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**Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force** **Date:** April 2022

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0804772F / <i>Training Developments</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	4.471	2.482	15.138	0.000	15.138	7.942	8.037	8.142	8.259	Continuing	Continuing
652400: <i>Training Developments</i>	-	4.471	2.482	7.831	0.000	7.831	7.942	8.037	8.142	8.259	Continuing	Continuing
652401: <i>AETC Transformational Education and Training</i>	-	0.000	0.000	7.307	0.000	7.307	0.000	0.000	0.000	0.000	Continuing	Continuing

**Note**  
This program, BA 5, PE 0804772F, project 652401, Air Mobility Fundamentals, is a new start.

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

No mission description provided.

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.

<b>B. Program Change Summary (\$ in Millions)</b>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>
Previous President's Budget	4.471	4.482	0.000	0.000	0.000
Current President's Budget	4.471	2.482	15.138	0.000	15.138
Total Adjustments	0.000	-2.000	15.138	0.000	15.138
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	-2.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	15.138	0.000	15.138

**Change Summary Explanation**  
Congressional Directed reduction for underexecution.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Air Force										<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 3600 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0804772F / Training Developments				<b>Project (Number/Name)</b> 652400 / Training Developments			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
652400: Training Developments	-	4.471	2.482	7.831	0.000	7.831	7.942	8.037	8.142	8.259	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

Pilot Training Next (PTN) offers a more effective approach to pilot training. New training technologies will be studied and validated. Results will be used by Air Education and Training Command to develop processes and procedures to increase pilot production, improve and streamline existing training programs, and to incorporate into other programs.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver PTN weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F.

Alignment to the NDS: PTN is part of a complete redesign of pilot training using cutting edge technology to provide a faster, more cost effective and more comprehensive training model to get the warfighter to the cockpit in half the time of the existing model.

Funding contained in this documentation directly aids Air Education and Training Command's flying training enterprise to continue its overall Future Years Defense Program pilot production increase starting in FY 2020, thus reducing the USAF Pilot Shortage.

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

	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<b>Title:</b> Pilot Training Next (PTN) Development	4.471	2.482	7.831
<b>Description:</b> Pilot Training Next currently utilizes eight (8) T-6B aircraft equipped with heads-up and advanced situational awareness displays. Mission computers were temporarily modified to enable Air-to-Air and Air-to-Ground simulated weapons delivery. Numerous Virtual Reality (VR) Immersive Training Devices (ITDs) are also being utilized in the training curriculum. The aircraft and VR ITDs enable proper assessment of advanced pilot training concepts, techniques, procedures, and capabilities, while also providing a flexible architecture that incorporates Live, Virtual, and Constructive (LVC) elements into undergraduate pilot training.			
Efforts will be focused on validating new LVC and VR ITD concepts to develop processes and procedures to increase pilot production, improve and streamline existing undergraduate pilot training programs.			
<b>FY 2022 Plans:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Air Force	<b>Date:</b> April 2022
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<b>Appropriation/Budget Activity</b> 3600 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0804772F / <i>Training Developments</i>	<b>Project (Number/Name)</b> 652400 / <i>Training Developments</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	FY 2021	FY 2022	FY 2023
<p>Continue development of T-6A avionics modifications as it relates to real-time data capture and advanced competency instruction within PTN. Continue experimentation with the T-6B aircraft configured in the Textron BP2+ software package. Further refine VR ITD capabilities.</p> <p><b><i>FY 2023 Plans:</i></b> Continue development of PTN.</p> <p><b><i>FY 2022 to FY 2023 Increase/Decrease Statement:</i></b> The FY 2022 President's Budget submittal did not reflect FY 2023 through FY 2026 funding. Therefore, an explanation of the change between the two budget positions for FY2023 cannot be made in a relevant manner.</p>			
<b>Accomplishments/Planned Programs Subtotals</b>	4.471	2.482	7.831

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

N/A

**Remarks**

**D. Acquisition Strategy**

Program Office(s) will select their own acquisition strategies based on Air Education and Training Command's innovation unit (Detachment 24) requirements. The initial systems PTN is primarily focused on are small-scale avionics modifications to the T-6A aircraft and incorporating Virtual Reality Immersive Training Devices into the undergraduate pilot training curriculum.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force** **Date:** April 2022

