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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force										Date: May 2017		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0604233F I Specialized Undergraduate Flight Training							
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	-	7.742	15.427	5.776	0.000	5.776	10.992	3.269	2.189	2.434	Continuing	Continuing
674101: Undergraduate Remotely Piloted Aircraft Training	-	0.700	0.734	0.758	0.000	0.758	0.777	0.802	0.816	0.833	Continuing	Continuing
676034: Joint Primary Aircraft Training System (JPATS)	-	0.391	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.391
676035: T-6 Operational System Development	-	0.193	1.811	3.008	0.000	3.008	1.789	1.290	0.176	0.379	Continuing	Continuing
676037: T-38 Operational System Development	-	6.458	12.882	2.010	0.000	2.010	8.426	1.177	1.197	1.222	0.000	33.372

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

Supports Air Education and Training Command's implementation of Specialized Undergraduate Pilot Training and the Department of Defense initiative for joint pilot training.

Undergraduate Remotely Piloted Aircraft Training supports Air Education and Training Command's implementation of Undergraduate Remotely Piloted Aircraft Training. This program provides and maintains the currency of Predator Reaper Integrated Mission Environment Desktop Training System.

T-6 Operational System Development continues follow on development activities to Joint Primary Aircraft Training System including studies & development efforts to support future ACAT III Engineering Change Proposals to the T-6 Aircraft, instructional courseware, and logistics support to include Diminishing Manufacturing Sources and Material Shortages and development activities related to Diminishing Manufacturing Sources and Material Shortages. Included is development for the Federal Aviation Administration mandated ACAT III program for Automatic Dependent Surveillance-Broadcast Out and associated upgrades.

T-38 program will continue development in FY2017 and FY2018 of a replacement Mission Display Processor, refurbishment of the existing Heads-Up Display, development and integration of an Automatic Dependent Surveillance-Broadcast solution as well as replacement of the Very High Frequency Communication radio system and the Very High Frequency Navigation system. System testing is projected to begin in FY2017 and production and deployment of the replacement the systems will begin in late FY2018 and continue through FY2021.

The FY 2018 funding request was reduced by \$5.354 million to account for the availability of prior year execution balances.

In FY 2016 T-6 Avionics Upgrades for FAA (Federal Aviation Administration) Compliance was a new start.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> FY 2018 Air Force	<b>Date:</b> May 2017
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<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604233F / <i>Specialized Undergraduate Flight Training</i>
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This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

<b><u>B. Program Change Summary (\$ in Millions)</u></b>	<b><u>FY 2016</u></b>	<b><u>FY 2017</u></b>	<b><u>FY 2018 Base</u></b>	<b><u>FY 2018 OCO</u></b>	<b><u>FY 2018 Total</u></b>
Previous President's Budget	8.565	15.427	11.130	0.000	11.130
Current President's Budget	7.742	15.427	5.776	0.000	5.776
Total Adjustments	-0.823	0.000	-5.354	0.000	-5.354
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	-0.803	0.000			
• SBIR/STTR Transfer	-0.020	0.000			
• Other Adjustments	0.000	0.000	-5.354	0.000	-5.354

**Change Summary Explanation**

The FY 2018 funding request was reduced by \$5.354 million to account for the availability of prior year execution balances.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force										Date: May 2017		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0604233F / Specialized Undergraduate Flight Training				Project (Number/Name) 674101 / Undergraduate Remotely Piloted Aircraft Training			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
674101: Undergraduate Remotely Piloted Aircraft Training	-	0.700	0.734	0.758	0.000	0.758	0.777	0.802	0.816	0.833	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

