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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604233F: Specialized Undergraduate Pilot Training							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	11.801	10.862	8.066	0.000	8.066	8.410	11.089	11.067	13.225	Continuing	Continuing
654102: Joint Primary Aircraft Training System (JPATS)	8.216	9.281	3.724	0.000	3.724	2.316	3.846	2.338	3.790	Continuing	Continuing
654376: T-38 Avionics Upgrade Program (AUP)	3.585	1.581	1.149	0.000	1.149	1.165	1.175	1.149	1.125	Continuing	Continuing
655340: Advanced Trainer Replacement T-X	0.000	0.000	3.193	0.000	3.193	4.929	6.068	7.580	8.310	Continuing	Continuing
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 associated Ground Based Training Systems (GBTS). The Air Force is the Executive Service. The T-38 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) program is a FY2011 new start to begin preliminary activity for the replacement of the T-38 trainer aircraft used in the advanced fighter/bomber SUPT track.											
JPATS T-6 FY2009 - FY2015 includes annual funding for the development and test of upgrades and enhancements to both the aircraft and the Ground Based Training System (GBTS) hardware and software components. FY2011, FY2013 and FY2015 include funding to upgrade software and threat libraries for the Simulator for Electronic Combat Technology (SECT), a generic electronic warfare simulator used to train student Combat Systems Officers (CSO). Although in the same project, SECT is unrelated to the JPATS program.											
T-38 FY2009 - FY2015 funding is for software block updates driven by FAA-mandated changes, National Aerospace System (NAS) requirements, and enhancements identified during test and evaluation. FY2009 included development funding for improved T-38 brakes, which has been cancelled.											
Advanced Trainer Replacement FY2011 - FY2015 funding will be used to complete Material Solution Analysis and begin competitive prototyping activities.											
This program element is in Budget Activity 5, System Development and Demonstration (SDD), because it primarily involves the missionization of commercial derivative aircraft, equipment, and components.											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
3600: Research, Development, Test & Evaluation, Air Force		PE 0604233F: Specialized Undergraduate Pilot Training			
BA 5: Development & Demonstration (SDD)					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	13.426	6.227	0.000	0.000	0.000
Current President's Budget	11.801	10.862	8.066	0.000	8.066
Total Adjustments	-1.625	4.635	8.066	0.000	8.066
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-1.625	4.635	8.066	0.000	8.066
Congressional Add Details (\$ in Millions, and Includes General Reductions)					
Project: 654102: Joint Primary Aircraft Training System (JPATS)				FY 2009	FY 2010
Congressional Add: AT-6 capability demonstration for the Air National Guard				6.000	7.000
Congressional Add Subtotals for Project: 654102				6.000	7.000
Congressional Add Totals for all Projects				6.000	7.000
Change Summary Explanation					
FY2009 includes a Below Threshold Reprogramming to transfer funding for the cancelled T-38 Improved Brake System Program (IBSP) to other Air Force programs.					
FY2010 includes Congressional reduction to remove funding for the T-38 IBSP and a Congressional add for an AT-6 capability demonstration for the Air National Guard (ANG).					
FY2011 includes funding for the Advanced Trainer Replacement (T-X) project.					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Air Force								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>				<b>PROJECT</b> 654102: <i>Joint Primary Aircraft Training System (JPATS)</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
654102: <i>Joint Primary Aircraft Training System (JPATS)</i>	8.216	9.281	3.724	0.000	3.724	2.316	3.846	2.338	3.790	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<b>A. Mission Description and Budget Item Justification</b> <p>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). The aircraft and GBTS will be 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, navigators, 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.</p> <p>FY2009 includes a Congressional increase to develop, integrate and demonstrate Intelligence, Surveillance, and Reconnaissance (ISR) capabilities for the Air National Guard (ANG) using the AT-6 platform.</p> <p>FY2009-FY2015 JPATS funding will be used to develop and test upgrades and enhancements to program hardware and software components.</p> <p>FY2011, FY2013 and FY2015 include funding to upgrade software and threat libraries for the Simulator for Electronic Combat Technology (SECT), a generic electronic warfare simulator used to train student Combat Systems Officers (CSO). Although in the same project, SECT is unrelated to the JPATS program.</p> <p>Budget Activity Justification: This program element is in Budget Activity 5, System Development and Demonstration (SDD), because it primarily involves the missionization of commercial derivative aircraft, equipment, and components.</p>											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
MAJOR THRUST: JPATS studies & development efforts.						2.216	2.281	2.284	0.000	2.284	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604233F: Specialized Undergraduate Pilot Training		PROJECT 654102: Joint Primary Aircraft Training System (JPATS)		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: In FY 2009: JPATS studies and development activities such as parachute surveillance study, aircraft weight study, Power Management Unit software upgrade, Aircrew Life Support System integration, and Aircrew Training Device visual system development study						
FY 2010 Plans: In FY 2010: JPATS studies and development activities such as parachute surveillance study, aircraft weight study, Power Management Unit software upgrade, Aircrew Life Support System integration, and Aircrew Training Device visual system development study						
FY 2011 Base Plans: In FY 2011: JPATS studies and development activities such as parachute surveillance study, aircraft weight study, Power Management Unit software upgrade, Aircrew Life Support System integration, and Aircrew Training Device visual system development study						
FY 2011 OCO Plans: FY 2011 (OCO): N/A						
MAJOR THRUST: Simulator for Electronic Combat Technology (SECT)		0.000	0.000	1.440	0.000	1.440
FY 2009 Accomplishments: In FY 2009: N/A						
FY 2010 Plans: In FY 2010: N/A						
FY 2011 Base Plans: In FY 2011: Update threat database definitions and threat library						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604233F: Specialized Undergraduate Pilot Training			PROJECT 654102: Joint Primary Aircraft Training System (JPATS)				
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: In FY 2011 (OCO): N/A											
Accomplishments/Planned Programs Subtotals							2.216	2.281	3.724	0.000	3.724
							FY 2009	FY 2010			
Congressional Add: AT-6 capability demonstration for the Air National Guard  FY 2009 Accomplishments: In FY 2009: Demonstrate an Intelligence, Surveillance and Reconnaissance (ISR) capability in a light attack aircraft such as the AT-6  FY 2010 Plans: In FY 2010: Demonstrate an ISR capability in a light attack aircraft such as the AT-6							6.000	7.000			
Congressional Adds Subtotals							6.000	7.000			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE Not Provided (7229): Related Activities	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE Not Provided (7241): Aircraft Procurement, Air Force, BA-3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0804740F: Weapon System	22.852	15.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2,452.071
• PE 0804740F (1): Initial Spares	15.954	2.507	0.457	0.000	0.457	0.000	0.000	0.000	0.000	0.000	118.249
• PE 0804740: Modifications	20.697	32.968	24.644	0.000	24.644	31.507	16.348	16.478	16.773	0.000	0.000

