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**Department of Defense
Fiscal Year (FY) 2017 President's Budget Submission**

February 2016



Army

*Justification Book of
Aircraft Procurement, Army*

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The following Justification Books were prepared at a cost of \$1,209,553: Aircraft (ACFT), Missile (MSLS), Weapons & Tracked Combat Vehicles (WTCV), Ammunition (AMMO), Other Procurement Army (OPA) 1 - Tactical & Support Vehicles, Other Procurement Army (OPA) 2 - Communications & Electronics, Other Procurement Army (OPA) 3 & 4 - Other Support Equipment & Spares, Research, Development, Test and Evaluation (RDTE) for: Budget Activity 1, Budget Activity 2, Budget Activity 3, Budget Activity 4, Budget Activity 5A, Budget Activity 5B, Budget Activity 6, and Budget Activity 7.

AIRCRAFT PROCUREMENT, ARMY

Appropriation Language

For construction, procurement, and modification of aircraft and equipment, including armor and armament, specialized ground handling equipment, and training devices, spare parts, and accessories therefore; specialized equipment; expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things, \$3,614,787,000 Base and \$313,171,000 OCO to remain available for obligations until September 30, 2019.

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Department of the Army
FY 2017 President's Budget
Exhibit P-1 FY 2017 President's Budget
Total Obligational Authority
(Dollars in Thousands)

01 Feb 2016

Appropriation	FY 2015 (Base & OCO)	FY 2016 Base Enacted	FY 2016 OCO Enacted	FY 2016 Total Enacted
Aircraft Procurement, Army	5,799,286	5,866,367	161,987	6,028,354
Total Department of the Army	5,799,286	5,866,367	161,987	6,028,354

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Department of the Army
FY 2017 President's Budget
Exhibit P-1 FY 2017 President's Budget
Total Obligational Authority
(Dollars in Thousands)

01 Feb 2016

Appropriation -----	FY 2017 Base -----	FY 2017 OCO -----	FY 2017 Total -----
Aircraft Procurement, Army	3,614,787	313,171	3,927,958
Total Department of the Army	3,614,787	313,171	3,927,958

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Department of the Army
 FY 2017 President's Budget
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 (Dollars in Thousands)

01 Feb 2016

Appropriation: Aircraft Procurement, Army

Budget Activity	FY 2015 (Base & OCO)	FY 2016 Base Enacted	FY 2016 OCO Enacted	FY 2016 Total Enacted
01. Aircraft	4,407,266	4,673,079	113,037	4,786,116
02. Modification of Aircraft	875,274	815,955	48,950	864,905
04. Support Equipment and Facilities	516,746	377,333		377,333
Total Aircraft Procurement, Army	5,799,286	5,866,367	161,987	6,028,354

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Department of the Army
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 (Dollars in Thousands)

01 Feb 2016

Appropriation: Aircraft Procurement, Army

Budget Activity -----	FY 2017 Base -----	FY 2017 OCO -----	FY 2017 Total -----
01. Aircraft	2,641,551	78,040	2,719,591
02. Modification of Aircraft	714,453	70,295	784,748
04. Support Equipment and Facilities	258,783	164,836	423,619
Total Aircraft Procurement, Army	3,614,787	313,171	3,927,958

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Department of the Army
 FY 2017 President's Budget
 Exhibit P-1 FY 2017 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

01 Feb 2016

Appropriation: 2031A Aircraft Procurement, Army

Line No	Item Nomenclature	Ident Code	FY 2015 (Base & OCO)		FY 2016 Base Enacted		FY 2016 OCO Enacted		FY 2016 Total Enacted		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 01: Aircraft											
Fixed Wing											
1	Utility F/W Aircraft		1	10,787		879				879	U
2	Aerial Common Sensor (ACS) (MIP)	A	18	165,890			5	96,500	5	96,500	U
3	MQ-1 UAV	A	19	238,081	15	270,436	2	16,537	17	286,973	U
4	RQ-11 (RAVEN)	A		3,964							U
Rotary											
5	Helicopter, Light Utility (LUH)	A	55	401,617	28	187,177			28	187,177	U
6	AH-64 Apache Block IIIA Reman Less: Advance Procurement (PY)	A	48	(1,116,940) (-150,931)	64	(1,300,799) (-157,338)			64	(1,300,799) (-157,338)	U
				966,009		1,143,461				1,143,461	
7	AH-64 Apache Block IIIA Reman Advance Procurement (CY)			157,338		209,930				209,930	U
	C (FY 2015 for FY 2016) (M)			(157,338)							
	C (FY 2016 for FY 2017) (M)					(209,930)				(209,930)	
	C (FY 2017 for FY 2018) (M)										
8	UH-60 Blackhawk M Model (MYP) Less: Advance Procurement (PY)		105	(1,464,384) (-112,807)	107	(1,695,077) (-120,332)			107	(1,695,077) (-120,332)	U
				1,351,577		1,574,745				1,574,745	
9	UH-60 Blackhawk M Model (MYP) Advance Procurement (CY)			117,138		127,079				127,079	U
	C (FY 2015 for FY 2016) (M)			(117,138)							
	C (FY 2016 for FY 2017) (M)					(127,079)				(127,079)	
	C (FY 2017 for FY 2018) (M)										
	C (FY 2017 for FY 2019) (M)										
	C (FY 2017 for FY 2020) (M)										
	C (FY 2017 for FY 2021) (M)										

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 (Dollars in Thousands)

01 Feb 2016

Appropriation: 2031A Aircraft Procurement, Army

Line No	Item Nomenclature	Ident Code	FY 2017 Base		FY 2017 OCO		FY 2017 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 01: Aircraft									
Fixed Wing									
1	Utility F/W Aircraft		3	57,529			3	57,529	U
2	Aerial Common Sensor (ACS) (MIP)	A							U
3	MQ-1 UAV	A		55,388				55,388	U
4	RQ-11 (RAVEN)	A							U
Rotary									
5	Helicopter, Light Utility (LUH)	A							U
6	AH-64 Apache Block IIIA Reman Less: Advance Procurement (PY)	A	48	(1,013,014) (-209,930)	4	(78,040)	52	(1,091,054) (-209,930)	U U
				803,084		78,040		881,124	
7	AH-64 Apache Block IIIA Reman Advance Procurement (CY) C (FY 2015 for FY 2016) (M) C (FY 2016 for FY 2017) (M) C (FY 2017 for FY 2018) (M)			185,160 (185,160)				185,160 (185,160)	U
8	UH-60 Blackhawk M Model (MYP) Less: Advance Procurement (PY)		36	(882,225) (-127,079)			36	(882,225) (-127,079)	U U
				755,146				755,146	
9	UH-60 Blackhawk M Model (MYP) Advance Procurement (CY) C (FY 2015 for FY 2016) (M) C (FY 2016 for FY 2017) (M) C (FY 2017 for FY 2018) (M) C (FY 2017 for FY 2019) (M) C (FY 2017 for FY 2020) (M) C (FY 2017 for FY 2021) (M)			174,107 (171,847) (1,823) (286) (151)				174,107 (171,847) (1,823) (286) (151)	U

P-1C1: FY 2017 President's Budget (Published Version of PB Position), as of February 1, 2016 at 07:53:30

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Department of the Army
 FY 2017 President's Budget
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 Total Obligational Authority
 (Dollars in Thousands)

01 Feb 2016

Appropriation: 2031A Aircraft Procurement, Army

Line No	Item Nomenclature	Ident Code	FY 2015 (Base & OCO)		FY 2016 Base Enacted		FY 2016 OCO Enacted		FY 2016 Total Enacted		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
10	UH-60 Black Hawk A and L Models	A			46	55,441			46	55,441	U
11	CH-47 Helicopter	A	32	(982,880)	39	(1,106,948)			39	(1,106,948)	U
	Less: Advance Procurement (PY)			(-90,376)		(-102,361)				(-102,361)	U
				892,504		1,004,587				1,004,587	
12	CH-47 Helicopter										
	Advance Procurement (CY)			102,361		99,344				99,344	U
	C (FY 2015 for FY 2016) (M)			(102,361)							
	C (FY 2016 for FY 2017) (M)					(99,344)				(99,344)	
	C (FY 2017 for FY 2018) (M)										
Total Aircraft				4,407,266		4,673,079		113,037		4,786,116	

