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

Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 5: System

PE 0604233F / Specialized Undergraduate Flight Training

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost			
Total Program Element	291.751	5.151	3.601	13.324	-	13.324	9.810	4.265	3.607	3.676	Continuing	Continuing			
654102: Joint Primary Aircraft Training System (JPATS)	288.900	3.828	2.327	6.212	-	6.212	7.537	3.132	2.453	2.500	-	316.889			
654376: T-38 Avionics Upgrade Program (AUP)	0.000	0.675	0.225	7.112	-	7.112	2.273	1.133	1.154	1.176	Continuing	Continuing			
655340: Advanced Trainer Replacement T-X	2.851	0.648	1.049	-	-	-	-	-	-	-	-	4.548			

MDAP/MAIS Code: 560

#### Note

In FY 2015, Project 655340, Advanced Trainer Replacement T-X, efforts were transferred to Program Element 0605223F, Advanced Pilot Training, Project 655340, Advanced Trainer Replacement T-X, to improve transparency on ACAT I acquisition programs.

# A. Mission Description and Budget Item Justification

Supports Air Education and Training Command's (AETC) implementation of Specialized Undergraduate Pilot Training (SUPT) and the Department of Defense initiative for joint pilot training. The Joint Primary Aircraft Training System (JPATS) is a joint USAF/USN venture to replace the Services' fleets of primary trainer aircraft (T-37 and T-34 respectively) and their associated Ground Based Training Systems (GBTS) with the T-6 and its GBTS. The Air Force is the Executive Service. The T-38 Avionics Upgrade Program (AUP) is an integrated modernization of the T-38A and AT-38B cockpits to support mission ready fighter and bomber training. The Advanced Trainer Replacement, T-X, will replace AETC's T-38C aircraft and associated GBTS currently used in the fighter/bomber advanced SUPT track as well as in the Introduction to Fighter Fundamentals (IFF) program. The T-38 was first introduced in 1961.

BA5 - 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.

The Air Force recognizes that these funds should be in BA 7 and is working to transfer these funds in the next President's Budget submission.

PE 0604233F: Specialized Undergraduate Flight Training Air Force

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<sup>\*</sup>The FY 2015 OCO Request will be submitted at a later date.

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

Date: March 2014

Appropriation/Budget Activity

3600: Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)

R-1 Program Element (Number/Name)

PE 0604233F I Specialized Undergraduate Flight Training

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	6.583	3.601	10.957	-	10.957
Current President's Budget	5.151	3.601	13.324	-	13.324
Total Adjustments	-1.432	-	2.367	-	2.367
<ul> <li>Congressional General Reductions</li> </ul>	-0.008	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-0.953	-			
<ul> <li>Congressional Rescissions</li> </ul>	_	-			
<ul> <li>Congressional Adds</li> </ul>	_	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	_	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-0.471	-	2.367	-	2.367

### **Change Summary Explanation**

PE 0604233F: Specialized Undergraduate Flight Training Air Force

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<sup>-</sup> Increase of \$2.367 million in FY2015 due to the addition of JPATS and T-38 Avionics Upgrade Program avionics obsolescence remediation efforts in this program and the transfer of Advanced Trainer Replacement, T-X, to Program Element 0605223F.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force  Date: March 2014													
1							<b>t (Number/</b> alized Under	•	Project (Number/Name) 654102 I Joint Primary Aircraft Training System (JPATS)				
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	
654102: Joint Primary Aircraft Training System (JPATS)	288.900	3.828	2.327	6.212	-	6.212	7.537	3.132	2.453	2.500	-	316.889	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

#### A. Mission Description and Budget Item Justification

The Joint Primary Aircraft Training System (JPATS) is a joint USAF/USN venture to replace the Services' fleets of primary trainer aircraft (T-37 and T-34, respectively) and associated Ground Based Training Systems (GBTS). Additionally the US Army will be purchasing four T-6 Army Variant aircraft to replace the T-34 aircraft for the Army Test and Evaluation Command. The T-6 aircraft and GBTS are used to train entry-level student aviators in the fundamentals of flying so they can transition into advanced training tracks leading to qualification as military pilots, combat systems officers, and naval flight officers. The program includes the purchase of aircraft, simulators, and other associated ground-based training devices, Training Integration Management System (TIMS), instructional courseware, and logistics support to include Diminishing Manufacturing Sources and Material Shortages (DMSMS) and development activities related to DMSMS.

