

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army										Date: February 2018		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605830A I Aviation Ground Support Equipment							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	2.060	6.930	2.706	-	2.706	5.430	2.938	4.775	4.672	0.000	29.511
EE5: Aviation Ground Support Equipment	-	2.060	6.930	2.706	-	2.706	5.430	2.938	4.775	4.672	0.000	29.511

A. Mission Description and Budget Item Justification

This Program Element funds Aviation Ground Support Equipment (AGSE) developmental testing and acquisition of prototypes to enhance the functionality of current and future aircraft maintenance equipment. This will be accomplished by identifying more effective aircraft maintenance equipment, validating new maintenance concepts, improving machine interfaces, updating aircraft maintenance processes, and developing improved diagnostic technologies which will reduce Operation and Support costs. This program provides for the development of rapid battle repair procedures, tools, ground handling, and test equipment to speed the return of aircraft to a fully mission capable status. Included in this program are: Tool Set, Aviation Unit Maintenance (TS, AUM) (formerly Aviation Unit Maintenance Shop Set), Self-propelled Crane Aircraft Maintenance and Positioning Increment II (SCAMP II) Type 2 (Expeditionary Variant) & Type 1 (Flight Line Variant), Pitot Static Test Set (PSTS), and development of support equipment required for maintenance of modernized/future force aircraft.

<u>B. Program Change Summary (\$ in Millions)</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019 Base</u>	<u>FY 2019 OCO</u>	<u>FY 2019 Total</u>
Previous President's Budget	2.142	6.930	4.255	-	4.255
Current President's Budget	2.060	6.930	2.706	-	2.706
Total Adjustments	-0.082	0.000	-1.549	-	-1.549
• Congressional General Reductions	-0.001	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.081	-			
• Adjustments to Budget Years	-	-	-1.549	-	-1.549

Change Summary Explanation

FY19 reflects HQDA realignments to other programs (-\$1.037 million) and realignment of reimbursable manpower funding to direct manpower funding (-\$0.512 million).

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army										Date: February 2018		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605830A / Aviation Ground Support Equipment				Project (Number/Name) EE5 / Aviation Ground Support Equipment			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
EE5: Aviation Ground Support Equipment	-	2.060	6.930	2.706	-	2.706	5.430	2.938	4.775	4.672	0.000	29.511
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This Program Element funds Aviation Ground Support Equipment (AGSE) developmental testing and acquisition of prototypes to enhance the functionality of current and future aircraft maintenance equipment. This will be accomplished by identifying more effective aircraft maintenance equipment, validating new maintenance concepts, improving machine interfaces, updating aircraft maintenance processes, and developing improved diagnostic technologies which will reduce Operation and Support costs. This program provides for the development of rapid battle repair procedures, tools, ground handling, and test equipment to speed the return of aircraft to a fully mission capable status. Included in this program are: Tool Set, Aviation Unit Maintenance (TS, AUM) (formerly Aviation Unit Maintenance Shop Set), Self-propelled Crane Aircraft Maintenance and Positioning Increment II (SCAMP II) Type 2 (Expeditionary Variant) & Type 1 (Flight Line Variant), Pitot Static Test Set (PSTS), and development of support equipment required for maintenance of modernized/future force aircraft.

