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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force **Date:** March 2014

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 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	0.000	-	-	8.201	-	8.201	11.920	71.685	166.595	408.618	581.113	1,248.132
655340: <i>Advanced Trainer Replacement T-X</i>	0.000	-	-	8.201	-	8.201	11.920	60.349	136.251	286.452	401.979	905.152
655361: <i>Stores-Aircraft Interface</i>	0.000	-	-	-	-	-	-	11.336	30.344	122.166	179.134	342.980

MDAP/MAIS Code: 436

The FY 2015 OCO Request will be submitted at a later date.

Note

In FY2015, Project 655340, Advanced Trainer Replacement T-X, efforts were transferred from Program 0604233F, Specialized Undergraduate Flight Training, Project 655340, Advanced Trainer Replacement T-X, in order to improve transparency of ACAT I acquisition programs.

In FY2017, Project 655361, Stores-Aircraft Interface, includes a new start effort.

A. Mission Description and Budget Item Justification

The Advanced Trainer Replacement, T-X, will replace Air Education and Training Command's (AETC) T-38C aircraft and associated Ground Based Training System (GBTS) 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 T-38C was first introduced in 1961 and now average 45 years. T-X will close training gaps which the T-38 cannot fully address and have grown with the introduction of the 4th and 5th generation fighter aircraft.

The Stores-Aircraft Interface project provides funding for the Companion Trainer Aircraft which is intended to develop a variant of the Advanced Pilot Training (APT) T-X aircraft to serve as a "Red Air" adversary or aggressor capability for 5th generation fighter aircraft. A version of the T-X equipped with radar/data-link and hard-points for weapons and jammer carriage is envisioned for this role.

This program is in Budget Activity 5, System Development and Demonstration (SDD) because Milestone B approval is anticipated to conduct 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 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	-	8.201	-	8.201
Total Adjustments	-	-	8.201	-	8.201
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	8.201	-	8.201

Change Summary Explanation

For FY 2015, activity transferred from PE 0604233F.

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force										Date: March 2014		
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 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
655340: <i>Advanced Trainer Replacement T-X</i>	-	-	-	8.201	-	8.201	11.920	60.349	136.251	286.452	401.979	905.152
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	6.000	-		

The FY 2015 OCO Request will be submitted at a later date.

Note

In FY2015, Project 655340, Advanced Trainer Replacement T-X, efforts were transferred from Program 0604233F, Specialized Undergraduate Flight Training, Project 655340, Advanced Trainer Replacement T-X, in order to improve transparency of ACAT I acquisition programs.

A. Mission Description and Budget Item Justification

The Advanced Trainer Replacement, T-X, will replace AETC's T-38C aircraft and associated Ground Based Training System (GBTS) currently used in the fighter/ bomber advanced Specialized Undergraduate Pilot Training (SUPT) track as well as in the Introduction to Fighter Fundamentals (IFF) program. Program is developing an acquisition strategy and related documentation to initiate an acquisition program with release of a request for proposal in early FY2017.

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

	FY 2013	FY 2014	FY 2015
Title: Advanced Pilot Training (APT) Family of Systems (FoS)	-	-	8.201
Description: Studies, analysis, acquisition documentation and market research activities to reduce risk in support of technology, engineering and manufacturing development. Includes APT PMA costs such as travel, Other Govt Costs (OGC) and Advisory and Assistance Services (A&AS) anticipating a Milestone B approval.			
FY 2013 Accomplishments: N/A			
FY 2014 Plans: N/A			
FY 2015 Plans: Studies, analysis, acquisition documentation and market research activities to reduce risk in support of technology, engineering and manufacturing development. Includes APT PMA costs such as travel, Other Govt Costs (OGC) and Advisory and Assistance Services (A&AS) anticipating a Milestone B approval.			
Accomplishments/Planned Programs Subtotals	-	-	8.201

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force		Date: March 2014
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>

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

<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• RDTE: BA05: PE 0604233F: <i>Advanced Trainer Replacement T-X</i>	0.648	1.049	-	-	-	-	-	-	-	-	4.548

Remarks

In FY2015, Project 655340, Advanced Trainer Replacement T-X, efforts were transferred from Program 0604233F, Specialized Undergraduate Flight Training, Project 655340, Advanced Trainer Replacement T-X, in order to improve transparency of ACAT I acquisition programs.