FY2013, FY2015 and FY2016 include funding to upgrade software and threat libraries for the T25 Simulator for Electronic Combat Technology (SECT). The T25 SECT primary training mission is to train undergraduate Combat Systems Officers (CSO) in all fundamental aspects of Electronic Combat (EC), including the operation and application of a wide variety of representative EC equipment in Threat Penetration, Electronic Counter Measures (ECM), Electronic Surveillance Measurement (ESM), and Suppression of Enemy Air Defenses (SEAD) or electronic attack (EA) type operations. Although in the same project, SECT is unrelated to the JPATS program.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Joint Primary Aircraft Training System (JPATS) Studies	1.433	2.327	1.168
Description: JPATS studies & development efforts.			
FY 2013 Accomplishments: Conducted JPATS studies and development activities to include development of the T-6 Power Management Unit (PMU) software upgrade, parachute surveillance study, safe/arm handle development, Engine High Cycle Fatigue Research, and Engine Component Improvement Program (CIP) study.			
FY 2014 Plans: Continued JPATS studies and development activities include development of the T-6 Power Management Unit (PMU) software upgrade, parachute surveillance study, safe/arm handle development, Engine High Cycle Fatigue Research, and Engine Component Improvement Program (CIP) study.			
FY 2015 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force			Date: M	larch 2014		
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604233F I Specialized Undergraduate Flight Training	Project (Number/Name) 654102 I Joint Primary Aircraft Training System (JPATS)				
B. Accomplishments/Planned Programs (\$ in Millions)		FY	2013	FY 2014	FY 2015	
Continue JPATS studies and development activities include development, parachute surveillance study, safe/arm handle developm Component Improvement Program (CIP) study.		е				
Title: T25 SECT			2.395	-	1.118	
<b>Description:</b> Funding upgrades to the Simulator for Electronic Con	mbat Technology (SECT)					
FY 2013 Accomplishments: Updated threat database definitions and threat library.						
<b>FY 2014 Plans:</b> N/A						
FY 2015 Plans: Update threat database definitions and threat library.						
Title: Avionics Upgrades for FAA (Federal Aviation Administration)	Compliance		-	-	3.926	
<b>Description:</b> Funding supports component selection, integration, t Broadcast (ADS-B Out)capability for use in T-6A aircraft and Ground						
FY 2013 Accomplishments: N/A						
<b>FY 2014 Plans:</b> N/A						
FY 2015 Plans: Funding will be used to develop and test upgrades and enhancement Upgrades for Federal Aviation Administration (FAA) Compliance. of the Automated Dependent Surveillance Broadcast (ADS-B Out) January 1, 2020 Federal Aviation Administration (FAA)ADS-B Out	Funding supports development, integration, test and certif capability in the T-6 Training System to comply with the					
	Accomplishments/Planned Programs Sub	totals	3.828	2.327	6.212	

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Exhibit R-2A, RDT&E Project Justi	'		Date: March 2014								
Appropriation/Budget Activity 3600 / 5				PE 06	•	<b>nent (Numb</b> ecialized Un	Project (Number/Name) 654102 I Joint Primary Aircraft Training System (JPATS)				
C. Other Program Funding Summa	ary (\$ in Milli	ons)									
			FY 2015	FY 2015	FY 2015					Cost To	
Line Item	FY 2013	FY 2014	Base	oco	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	<b>Total Cost</b>
<ul><li>APAF: BA06: Line Item #</li></ul>	0.020	0.626	0.948	_	0.948	0.918	2.571	2.619	2.668	Continuing	Continuing
000999: Initial Spares/Repair Parts										_	
APAF: BA05: Line	13.633	5.392	14.486	_	14.486	18.208	26.530	26.063	26.515	Continuing	Continuing
Item # JPAT00: <i>T-6</i>											_
<ul><li>APN: BA03: Line</li></ul>	230.403	249.080	-	-	-	9.013	6.009	-	-	-	2,036.997
Item # 033900: <i>JPATS</i>											
<ul> <li>APN: BA05: Line Item</li> </ul>	1.550	1.576	1.085	-	1.085	7.567	11.205	18.356	26.487	Continuing	Continuing
# 057100: JPATS Series											
<ul><li>APN: BA06: Line Item #</li></ul>	2.566	3.171	0.094	-	0.094	0.071	0.099	0.093	-	Continuing	Continuing
060500: Spares and Repair Parts											
<ul><li>APA: BA01: Line Item #</li></ul>	16.874	12.617	-	-	-	_	-	-	-	-	29.919
A11300: Utility F/W Aircraft											
Dl											

#### Remarks

### **D. Acquisition Strategy**

Avionics Upgrades for FAA Compliance are outside of the JPATS Major Defense Acquisition Program and will be established as a new Joint Acquisition Program with the Navy. For the JPATS Avionics Upgrades for FAA Compliance effort, an competitive award is anticipated to be the stategy for the T-6A air vehicles due to their federated design.