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C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0804740F (2): Post Production Support	0.000	0.000	9.450	0.000	9.450	0.000	0.000	0.000	0.000	0.000	9.450
• PE 0804741F: Military Construction Air Force	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.200
• PE 0603208N: Training System Aircraft, H1150, JPATS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.300
• PE 0804745N: Weapon System	287.065	255.450	266.065	0.000	266.065	309.835	302.499	16.387	0.000	0.000	2,130.177
• PE 0804745N (3): Modifications	5.199	4.858	1.854	0.000	1.854	1.555	1.585	1.614	1.643	0.000	0.000
• PE 0804745N (4): Initial Spares	8.612	10.160	10.589	0.000	10.589	7.252	6.150	0.000	0.000	0.000	75.920
• PE 0804745N (5): Military Construction Navy	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	120.763
D. Acquisition Strategy											
JPATS was competitively awarded with the intent of maximizing the use of commercially available equipment and best commercial practices. Initially, the JPATS Program competitively awarded two contracts: a Firm Fixed Price Contractor Logistics Support (CLS) - Operations and Maintenance funds - contract and a Fixed Price Incentive Firm Target (FPIF) manufacturing development (MD)/production contract with seven options. The FY2002 (Lots 9-13) production contract for both the air vehicle and GBTS is Firm Fixed Price, FAR Part 12 (commercial). The FY2007 production follow-on contract for both the air vehicle and GBTS was awarded as a FAR Part 15 action.											
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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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Air Force</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>				<b>PROJECT</b> 654102: <i>Joint Primary Aircraft Training System (JPATS)</i>					
 <b>Product Development (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
JPATS	C/FPI	HBC Wichita KS	227.548	2.281	Dec 2009	2.284	Dec 2010	0.000		2.284	Continuing	Continuing	Continuing
AT-6B	MIPR	Georgia Technical Research Institute (GTRI) Atlanta GA	8.330	7.000		0.000		0.000		0.000	0.000	15.330	Continuing
SECT Upgrade	C/FFP	AAI Services Corp Hunt Valley MD	4.088	0.000		1.440	Jan 2011	0.000		1.440	Continuing	Continuing	0.000
<b>Subtotal</b>			239.966	9.281		3.724		0.000		3.724			
<b>Remarks</b>													
			<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			239.966	9.281		3.724		0.000		3.724			
<b>Remarks</b> Total Prior Years Cost may include only FY 2009 data.													

