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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army	Date: March 2019
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Appropriation/Budget Activity	R-1 Program Element (Number/Name)											
2040: <i>Research, Development, Test & Evaluation, Army I BA 7: Operational Systems Development</i>	PE 0607138A / <i>Fixed Wing Product Improvement Program</i>											
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	7.782	2.280	4.545	-	4.545	1.920	0.000	0.000	0.000	0.000	16.527
ES5: <i>Fixed Wing Product Improvement Program</i>	-	7.782	2.280	4.545	-	4.545	1.920	0.000	0.000	0.000	0.000	16.527

A. Mission Description and Budget Item Justification

The budget line provides for Fixed Wing (FW) fielded fleet Non-Recurring Engineering (NRE), development of supplemental type certificates (STC) and associated developmental testing, and integration of all Army Fixed Wing Aircraft to provide Communications, Navigation and Surveillance (CNS), Aircraft Survivability Equipment (ASE), modifications in service, and Department of Defense (DoD) mandated safety equipment to meet current and evolving international and Army standards. As requirements for new avionics equipment evolve, aircraft delays and airspace exclusions are likely for aircraft not properly equipped. Upgrade of communication and aircraft modifications assures worldwide deployability for those required to deploy. This budget line provides funding for studies, evaluations and Analysis of Alternatives to support emerging Army Fixed Wing requirements for product improvements to support the FW fleet. This budget line also provides funding for continued Test and Evaluation of Fixed Wing Aircraft.

B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	9.981	4.189	4.545	-	4.545
Current President's Budget	7.782	2.280	4.545	-	4.545
Total Adjustments	-2.199	-1.909	0.000	-	0.000
• Congressional General Reductions	-0.008	-0.003			
• Congressional Directed Reductions	-	-1.906			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.800	-			
• SBIR/STTR Transfer	-0.391	-			

Change Summary Explanation

The FUA Test and Evaluation Plan was scheduled to have the highest cost in FY18 with a decrease in FY 2019 due to completion of test activities. House Appropriations Committee (HAC) marked FY 2019 in the amount of -\$2.043M.

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army										Date: March 2019		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0607138A / Fixed Wing Product Improvement Program				Project (Number/Name) ES5 / Fixed Wing Product Improvement Program			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
ES5: Fixed Wing Product Improvement Program	-	7.782	2.280	4.545	-	4.545	1.920	0.000	0.000	0.000	0.000	16.527
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The budget line provides for Fixed Wing (FW) fielded fleet Non-Recurring Engineering (NRE), development of supplemental type certificates (STC) and associated developmental testing, and integration of all Army Fixed Wing Aircraft to provide Communications, Navigation and Surveillance (CNS), Aircraft Survivability Equipment (ASE), modifications in service, and Department of Defense (DoD) mandated safety equipment to meet current and evolving international and Army standards. As requirements for new avionics equipment evolve, aircraft delays and airspace exclusions are likely for aircraft not properly equipped. Upgrade of communication and aircraft modifications assures worldwide deployability for those required to deploy. This budget line provides funding for studies, evaluations and Analysis of Alternatives to support emerging Army fixed wing requirements for product improvements to support the FW fleet. This budget line also provides funding for continued Test and Evaluation of Fixed Wing Aircraft.

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

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Program Management (PM)	0.467	0.215	0.383	-	0.383
Description: Program Management support for Fixed Wing (FW) Aircraft efforts					
FY 2019 Plans: PM Fixed Wing (FW) will provides funding for Program Management and Engineering Support for Fixed Wing (FW) fielded fleet Non-Recurring Engineering (NRE), development of Supplemental Type Certificates (STC) and associated developmental testing, and integration of all Army Fixed Wing Aircraft to provide Communications, Navigation and Surveillance (CNS), Aircraft Survivability Equipment (ASE), modifications in service, and Department of Defense (DoD) mandated safety equipment to meet current and evolving international and Army standards.					
FY 2020 Base Plans: Provides funding for Program Management and Engineering Support in order to meet Fixed Wing Aircraft Capability requirements					
FY 2019 to FY 2020 Increase/Decrease Statement:					

