related documentation to meet the requirements of the Capabilities Development Document (CDD) in order to comply with OSD direction to continue toward a Milestone B entry and return for a Request for Proposal Defense Acquisition Board in fiscal year FY 2016.

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

	FY 2015	FY 2016	FY 2017
Title: Advanced Pilot Training (APT) Program	8.201	10.395	12.377
Description: Studies, analysis, acquisition documentation and market research activities to reduce risk in support of acquisition strategy, engineering and manufacturing development. Included APT PMA costs such as travel, Other Govt Costs (OGC) and Advisory and Assistance Services (A&AS) in support of a Milestone B approval.			
FY 2015 Accomplishments: Studies, analysis, acquisition documentation and market research activities completed to reduce risk in support of acquisition strategy, engineering and manufacturing development. Included APT PMA costs such as travel, Other Govt Costs (OGC) and Advisory and Assistance Services (A&AS) in support of Milestone B approval.			
FY 2016 Plans: Studies, analysis, acquisition documentation and RFP development activities in support of RFP Release Decision DAB and Source Selection activities. Includes APT PMA costs such as travel, Other Govt Costs (OGC) and Advisory and Assistance Services (A&AS) in support of Milestone B approval.			
FY 2017 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force		Date: February 2016
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>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
Studies, analysis, acquisition documentation, source selection activities and contract award. Plans include APT PMA costs such as travel, Other Govt Costs (OGC) and Advisory and Assistance Services (A&AS) in support of Milestone B approval as well as contract kickoff activities.			
Accomplishments/Planned Programs Subtotals	8.201	10.395	12.377

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2015	FY 2016	FY 2017	FY 2017	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Cost To	Cost To
• APAF:BA03:Line Item # APT000: <i>Advanced Trainer Replacement T-X</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	63.500	4,792.000	4,855.500

Remarks

D. Acquisition Strategy

A full and open competitive source selection is anticipated with USD(AT&L) direction to return for an RFP Release Decision DAB in FY2016. The acquisition strategy is in development.

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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Air Force **Date:** February 2016

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>
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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Advanced Pilot Training Future Contracts	Various	TBD : TBD	0.000	0.000		0.000		12.236	Sep 2017	0.000		12.236	1,339.427	1,351.663	-
Subtotal			0.000	0.000		0.000		12.236		0.000		12.236	1,339.427	1,351.663	-

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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Advanced Pilot Training Studies and Analysis	Various	Various : Various	0.000	4.020	May 2016	0.000		0.000		0.000		0.000	0.000	4.020	-
Subtotal			0.000	4.020		0.000		0.000		0.000		0.000	0.000	4.020	-

Remarks
Plan to fund both FY15 and FY16 Studies and Analysis requirements with FY15 budget.

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Advanced Pilot Training Test Support	MIPR	Edwards AFB : Edwards AFB, CA	0.000	0.029	Jul 2015	0.413	Dec 2016	0.000		0.000		0.000	0.000	0.442	-
Subtotal			0.000	0.029		0.413		0.000		0.000		0.000	0.000	0.442	-

Remarks
Plan to fund both FY16 and FY17 Test Support requirements with FY16 budget.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Air Force											Date: February 2016				
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>				

Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Advanced Pilot Training PMA Government Costs	Various	AFLCMC : Dayton, OH	0.000	1.406	Jul 2016	1.874	May 2017	0.141	Sep 2017	0.000		0.141	0.000	3.421	-
Advanced Pilot Training A&AS	Various	AFLCMC : Dayton, OH	0.000	2.746	Apr 2015	8.108	Mar 2017	0.000		0.000		0.000	0.000	10.854	-
Subtotal			0.000	4.152		9.982		0.141		0.000		0.141	0.000	14.275	-

Remarks
Plan to fund both FY16 and FY17 PMA (except Travel) and A&AS requirements with FY16 budget.

	Prior Years	FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	8.201		10.395		12.377		0.000		12.377	1,339.427	1,370.400	-

Remarks
Prior years amounts under Program 0604233F, Specialized Undergraduate Flight Training.
Advanced Pilot Training Studies and Analysis: \$0.971M
Advanced Pilot Training PMA Government Costs: \$1.418M
Advanced Pilot Training A&AS: \$2.711M

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Air Force		Date: February 2016
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 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
In-Process Review (IPR) Defense Acquisition Board (DAB)	■																											
Capability Development Document (CDD)	■	■																										
CDD Validation				■																								
Acquisition Strategy Development	■	■	■																									
Acquisition Strategy Approval				■																								
Product Support Analysis	■	■	■																									
Cost Estimate Preparation Certification	■	■	■	■	■	■	■	■																				
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																					■	■	■	■	■	■	■	■
Advanced Procurement (AP) Approval																												■
AP Delivery Order																												■

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Air Force		Date: February 2016
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	Start		End	
	Quarter	Year	Quarter	Year
In-Process Review (IPR) Defense Acquisition Board (DAB)	1	2015	1	2015
Capability Development Document (CDD)	1	2015	2	2015
CDD Validation	4	2015	4	2015
Acquisition Strategy Development	1	2015	4	2015
Acquisition Strategy Approval	4	2015	4	2015
Product Support Analysis	1	2015	4	2015
Cost Estimate Preparation Certification	1	2015	4	2016
Pre Milestone B (RFP Release) Decision Point	4	2016	4	2016
RFP Release	4	2016	4	2016
Source Selection	1	2017	4	2017
Milestone B	4	2017	4	2017
Engineering and Manufacturing Development Phase	1	2018	3	2021
Government Preliminary Design Review (PDR)	2	2018	2	2018
Post PDR Review	3	2018	3	2018
Government Critical Design Review (CDR)	2	2019	2	2019
Development, Test and Evaluation	1	2020	4	2021
Advanced Procurement (AP) Approval	4	2021	4	2021
AP Delivery Order	4	2021	4	2021