Budget Activity 02: Modification of Aircraft

Modification of Aircraft

13	MQ-1 Payload (MIP)	A		25,313		139,653		8,700		148,353	U
14	Guardrail Mods (MIP)			14,182							U
15	Multi Sensor ABN Recon (MIP)			131,892		95,725				95,725	U
16	AH-64 Mods	A		181,869		116,153				116,153	U
17	CH-47 Cargo Helicopter Mods (MYP)			32,092		90,330				90,330	U
18	GRCS SEMA Mods (MIP)	A				4,019				4,019	U
19	ARL SEMA Mods (MIP)	A				16,302		32,000		48,302	U
20	EMARSS SEMA Mods (MIP)	A				13,669				13,669	U
21	Utility/Cargo Airplane Mods			15,029		16,166				16,166	U
22	Utility Helicopter Mods			76,515		16,893				16,893	U
23	Network and Mission Plan	A		102,930		108,807				108,807	U

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Department of the Army
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 (Dollars in Thousands)

01 Feb 2016

Appropriation: 2031A Aircraft Procurement, Army

Line No	Item Nomenclature	Ident Code	FY 2017 Base		FY 2017 OCO		FY 2017 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
10	UH-60 Black Hawk A and L Models	A	38	46,173			38	46,173	U
11	CH-47 Helicopter	A	22	(655,601)			22	(655,601)	U
	Less: Advance Procurement (PY)			(-99,344)				(-99,344)	U
				556,257				556,257	
12	CH-47 Helicopter								
	Advance Procurement (CY)			8,707				8,707	U
	C (FY 2015 for FY 2016) (M)								
	C (FY 2016 for FY 2017) (M)								
	C (FY 2017 for FY 2018) (M)			(8,707)				(8,707)	
Total Aircraft				2,641,551		78,040		2,719,591	

Budget Activity 02: Modification of Aircraft

Modification of Aircraft

13	MQ-1 Payload (MIP)	A		43,735				43,735	U
14	Guardrail Mods (MIP)								U
15	Multi Sensor ABN Recon (MIP)			94,527		21,400		115,927	U
16	AH-64 Mods	A		137,883				137,883	U
17	CH-47 Cargo Helicopter Mods (MYP)			102,943				102,943	U
18	GRCS SEMA Mods (MIP)	A		4,055				4,055	U
19	ARL SEMA Mods (MIP)	A		6,793				6,793	U
20	EMARSS SEMA Mods (MIP)	A		13,197		2 42,700		2 55,897	U
21	Utility/Cargo Airplane Mods			17,526				17,526	U
22	Utility Helicopter Mods			10,807				10,807	U
23	Network and Mission Plan	A		74,752				74,752	U

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 Total Obligational Authority
 (Dollars in Thousands)

01 Feb 2016

Appropriation: 2031A Aircraft Procurement, Army

Line No	Item Nomenclature	Ident Code	FY 2015 (Base & OCO)		FY 2016 Base Enacted		FY 2016 OCO Enacted		FY 2016 Total Enacted		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
24	Comms, Nav Surveillance	A		115,795		82,904				82,904	U
25	GATM Rollup	A		54,277		33,890				33,890	U
26	RQ-7 UAV MODS	A		125,380		81,444		8,250		89,694	U
27	UAS MODS	A									U
Total Modification of Aircraft				875,274		815,955		48,950		864,905	
Budget Activity 04: Support Equipment and Facilities											
Ground Support Avionics											
28	Aircraft Survivability Equipment			89,059		56,215				56,215	U
29	Survivability CM			7,800		8,917				8,917	U
30	CMWS	A		201,912		104,348				104,348	U
31	CIRCM	A									U
Other Support											
32	Avionics Support Equipment			6,847		6,937				6,937	U
33	Common Ground Equipment			31,681		58,067				58,067	U
34	Aircrew Integrated Systems			48,081		44,085				44,085	U
35	Air Traffic Control			127,232		94,545				94,545	U
36	Industrial Facilities			1,203		1,207				1,207	U
37	Launcher, 2.75 Rocket			2,931		3,012				3,012	U
Total Support Equipment and Facilities				516,746		377,333				377,333	
Total Aircraft Procurement, Army				5,799,286		5,866,367		161,987		6,028,354	

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Department of the Army
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 Total Obligational Authority
 (Dollars in Thousands)

01 Feb 2016

Appropriation: 2031A Aircraft Procurement, Army

Line No	Item Nomenclature	Ident Code	FY 2017 Base		FY 2017 OCO		FY 2017 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
24	Comms, Nav Surveillance	A		69,960			69,960		U
25	GATM Rollup	A		45,302			45,302		U
26	RQ-7 UAV MODS	A		71,169		1,775	72,944		U
27	UAS MODS	A		21,804		4,420	26,224		U
Total Modification of Aircraft				714,453		70,295	784,748		
Budget Activity 04: Support Equipment and Facilities									
Ground Support Avionics									
28	Aircraft Survivability Equipment			67,377			67,377		U
29	Survivability CM			9,565			9,565		U
30	CMWS	A		41,626		56,115	97,741		U
31	CIRCM	A				108,721	108,721		U
Other Support									
32	Avionics Support Equipment			7,007			7,007		U
33	Common Ground Equipment			48,234			48,234		U
34	Aircrew Integrated Systems			30,297			30,297		U
35	Air Traffic Control			50,405			50,405		U
36	Industrial Facilities			1,217			1,217		U
37	Launcher, 2.75 Rocket			3,055			3,055		U
Total Support Equipment and Facilities				258,783		164,836	423,619		
Total Aircraft Procurement, Army				3,614,787		313,171	3,927,958		

P-1C1: FY 2017 President's Budget (Published Version of PB Position), as of February 1, 2016 at 07:53:30

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Exhibit MYP-1, Multiyear Procurement Criteria		Date: February 2017
Appropriation / Budget Activity: 2031 Aircraft Procurement - Army / Aircraft (BA-01)	P-1 Item Nomenclature: AH-64E Apache Remanufacture MY-1	
<p>1. <u>Multiyear Procurement Description:</u></p> <p>This proposed Multiyear Procurement (MYP) covers the purchase of AH-64E aircraft in FY 2017 through FY 2021 under a single fixed-price-incentive-firm (FPIF) five year contract. The MYP has an estimated cost avoidance of 11.2% (\$425.7M) when compared to five annual contracts. This MYP contract, scheduled to be awarded on 20 January 2017, will be certified by the Secretary of Defense 30 days prior to award. The Request for Proposal (RFP) was released with a minimum quantity of 46 per year, with options for Remanufactured quantities up to 75 per year. The RFP also included base New Build quantities of seven per year in FY 2020 and FY 2021, but also included options of up to 30 per year. In no year would total quantities of Remanufactured and New Build aircraft exceed 90 per year.</p> <p>Multiyear Procurement (MYP) avoidance percentages are estimated contract award values based upon a Business Case Analysis conducted in 2014 and applied to the latest updated Apache Program Office Estimate (POE), while single year values (SYP) are based upon the Apache Program Office Estimates (POE) over the same time period without the MY avoidance percentages applied. The Apache MYP Cost Benefit Analysis (CBA) was validated by the Deputy Assistant Secretary of the Army for Cost and Economics on 10 July 2014 to be sufficient for Army decision making.</p>		
<p>2. <u>Benefit to the Government:</u></p> <p>a. <u>Substantial Savings:</u></p> <p>Implementation of this proposed MYP will yield significant opportunity for cost avoidance through the term of the contract. Specifically, cost avoidance for FY 2017 through FY 2021 attributable to this MYP strategy is estimated at \$425.7M(11.2%) for the AH-64E. This level of avoidance is based on a detailed cost analysis of the prices for five single year contracts to the price for one five year multiyear contract. Administrative costs are reduced since there is only one proposal, negotiation, and purchase order instead of a string of five single year procurement actions. These bid and proposal costs are reduced since they only have one contract to negotiate with the Government vice five. Prime contractor costs will also be reduced as subcontracts will only be entered into once. Since some suppliers include proposal preparation and negotiation as a direct charge to the purchase order, there will be a dollar for dollar reduction and the cost will not get lost in overhead rates. Another administrative reduction is realized in production planning. Stabilizing long-term production quantity requirements will reduce production line administrative costs. Additionally, the workload on the Government acquisition workforce will be reduced via the MYP, resulting in greater efficiency in other AH-64E acquisition operations. The prime contractor sets the standard for the vendors that support their contract commitments and, as new processes and innovations are implemented at the prime facility, the vendors are encouraged to adopt those elements that enhance their performance. The stability of long term commitments supported by multiyear contracts provides the collateral required to support their financial investments. Many electronic components have minimum buy quantities which may not be met under single year procurements, driving up unit costs so that total cost is artificially high. Multiyear procurement quantities will allow the prime contractor and subcontractors to exceed minimum order quantities and capture economic order quantity benefits on these components. Typically, suppliers will provide price discounts to lock in business. Given a five year contract, suppliers will have greater total business and stability; therefore, they will be capable of finding innovative processes and be able to justify capital investments necessary to reduce costs. Some of these cost reductions will be passed on to the customer in the form of price reductions. In addition to these types of process innovations and capital investments, competition will be greater based on larger purchase volumes. The Prime contractor is also incentivized to increase competition due to the requirement for reach “substantial” savings. Moreover, obsolescence risks and costs are expected to be minimized because the Prime is now responsible for all contractor furnished equipment obsolescence for the entire 5 year period.</p>		