The SECT upgrade effort is an Engineering Change Proposal (ECP) to the competitively awarded Firm Fixed Price Contractor Logistics Support (CLS) contract.

#### 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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					0.1	CLAS	, <b>_</b> _								
Exhibit R-3, RDT&E F	Project C	ost Analysis: PB 2	2015 Air F	orce								Date:	March 20	014	
<b>Appropriation/Budge</b> 3600 / 5	t Activity	1				R-1 Program Element (Number/Name) PE 0604233F / Specialized Undergraduate Flight Training						Project (Number/Name) 654102 I Joint Primary Aircraft Training System (JPATS)			
Product Developmen	nt (\$ in M	illions)		FY 2013		FY 2014		FY 2015 Base			2015 CO	FY 2015 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 Contrac
JPATS Engine CIP	РО	Arnold Engineering Development Center : Arnold AFB, TN	0.000	1.157	May 2013	0.717	Jan 2014	-		-		-	-	1.874	5.67
JPATS Engine High Cycle Fatigue	C/CPFF	Universal Technology Corp : Dayton, OH	0.000	0.194	Apr 2013	0.149	Apr 2014	0.231	Apr 2015	-		0.231	Continuing	Continuing	ТВ
JPATS Parachute Surveillance	C/FFP	Martin Baker Aircraft Co LTD:, UK	0.000	0.019	Jun 2013	0.452	Apr 2014	0.603	Apr 2015	-		0.603	-	1.074	2.58
JPATS PMU	Various	Various : Various,	0.000	0.063		1.009	Dec 2013	0.334		-		0.334	Continuing	Continuing	ТВ
SECT Upgrade	C/FFP	BowHead Systems Management, Inc. : King George, VA	0.000	2.395	Dec 2012	-		1.118		-		1.118	Continuing	Continuing	-
Avionics Upgrades for FAA Compliance	C/FFP	TBD : TBD,	0.000	-		-		3.926	Aug 2015	-		3.926	3.926	7.852	ТВІ
JPATS Completed Contracts	C/Various	Various : Various,	288.900	-		-		-		-		-	-	288.900	288.90
		Subtotal	288.900	3.828		2.327		6.212		-		6.212	-	-	-
Support (\$ in Millions	s)			FY 2	2013	FY 2	2014	FY 2 Ba	2015 ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location Subtotal	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contrac
Test and Evaluation (\$ in Millions)				FY 2	2013	FY 2	2014	FY 2	2015 Ise		2015 CO	FY 2015 Total	<u> </u>		
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 Contrac
·		Subtotal	-	-		-		-		-		_	_	-	-

PE 0604233F: Specialized Undergraduate Flight Training Air Force

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Exhibit R-3, RDT&E	Project Co	st Analysis: PB 2	2015 Air F	orce				,			,	Date:	March 20	14	
Appropriation/Budget Activity 3600 / 5							R-1 Program Element (Number/Name) PE 0604233F / Specialized Undergraduate Flight Training Project (No. 654102 / Journal of System (JF)					Ì Joint Pr		raft Trai	ning
Management Servic		FY 2	2013	FY 2	2014		2015 ase		2015 CO	FY 2015 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
		Subtotal	-	-		-		-		-		-	-	-	-
			Prior Years	FY 2	2013	FY 2	2014		2015 ase		2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	288.900	3.828		2.327		6.212		-		6.212	-	-	-