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

	FY 2017	FY 2018	FY 2019
Title: Tool Set, Aviation Unit Maintenance Description: The Tool Set, Aviation Unit Maintenance consists of three deployable shelters which provide tool loads required for unit-level aviation maintenance tasks. FY 2018 Plans: Develop solution for transporting the one-sided expandable International Organization for Standardization (ISO) shelters. FY 2018 to FY 2019 Increase/Decrease Statement: Transition to procurement and fielding of MWO.	0.910	1.000	-
Title: SCAMP II, Type 2 (Expeditionary Variant) Description: The SCAMP II, Type 2 will remove and replace major aircraft components (maintenance lifting) in support of Army Aviation Maintenance. Type 2 supports maintenance on unimproved, austere locations, split operations and downed aircraft recovery. FY 2018 Plans: Prepare acquisition documentation in support of Milestone C. FY 2018 to FY 2019 Increase/Decrease Statement:	0.457	1.403	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army		Date: February 2018	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605830A / Aviation Ground Support Equipment	Project (Number/Name) EE5 / Aviation Ground Support Equipment	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018
Transition to procurement and fielding.			FY 2019
Title: SCAMP II, Type 1 (Flight Line Variant) Description: SCAMP II, Type 1 will remove and replace major aircraft components (maintenance lifting) in support of Army Aviation Maintenance. Type 1 is used on improved surfaces and will lift and reach the most extreme loads. FY 2018 Plans: Evaluate capability enhancements to legacy system and begin updating the technical manual to current Military Standards. FY 2018 to FY 2019 Increase/Decrease Statement: Plans for requirement to consolidate in the procurement of SCAMP II, Type 2		-	2.906
Title: Pitot Static Test Set (PSTS) Description: PSTS is a portable aircraft air data systems tester which provides the capability of troubleshooting, repairing, and verifying proper operation of flight critical aircraft air data systems. FY 2018 Plans: Procure product test samples and conduct testing. FY 2019 Plans: Conduct Acceptance Tests and Airworthiness Release. FY 2018 to FY 2019 Increase/Decrease Statement: Requirement increase to complete testing, Tech Manual development and verification.		-	2.706
Title: Management Support Services Description: Management Support Services in support of the Aviation Ground Support Equipment Product Management Office. FY 2018 Plans: Continue Management Support Services. FY 2018 to FY 2019 Increase/Decrease Statement: Manpower moved to direct OMA funding.		0.321	0.304
Title: Research, Development, Test, and Evaluation (RDTE) Project Test Support Description: RDTE Project Test Support for the Aviation Ground Support Equipment Product Management Office.		0.062	-
Title: Technical Engineering Services		0.310	0.371

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army							Date: February 2018				
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605830A / Aviation Ground Support Equipment			Project (Number/Name) EE5 / Aviation Ground Support Equipment				
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2017	FY 2018	FY 2019		
Description: Technical Engineering Services in support of Airworthiness and Safety certifications for Aviation Ground Support Equipment. FY 2018 Plans: Continue Technical Engineering Services FY 2018 to FY 2019 Increase/Decrease Statement: Manpower moved to direct OMA funding.											
Accomplishments/Planned Programs Subtotals							2.060	6.930	2.706		
C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u> <u>Base</u>	<u>FY 2019</u> <u>OCO</u>	<u>FY 2019</u> <u>Total</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• AZ3520: AVIATION GROUND SUPPORT EQUIPMENT	48.234	47.404	34.818	-	34.818	34.543	31.720	32.652	33.360	0.000	262.731
Remarks											
D. Acquisition Strategy											
This project is an aggregate of aviation ground support equipment related projects. While the detailed acquisition strategy varies from program to program, the general strategy for each individual program is to complete the development effort through Government test (developmental and operational). Program documentation for each milestone decision is prepared, as appropriate, concurrently with the development effort.											
E. Performance Metrics											
N/A											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army												Date: February 2018			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605830A / Aviation Ground Support Equipment				Project (Number/Name) EE5 / Aviation Ground Support Equipment					
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Management Support Services	Various	PM AGSE : Redstone Arsenal, AL	0.656	0.321	Oct 2016	0.304	Oct 2017	-		-		-	0.000	1.281	-
Subtotal			0.656	0.321		0.304		-		-		-	0.000	1.281	N/A
Remarks None.															
Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Tool Set, Aviation Unit Maintenance	Various	AMRDEC, RSA; RTTC, RSA; Aberdeen Test Center, : Aberdeen Proving Ground, MD	3.681	0.910	Jul 2017	1.000		-		-		-	0.000	5.591	-
SCAMP II, Type 2 (Expeditionary)	Various	AMCOM, RSA; AMRDEC, RSA : Redstone Arsenal, AL	0.721	0.457	Jul 2017	1.403		-		-		-	0.000	2.581	-
SCAMP II, Type 1 (Flight Line)	Various	AMCOM, RSA; AMRDEC, RSA : Redstone Arsenal, AL	-	-		2.906		-		-		-	0.000	2.906	-
PSTS	C/TBD	TBD : TBD	-	-		0.946		2.706	Apr 2019	-		2.706	Continuing	Continuing	Continuing
Subtotal			4.402	1.367		6.255		2.706		-		2.706	Continuing	Continuing	N/A
Remarks None.															