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

**APPROPRIATION/BUDGET ACTIVITY**

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

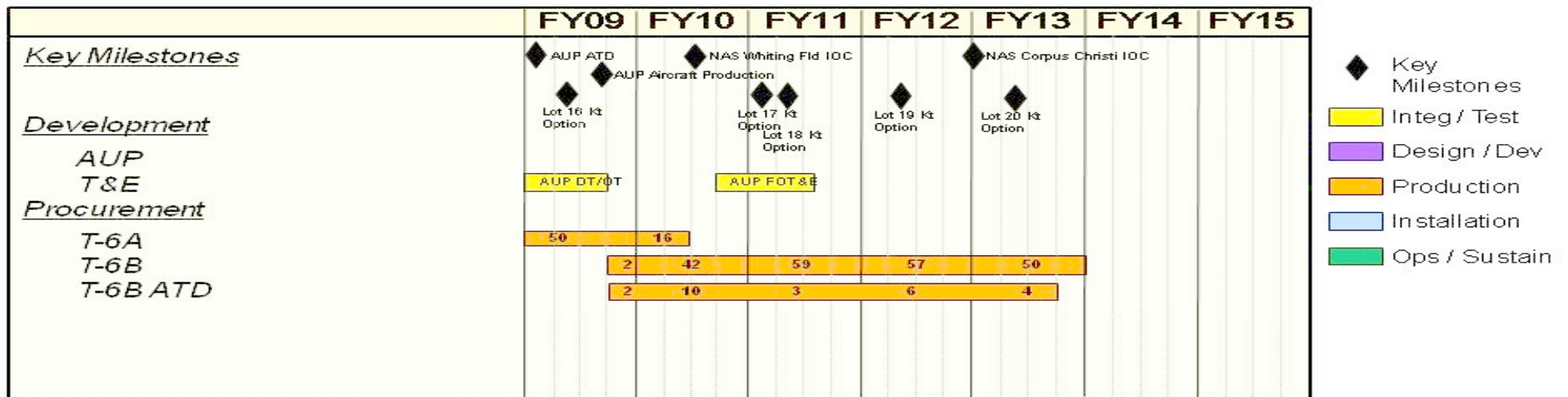
**R-1 ITEM NOMENCLATURE**

PE 0604233F: Specialized Undergraduate Pilot Training

**PROJECT**

654102: Joint Primary Aircraft Training System (JPATS)

# JPATS Schedule



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2011 Air Force			<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>	<b>PROJECT</b> 654102: <i>Joint Primary Aircraft Training System (JPATS)</i>	

## Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Continue JPATS Universal Water-Activated Release System (UWARS) Development	3	2009	3	2010
Continue JPATS Parachute Surveillance System Development	1	2009	3	2010
JPATS Aircrew Training Device (ATD) Visual System Development	1	2009	2	2009
Continue JPATS Engine Studies	3	2009	4	2009
Initiate JPATS Aviator Life Support System (ALSS) Weight Study	1	2010	2	2010
Initiate JPATS Power Management Unit (PMU) Software Upgrade	3	2011	4	2011
Update SECT Software and Threat Library	2	2011	4	2011