Remarks

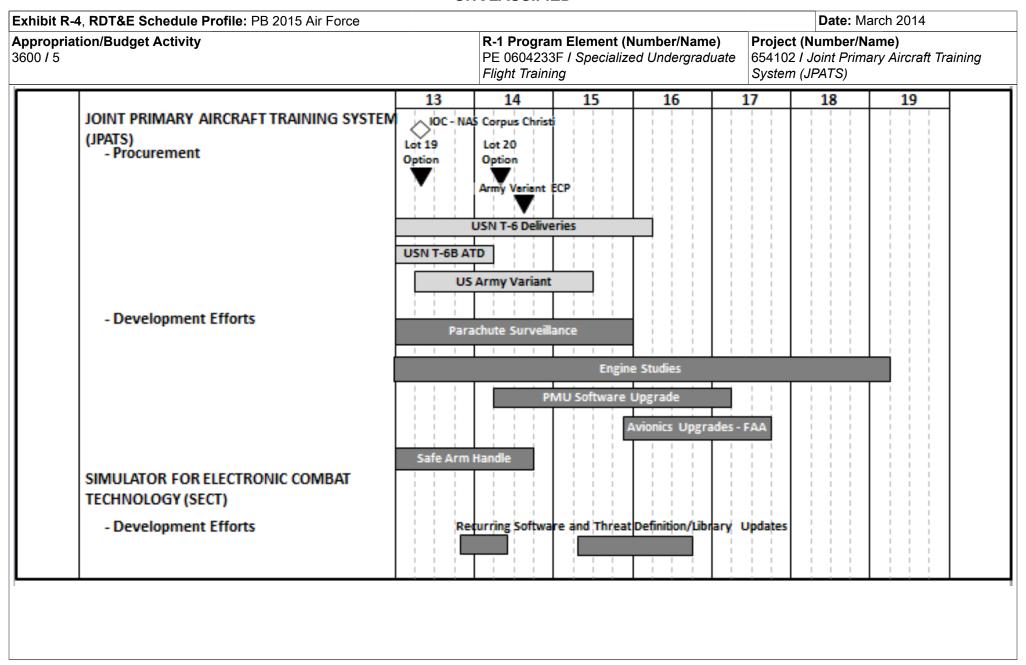


Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force			Date: March 2014
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 / 5	PE 0604233F I Specialized Undergraduate	654102 <i>I J</i>	oint Primary Aircraft Training
	Flight Training	System (JI	PATS)

# Schedule Details

	Sta	art	Er	nd
Events	Quarter	Year	Quarter	Year
JPATS Parachute Surveillance System Development	1	2013	4	2015
JPATS Engine Studies	1	2013	1	2019
JPATS Avionics Upgrades for FAA Compliance	4	2015	4	2017
JPATS PMU Software Upgrade	2	2014	2	2017
JPATS Lot 19 Contract Award	2	2013	2	2013
JPATS Lot 20 Contract Award	2	2014	2	2014
JPATS IOC NAS Corpus Christi	2	2013	2	2013
JPATS Award Army Variant Engineering Change Proposal (ECP)	3	2014	3	2014
JPATS Continuing USN / USA T-6 Deliveries	1	2013	1	2016
JPATS Continuing USN T-6B Aircrew Training Device (ATD) Deliveries	1	2013	1	2014
JPATS US Army Variant	2	2013	2	2015
SECT Update Software and Threat Library (FY2013)	4	2013	2	2014
SECT Update Software and Threat Library (FY2015/FY2016)	2	2015	3	2016

Exhibit R-2A, RDT&E Project Ju		Date: March 2014											
Appropriation/Budget Activity 3600 / 5						<b>am Elemen</b> 33F / Specia ning	•	,	Project (Number/Name) 654376 / T-38 Avionics Upgrade Program (AUP)				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
654376: T-38 Avionics Upgrade Program (AUP)	-	0.675	0.225	7.112	-	7.112	2.273	1.133	1.154	1.176	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