D. Acquisition Strategy

A full and open competitive source selection is anticipated with a specific acquisition strategy under 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 2015 Air Force												Date: March 2014			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
3600 / 5				PE 0605223F / Advanced Pilot Training				655340 / Advanced Trainer Replacement T-X							
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	Cost To Complete	Total Cost	Target Value of Contract
Training (APT) Family of Systems (FoS) - Studies and Analyses	Various	TBD : TBD,	0.000	-		-		1.000	Feb 2015	-		1.000	Continuing	Continuing	-
Training (APT) Family of Systems (FoS) A&AS	Various	TDB : TDB,	0.000	-		-		7.000	Mar 2015	-		7.000	Continuing	Continuing	-
Advanced Pilot Training (APT) Family of Systems (FoS) Future Contracts	C/FFP	TDB : TBD,	0.000	-		-		-		-		-	898.152	898.152	-
Subtotal			0.000	-		-		8.000		-		8.000	-	-	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	Cost To Complete	Total Cost	Target Value of Contract
Training (APT) Family of Systems (FoS) - PMA Government Costs	C/Various	AFLCMC : Dayton, OH	0.000	-		-		0.201	Aug 2015	-		0.201	Continuing	Continuing	-
Subtotal			0.000	-		-		0.201		-		0.201	-	-	-

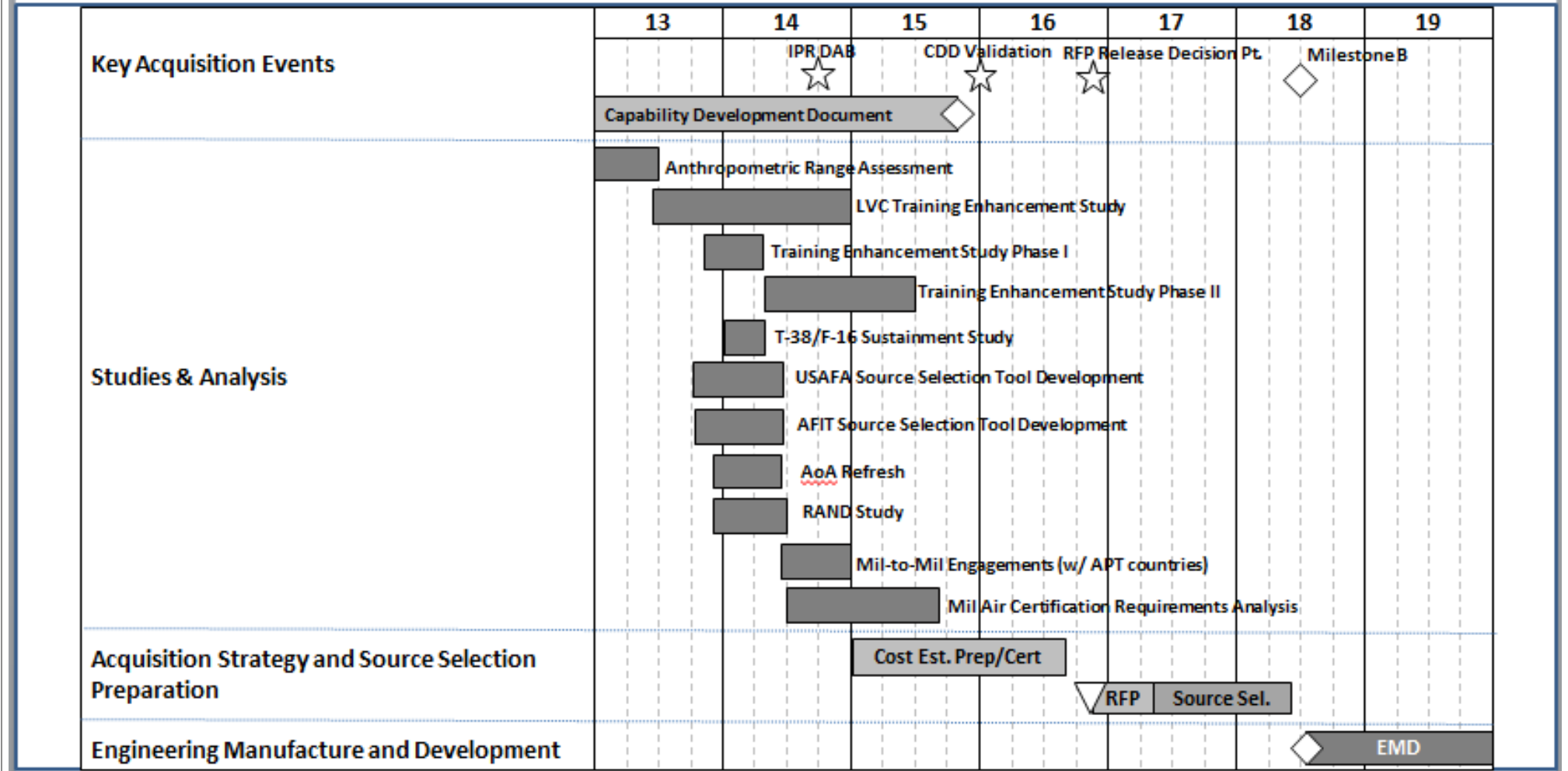
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force								Date: March 2014			
Appropriation/Budget Activity 3600 / 5			R-1 Program Element (Number/Name) PE 0605223F / <i>Advanced Pilot Training</i>			Project (Number/Name) 655340 / <i>Advanced Trainer Replacement T-X</i>					
	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals	0.000	-	-	8.201	-	8.201	-	-	-		