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Air Force								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>				<b>PROJECT</b> 654376: <i>T-38 Avionics Upgrade Program (AUP)</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
654376: <i>T-38 Avionics Upgrade Program (AUP)</i>	3.585	1.581	1.149	0.000	1.149	1.165	1.175	1.149	1.125	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<p><b>A. Mission Description and Budget Item Justification</b></p> <p>The T-38 Avionics Upgrade Program (AUP) is an integrated modernization of the T-38A and AT-38B cockpits to support mission-ready fighter training and converts all T-38A and AT-38B aircraft to T-38C configuration. The modernized digital cockpit will include Global Positioning System (GPS), Heads-Up Display (HUD), Inertial Navigation System (INS), Multi-Function Displays (MFDs), Up-Front Control Panel (UFCP), Data Transfer System (DTS), No-Drop Bombing System (NDBS), and Hands-On Throttle and Stick (HOTAS) switchology. HUD symbology is the new USAF standard recently certified as a primary flight reference. Also included is the acquisition of three types of Aircrew Training Devices (ATDs) to replace the existing T-51 simulators. The program includes the design, integration, test, and installation of the cockpit prototype in aircraft, ATDs, and other training devices, as well as engineering services, studies, analysis and support to determine the feasibility of incorporating changes for purposes of making informed life-cycle cost business decisions.</p> <p>FY 2009 - FY2015 funding is to develop and test aircraft and ATD hardware/software block updates, mission planning software, requirements driven by DoD, FAA and National Aerospace System (NAS) mandated changes (Crash Survivable Flight Data Recorder, Cockpit Voice Recorder, Emergency Locator Transmitter, etc.), enhancements identified during test and evaluation, Global Air Traffic Management (GATM), Joint Precision Approach and Landing System (JPALS), GPS, GPS Embedded Module (GEM) issues such as Selective Availability Anti-Spoofing Module (SAASM), and precision and GPS approaches. Other upgrades will include enhancements identified during Development Testing, Operational Testing and Force Development Evaluation (FDE), and AETC operations, such as a scratch pad, improvements to UFCP, HUD, Built In Test (BIT), mechanization of menus/modes and mission planning/debriefing system, ATD HUD projectors, and Companion Aircraft Model (CAM) operations.</p> <p>FY 2009 - FY 2010 included development funding for the T-38C Improved Brake System Program (IBSP). This effort has been cancelled. Residual funding will be reprogrammed to other Air Force requirements.</p> <p>Budget Activity Justification. This project is in Budget Activity 5, System Development and Demonstration (SDD), because it primarily involves the missionization of NDI or COTS equipment, and components.</p> <p><b>B. Accomplishments/Planned Program (\$ in Millions)</b></p>											

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: T-38 Avionics Upgrade Program (AUP) block software upgrades  FY 2009 Accomplishments: In FY 2009: Develop and test Block 8 AUP aircraft and ATD hardware/software upgrades, mission planning software, requirements driven by DoD/ FAA/NAS mandates, and/or improvements identified during Test and Evaluation and AETC operations.  FY 2010 Plans: In FY 2010: Develop and test Block 9 AUP aircraft and ATD hardware/software upgrades, mission planning software, requirements driven by DoD/ FAA/NAS mandates, and/or improvements identified during Test and Evaluation and AETC operations. Block 9 is not scheduled to be complete until FY2012, due to 2 year block upgrade cycle vs. 1 year cycle.  FY 2011 Base Plans: In FY 2011: Continue development and test of Block 9 AUP aircraft and ATD hardware/software upgrades, mission planning software, requirements driven by DoD/ FAA/NAS mandates, and/or improvements identified during Test and Evaluation and AETC operations.  FY 2011 OCO Plans: In FY 2011 (OCO): N/A		1.568	1.581	1.149	0.000	1.149
MAJOR THRUST: T-38 Improved Brake System Program (IBSP)  FY 2009 Accomplishments: In FY 2009: The T-38 IBSP was cancelled. Residual funding will be reprogrammed to other Air Force requirements  FY 2010 Plans: In FY 2010: N/A		2.017	0.000	0.000	0.000	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Air Force				<b>DATE:</b> February 2010							
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<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
				<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>			
<i>FY 2011 Base Plans:</i> In FY 2011: N/A  <i>FY 2011 OCO Plans:</i> In FY 2011 (OCO): N/A											
Accomplishments/Planned Programs Subtotals				3.585	1.581	1.149	0.000	1.149			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PE 0804741F: <i>T-38 Improved Brakes</i>	1.686	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>D. Acquisition Strategy</b>											
The T-38C AUP competitively awarded three contracts: a) a cost plus award fee EMD contract with six firm fixed price production options; b) a firm fixed price CLS contract for avionics including Contractor Owned and Maintained Base Supply (COMBS) (O&M funds); and c) a fixed price award fee maintenance contract for the current and new Aircrew Training Devices (ATDs). During FY2004 new firm fixed priced contracts were negotiated to complete the AUP modification and pricing was negotiated for the period FY2005-2008 for the CLS contract, subsequently pricing was solicited for FY09 T-38C CLS requirements. FY2005-2010 block updates are being executed under the new contract.											
<b>E. Performance Metrics</b>											
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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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Air Force</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>				<b>PROJECT</b> 654376: <i>T-38 Avionics Upgrade Program (AUP)</i>					
<b>Product Development (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Avionics Upgrade Program (AUP)	C/CPAF	The Boeing Corporation St. Louis MO	1.568	1.581		1.149		0.000		1.149	Continuing	Continuing	Continuing
Improved Brake System Program (IBSP)	TBD/TBD	TBD TBD	2.017	0.000		0.000		0.000		0.000	0.000	2.017	Continuing
<b>Subtotal</b>			3.585	1.581		1.149		0.000		1.149			
<b>Remarks</b>													
			<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			3.585	1.581		1.149		0.000		1.149			
<b>Remarks</b> Total Prior Years Cost may include only FY 2009 data.													