#### A. Mission Description and Budget Item Justification

The T-38C Avionics Upgrade Program (AUP) installed a "Glass Cockpit" into the T-38 jet trainer and re-designated the upgraded aircraft from the T-38A/B to the T-38C model. The AUP modification, which utilized a Commercial Off-The-Shelf (COTS)/Non-Developmental Item (NDI) approach to acquire kits, is currently in sustainment phase under the T-38C Avionics Post Production Support acquisition program. The avionics system requires regular block upgrades to keep the system current and airworthy. Block upgrades incorporate software and/or hardware improvements to comply with new requirements mandated by Department of Defense, Federal Aviation Administration or National Airspace System (DoD/FAA/NAS) and to address flight safety issues. The block upgrades support the T-38C aircraft and Aircrew Training Devices (ATD). This effort also includes development of the aircraft Mission Planning System (MPS) support to obtain Joint Mission Planning System (JMPS) currency and certification for T-38C flight operations. The JMPS requirements are levied from outside the T-38 program office and may or may not correlate with block upgrade requirements. Additionally, engineering services, studies, analysis and support are required to determine the feasibility of integrating changes into the system and making informed business decisions related to Diminishing Manufacturing Sources and Material Shortages (DMSMS) and other lifecycle related concerns. FY2015 also includes an avionics obsolesence remediation effort to qualify updated instruments in the T-38C.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: T-38C Avionics Post Production Support (APPS)	0.675	0.225	7.112
<b>Description:</b> T-38C APPS hardware and software block upgrades, Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM) compliance and Joint Mission Planning System (JMPS) support.			
FY 2013 Accomplishments:  Completed requirements analysis of Block 10 aircraft and Aircrew Training Device (ATD) hardware/software upgrade and determined JMPS planning software upgrade requirements. Accomplished government testing of ATD software being developed to replace contractor proprietary software. Took delivery of ATD software that provides unlimited government rights to ensure future viability of the aircraft and ATD systems. Integrated the T-38C program into the Air Force Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) program to ensure the T-38C aircraft is compliant with all Air Force standards and directives.			
FY 2014 Plans: Finalized requirement analysis for Block 10 and begin software development for required aircraft and Aircrew Training Device (ATD) hardware/software upgrades. Finalized JMPS mission planning software upgrade requirements and begin development			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force		Date: N	March 2014		
Appropriation/Budget Activity 3600 / 5	Project (Number/Name) 654376 / T-38 Avionics Upgrade Pro (AUP)				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015	
and testing. Coordinate surveillance and testing requirements with Management (CNS/ATM) Center of Excellence program to ensur chain management standards and directives. Designed and dev by DoD and Federal Aviation Administration/National Airspace Stest and evaluation and AETC operations.	re the T-38C aircraft is compliant with Air Force navigation of eloped hardware and software solutions for requirements di	lata riven			
FY 2015 Plans: Complete software development for required aircraft Operational hardware/software upgrades. Finalize JMPS upgrade development and developmental testing. Coordinate surveillance and testing rair Traffic Management (CNS/ATM) Center of Excellence to ensudate chain management standards and directives. Complete derequirements driven by DoD and FAA/NAS mandates, and defici Commence Block 10 OFP DT.	ent and begin JMPS Unique Planning Component (UPC) IV equirements with the Communications, Navigation, Surveillaure the T-38C aircraft is compliant with Air Force navigation sign and development of hardware and software solutions for	ance/ or			
Begin development solutions for T-38C avionics component obsort Display (AMLCD) for the Electronic Engine Display. The AMLCD research and development for a replacement Heads-Up Display	is out of production and there are no spares available. Beg	in			

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

supportable beyond FY2017. Begin research and development for a replacement Mission Display Processor.

			FY 2015	FY 2015	FY 2015					<b>Cost To</b>	
Line Item	FY 2013	FY 2014	Base	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	<b>Total Cost</b>
<ul> <li>APAF: BA05: Line</li> </ul>	19.428	19.334	34.845	-	34.845	38.974	37.562	25.409	25.824	Continuing	Continuing
Item # T03800: T-38										_	

**Accomplishments/Planned Programs Subtotals** 

#### Remarks

## D. Acquisition Strategy

The Avionics Post Production Support (APPS) acquisition program awarded a contract in FY2012 through a competitive bid, C type, Firm Fixed Price contract with a period of performance from April 2012 through March 2017. The block 10 software update will be a Firm Fixed Price effort based on AETC operational requirements. Unknown/unforeseen requirements will be negotiated and separately priced by the government as an out-of-cycle update/modification as provisioned within the contract.

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R-1 Line #59

0.675

0.225

7.112

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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 0604233F I Specialized Undergraduate Flight Training	Project (Number/Name) 654376 / T-38 Avionics Upgrade Program (AUP)
Please refer to the Performance Base Budget Overview Borce performance goals and most importantly, how they	Book for information on how Air Force resources are applied and h contribute to our mission.	ow those resources are contributing to Air