This effort supports Air Education and Training Command's (AETC) implementation of Undergraduate Remotely Piloted Aircraft (RPA) Training (URT). URT produces RPA pilots and Sensor Operators from accession sources to man RPA squadrons. Success of the program is heavily dependent on Predator Reaper Integrated Mission Environment (PRIME) Desktop Training System (DTS) to prepare undergraduate students for entry in RPA Formal Training Units (FTU). PRIME has completed 6 Phases of development and is now at baseline functionality. PRIME is a desktop similar to the Reaper training system now in use to train undergraduate RPA pilots and sensor operators. PRIME currently emulates the MQ-9 Reaper and needs to keep pace with that baseline system and expand to other RPAs in order to maintain concurrency and relevancy. Funds may be used to address emerging and short-notice Diminishing Manufacturing and Material Shortage (DMSMS) issues."DMS efforts to include removal of end-of-life software/hardware within simulators systems and move to a modular, common open system architecture that is sustainable and cyber-resilient. Implement requirements and standards defined under the Simulator Common Architecture Requirements and Standards (SCARS) initiative.

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

	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>
<b>Title:</b> Predator Reaper Integrated Mission Environment (PRIME) support	0.700	0.734	0.758
<b>Description:</b> Add Phase 7 operational capabilities.			
<b>FY 2016 Accomplishments:</b> Extended and enhanced interoperability between PRIME and Modern Air Combat Environment (MACE) software incorporated in Phase 6 for instructor operations and entity generation.			
<b>FY 2017 Plans:</b> Continue to extend and enhance interoperability between PRIME and Modern Air Combat Environment (MACE) software incorporated in Phase 7 for instructor operations and entity generation. Add additional instrumentation functionality. Add record and playback functionality. Add multiple emergency missions.			
<b>FY 2018 Plans:</b> Continue to extend and enhance interoperability between PRIME and Modern Air Combat Environment (MACE) software incorporated in Phase 7 for instructor operations and entity generation. Add additional instrumentation			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Air Force		<b>Date:</b> May 2017	
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0604233F / <i>Specialized Undergraduate Flight Training</i>	<b>Project (Number/Name)</b> 674101 / <i>Undergraduate Remotely Piloted Aircraft Training</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2016</b>	<b>FY 2017</b>
functionality. Add multiple emergency missions. Add additional entity functionality. Phase 8 planning that was originally planned to occur has been pushed out awaiting completion of Phase 7.			
<b>Accomplishments/Planned Programs Subtotals</b>		0.700	0.734
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b> Contract via Training Systems Acquisition III (TSA III) to Cubic Corporation, parent company of PRIME software data rights owner (Intific).			
<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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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force										Date: May 2017		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0604233F / Specialized Undergraduate Flight Training				Project (Number/Name) 676034 / Joint Primary Aircraft Training System (JPATS)			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
676034: Joint Primary Aircraft Training System (JPATS)	-	0.391	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.391
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
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 purchased four T-6 Army Variant aircraft to replace the T-34 aircraft for the Army Test and Evaluation Command. The USAF/USN 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.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2016	FY 2017	FY 2018	
Title: Joint Primary Aircraft Training System (JPATS) Studies									0.088	-	-	
Description: JPATS studies and development activities including but not limited to: T-6 Power Management Unit (PMU) software upgrade, parachute surveillance study, ejection seat, and safe/arm handle development.												
FY 2016 Accomplishments: Continued JPATS studies and development activities including but not limited to additional phases of the 6 Engine Upgrade Studies, Phase 2 of the Parachute Surveillance study, ejection seat alternative to existing T-6A/B/D, and safe/arm handle development												
Title: Alternate Ejection Seat Study									0.074	-	-	
Description: JPATS requested a study to assess the existing issues with the current seat, other potential options for the T-6 ejection seat, and what modifications would be required to integrate an alternate ejection seat option into the existing one. The purpose of this study was to determine the cost to buy and install an upgraded T-6 seat and an estimate of the life cycle costs based on the remaining service life of the aircraft.												