Exhibit MYP-1, Multiyear Procurement CriteriaDate:
February 2017**Appropriation / Budget Activity:**
2031 Aircraft Procurement - Army / Aircraft (BA-01)**P-1 Item Nomenclature:**
AH-64E Apache Remanufacture MY-1**b. Stability of Requirement:**

The AH-64E Apache is one of the core aviation programs and is approved through the current Five Year Defense Program (FYDP). The minimum need for the AH-64E is not expected to decrease during the contemplated contract period, as the requirement for over 600 replacement aircraft will support production well into the 2020s. The requirement for the AH-64E aircraft is well documented within the Army. The AH-64E is a key component in the Army's investment strategy for Long range recapitalization and modernization. The AH-64E Capability Development Document was approved by the Joint Requirements Oversight Council (JROC) on 03 May 2006, and subsequently updated on 02 April 2013 to include the AH-64E v4 Capability Insertion. The latest draft version includes V6 updates as of 25 June 2015.

c. Stability of Funding:

The funding for the AH-64E is stable. The Army has consistently included funding for the AH-64E in its budget submissions. Congress has provided funding for production in excess of the President's Budget over the past few years. The Defense Acquisition Executive (DAE) conducted a Defense Acquisition Board (DAB) on August 16, 2012, which approved Full Rate Production (FRP) for the AH-64E Apache Remanufacture program. The DAE issued an Acquisition Decision Memorandum (ADM) approving the designation of the AH-64E Apache Remanufacture and AH-64E Apache New Build programs as ACAT IC after approval of the AH-64E Remanufacture APB. The DAE approved the APB on November 26, 2012. Funding support for the AH-64E has consistently been shown by both the Army and the Congress.

d. Stable Configuration:

The AH-64E airframe will be in its seventh year of production in FY 2017. There have been two categories of changes in this period. One, there have been slight changes in aircraft configuration to improve reliability and produce ability. There have also been DAE pre-approved configuration changes, such as the inclusion of LINK-16 to meet defined incremental system enhancements which allow for changing mission requirements.

e. Realistic Cost Estimate:

The multiyear (MY) cost estimate for the AH-64E reflects the avoidance percentages contained in the Business Case Analysis (BCA) data provided by the Apache Program Management Office, validated by the Deputy Assistant Secretary of the Army for Cost and Economics on 10 July 2014 to be sufficient for Army decision making. The AH-64E prime contract is envisioned to be a five year contract. The SY estimate reflects an Apache Program Office estimate without the MY avoidance calculated and assumes the same budget procuring few quantities as the program buys to the available budget.

f. National Security:

The AH-64E is the heavy attack helicopter of the current and future force. It is a twin engine, four-bladed, tandem seat, attack helicopter with 30-millimeter ammunition, 2.75-inch rockets, laser and Radio Frequency Hellfire missiles. The AH-64E is the Army's network-centric, multi-role weapon system within the Future Modular Force (FMF). It provides the capability to simultaneously conduct (or quickly transition between) close combat, mobile strike, armed reconnaissance, Manned-Unmanned Teaming, security and vertical maneuver missions across the full spectrum of warfare from Stability and Support Operations to Major Combat Operations, when required, in day, night, obscured battlefield and adverse weather conditions. The AH-64E enables the Joint Air/Ground Maneuver Team to dominate the battle space by providing air-ground synergy

Exhibit MYP-1, Multiyear Procurement Criteria

Date:
February 2017

Appropriation / Budget Activity:
2031 Aircraft Procurement - Army / Aircraft (BA-01)

P-1 Item Nomenclature:
AH-64E Apache Remanufacture MY-1

through real-time Intelligence, Surveillance, and Reconnaissance (ISR) information and responsive precision fires. The AH-64E is linked to Joint and Combined Arms Air/Ground Maneuver Teams via Enhanced Digital Communications, Unmanned Aircraft Systems Data Links and Joint networking waveforms. The AH-64E is an Apache attack helicopter modified as required to effectively and efficiently integrate the Longbow Apache well into the 21st century by providing improvements to make it relevant in FMF operations. It provides a significantly enhanced warfighting capability over the AH-64A and AH-64D. It is capable of being employed day or night in adverse weather and obscurants, and can effectively engage and destroy advanced threat weapon systems on the air-land battlefield. Tactically, the AH-64E provides significant war fighting advantages over the original AH-64D and multiplies the combat effectiveness of the entire fleet. It will be fully capable of employing the Longbow Fire Control Radar mission kit, the Modernized Target Acquisition Designation System/Modernized Pilot Night Vision System, the Longbow Hellfire missiles, and future improved munitions in addition to the normal complement of AH-64D munitions. Additionally, the AH-64E includes upgraded engines, an evolutionary transmission technology and incorporates significant improvements to its main rotor system which increases power and provides substantial performance gains. The AH-64E is fully network-centric capable with current digitized forces and FMF-equipped forces. This enables interoperability with current and future Tactical Operations Center and Army Battle Command System forces. In addition, this reduces the logistics footprint, enhances its deployability, reduces O&S costs, improves AH-64D model flight performance and provides a means to effectively utilize already funded technology insertions. The AH-64E has a fully compatible and rapidly re-configurable open system architecture mission processor design, enabling rapid integration of future communication systems, and minimizing obsolescence. The AH-64E operates within the future force system-of-systems environment where maximum combat power is delivered to units only in coherent packages of systems with synergistic interdependence. The FMF concept drives the demand for network-centric interdependence and Joint integration across the force to new levels. The AH-64E meets these challenges by providing and integrating Command and Control, ISR, and communications connectivity for attack/reconnaissance aviation within Brigade Combat Teams, Divisions, and Corps.