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
\$.168 million increase from FY19 to FY20 is due to increased Test and Evaluation required program management.						
Title: Test And Evaluation Description: Support studies, test and evaluations, and Analysis of Alternatives to support emerging Army Fixed Wing (FW) requirements for product improvements to support the FW fleet. FY 2019 Plans: This budget line will provide funding for continued Test and Evaluation of Fixed Wing Aircraft. FY 2020 Base Plans: Provides funding for Test and Evaluation and Engineering Services in order to meet Fixed Wing Aircraft Capability requirements FY 2019 to FY 2020 Increase/Decrease Statement: \$.549 million increase from FY19 to FY20 is to evaluate feasibility of increasing performance of Army Test & Evaluation Command T-6 aircraft to support future testing of all Fixed Wing and Rotary Wing aircraft.		7.315	1.116	1.665	-	1.665
Title: Support Cost Description: Non-recurring Engineering Support for Fixed Wing (FW) Aircraft FY 2019 Plans: This budget line will provide funding for Support Cost of FW Aircraft. FY 2020 Base Plans: Provides funding for Support Costs and Engineering Services in order to meet Fixed Wing Aircraft Capability requirements FY 2019 to FY 2020 Increase/Decrease Statement: \$1.682 million increase from FY19 to FY20 is due to aircraft navigation and performance enhancements to include survivability, safety, and situational awareness such as C-26 extended range fuel tanks and Army Test & Evaluation Command T-6 increase max gross takeoff weight.		-	0.815	2.497	-	2.497
Title: FY 2019 SBIR/STTR Transfer Description: FY2019 SBIR/STTR Transfer of \$134M		-	0.134	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
<i>FY 2019 Plans:</i> FY2019 SBIR/STTR Transfer of \$134M					
<i>FY 2019 to FY 2020 Increase/Decrease Statement:</i> FY2019 SBIR/STTR Reduction of \$134M					
Accomplishments/Planned Programs Subtotals	7.782	2.280	4.545	-	4.545

C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2020</u>	<u>FY 2020</u>	<u>FY 2020</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>Complete</u>	<u>Total Cost</u>
• A11300: <i>Utility F/W Aircraft</i>	75.115	18.644	16.000	-	16.000	-	-	-	-	0.000	109.759
• AA0270: <i>Utility/Cargo Airplane Mods</i>	57.737	17.719	15.476	8.362	23.838	22.244	-	-	-	Continuing	Continuing

Remarks
The A11300 Utility F/W Aircraft (Aircraft Procurement Army (APA) P-1 Line #2) budget line provides for the acquisition of Army Fixed Wing Aircraft in support of mission requirements, training, and other support activities. The AA0270 Utility/Cargo Airplane Mods (Aircraft Procurement Army (APA) P-1 Line #27) provides for aircraft modification in support of Fixed Wing programs.

D. Acquisition Strategy
The US Army Fixed Wing acquisition and modernization strategy leverages commercial derivative aircraft through the use of supplemental type certificates (STC) and associated testing and includes cockpit modernization for civil and tactical upgrades of military unique equipment and integration of Communications, Navigation and Surveillance (CNS) and Aircraft Survivability Equipment (ASE).

E. Performance Metrics
N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army												Date: March 2019			
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0607138A / Fixed Wing Product Improvement Program				Project (Number/Name) ES5 / Fixed Wing Product Improvement Program					
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	PM Fixed Wing : Redstone Arsenal, AL	0.118	0.467	Jan 2018	0.215	Jan 2019	0.383	Jan 2020	-		0.383	0.190	1.373	-
Subtotal			0.118	0.467		0.215		0.383		-		0.383	0.190	1.373	N/A
Remarks FY19 to FY20 increase due to test and evaluation program management requirements.															
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Fixed Wing Non-recurring Engineering	Various	Various : Various	1.806	-		1.116	Mar 2019	2.497	Mar 2020	-		2.497	0.866	6.285	-
2019 SBIR/STTR Transfer	TBD	NA : NA	-	-		0.134		-		-		-	0.000	0.134	-
Subtotal			1.806	-		1.250		2.497		-		2.497	0.866	6.419	N/A
Remarks FY19 to FY20 increases are due to aircraft navigation and performance enhancements to include survivability, safety, and situational awareness such as C-26 extended range fuel tanks and Army Test & Evaluation Command T-6 increase max gross takeoff weight.															
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Testing Support	Various	Various : Various	0.765	7.315	Jun 2018	0.815	Jun 2019	1.665	Jun 2020	-		1.665	0.864	11.424	-
Subtotal			0.765	7.315		0.815		1.665		-		1.665	0.864	11.424	N/A
Remarks FY19 to FY20 increase is to evaluate feasibility of increasing performance of Army Test & Evaluation Command T-6 aircraft to support future testing of all Fixed Wing and Rotary Wing aircraft.															

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	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	2.689	7.782		2.280		4.545		-		4.545	1.920	19.216	N/A
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Army																Date: March 2019													
Appropriation/Budget Activity 2040 / 7										R-1 Program Element (Number/Name) PE 0607138A / Fixed Wing Product Improvement Program										Project (Number/Name) ES5 / Fixed Wing Product Improvement Program									
Event Name	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				
	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	
FW Non-Recurring Engineering																													
Testing Support																													

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Army			Date: March 2019
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607138A / <i>Fixed Wing Product Improvement Program</i>	Project (Number/Name) ES5 / <i>Fixed Wing Product Improvement Program</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FW Non-Recurring Engineering	1	2019	4	2021
Testing Support	1	2018	4	2021