FY 2016 Accomplishments: JPATS requested a study to assess the existing issues with the current seat, other potential options for the T-6 ejection seat, and what modifications would be required to integrate an alternate ejection seat option into the existing one. The purpose of this study												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Air Force								<b>Date:</b> May 2017			
<b>Appropriation/Budget Activity</b> 3600 / 7				<b>R-1 Program Element (Number/Name)</b> PE 0604233F / <i>Specialized Undergraduate Flight Training</i>				<b>Project (Number/Name)</b> 676034 / <i>Joint Primary Aircraft Training System (JPATS)</i>			
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>								<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	
was to determine the cost to buy and install an upgraded T-6 seat and an estimate of the life cycle costs based on the remaining service life of the aircraft. Subsequently, this study was cancelled. This FY16 amount reflects B&P costs.											
<b>Title:</b> High Cycle Engine Fatigue Research  <b>Description:</b> Analysis of Hight Cycle Fatigue (HCF) and Structural Health Monitoring (SHM) of the T106-PW-100 engine.  <b>FY 2016 Accomplishments:</b> Continued research and analysis of High Cycle Fatigue (HCF) and Structural Health Monitoring (SHM) of the T106-PW-100 engine.								0.229	-	-	
<b>Accomplishments/Planned Programs Subtotals</b>								0.391	-	-	
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• APAF: BA06: Line Item #	0.875	0.000	3.079	0.000	3.079	1.190	1.214	1.548	1.860	0.00	9.766
000999: <i>Initial Spares/Repair Parts</i>											
• APAF: BA05: Line Item # JPAT00: T-6	14.968	12.765	35.648	0.000	35.648	26.035	11.702	26.975	14.252	0.00	142.345
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
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 (FFP) Contractor Logistics Support (CLS) Operations and Maintenance funded contract and a Fixed Price Incentive Firm Target (FPIF) manufacturing development (MD)/production contract with seven options. The follow-on contract production for both the air vehicle and GBTS was awarded as a FAR Part 15 action. The FFP CLS Operations and Maintenance funded contract is a FAR Part 15 action.											
<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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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force										Date: May 2017		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0604233F / Specialized Undergraduate Flight Training				Project (Number/Name) 676035 / T-6 Operational System Development			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
676035: T-6 Operational System Development	-	0.193	1.811	3.008	0.000	3.008	1.789	1.290	0.176	0.379	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
T-6 Operational System Development continues follow on development activities to JPATS including studies & development efforts to support future ACAT III Engineering Change Proposals (ECPs) to the T-6 Aircraft, instructional courseware, and logistics support to include Diminishing Manufacturing Sources and Material Shortages (DMSMS) and development activities related to DMSMS. Included is development for the FAA mandated ACAT III program for Automatic Dependent Surveillance - Broadcast (ADS-B) Out and associated upgrades.												
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2016	FY 2017	FY 2018
Title: T-6 (JPATS) Studies										0.005	0.442	0.209
Description: T-6 studies and development activities to support engine upgrades and future ACAT III Engineering Change Proposals (ECPs) to the T-6 (JPATS) aircraft and engine.												
FY 2016 Accomplishments: Continued JPATS studies and development activities including but not limited to additional phases of the 6 Engine Upgrade Studies, Phase 2 of the Parachute Surveillance study, Safe/Arm Handle development, Crash Survivable Cockpit Voice Recorder (CSCVR), and ejection seat alternative to existing T-6A/B/D.												
FY 2017 Plans: Continue T-6 Aircraft studies and development activities including but not limited to: the T-6 Power Management Unit (PMU) Software Upgrade study, parachute surveillance study, safe/arm handle development, Crash Survivable Cockpit Voice Recorder (CSCVR), ejection seat alternatives, and engine upgrade studies.												
FY 2018 Plans: Continue T-6 Aircraft studies and development activities including but not limited to: the T-6 Power Management Unit (PMU) Software Upgrade study, parachute surveillance study, safe/arm handle development, Crash Survivable Cockpit Voice Recorder (CSCVR), and engine upgrade studies.												
Title: T-6 Avionics Upgrades for FAA (Federal Aviation Administration) Compliance										0.188	1.369	2.799