3. Source of Savings:

	<u>\$ in Millions</u>
Inflation	\$78.830
Vendor Procurement	\$0.000
Manufacturing	\$302.638
Design/Engineering	\$9.805
Tool Design	\$0.000
Support Equipment	\$6.488
Other	\$27.969
Workload Savings	\$0.000
Total	\$425.730

4. Advantages of the MYP:

This MYP strategy has been structured to achieve significant cost avoidance (\$425.7M) and will eliminate the need to develop an annual plan on a yearly basis; one year of long-range MY planning will replace five independent years of planning. This strategy includes the options to produce additional aircraft to maintain an industrial base necessary to

Exhibit MYP-1, Multiyear Procurement Criteria		Date: February 2017																								
Appropriation / Budget Activity: 2031 Aircraft Procurement - Army / Aircraft (BA-01)		P-1 Item Nomenclature: AH-64E Apache Remanufacture MY-1																								
meet the production requirements of current and future helicopter systems. Cost avoidance resulting from economic order quantities and independent planning result in benefit to industry and government.																										
<p>5. <u>Impact on Defense Industrial Base:</u></p> <p>Implementation of this proposed MYP will also yield a favorable impact on the industrial base. The stability afforded by the use of multiyear procurement will allow the prime contractor to enter into long term agreements with suppliers at every tier which provide substantial cost avoidance. Such long term agreements incentivize both the prime and the subcontractors to invest in process improvements which yield long term benefits in terms of product quality and cost. The stability of the prime multiyear contract will also foster improved competition at the subcontractor level as the offer of a longer term business arrangement will encourage more aggressive pursuit of a contract award. The contractor and the subcontractor will be at a reduced risk when implementing production process improvements, facility improvements, tooling design improvements and fabrication process improvements. The ability for the Government and industry to enter into a long-term agreement will allow industry the opportunity to place capital investments upfront which reduces the overall cost and improves the quality of the Army AH-64E.</p>																										
<p>6. <u>Multiyear Procurement Summary:</u></p> <table border="1"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Annual Contracts</u></th> <th style="text-align: center;"><u>MultiYear Contract</u></th> </tr> </thead> <tbody> <tr> <td>Quantity</td> <td style="text-align: center;">275</td> <td style="text-align: center;">275</td> </tr> <tr> <td>Total Contract Price</td> <td style="text-align: center;">\$3,801.138</td> <td style="text-align: center;">\$3,375.407</td> </tr> <tr> <td>Cancellation Ceiling (highest point)</td> <td></td> <td></td> </tr> <tr> <td> Funded</td> <td></td> <td style="text-align: center;">\$ 0.000</td> </tr> <tr> <td> Unfunded</td> <td></td> <td style="text-align: center;">\$ 0.000</td> </tr> <tr> <td>\$ Cost Avoidance Over Annual</td> <td></td> <td style="text-align: center;">\$425.731</td> </tr> <tr> <td>% Cost Avoidance Over Annual</td> <td></td> <td style="text-align: center;">11.2%</td> </tr> </tbody> </table>				<u>Annual Contracts</u>	<u>MultiYear Contract</u>	Quantity	275	275	Total Contract Price	\$3,801.138	\$3,375.407	Cancellation Ceiling (highest point)			Funded		\$ 0.000	Unfunded		\$ 0.000	\$ Cost Avoidance Over Annual		\$425.731	% Cost Avoidance Over Annual		11.2%
	<u>Annual Contracts</u>	<u>MultiYear Contract</u>																								
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Exhibit MYP-2 Total Program Funding Plan (ARMY)							Date: February 2017								
PROCUREMENT							P-1 Line Item Nomenclature - AH-64E Apache Remanufacture MY-1 (ARMY)								
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	
Procurement Quantity		52	58	59	57	49								275	
Annual Procurement															
Gross Cost		1,166.1	1155.7	1268.6	1234.5	1095.3								5920.2	
Less PY Adv Procurement		(209.9)	(185.2)	(196.6)	(198.0)	(178.7)								(968.4)	
Net Procurement (= P-1)		956.2	970.5	1072.0	1036.5	916.6								4951.8	
Plus CY Adv Procurement	209.9	185.2	196.6	198.0	178.7									968.4	
Weapon System Cost	209.9	1141.3	1167.1	1270.1	1215.2	916.6								5920.2	
Multiyear Procurement															
Gross Cost (P-1)		1091.1	1070.6	1177.8	1142.5	1012.5								5494.5	
Less PY Adv Procurement		(209.9)	(185.2)	(196.6)	(198.0)	(178.7)								(968.4)	
Net Procurement (= P-1)		881.1	885.4	981.2	944.5	833.8								4526.1	
Advance Procurement															
For FY17	209.9													209.9	
For FY18		185.2												185.2	
For FY19			196.6											196.6	
For FY20				198.0										198.0	
For FY21					178.7									178.7	
Plus CY Adv Procurement	209.9	185.2	196.6	198.0	178.7									968.4	
Weapon System Cost	209.9	1066.3	1082.0	1179.3	1123.2	833.8								5494.5	
Multiyear Savings (\$)		75.1	85.1	90.8	92.0	82.8								425.7	
Multiyear Savings (%) (total only)														7.2%	
Cancellation Ceiling, Funded															
Cancellation Ceiling, Unfunded															
OUTLAYS															
Annual	19.7	190.1	622.1	944.7	1140.7	1153.6	964.0	522.6	220.5	68.3	39.4	24.4	10.2	5920.2	
Multiyear	19.7	183.0	584.4	880.7	1059.6	1067.6	887.0	479.7	201.9	62.8	36.3	22.4	9.3	5494.5	
Savings		7.0	37.7	63.9	81.0	86.0	77.0	42.9	18.6	5.4	3.1	2.0	0.9	425.7	

Exhibit MYP-2, Total Program Funding Plan

* Numbers may not add due to rounding.

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Exhibit MYP-3 Total Contract Funding Plan (ARMY)							Date: February 2017								
PROCUREMENT							P-1 Line Item Nomenclature - AH-64E Apache Remanufacture MY-1 (ARMY)								
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	
Procurement Quantity		52	58	59	57	49								275	
Annual Procurement															
Gross Cost		670.1	759.8	810.6	821.1	739.6								3801.1	
Less PY Adv Procurement		(114.5)	(116.7)	(120.1)	(126.4)	(115.9)								(593.6)	
Net Procurement (= P-1)		555.6	643.1	690.4	694.8	623.7								3207.5	
Plus CY Adv Procurement	114.5	116.7	120.1	126.4	115.9									593.6	
Contract Price	114.5	672.3	763.2	816.8	810.7	623.7								3801.1	
Multiyear Procurement															
Gross Cost (P-1)		595.1	674.7	719.8	729.2	656.7								3375.4	
Less PY Adv Procurement		(114.5)	(116.7)	(120.1)	(126.4)	(115.9)								(593.6)	
Net Procurement (= P-1)		480.6	558.0	599.6	602.8	540.8								2781.8	
Advance Procurement															
For FY17	114.5													114.5	
For FY18		116.7												116.7	
For FY19			120.1											120.1	
For FY20				126.4										126.4	
For FY21					115.9									115.9	
Plus CY Adv Procurement	114.5	116.7	120.1	126.4	115.9									593.6	
Contract Price	114.5	597.2	678.1	726.0	718.7	540.8								3375.4	
Multiyear Savings (\$)		75.1	85.1	90.8	92.0	82.8								425.7	
Multiyear Savings (%) (total only)														11.2%	
Cancellation Ceiling, Funded															
Cancellation Ceiling, Unfunded															
OUTLAYS															
Annual	10.7	108.3	370.9	591.4	729.7	756.7	641.3	349.8	147.5	45.4	26.1	16.5	6.9	3801.1	
Multiyear	10.7	101.3	333.2	527.5	648.6	670.7	564.3	306.8	128.9	39.9	23.0	14.4	6.0	3375.4	
Savings		7.0	37.7	63.9	81.0	86.0	77.0	42.9	18.6	5.4	3.1	2.0	0.9	425.7	

Exhibit MYP-3, Total Contract Funding Plan

* Numbers may not add due to rounding.