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force		Date: March 2014
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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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force		Date: March 2014
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)	4	2014	4	2014
Capability Development Document	1	2013	4	2015
CDD Validation	4	2015	4	2015
Anthropometric Range Assessment	1	2013	2	2013
Live Virtual Constructive Training Enhancement Study	2	2013	4	2014
USAFA Source Selection Tool Development	4	2013	2	2014
AFIT Source Selection Tool Development	4	2013	2	2014
AoA Refresh Support	4	2013	2	2014
RAND Study	4	2013	2	2014
Training Enhancement Study Phase 1	2	2013	2	2014
Training Enhancement Study Phase 2	2	2014	2	2015
T-38/F-16 Sustainment Study	1	2014	2	2014
Mil Air Certification Requirements Analysis	3	2014	3	2015
Mil to Mil Engagements	2	2014	4	2014
Cost Estimate Preparation Certification	1	2015	3	2016
Pre Milestone B (RFP Release) Decision Point	4	2016	4	2016
RFP Release	4	2016	2	2017
Source Selection	2	2017	2	2018
Milestone B	3	2018	3	2018
Engineering and Manufacturing Development	3	2018	4	2019

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force **Date:** March 2014

Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0605223F / Advanced Pilot Training				Project (Number/Name) 655361 / Stores-Aircraft Interface			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
655361: Stores-Aircraft Interface	-	-	-	-	-	-	-	11.336	30.344	122.166	179.134	342.980
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

Note

In FY2017, Project Number 655361, Stores-Aircraft Interface, includes a new start effort.

A. Mission Description and Budget Item Justification

The Companion Trainer is intended to develop a variant of the Advanced Pilot Training (APT) T-X aircraft to provide a "Red Air" adversary or aggressor capability for 5th generation fighter aircraft. An Office of the Secretary of Defense (OSD) endorsed report estimates considerable savings over the life of the F-35 through use of Companion Trainer due to significantly lower operating costs. The T-X variant will be equipped with radar/data-link and hard-points for weapons and jammer carriage is envisioned for this role. Missionization of the T-X to meet Companion Trainer requirements is expected to begin in FY2017.

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

	FY 2013	FY 2014	FY 2015
Title: Companion Trainer	-	-	-
Description: Missionize the Advanced Pilot Training (APT) T-X to meet the "Red Air" adversary/aggressor role.			
FY 2013 Accomplishments: N/A			
FY 2014 Plans: N/A			
FY 2015 Plans: N/A			
Accomplishments/Planned Programs Subtotals	-	-	-

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

N/A

Remarks

D. Acquisition Strategy

An acquisition strategy will be developed as Companion Trainer variant of the T-X acquisition.

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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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		13	14	15	16	17	18	19
	Companion Trainer <u>Missionization</u>							

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force		Date: March 2014
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0605223F / <i>Advanced Pilot Training</i>	Project (Number/Name) 655361 / <i>Stores-Aircraft Interface</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Begin Companion Trainer Missionization	2	2017	4	2019