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

## APPROPRIATION/BUDGET ACTIVITY

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

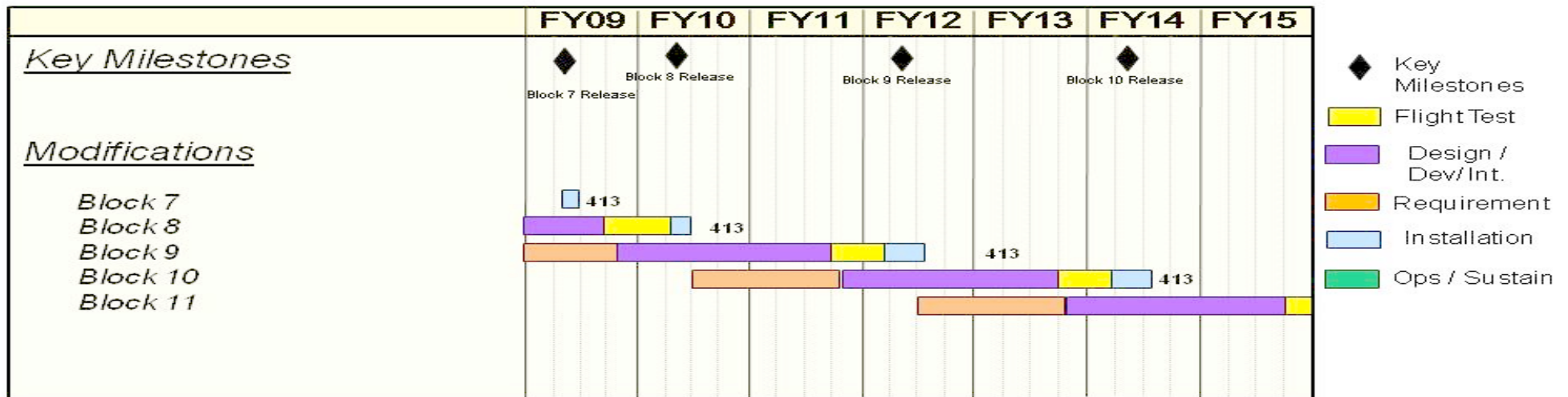
## R-1 ITEM NOMENCLATURE

PE 0604233F: Specialized Undergraduate Pilot Training

## PROJECT

654376: T-38 Avionics Upgrade Program (AUP)

# T-38 Avionics Upgrade Program (AUP) Schedule



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2011 Air Force			<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>	<b>PROJECT</b> 654376: <i>T-38 Avionics Upgrade Program (AUP)</i>	

**Schedule Details**

<b>Event</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
AUP Block 7 Retrofit and Release	2	2009	2	2009
AUP Block 8 Implementation	1	2009	3	2009
AUP Block 8 Flight Test	3	2009	2	2010
AUP Block 8 Retrofit and Release	2	2010	2	2010
AUP Block 9 Implementation	4	2009	3	2011
AUP Block 9 Flight Test	3	2011	4	2011