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Exhibit MYP-4 Present Value Analysis (ARMY)							Date: February 2017								
PROCUREMENT							P-1 Line Item Nomenclature - AH-64E Apache Remanufacture MY-1 (ARMY)								
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	
Annual Proposal															
Then Year Cost	10.7	108.3	370.9	591.4	729.7	756.7	641.3	349.8	147.5	45.4	26.1	16.5	6.9	3801.1	
Constant Year Cost	10.7	106.3	356.7	557.7	674.6	685.8	569.9	304.7	126.0	38.0	21.4	13.2	5.5	3470.4	
Present Value	10.6	103.7	344.6	533.5	639.0	643.3	529.3	280.2	114.7	34.2	19.1	11.7	4.8	3268.8	
Multiyear Proposal															
Then Year Cost	10.7	101.3	333.2	527.5	648.6	670.7	564.3	306.8	128.9	39.9	23.0	14.4	6.0	3375.4	
Constant Year Cost	10.7	99.4	320.5	497.4	599.6	607.9	501.4	267.3	110.1	33.4	18.9	11.6	4.7	3083.0	
Present Value	10.6	96.9	309.6	475.8	568.0	570.2	465.7	245.8	100.3	30.1	16.9	10.3	4.1	2904.4	
Difference															
Then Year Cost		7.0	37.7	63.9	81.0	86.0	77.0	42.9	18.6	5.4	3.1	2.0	0.9	425.7	
Constant Year Cost		6.9	36.3	60.3	74.9	78.0	68.5	37.4	15.9	4.6	2.5	1.6	0.7	387.5	
Present Value		6.7	35.0	57.7	71.0	73.1	63.6	34.4	14.5	4.1	2.3	1.4	0.6	364.4	
Multiyear Savings (\$)		7.0	37.7	63.9	81.0	86.0	77.0	42.9	18.6	5.4	3.1	2.0	0.9	425.7	

NOTE: MYP Procurement Period is 13 years. Real Interest Rate for MYP Procurement Period of 13 years is 1.00990000%.
(OMB Circular No. A-94, January 2016)

Exhibit MYP-4 Present Value Analysis

* Numbers may not add due to rounding.

Exhibit MYP-1, Multiyear Procurement CriteriaDate:
February 2017**Appropriation / Budget Activity:**

2031 Aircraft Procurement - Army / Aircraft (BA-01)

P-1 Item Nomenclature:

UH-60M/HH-60M BLACK HAWK Helicopter Multiyear IX

1. Multiyear Procurement Description:

This proposed Multiyear Procurement (MYP) covers the purchase of 268 UH-60M/HH-60M BLACK HAWK aircraft in Fiscal Year (FY) 2017 through FY 2021 under a single, five year Firm Fixed Price (FFP) type contract. The MYP strategy is structured to achieve \$455.4 Million (Then Year \$ (TY\$)) in cost avoidance over the five year period. This proposed multiyear contract for the procurement of Army UH-60M/HH-60M BLACK HAWK aircraft follows a currently executing (FY 2012 through FY 2016) Joint Service MYP between the Army, Navy, and Sikorsky Aircraft Corporation for H-60 helicopters. The UH-60M/HH-60M aircraft that will be procured on the proposed multiyear contract are essentially the same configuration as those being procured on the current FY 2012 through FY 2016 multiyear contract.

The MYP will also include a Variation in Quantity Clause allowing for minor fluctuation of aircraft quantity and provide baseline pricing for potential Foreign Military Sales. The Request for Proposal solicitation was released with a minimum quantity of 36 per year, base quantity of 50 per year, with options to increase the maximum quantity of 72 per year.

The U.S. Army proposes the UH-60M/HH-60M BLACK HAWK helicopter system (airframe) as a multiyear contract for FY 2017 through FY 2021, since it satisfies each of the elements of the criteria.

2. Benefit to the Government:**a. Substantial Savings:**

Implementation of this proposed MYP will yield significant opportunity for cost avoidance through the term of the contract. Specifically, contract cost avoidance for FY 2017 through FY 2021 attributable to this MYP strategy is estimated at \$455.4 Million (TY\$). This level of avoidance is based on a comparison of the prices for five single year contracts to the price for one five year multiyear contract. The budgets of both aircraft programs reflect the pricing of the estimated multiyear alternative.

The previous multiyear contract (MYP-8; FY 2012 through FY 2016) is currently estimated to result in a cost avoidance of 10.85%. This proposed MYP is anticipated to result in a cost savings of 10.9% equating to a cost avoidance of 12.2%. Administrative costs are reduced since there is only one proposal, negotiation, and purchase order instead of a string of five single year procurement actions. These costs are reduced to the prime contractor, since they only have one contract to negotiate with the Government vice five. Prime contractor costs will also be reduced as subcontracts at all tiers will only be entered into once. Since some suppliers include proposal preparation and negotiation as a direct charge to the purchase order, there will be a dollar for dollar reduction in these cases and the cost will not get lost in overhead rates. Another administrative reduction is realized in production planning. Cost avoidance will be gained as production line administrative processes will only be performed once, rather than five times under single year procurement. Additionally, the workload on the Government's acquisition workforce will be reduced via the MYP, resulting in greater efficiency in other H-60 acquisition operations.

The prime contractor sets the standard for the vendors that support his contract commitments and, as new processes and innovations are implemented at the prime facility, the vendors are encouraged to adopt those elements that enhance their performance. The stability of long term commitments supported by multiyear contracts provides the collateral required to support their financial investments.

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17-MD09Exhibit MYP-1, Multiyear Procurement Criteria
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Exhibit MYP-1, Multiyear Procurement CriteriaDate:
February 2017**Appropriation / Budget Activity:**
2031 Aircraft Procurement - Army / Aircraft (BA-01)**P-1 Item Nomenclature:**
UH-60M/HH-60M BLACK HAWK Helicopter Multiyear IX

Many electronics components have minimum buy quantities which may not be met under single year procurements, driving up unit costs so that total cost is artificially high. Multiyear procurement quantities will allow the prime contractor and subcontractors at all tiers to exceed minimum order quantities and capture cost avoidance on these components. Typically suppliers will provide price discounts to lock in business. Given a five year contract, suppliers will have greater total business and stability. Therefore, they will be capable of finding innovative processes and be able to justify capital investments necessary to reduce costs. Some of these cost reductions will be passed on to the customer in the form of price reductions. In addition to these types of process innovations and capital investments, competition is expected to be greater based on larger purchase volumes, and obsolescence risks and costs are expected to be minimized.

b. Stability of Requirement:

The UH-60M/HH-60M BLACK HAWK is one of the core aviation programs and is approved through the current Five Year Defense Program (FYDP). The minimum need for the UH-60M/HH-60M BLACK HAWK is not expected to decrease during the contemplated contract period, as the requirement for over 500 replacement aircraft will support production well into the 2020s.

c. Stability of Funding:

The funding for the UH-60M/HH-60M BLACK HAWK is stable. The Army has consistently included funding for the UH-60 BLACK HAWK in its budget submissions. Congressional action has provided funding for production in excess of the President's Budget request in twelve of the previous thirteen years, with FY 2012 being the exception.

d. Stable Configuration:

The UH-60M/HH-60M BLACK HAWK airframe will be in its eleventh year of full rate production in FY17. Changes to both aircraft models have been minor and the aircraft will be produced in basically the same configurations that have been utilized in previous years. There have been some configuration changes during that period to allow for changing mission requirements or to improve on the producibility or reliability of the system. Commonality between the configurations is substantial.

e. Realistic Cost Estimate:

The procurement cost estimate for the UH-60M/HH-60M BLACK HAWK airframe is realistic. The estimates are based on many years of historical cost data/actuals and the most accurate cost data to date. The contract is planned to be a five year Firm Fixed Price contract.

One major driver in the cost avoidance numbers between the previous Multiyear (MY VIII) and the proposed Multiyear (MY IX) is the level of detail Sikorsky Business Case Analysis (BCA) which shall ultimately affect the proposal quality. With the increased level of review that MYPs now face the contractor went out to the supply base and requested pricing data for not only the MYP but the Single Year Procurement (SYP) as well. This has provided a much finer level of granularity for the SYP estimate. In addition, the contractor prepared a Forward Pricing Rate Proposal (FPRP) that applies assumptions of the company's willingness to include "speculative" aircraft in their base thus impacting the rates applied. In a SYP the contractor is unwilling to include this speculative aircraft there is a negative impact to the SYP rates. Looking at these factors the proposed material cost avoidance is similar to that experienced on MYPs. Then combine that with the impacts of a Break in Production (labor loss of learning, schedule as well as direct charging indirect) and the loss of speculative aircraft to account for the overall impact to the rates. The BCA information provided by Sikorsky in March

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Exhibit MYP-1, Multiyear Procurement Criteria

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Exhibit MYP-1, Multiyear Procurement Criteria

Date:
February 2017

Appropriation / Budget Activity:
2031 Aircraft Procurement - Army / Aircraft (BA-01)