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Exhibit R-3, RDT&E I	Project C	ost Analysis: PB 2	2015 Air F	orce		,					,	Date:	March 20	014			
Appropriation/Budge 3600 / 5	Appropriation/Budget Activity 3600 / 5						, , , ,						ect (Number/Name) 376 / T-38 Avionics Upgrade Program P)				
Product Developmer	nt (\$ in M	illions)		FY 2	2013 FY 2014					2015 CO	FY 2015 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	Total Cost	Target Value of Contract		
Avionics Upgrade Program (AUP)	C/FFP	The Boeing Corporation : St. Louis, MO	0.000	0.609	Oct 2012	-		5.687	Oct 2014	-		5.687	Continuing	Continuing	ј ТВГ		
0AUP Other	Various	TBD : TBD,	0.000	-		-		-		-		-	-	-	TBD		
		Subtotal	0.000	0.609		-		5.687		-		5.687	-	-	-		
Support (\$ in Millions	s)			FY 2	2013	FY 2	2014		2015 ase		2015 CO	FY 2015 Total			1		
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	Total Cost	Target Value of Contract		
Other Government Costs	Various	Not specified.:,	0.000		Feb 2013		Feb 2014	0.055		-	2 3.00			Continuing	-		
JMPS Support	C/FFP	Not specified.:,	0.000	-		0.120	Mar 2014	0.120	Oct 2014	-		_		Continuing			
		Subtotal	0.000	0.020		0.175		0.175		-		0.175	-	-	-		
Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY 2014		FY 2015 Base		FY 2015 OCO							
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	Total Cost	Target Value of Contract		
AUP T&E	C/FFP	TBD:,	0.000	-		-		1.200	Oct 2014	-		1.200	-	1.200	ТВГ		
		Subtotal	0.000	-		-		1.200		-		1.200	-	1.200	-		
Management Service	Management Services (\$ in Millions)			FY 2	2013	FY 2	2014		2015 ase		2015 CO	FY 2015 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		
							1 0044	0.050	D 0044		1	0.050	Continuino	Cantinuina	TBI		
PMA Contract Support	C/FFP	Not specified.:,	0.000	0.046	Jan 2013	0.050	Jan 2014	0.050	Dec 2014			0.030	Continuing	Continuing	, IDL		

PE 0604233F: Specialized Undergraduate Flight Training Air Force

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2	.015 Air Fo	orce								Date:	March 20	14	
Appropriation/Budget Activity 3600 / 5				PE 0604233F / Specialized Undergraduate				<b>Project (Number/Name)</b> 654376 <i>I T-38 Avionics Upgra</i> (AUP)			grade Pi	ade Program	
Prior Years FY 2013				FY 2	2014	FY 2 Ba		FY 2		FY 2015 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals 0.000 0.675						7.112		-		7.112	-	-	-

Remarks

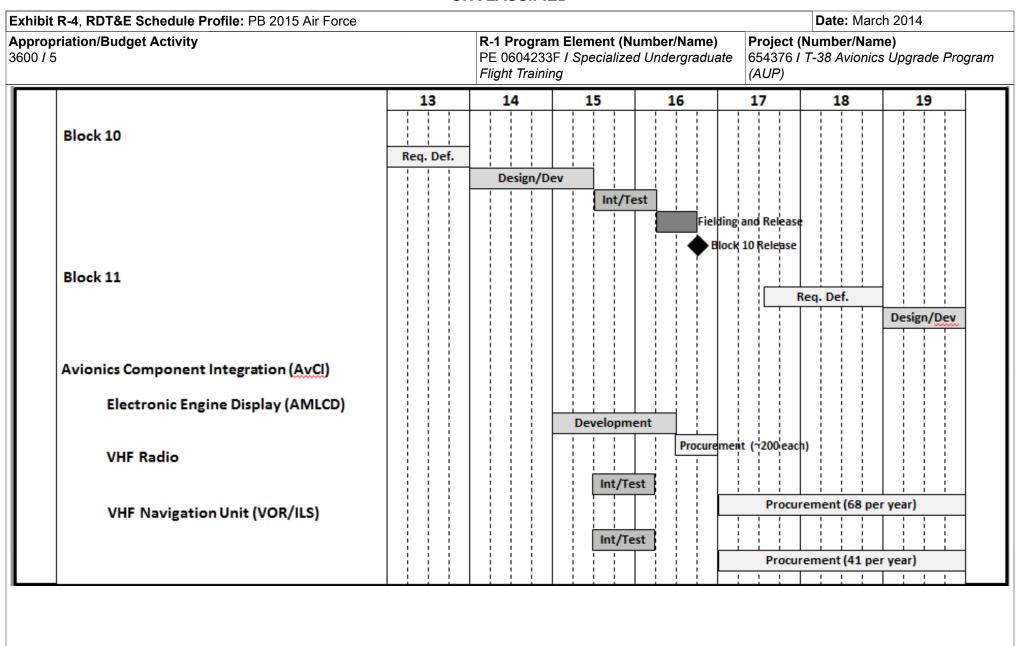


Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force			Date: March 2014
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604233F / Specialized Undergraduate Flight Training	- 3 (	umber/Name) -38 Avionics Upgrade Program