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Air Force										<b>Date:</b> May 2017		
<b>Appropriation/Budget Activity</b> 3600 / 7				<b>R-1 Program Element (Number/Name)</b> PE 0604233F / <i>Specialized Undergraduate Flight Training</i>				<b>Project (Number/Name)</b> 676035 / <i>T-6 Operational System Development</i>				
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>										<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>
<p><b>Description:</b> The T-6 Automatic Dependent Surveillance Broadcast (ADS-B) Out program includes the component selection, integration, test and certification of ADS-B Out capability for the T-6A aircraft and Ground Based Training System (GBTS) to meet FAA compliance.</p> <p><b>FY 2016 Accomplishments:</b> Began the development, integration, test, and certification of the Automatic Dependent Surveillance Broadcast (ADS-B Out) capability in the T-6 Training System to comply with the January 1, 2020 Federal Aviation Administration (FAA) ADS-B Out mandate.</p> <p><b>FY 2017 Plans:</b> Continue the development, integration, test, and certification of the Automatic Dependent Surveillance Broadcast (ADS-B Out) capability in the T-6 Training System to comply with the January 1, 2020 Federal Aviation Administration (FAA) ADS-B Out mandate.</p> <p><b>FY 2018 Plans:</b> Continue the development, integration, test, and certification of the Automatic Dependent Surveillance Broadcast (ADS-B Out) capability in the T-6 Training System to comply with the January 1, 2020 Federal Aviation Administration (FAA) ADS-B Out mandate.</p>												
<b>Accomplishments/Planned Programs Subtotals</b>										0.193	1.811	3.008
<b>C. Other Program Funding Summary (\$ in Millions)</b>												
	<u>Line Item</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u> <u>Base</u>	<u>FY 2018</u> <u>OCO</u>	<u>FY 2018</u> <u>Total</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
	• APAF: BA06: Line Item # 000999: <i>Initial Spares/Repair Parts</i>	0.875	0.000	3.079	0.000	3.079	1.190	1.214	1.548	1.860	0.00	9.766
	• APAF: BA05: Line Item # JPAT00: <i>T-6</i>	14.968	12.765	35.648	0.000	35.648	26.035	11.702	26.975	14.252	0.00	142.345
<b>Remarks</b>												
<b>D. Acquisition Strategy</b>												
The Air Force is lead service for the T-6 Operational Systems Development program and currently manages upgrades to the entire family of systems for both the Air Force and Navy. T-6 Operational Systems Development acquisition strategy for satisfying emerging software and hardware requirements is designed to enable competition and control cost. Development resulting from Diminishing Manufacturing Sources and Material Shortages requirement will be evaluated and implemented incrementally to efficiently deliver required capabilities to AETC.												



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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date: May 2017
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0604233F / <i>Specialized Undergraduate Flight Training</i>	Project (Number/Name) 676035 / <i>T-6 Operational System Development</i>

**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-2A, RDT&E Project Justification: FY 2018 Air Force										Date: May 2017		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0604233F / Specialized Undergraduate Flight Training				Project (Number/Name) 676037 / T-38 Operational System Development			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
676037: T-38 Operational System Development	-	6.458	12.882	2.010	0.000	2.010	8.426	1.177	1.197	1.222	0.000	33.372
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
The T-38 is a twin engine, two seat (tandem), supersonic jet trainer used by Air Education and Training Command as an advanced trainer in Specialized Undergraduate Pilot Training. Modifications are budgeted to enhance operational capability while improving flight safety, reliability and maintainability. There are currently 505 T-38's in the Air Force inventory (53 T-38A, 6 AT-38B and 446 T-38C) with 5 T-38Cs pending removal. T-38s first entered service in 1961 and average over 49 years old.												
T-38C Avionics System obsolescence remediation efforts to qualify updated systems will continue from FY2016 through 2018 with development of a replacement Mission Display Processor, refurbishment of the existing Heads-Up Display, development and integration of an Automatic Dependent Surveillance - Broadcast solution as well as replacement of the Very High Frequency Communication radio system and the Very High Frequency Navigation radio system. The development and integration of an Automatic Dependent Surveillance-Broadcast solution will also include the T-38A/B aircraft.												
Additionally, studies & development efforts to support future ACAT III Engineering Change Proposals to address obsolescence issues and the regular block upgrades are required to keep the system current. These will be accomplished with O&M unless block upgrade provides additional capabilities. Block upgrades incorporate software and/or hardware improvements to comply with new capabilities mandated by Department of Defense, Federal Aviation Administration or National Airspace System and to address flight safety issues. The block upgrades support the T-38C aircraft and Aircrew Training Devices.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2016	FY 2017	FY 2018	
Title: T-38 Avionics Post Production Support (APPS)									6.458	10.609	-	
Description: T-38C Avionics System obsolescence remediation effort is intended to develop and qualify replacement components/LRUs that are becoming non-supportable. Systems include the Mission Display Processor, Heads-Up Display and Very High Frequency Communication and Navigation radios. Additionally, the T-38C program will begin development of a solution for the Federal Aviation Administration Automated Dependent Surveillance-Broadcast (Out) mandate.												
FY 2016 Accomplishments: Continue (from BA5) T-38C Avionics System obsolescence remediation efforts. Development and system integration efforts will continue for the Mission Display Processor, Heads-Up Display, Very High Frequency Communication and Navigation radios. Additionally, the T-38C program will continue development and integration of a solution for the Federal Aviation Administration Automatic Dependent Surveillance-Broadcast (Out) mandate.												
FY 2017 Plans:												