P-1 Item Nomenclature:
UH-60M/HH-60M BLACK HAWK Helicopter Multiyear IX

2015 is much more refined and accurate than an independent business case that would only have limited historical data available, contain rough order of magnitude estimates.

f. National Security:

As a principle element of the Defense Planning Guidance (DPG), the Department of the Army developed its Transformation Roadmap. The Roadmap describes the key army concepts, capabilities, initiatives, processes and programs that will guide the transformation efforts of the Army. The Army transformation will support joint transformation by delivering new military capabilities that will greatly expand the sovereign options available to joint force commanders to project power, assure access, and protect and advance America’s interest worldwide in the face of emergent threat technologies and strategies. The H-60 BLACK HAWK is the Army’s primary helicopter for air assault, air cavalry, and aeromedical evacuation units. Modified H-60 BLACK HAWKs also fulfill command and control, electronic warfare, and special operations roles. The H-60 BLACK HAWK has enhanced the overall mobility of the Army because of its dramatic improvements in troop capacity and cargo lift capability troops can be transported faster and in most weather conditions. The H-60M BLACK HAWK is a lethal and flexible platform that offer the force commander multiple options to conduct a capabilities based response to future threats. The H-60M BLACK HAWK system directly supports five of the nine joint capability areas to include force application, battle space awareness, protection, building partnerships, and logistics.

3. Source of Savings:

	<u>\$ in Millions</u>
Inflation	\$39.061
Vendor Procurement	\$0.000
Manufacturing	\$355.020
Design/Engineering	\$0.000
Tool Design	\$0.000
Support Equipment	\$0.000
Other	\$61.342
Workload Savings	\$0.000
Total	\$455.423

4. Advantages of the MYP:

This MYP strategy has been structured to achieve significant cost avoidance (\$ 455.4 Million (TY\$)) and will eliminate the need to develop an annual plan on a yearly basis; one year of planning will replace five independent years of planning. The strategy maintains the capability to produce additional aircraft to maintain an industrial base necessary to meet the production requirements of current and future helicopter systems. Cost avoidance resulting from economic order quantities and independent planning result in benefit to industry and government.

Exhibit MYP-1, Multiyear Procurement Criteria

Date:
February 2017

Appropriation / Budget Activity:
2031 Aircraft Procurement - Army / Aircraft (BA-01)

P-1 Item Nomenclature:
UH-60M/HH-60M BLACK HAWK Helicopter Multiyear IX

5. Impact on Defense Industrial Base:

Implementation of this proposed MYP will also yield a favorable impact on the industrial base. The stability afforded by the use of MYP will allow the prime contractor to enter into long term agreements with suppliers, at every tier, which provide substantial cost avoidance. Such long term agreements incentivize both the prime and the subcontractors to invest in process improvements which yield long term benefits in terms of product quality and cost. The stability of the prime multiyear contract will also foster improved competition at the subcontractor level, as the offer of a longer term business arrangement will encourage more aggressive pursuit of a contract award. The contractor and the subcontractor will be at a reduced risk when implementing production process improvements, facility improvements, tooling design improvements, and fabrication process improvements. The ability for the Government and industry to enter into a long-term agreement will allow industry the opportunity to place capital investments upfront, which reduces the overall cost and improves the quality of the Army H-60.

6. Multiyear Procurement Summary:

	<u>Annual Contracts</u>	<u>MultiYear Contract</u>
Quantity	268	268
Total Contract Price	\$4,178.116	\$3,722.643
Cancellation Ceiling (highest point)		
Funded		\$ 0.000
Unfunded		\$ 0.000
\$ Cost Avoidance Over Annual		\$455.473
% Cost Avoidance Over Annual		10.9%

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Exhibit MYP-2 Total Program Funding Plan (ARMY)							Date: February 2017								
PROCUREMENT							P-1 Line Item Nomenclature - UH-60M/HH-60M BLACK HAWK Helicopter Multiyear IX (ARMY)								
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	
Procurement Quantity		36	60	69	38	65								268	
Annual Procurement															
Gross Cost		981.5	1241.9	1375.0	1021.3	1408.6								6028.4	
Less PY Adv Procurement		(127.1)	(188.1)	(150.5)	(89.3)	(150.1)								(705.2)	
Net Procurement (= P-1)		854.4	1053.8	1224.5	932.0	1258.5								5323.2	
Plus CY Adv Procurement	127.1	188.1	150.5	89.3	150.1									705.2	
Weapon System Cost	127.1	1042.5	1204.3	1313.8	1082.1	1258.5								6028.4	
Multiyear Procurement															
Gross Cost (P-1)		882.2	1156.6	1280.6	955.0	1243.8								5518.2	
Less PY Adv Procurement		(127.1)	(171.8)	(139.9)	(87.1)	(150.3)								(676.2)	
Net Procurement (= P-1)		755.1	984.8	1140.7	867.9	1093.5								4842.0	
Advance Procurement															
For FY17	127.1													127.1	
For FY18		171.8												171.8	
For FY19		1.8	138.0											139.9	
For FY20		0.3	4.8	82.1										87.1	
For FY21		0.2	2.1	3.6	144.4									150.3	
Plus CY Adv Procurement	127.1	174.1	145.0	85.7	144.4									676.2	
Weapon System Cost	127.1	929.3	1129.7	1226.4	1012.3	1093.5								5518.2	
Multiyear Savings (\$)		113.3	74.6	87.5	69.9	165.0								510.2	
Multiyear Savings (%) (total only)														8.5%	
Cancellation Ceiling, Funded															
Cancellation Ceiling, Unfunded															
OUTLAYS															
Annual	8.9	135.7	556.0	921.7	1143.7	1153.6	1072.2	603.0	272.1	77.7	42.5	27.2	14.0	6028.4	
Multiyear	12.4	137.4	510.6	851.2	1057.7	1064.2	963.8	536.6	239.4	69.9	38.5	24.3	12.1	5518.2	
Savings	(3.5)	(1.6)	45.4	70.4	86.1	89.4	108.3	66.4	32.7	7.8	4.0	2.9	1.9	510.2	

Exhibit MYP-2, Total Program Funding Plan

* Numbers may not add due to rounding.

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Exhibit MYP-3 Total Contract Funding Plan (ARMY)							Date: February 2017								
PROCUREMENT							P-1 Line Item Nomenclature - UH-60M/HH-60M BLACK HAWK Helicopter Multiyear IX (ARMY)								
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	
Procurement Quantity		36	60	69	38	65								268	
Annual Procurement															
Gross Cost		656.4	855.9	977.7	721.3	966.8								4178.1	
Less PY Adv Procurement		(42.3)												(42.3)	
Net Procurement (= P-1)		614.1	855.9	977.7	721.3	966.8								4135.8	
Plus CY Adv Procurement	42.3													42.3	
Contract Price	42.3	614.1	855.9	977.7	721.3	966.8								4178.1	
Multiyear Procurement															
Gross Cost (P-1)		585.5	763.3	870.7	642.2	861.0								3722.6	
Less PY Adv Procurement		(42.3)	(110.7)	(39.8)	(30.9)	(52.2)								(276.0)	
Net Procurement (= P-1)		543.2	652.6	830.9	611.2	808.8								3446.7	
Advance Procurement															
For FY17	42.3													42.3	
For FY18		110.7												110.7	
For FY19		1.8	38.0											39.8	
For FY20		0.3	4.8	25.9										30.9	
For FY21		0.2	2.1	3.6	46.3									52.2	
Plus CY Adv Procurement	42.3	113.0	44.9	29.5	46.3									276.0	
Contract Price	42.3	656.1	697.5	860.4	657.5	808.8								3722.6	
Multiyear Savings (\$)		(42.0)	158.4	117.3	63.7	158.0								455.5	
Multiyear Savings (%) (total only)														10.9%	
Cancellation Ceiling, Funded															
Cancellation Ceiling, Unfunded															
OUTLAYS															
Annual	4.1	74.3	335.6	614.9	800.6	812.1	777.8	439.1	201.5	56.9	30.8	19.6	10.7	4178.0	
Multiyear	4.0	76.6	338.9	553.4	709.0	714.3	674.3	378.7	171.9	48.6	26.9	17.0	9.0	3722.6	
Savings	0.1	(2.3)	(3.3)	61.5	91.6	97.8	103.5	60.4	29.6	8.3	3.9	2.6	1.7	455.4	

Exhibit MYP-3, Total Contract Funding Plan

* Numbers may not add due to rounding.