# Schedule Details

	St	art	End		
Events	Quarter	Year	Quarter	Year	
AUP Block 10 Requirements	1	2013	4	2013	
AUP Block 10 Design/Development	1	2014	2	2015	
AUP Block 10 Integration and Test	3	2015	1	2016	
AUP Block 10 Fielding	2	2016	3	2016	
AUP Block 10 Release	3	2016	3	2016	
AUP Block 11 Requirements	3	2017	4	2018	
AUP Block 11 Design/Development	1	2019	4	2019	
Electronic Engine Display Active Matrix Liquid Crystal Display (AMLCD) Development	1	2015	2	2016	
Electronic Engine Display AMLCD Procurement	3	2016	4	2016	
Integration and Test of CVC-151 Very High Frequency Radio	3	2015	1	2016	
Procurement of CVC-151 Very High Frequency Radio	1	2017	4	2019	
Integration and Test of CVN-251 Very High Frequency Navigation Unit	3	2015	1	2016	
Procurement of CVN-251 Very High Frequency Navigation Unit	1	2017	4	2019	

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 0604233F / Specialized Undergraduate Flight Training Project (Number/Name) 655340 / Advanced Trainer Replace X					cement T-		
COST (\$ in Millions)  Prior Years  FY 2013  FY 2014  Base						FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
655340: Advanced Trainer Replacement T-X	2.851	0.648	1.049	-	-	-	-	-	-	-	-	4.548
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

#### Note

In FY 2015, Project 655340, Advanced Trainer Replacement T-X, efforts were transferred to Program 0605223F, Advanced Pilot Training, Project 655340, Advanced Trainer Replacement T-X, in order to comply with OSD direction that Major Defense Acquisition Programs (MDAP) be in separately identifiable program elements.

# 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. The T-38C was first introduced in 1961.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Advanced Pilot Training (APT) Family of Systems (FoS)	0.648	1.049	-
<b>Description:</b> Conduct studies, analysis and acquisition 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).			
FY 2013 Accomplishments: Conducted studies, analysis and acquisition activities to reduce risk in support of technology, engineering and manufacturing development. Studies and analyses consisted of, but are not limited to, Live Virtual Constructive training concepts and applicability to AETC pilot training transformation efforts, non-developmental item (NDI) industrial base beyond 2020, USAF/DoD militarization of foreign NDI alternatives, USAF Airworthiness Certification gap analysis of NDI alternatives, RAND Project Air Force study on T-38 Repair/Replace resulting in a T-X affordability target and United States Air Force Academy/Air Force Institute of Technology sponsored studies for development of source selection tools and criteria. Includes APT PMA costs such as travel, Other Govt Costs (OGC) and Advisory and Assistance Services (A&AS).  FY 2014 Plans:			

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Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604233F / Specialized Undergraduate Flight Training	Project (N 655340 / A X		Name) d Trainer Rep	lacement T-
B. Accomplishments/Planned Programs (\$ in Millions)		FY	2013	FY 2014	FY 2015

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Conducted studies, analysis and acquisition activities to reduce risk in support of technology, engineering and manufacturing			
development. Funds APT PMA costs such as travel, Other Govt Costs (OGC) and Advisory and Assistance Services (A&AS).			
FY 2015 Plans:			
N/A			
Accomplishments/Planned Programs Subtotals	0.648	1.049	_

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

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	<b>Base</b>	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	<b>Complete</b>	<b>Total Cost</b>
• RDTE: BA05: PE 0605223F:	-	-	8.201	-	8.201	11.920	71.685	166.595	408.618	Continuing	Continuing
Advanced Pilot Training										_	

#### Remarks

#### D. Acquisition Strategy

A full and open competitive source selection is anticipated with a specific acquisition strategy to be developed after acquisition milestone entry point determination.

