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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force **Date:** March 2023

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0804772F / <i>Training Developments</i>
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	2.482	10.838	1.922	0.000	1.922	4.951	5.074	5.177	5.287	Continuing	Continuing
652400: <i>Training Developments</i>	-	2.482	7.831	1.922	0.000	1.922	4.951	5.074	5.177	5.287	Continuing	Continuing
652401: <i>AETC Transformational Education and Training</i>	-	0.000	3.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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.

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 reducing the USAF Pilot Shortage.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY2022 \$0 was expended for civilian pay expenses in this program element, and in FY2023 \$0 is forecasted for civilian pay expenses in this program element

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.

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B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	2.482	15.138	7.942	0.000	7.942
Current President's Budget	2.482	10.838	1.922	0.000	1.922
Total Adjustments	0.000	-4.300	-6.020	0.000	-6.020
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	-4.300			
• 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	-6.020	0.000	-6.020

Change Summary Explanation

FY2023 directed reduction (-4.300 million) for insufficient justification.
 FY2024 funding reduced to match requirements.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force										Date: March 2023		
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0804772F / <i>Training Developments</i>				Project (Number/Name) 652400 / <i>Training Developments</i>			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
652400: <i>Training Developments</i>	-	2.482	7.831	1.922	0.000	1.922	4.951	5.074	5.177	5.287	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.

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 reducing the USAF Pilot Shortage.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY2022 \$0 was expended for civilian pay expenses in this program element, and in FY2023 \$0 is forecasted for civilian pay expenses in this program element

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

	FY 2022	FY 2023	FY 2024
Title: Pilot Training Next (PTN) Development	2.482	7.831	1.922
Description: 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.			
FY 2023 Plans: Continue development of PTN.			
FY 2024 Plans:			

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Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0804772F / <i>Training Developments</i>	Project (Number/Name) 652400 / <i>Training Developments</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
Continue development of PTN.			
<i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Funding adjusted to match requirement.			
Accomplishments/Planned Programs Subtotals	2.482	7.831	1.922

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 2024 Air Force **Date:** March 2023

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0804772F / Training Developments	Project (Number/Name) 652400 / Training Developments
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Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	-	1.111	Jun 2022	6.460	Apr 2023	1.248	Apr 2024	-		1.248	Continuing	Continuing	-
Subtotal			-	1.111		6.460		1.248		-		1.248	Continuing	Continuing	N/A

Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	-	0.152		0.152		-		-		-	Continuing	Continuing	-
Subtotal			-	0.152		0.152		-		-		-	Continuing	Continuing	N/A

Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	-	0.457	Jan 2022	0.457	Oct 2022	0.044	Oct 2024	-		0.044	Continuing	Continuing	-
Administrative and Advisory Services Support	TBD	Not specified. : TBD	-	0.660	Mar 2022	0.660	Oct 2022	0.550	Oct 2024	-		0.550	Continuing	Continuing	-
Government Travel	Various	Not specified. : TBD	-	0.102	Jan 2022	0.102	Oct 2022	0.080	Oct 2024	-		0.080	Continuing	Continuing	-
Subtotal			-	1.219		1.219		0.674		-		0.674	Continuing	Continuing	N/A

	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals		-	2.482	7.831	1.922	-	1.922	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Air Force	Date: March 2023
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Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0804772F / <i>Training Developments</i>	Project (Number/Name) 652400 / <i>Training Developments</i>
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FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
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>Pilot Training Next Studies</i>	
Pilot Training Next Systems Development	[REDACTED]

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0804772F / <i>Training Developments</i>	Project (Number/Name) 652400 / <i>Training Developments</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Pilot Training Next Studies</i>				
Pilot Training Next Systems Development	2	2022	4	2028

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force										Date: March 2023		
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0804772F / <i>Training Developments</i>				Project (Number/Name) 652401 / <i>AETC Transformational Education and Training</i>			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
652401: <i>AETC Transformational Education and Training</i>	-	0.000	3.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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)

	FY 2022	FY 2023	FY 2024
Title: Air Mobility Fundamentals	-	3.007	-
Description: 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.			
FY 2023 Plans: Develop Air Mobility Fundamentals prep course.			
FY 2023 to FY 2024 Increase/Decrease Statement: Development will be complete in 2023			
Accomplishments/Planned Programs Subtotals	-	3.007	-

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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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0804772F / <i>Training Developments</i>	Project (Number/Name) 652401 / <i>AETC Transformational Education and Training</i>

FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
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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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0804772F / <i>Training Developments</i>	Project (Number/Name) 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