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Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0604233F / Specialized Undergraduate Flight Training				Project (Number/Name) 676037 / T-38 Operational System Development			
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2016	FY 2017	FY 2018	
Continue T-38C Avionics System development and system integration efforts. Begin flight test planning and preliminary test for the Mission Display Processor, Heads-Up Display, Very High Frequency Communication and Navigation radios and the Automatic Dependent Surveillance-Broadcast (Out) solution.											
Title: T-38 Studies and Development Efforts								-	0.100	-	
Description: Studies and efforts to support future ACAT III Engineering Change Proposals to address obsolescence issues and the regular block upgrades are required to keep the system current.											
FY 2017 Plans: Component Diminishing Manufacturing Sources and Material Shortages studies.											
Title: T-38A/B ADS-B								-	2.173	2.010	
Description: Develop and integrate an Automatic Dependent Surveillance Broadcast (Out) solution the T-38A/B model fleet. The solution must maintain the military transponder modes.											
FY 2017 Plans: Begin ADS-B system development.											
FY 2018 Plans: Complete system development and integration. Accomplish ground and flight testing. Finalize TCTO development.											
Accomplishments/Planned Programs Subtotals								6.458	12.882	2.010	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• APAF: BA05: Line Item #T03800: T-38	30.604	45.090	54.692	0.000	54.692	97.503	25.795	26.269	0.000	0.00	0.000
Remarks											
D. Acquisition Strategy											
The T-38 Operations System Development acquisition strategy for satisfying emerging software and hardware requirements is designed to enable competition and cost control. Developmental requirements resulting from Diminishing Manufacturing Sources and Material Shortages research and reporting will be evaluated and implemented incrementally to efficiently deliver required capabilities to Air Education & Training Command in support of the pilot training program. System block upgrades will be required to maintain aircraft airworthiness and will be implemented based on Air Education & Training Command requirements. An appropriate level of technical data rights is required by all current support contracts.											

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<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0604233F / <i>Specialized Undergraduate Flight Training</i>	<b>Project (Number/Name)</b> 676037 / <i>T-38 Operational System Development</i>
<p>Contract FA8211-16-D-0001 is a Type D Indefinite Delivery, Indefinite Quantity contract competitively awarded to address T-38C avionics system obsolescence issues and provide Contractor Logistics Support follow-on support. The Avionics Component Integration contract was awarded 8 January 2016. Obsolescence remediation efforts began immediately and the follow-on Contractor Logistics Support effort will begin 1 April 2017.</p> <p>The T-38A/B Automatic Dependent Surveillance-Broadcast program is in the source selection phase. Projected contract award is June 2017. The current contract strategy is a Type D Indefinite Delivery, Indefinite Quantity contract sole source awarded to modify APX-119 transponders declared excess by the Item Manager and "free issued" to the T-38 Program Office. As part of the sole source effort, the aircraft integration work will be accomplished.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>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.</p>		