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Air Force								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>				<b>PROJECT</b> 655340: <i>Advanced Trainer Replacement T-X</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
655340: <i>Advanced Trainer Replacement T-X</i>	0.000	0.000	3.193	0.000	3.193	4.929	6.068	7.580	8.310	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<b>A. Mission Description and Budget Item Justification</b> <p>The Advanced Trainer Replacement, T-X, will replace the USAF T-38 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-38 was first introduced in 1961 and is currently projected to begin phase out by 2017.</p> <p>This is a new start in FY2011.</p> <p>FY2011 plans include completion of Material Solution Analysis, Milestone A, and initiation of competitive prototyping activities.</p> <p>Budget Activity Justification. This project is in Budget Activity 5, System Development and Demonstration (SDD), because it primarily involves the missionization of essentially non-developmental aircraft, equipment, and components.</p>											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
MAJOR THRUST: Perform preliminary activities to acquire a replacement for the T-38 advanced trainer aircraft and Ground Based Training System						0.000	0.000	3.193	0.000	3.193	
<i>FY 2009 Accomplishments:</i> In FY 2009: N/A											
<i>FY 2010 Plans:</i> In FY 2010: N/A											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Air Force				<b>DATE:</b> February 2010							
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>		<b>PROJECT</b> 655340: <i>Advanced Trainer Replacement T-X</i>							
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
				<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>			
<i>FY 2011 Base Plans:</i> In FY 2011: Complete Material Solutions Analysis, Milestone A and initiation of competitive prototyping activities  <i>FY 2011 OCO Plans:</i> In FY 2011 (OCO): N/A											
Accomplishments/Planned Programs Subtotals				0.000	0.000	3.193	0.000	3.193			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PE 0804741F: <i>Operations and Maintenance, Air Force</i>	0.000	1.500	1.500	0.000	1.500	1.500	0.000	0.000	0.000	0.000	0.000
<b>D. Acquisition Strategy</b>											
A full and open competitive source selection is anticipated with a specific acquisition strategy to be determined.											
<b>E. Performance Metrics</b>											
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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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Air Force</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>				<b>PROJECT</b> 655340: <i>Advanced Trainer Replacement T-X</i>					
<b>Product Development (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Program Office	C/TBD	Aeronautical Systems Center (ASC) WPAFB OH	0.000	0.000		3.193		0.000		3.193	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	0.000		3.193		0.000		3.193			
<b>Remarks</b>													
			<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			0.000	0.000		3.193		0.000		3.193			
<b>Remarks</b> Total Prior Years Cost may include only FY 2009 data.													

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

**APPROPRIATION/BUDGET ACTIVITY**

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

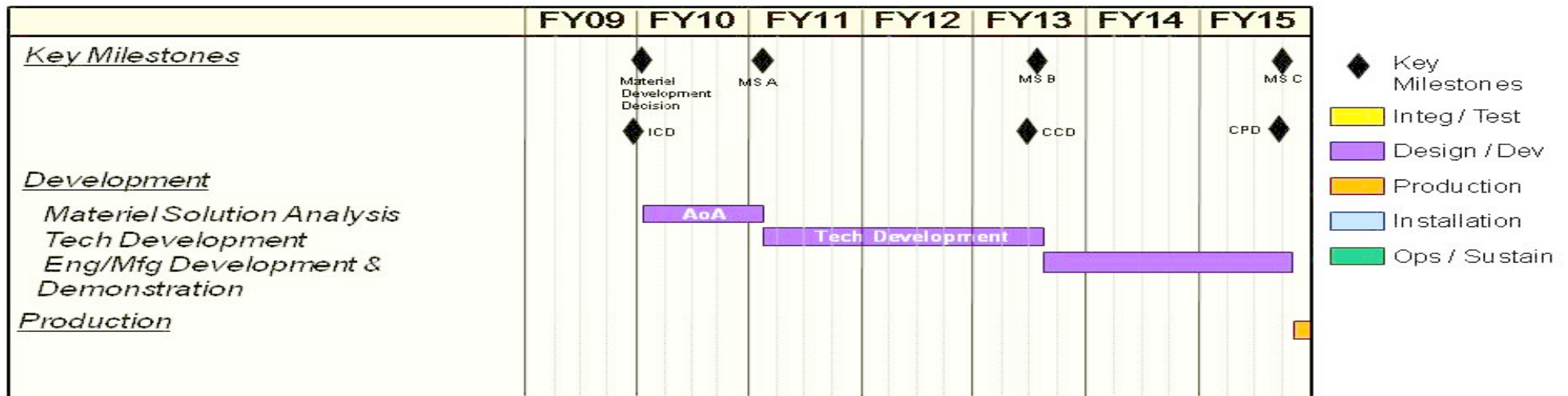
**R-1 ITEM NOMENCLATURE**

PE 0604233F: Specialized Undergraduate Pilot Training

**PROJECT**

655340: Advanced Trainer Replacement T-X

# Advanced Trainer Replacement (T-X) Schedule



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2011 Air Force			<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604233F: <i>Specialized Undergraduate Pilot Training</i>	<b>PROJECT</b> 655340: <i>Advanced Trainer Replacement T-X</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Complete Initial Capabilities Document (ICD)	4	2009	4	2009
Material Development Decision	1	2010	1	2010
Complete Analysis of Alternatives	1	2011	1	2011
Complete Material Solution Analysis	1	2011	1	2011
Milestone A	1	2011	1	2011

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