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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2022 Air Force **Date:** May 2021

<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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	-	0.000	4.471	4.482	0.000	4.482	-	-	-	-	-	-
652400: <i>Training Developments</i>	-	0.000	4.471	4.482	0.000	4.482	-	-	-	-	-	-
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.

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>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Previous President's Budget	0.000	4.479	4.550	0.000	4.550
Current President's Budget	0.000	4.471	4.482	0.000	4.482
Total Adjustments	0.000	-0.008	-0.068	0.000	-0.068
• 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	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	-0.008	-0.068	0.000	-0.068

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
<p><b>Title:</b> Pilot Training Next (PTN) Development</p> <p><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.</p> <p>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.</p> <p><b>FY 2021 Plans:</b> Continue experimentation with the T-6B aircraft configured in the Textron BP2+ software package. Begin development and prototyping of T-6A avionics modifications as it relates to real-time data capture and advanced competency instruction within PTN. Further refine VR ITD capabilities.</p> <p><b>FY 2022 Plans:</b> 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>FY 2021 to FY 2022 Increase/Decrease Statement:</b> Funding increased to due economic adjustment.</p>		0.000	4.471	4.482
<b>Accomplishments/Planned Programs Subtotals</b>		0.000	4.471	4.482
<b>D. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>Remarks</b>				
<b>E. Acquisition Strategy</b>				
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 2022 Air Force** **Date:** May 2021

<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 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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	3.111	Jun 2022	-		3.111	-	-	-
<b>Subtotal</b>			-	-		3.121		3.111		-		3.111	-	-	N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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	-	-	-
<b>Subtotal</b>			-	-		0.150		0.152		-		0.152	-	-	N/A

<b>Management Services (\$ in Millions)</b>				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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	-	-	-
Administrative and Advisory Services Support	TBD	Not specified. : TBD	-	-		0.650	Mar 2021	0.660	Mar 2022	-		0.660	-	-	-
Government Travel	Various	Not specified. : TBD	-	-		0.100	Jan 2021	0.102	Jan 2022	-		0.102	-	-	-
<b>Subtotal</b>			-	-		1.200		1.219		-		1.219	-	-	N/A

			Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>			-	-	4.471	4.482	-	4.482	-	-	N/A

**Remarks**

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**Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force** **Date:** May 2021

<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 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
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	

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2022 Air Force	<b>Date:</b> May 2021
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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