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army													Date: February 2018		
Appropriation/Budget Activity 2040 / 5							R-1 Program Element (Number/Name) PE 0605830A / Aviation Ground Support Equipment				Project (Number/Name) EE5 / Aviation Ground Support Equipment				

Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Technical Engineering Services	MIPR	AATD : Ft. Eustis, VA	0.556	0.200	Apr 2017	0.300	Apr 2018	-		-		-	0.000	1.056	-
Technical Engineering Services	MIPR	AED : Redstone Arsenal, AL	0.237	0.110	Apr 2017	0.071	Apr 2018	-		-		-	0.000	0.418	-
Subtotal			0.793	0.310		0.371		-		-		-	0.000	1.474	N/A

Remarks None.															
-------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Lakota NGHMS Demo	MIPR	ATC : Aberdeen Proving Ground, MD	0.420	-		-		-		-		-	0.000	0.420	-
Lakota NGHMS Demo	Various	AMRDEC : Redstone Arsenal, AL	0.190	-		-		-		-		-	0.000	0.190	-
Lakota NGHMS	Various	AMRDEC : Redstone Arsenal, AL	4.825	-		-		-		-		-	0.000	4.825	-
AGSE Test Support	Various	AMCOM, : Redstone Arsenal, AL	0.055	0.062	Jan 2017	-		-		-		-	0.000	0.117	-
Subtotal			5.490	0.062		-		-		-		-	0.000	5.552	N/A

Remarks None.															
-------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	11.341	2.060		6.930		2.706		-		2.706	Continuing	Continuing	N/A

Remarks															
----------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army			Date: February 2018		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605830A / Aviation Ground Support Equipment		Project (Number/Name) EE5 / Aviation Ground Support Equipment	

Event Name	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
AGPU Next Gen.																												
Tool Set, Aviation Unit Maintenance (TS, AUM)																												
Self-Propelled Crane Aircraft Maintenance and Positioning II, Type 2																												
Self-Propelled Crane Aircraft Maintenance and Positioning II, Type 1																												
Pitot Static Test Set (PSTS)																												
Aircraft Cleaning and Deicing System (ACDS)																												
Shop Equipment Contact Maintenance (SECM)																												
Aviation Intermediate Maintenance Shop Set																												
Common Aviation Tool System																												
Generic Aircraft Nitrogen Generator																												
Standard Aircraft Towing System																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605830A / Aviation Ground Support Equipment	Project (Number/Name) EE5 / Aviation Ground Support Equipment	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
AGPU Next Gen.	2	2020	4	2023
Aviation Unit Maintenance Shop Set (AVUM SS)	3	2015	4	2016
Tool Set, Aviation Unit Maintenance (TS, AUM)	4	2016	2	2019
Self-Propelled Crane Aircraft Maintenance and Positioning II, Type 2	3	2015	4	2019
Self-Propelled Crane Aircraft Maintenance and Positioning II, Type 1	3	2018	4	2018
Pitot Static Test Set (PSTS)	2	2018	4	2019
Aircraft Cleaning and Deicing System (ACDS)	1	2022	3	2023
Shop Equipment Contact Maintenance (SECM)	2	2020	4	2021
Aviation Intermediate Maintenance Shop Set	2	2023	4	2024
Common Aviation Tool System	2	2023	4	2024
Generic Aircraft Nitrogen Generator	3	2023	4	2024
Standard Aircraft Towing System	4	2023	4	2024