<b>Appropriation/Budget Activity</b> 3600 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0804772F / Training Developments	<b>Project (Number/Name)</b> 652400 / Training Developments
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<b>Product Development (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Pilot Training Next Contracts	Various	AFLCMC : TBD	-	3.121	Jun 2021	1.111	Jun 2022	6.460	Apr 2023	-		6.460	Continuing	Continuing	-
<b>Subtotal</b>			-	3.121		1.111		6.460		-		6.460	Continuing	Continuing	N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Pilot Training Next Test Activities	TBD	TBD : TBD	-	0.150		0.152		0.152		-		0.152	Continuing	Continuing	-
<b>Subtotal</b>			-	0.150		0.152		0.152		-		0.152	Continuing	Continuing	N/A

<b>Management Services (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management Administrative Support	TBD	Not specified. : TBD	-	0.450	Jan 2021	0.457	Jan 2022	0.457	Oct 2022	-		0.457	Continuing	Continuing	-
Administrative and Advisory Services Support	TBD	Not specified. : TBD	-	0.650	Mar 2021	0.660	Mar 2022	0.660	Oct 2022	-		0.660	Continuing	Continuing	-
Government Travel	Various	Not specified. : TBD	-	0.100	Jan 2021	0.102	Jan 2022	0.102	Oct 2022	-		0.102	Continuing	Continuing	-
<b>Subtotal</b>			-	1.200		1.219		1.219		-		1.219	Continuing	Continuing	N/A

			Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>			-	4.471	2.482	7.831	-	7.831	Continuing	Continuing	N/A

**Remarks**

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2023 Air Force	<b>Date:</b> April 2022
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<b>Appropriation/Budget Activity</b> 3600 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0804772F / <i>Training Developments</i>	<b>Project (Number/Name)</b> 652400 / <i>Training Developments</i>
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FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

<b><i>Pilot Training Next Studies</i></b>	
Pilot Training Next Systems Development	[REDACTED]

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2023 Air Force **Date:** April 2022

<b>Appropriation/Budget Activity</b> 3600 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0804772F / <i>Training Developments</i>	<b>Project (Number/Name)</b> 652400 / <i>Training Developments</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Pilot Training Next Studies</i></b>				
Pilot Training Next Systems Development	2	2021	4	2026

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<b>Appropriation/Budget Activity</b> 3600 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0804772F / <i>Training Developments</i>				<b>Project (Number/Name)</b> 652401 / <i>AETC Transformational Education and Training</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
652401: <i>AETC Transformational Education and Training</i>	-	0.000	0.000	7.307	0.000	7.307	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**  
This program, BA 5, PE 0804772F, project 652401, Air Mobility Fundamentals, is a new start.

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

The Mobility Pilot Production Fundamentals simulator provides stop-gap training for the Mobility Pilot production while the T-1 divests. Air Mobility Fundamentals is a prep course, allowing FTU manning to teach both this simulator and flying courses.

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

	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<b>Title:</b> Air Mobility Fundamentals	-	-	7.307
<b>Description:</b> The Mobility Pilot Production Fundamentals simulator provides stop-gap training for the Mobility Pilot production while the T-1 divests. Air Mobility Fundamentals is a prep course, allowing FTU manning to teach both this simulator and flying courses.			
<b>FY 2023 Plans:</b> Develop Air Mobility Fundamentals prep course.			
<b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> The is new start.			
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	7.307

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

N/A

**Remarks**

**D. Acquisition Strategy**

Program Office(s) will select their own acquisition strategies based on Air Education and Training Command's innovation unit (Detachment 24) requirements.



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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2023 Air Force		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 3600 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0804772F / <i>Training Developments</i>	<b>Project (Number/Name)</b> 652401 / <i>AETC Transformational Education and Training</i>

FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

<i>No project title.</i>																													
No event title.																													

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2023 Air Force		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 3600 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0804772F / <i>Training Developments</i>	<b>Project (Number/Name)</b> 652401 / <i>AETC Transformational Education and Training</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>No project title.</i>				
No event title.	1	2023	4	2023