### 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 C	ost Analysis: PB 2	2015 Air F	orce								Date:	March 20	14	
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0604233F I Specialized Undergraduate Flight Training				Project (Number/Name) 655340 / Advanced Trainer Replacement T-X						
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	Total Cost	Target Value o Contrac
Advanced Pilot Training (APT) Family of Systems (FoS) - Studies and Analyses	Various	Various : Various,	0.621	0.350	Oct 2013	-		-		-		-	-	0.971	-
		Subtotal	0.621	0.350		-		-		-		-	-	0.971	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 o Contrac
		Subtotal	-	-		-		-		-		-	-	-	
Test and Evaluation	(\$ in Milli	ons)		FY	2013	FY 2	2014		2015 ase		2015 CO	FY 2015 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	Total Cost	Target Value o Contrac
<u> </u>		Subtotal	-	-		-		-		-		-	-	-	
Management Services (\$ in Millions)			FY 2	2013	FY 2	FY 2014		FY 2015 Base		FY 2015 OCO					
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 o Contrac
Advanced Pilot Training (APT) Family of Systems (FoS) - PMA - Contractor Services	C/FFP	AFLCMC : Dayton, OH	2.129	-		0.950	Mar 2014	-		-		-	-	3.079	-
Training (APT) Family of Systems (FoS) - PMA - Government Costs	C/Various	AFLCMC : Dayton, OH	0.101	0.298		0.099		-		-		-	-	0.498	-
		Subtotal	2.230	0.298		1.049		_		_	1	_	_	3.577	_

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2							Date:	Date: March 2014					
Appropriation/Budget Activity 3600 / 5				PE 060	R-1 Program Element (Number/Name) PE 0604233F I Specialized Undergraduate Flight Training					Project (Number/Name) 655340 / Advanced Trainer Replacement T-X			
	Prior Years	FY 2	2013	FY	2014	FY 2 Ba		FY 2		FY 2015 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	2.851	0.648		1.049		-		-		-	-	4.548	-

Remarks

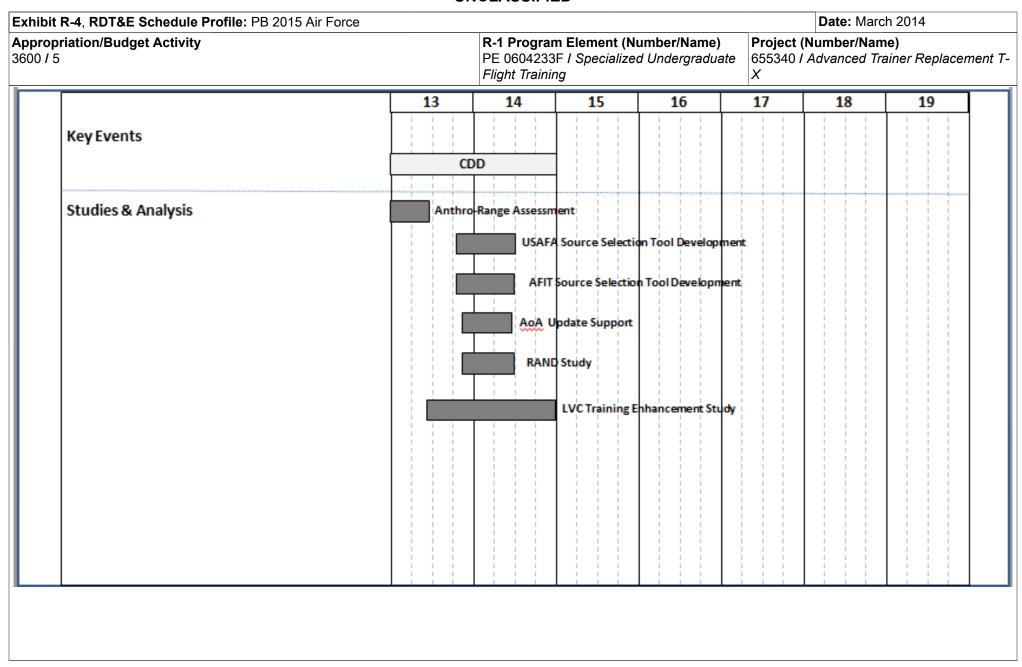


Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force	Date: March 2014		
Appropriation/Budget Activity 3600 / 5	,	- , (	umber/Name) dvanced Trainer Replacement T-

# Schedule Details

	Sta	End		
Events	Quarter	Year	Quarter	Year
Capability Development Document	1	2013	4	2014
Anthropomertric Range Assessment	1	2013	2	2013
Analysis of Alternatives Update Support	4	2013	2	2014
USAFA Source Selection Tool Development	4	2013	2	2014
AFIT Source Selection Tool Development	4	2013	2	2014
RAND Study	4	2013	2	2014
Live / Virtual / Constructive Training Enhancement Study	2	2013	4	2014