P-1 Shopping List - Item No
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17-MD09

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Exhibit MYP-4 Present Value Analysis (ARMY)							Date: February 2017								
PROCUREMENT							P-1 Line Item Nomenclature - UH-60M/HH-60M BLACK HAWK Helicopter Multiyear IX (ARMY)								
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL	
Annual Proposal															
Then Year Cost	4.1	74.3	335.6	614.9	800.6	812.1	777.8	439.1	201.5	56.9	30.8	19.6	10.7	4178.0	
Constant Year Cost	4.1	72.9	322.8	579.8	740.1	736.1	691.1	382.5	172.1	47.6	25.3	15.8	8.4	3798.7	
Present Value	4.0	71.1	311.8	554.7	701.1	690.4	641.9	351.8	156.7	43.0	22.6	13.9	7.4	3570.5	
Multiyear Proposal															
Then Year Cost	4.0	76.6	338.9	553.4	709.0	714.3	674.3	378.7	171.9	48.6	26.9	17.0	9.0	3722.6	
Constant Year Cost	4.0	75.1	326.0	521.8	655.4	647.4	599.2	329.9	146.8	40.7	22.1	13.7	7.1	3389.2	
Present Value	3.9	73.3	314.9	499.2	620.9	607.3	556.5	303.4	133.7	36.7	19.7	12.1	6.2	3187.8	
Difference															
Then Year Cost	0.1	(2.3)	(3.3)	61.5	91.6	97.8	103.5	60.4	29.6	8.3	3.9	2.6	1.7	455.4	
Constant Year Cost	0.1	(2.3)	(3.2)	58.0	84.7	88.6	92.0	52.6	25.3	6.9	3.2	2.1	1.3	409.4	
Present Value	0.1	(2.2)	(3.1)	55.5	80.2	83.1	85.4	48.4	23.0	6.3	2.9	1.9	1.2	382.6	
Multiyear Savings (\$)	0.1	(2.3)	(3.3)	61.5	91.6	97.8	103.5	60.4	29.6	8.3	3.9	2.6	1.7	455.4	

NOTE: MYP Procurement Period is 13 years. Real Interest Rate for MYP Procurement Period of 13 years is 1.00990000%.
(OMB Circular No. A-94, January 2016)

Exhibit MYP-4 Present Value Analysis

* Numbers may not add due to rounding.

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2	01	10	A02005	Aerial Common Sensor (ACS) (MIP).....	9
3	01	10	A00005	MQ-1 UAV.....	18
4	01	10	A00010	RQ-11 (RAVEN).....	30
5	01	20	A05001	Helicopter, Light Utility (LUH).....	34
6	01	20	A05111	AH-64 Apache Block IIIA Reman.....	44
7	01	20	A05111	AH-64 Apache Block IIIA Reman, Advance Procurement.....	52
8	01	20	AA0005	UH-60 Blackhawk M Model (MYP).....	56
9	01	20	AA0005	UH-60 Blackhawk M Model (MYP), Advance Procurement.....	65
10	01	20	A05009	UH-60 BLACK HAWK A AND L MODELS.....	69
11	01	20	A05101	CH-47 Helicopter.....	75
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Line #	BA	BSA	Line Item Number	Line Item Title	Page
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16	02	10	AA6605	AH-64 MODS.....	135
17	02	10	AA0252	CH-47 Cargo Helicopter Mods (MYP).....	146
18	02	10	A02111	GRCS SEMA Mods (MIP).....	168
19	02	10	A02110	ARL SEMA Mods (MIP).....	173
20	02	10	A02112	EMARSS SEMA Mods (MIP).....	179
21	02	10	AA0270	Utility/Cargo Airplane Mods.....	185
22	02	10	AA0480	Utility Helicopter Mods.....	190
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25	02	10	AA0711	GATM Rollup.....	228
26	02	10	A00018	RQ-7 UAV MODS.....	243
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Appropriation 2031A: Aircraft Procurement, Army

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32	04	30	AZ3000	Avionics Support Equipment.....	294
33	04	30	AZ3100	Common Ground Equipment.....	301
34	04	30	AZ3110	Aircrew Integrated Systems.....	305
35	04	30	AA0050	Air Traffic Control.....	314
36	04	30	AZ3300	Industrial Facilities.....	319
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AH-64 Apache Block IIIA Reman, Advance Procurement	A05111	7	01	20.....	52
AH-64 MODS	AA6605	16	02	10.....	135
ARL SEMA Mods (MIP)	A02110	19	02	10.....	173
Aerial Common Sensor (ACS) (MIP)	A02005	2	01	10.....	9
Air Traffic Control	AA0050	35	04	30.....	314
Aircraft Survivability Equipment	AZ3504	28	04	10.....	260
Aircrew Integrated Systems	AZ3110	34	04	30.....	305
Avionics Support Equipment	AZ3000	32	04	30.....	294
CH-47 Cargo Helicopter Mods (MYP)	AA0252	17	02	10.....	146
CH-47 Helicopter	A05101	11	01	20.....	75
CH-47 Helicopter, Advance Procurement	A05101	12	01	20.....	90
CIRCM	AZ3537	31	04	10.....	288
CMWS	AZ3517	30	04	10.....	279
Common Ground Equipment	AZ3100	33	04	30.....	301
Comms, Nav Surveillance	AA0723	24	02	10.....	213
EMARSS SEMA Mods (MIP)	A02112	20	02	10.....	179

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Line Item Title	Line Item Number	Line #	BA	BSA	Page
GATM Rollup	AA0711	25	02	10.....	228
GRCS SEMA Mods (MIP)	A02111	18	02	10.....	168
Guardrail Mods (MIP)	AZ2000	14	02	10.....	113
Helicopter, Light Utility (LUH)	A05001	5	01	20.....	34
Industrial Facilities	AZ3300	36	04	30.....	319
Launcher, 2.75 Rocket	A50100	37	04	30.....	322
MQ-1 Payload (MIP)	A01001	13	02	10.....	94
MQ-1 UAV	A00005	3	01	10.....	18
Multi Sensor ABN Recon (MIP)	AZ2001	15	02	10.....	119
Network And Mission Plan	AA0712	23	02	10.....	202
RQ-11 (RAVEN)	A00010	4	01	10.....	30
RQ-7 UAV MODS	A00018	26	02	10.....	243
Survivability CM	AZ3507	29	04	10.....	276
UAS MODS	A01002	27	02	10.....	255
UH-60 BLACK HAWK A AND L MODELS	A05009	10	01	20.....	69
UH-60 Blackhawk M Model (MYP)	AA0005	8	01	20.....	56
UH-60 Blackhawk M Model (MYP), Advance Procurement	AA0005	9	01	20.....	65
Utility F/W Aircraft	A11300	1	01	10.....	1
Utility Helicopter Mods	AA0480	22	02	10.....	190
Utility/Cargo Airplane Mods	AA0270	21	02	10.....	185

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing **P-1 Line Item Number / Title:** A11300 / Utility F/W Aircraft

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	35	1	-	3	-	3	7	6	8	5	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	315.606	10.787	0.879	57.529	-	57.529	117.363	107.151	134.254	101.304	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	315.606	10.787	0.879	57.529	-	57.529	117.363	107.151	134.254	101.304	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	315.606	10.787	0.879	57.529	-	57.529	117.363	107.151	134.254	101.304	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	9,017.314	10,787.000	-	19,176.333	-	19,176.333	16,766.143	17,858.500	16,781.750	20,260.800	Continuing	Continuing

Description:

The budget line funds the acquisition of Army fixed wing aircraft to include the procurement of fixed wing aircraft to support Transport and Operational Support Airlift (OSA) requirements, training, and other fixed wing support aircraft. This budget line also provides for the acquisition of new commercial-off-the-shelf (COTS), modified COTS, and non-developmental fixed wing aircraft systems including used aircraft systems.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	1	-	3	-	3	-	5	-	-
	Total Obligation Authority	10.787	0.879	57.529	-	57.529	-	89.951	-	-
ANG	Quantity	-	-	-	-	-	7	1	8	5
	Total Obligation Authority	-	-	-	-	-	117.363	17.200	134.254	101.304
Total:	Quantity	1	-	3	-	3	7	6	8	5
Secondary Distribution	Total Obligation Authority	10.787	0.879	57.529	-	57.529	117.363	107.151	134.254	101.304

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing **P-1 Line Item Number / Title:** A11300 / Utility F/W Aircraft

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A11300 / Utility F/W Aircraft	P-5a, P-21		35 / 315.606	1 / 10.787	- / 0.879	3 / 57.529	- / -	3 / 57.529
P-40	Total Gross/Weapon System Cost			35 / 315.606	1 / 10.787	- / 0.879	3 / 57.529	- / -	3 / 57.529

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY 17 Base procurement dollars in the amount of \$57.529 million to support the procurement of (3) Fixed Wing Aircraft and associated civil and military modifications, Engineering Change Proposals (ECP), and initial spares. Aircraft will be capable of self-deploying over extended ranges, and will provide CONUS/OCONUS time sensitive movement of key personnel and equipment; support to homeland defense/security operations; support to civil authorities; and Operational Support Airlift (OSA) in support of Major Commands (MACOM) and state requirements.

The difference in unit cost of \$8.988 in FY15 and unit cost of \$13.402 in FY17 is due to the different type of aircraft being procured. FY15 procurement dollars is for the procurement of a used aircraft for Golden Knights C-31 replacement. FY17 dollars is for the procurement of Fixed Wing Utility Aircraft (FUA).

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2017 Army					Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10			P-1 Line Item Number / Title: A11300 / Utility F/W Aircraft			Item Number / Title [DODIC]: A11300 / Utility F/W Aircraft			
ID Code (A=Service Ready, B=Not Service Ready) :					MDAP/MAIS Code:				
Resource Summary			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	
Procurement Quantity (<i>Units in Each</i>)			35	1	-	3	-	3	
Gross/Weapon System Cost (<i>\$ in Millions</i>)			315.606	10.787	0.879	57.529	-	57.529	
Less PY Advance Procurement (<i>\$ in Millions</i>)			-	-	-	-	-	-	
Net Procurement (P-1) (<i>\$ in Millions</i>)			315.606	10.787	0.879	57.529	-	57.529	
Plus CY Advance Procurement (<i>\$ in Millions</i>)			-	-	-	-	-	-	
Total Obligation Authority (<i>\$ in Millions</i>)			315.606	10.787	0.879	57.529	-	57.529	
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>									
Initial Spares (<i>\$ in Millions</i>)			-	-	-	-	-	-	
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)			9,017.314	10,787.000	-	19,176.333	-	19,176.333	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Aircraft Procurement/Modification ^(†)	7,643.303	33	252.229	8,989.000	1	8.989	-	-	-	13,402.333	3	40.207	-	-	-	13,402.333	3	40.207
Engineering Changes	-	-	3.330	-	-	0.349	-	-	-	-	-	-	-	-	-	-	-	-
Initial Spares	-	-	13.936	-	-	0.984	-	-	-	-	-	2.894	-	-	-	-	-	2.894
Systems Test and Evaluation	-	-	2.883	-	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-
Integration Engineering	-	-	3.248	-	-	-	-	-	-	-	-	5.000	-	-	-	-	-	5.000
<i>Subtotal: Recurring Cost</i>	<i>-</i>	<i>-</i>	<i>275.626</i>	<i>-</i>	<i>-</i>	<i>10.341</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>48.101</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>48.101</i>
<i>Subtotal: Flyaway Cost</i>	<i>-</i>	<i>-</i>	<i>275.626</i>	<i>-</i>	<i>-</i>	<i>10.341</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>48.101</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>48.101</i>
Support Cost																		
Program Management	-	-	27.997	-	-	-	-	-	0.879	-	-	7.175	-	-	-	-	-	7.175
Data	-	-	6.983	-	-	0.446	-	-	-	-	-	1.636	-	-	-	-	-	1.636
Support Equipment	-	-	-	-	-	-	-	-	-	-	-	0.617	-	-	-	-	-	0.617
Training	-	-	2.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Post Production Mods	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support Cost</i>	<i>-</i>	<i>-</i>	<i>39.980</i>	<i>-</i>	<i>-</i>	<i>0.446</i>	<i>-</i>	<i>-</i>	<i>0.879</i>	<i>-</i>	<i>-</i>	<i>9.428</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>9.428</i>
Gross/Weapon System Cost	9,017.314	35	315.606	10,787.000	1	10.787	-	-	0.879	19,176.333	3	57.529	-	-	-	19,176.333	3	57.529

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Exhibit P-5, Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A11300 / Utility F/W Aircraft	Item Number / Title [DODIC]: A11300 / Utility F/W Aircraft
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ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	1	-	3	-	3
	Total Obligation Authority	10.787	0.879	57.529	-	57.529
Total:	Quantity	1	-	3	-	3
Secondary Distribution	Total Obligation Authority	10.787	0.879	57.529	-	57.529

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A11300 / Utility F/W Aircraft	Item Number / Title [DODIC]: A11300 / Utility F/W Aircraft
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Aircraft Procurement/Modification ^(†)		2015	LSF / Redstone Arsenal	C / CPFF	Redstone Arsenal, AL	Mar 2016	Sep 2017	1	8,989.000			Dec 2014
Aircraft Procurement/Modification ^(†)		2017	TBD / TBD	C / TBD	Redstone Arsenal, AL	Aug 2017	Jun 2019	3	13,402.333			Jun 2016

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Army																							Date: February 2016											
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10										P-1 Line Item Number / Title: A11300 / Utility F/W Aircraft										Item Number / Title [DODIC]: A11300 / Utility F/W Aircraft														
Cost Elements (Units in Each)					Fiscal Year 2016															Fiscal Year 2017												B A L A N C E		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCE PT TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016															Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
Aircraft Procurement/Modification																																		
Prior Years Deliveries: 33																																		
1	2015	ARMY	1	-	1								A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-			
2	2017	ARMY	3	-	3																									A	-	-	3	
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A11300 / Utility F/W Aircraft	Item Number / Title [DODIC]: A11300 / Utility F/W Aircraft
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2018												Fiscal Year 2019												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018												Calendar Year 2019												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Aircraft Procurement/Modification																															
Prior Years Deliveries: 33																															
	1	2015	ARMY	1	1	-																									
	2	2017	ARMY	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A11300 / Utility F/W Aircraft	Item Number / Title [DODIC]: A11300 / Utility F/W Aircraft
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	LSF - Redstone Arsenal	1	6	18	-	12	11	23	-	3	11	14
2	TBD - TBD	1	6	18	-	12	8	20	-	3	8	11

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing **P-1 Line Item Number / Title:** A02005 / Aerial Common Sensor (ACS) (MIP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	3	18	5	-	-	-	-	-	-	-	-	26
Gross/Weapon System Cost (<i>\$ in Millions</i>)	82.700	165.890	96.500	-	-	-	-	-	-	-	-	345.090
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	82.700	165.890	96.500	-	-	-	-	-	-	-	-	345.090
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	82.700	165.890	96.500	-	-	-	-	-	-	-	-	345.090

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	27,566.667	9,216.111	19,300.000	-	-	-	-	-	-	-	-	13,272.692

Description:

The Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) is the Army's next generation C-12 based, direct support, manned airborne intelligence collection, processing, and targeting support system. EMARSS provides a persistent capability to detect, locate, classify/identify, and track surface targets with a high degree of timeliness and accuracy. EMARSS aircraft will be assigned to the U.S. Army Intelligence and Security Command's (INSCOM) Aerial Exploitation Battalions (AEB). EMARSS is an improvement over the existing Medium Altitude Reconnaissance and Surveillance System Quick Reaction Capability (MARSS QRC) in that it hosts an on board Distributed Common Ground System - Army (DCGS-A) capability, improved satellite communications, improved aircraft performance, and life cycle logistics sustainment capability.

EMARSS will consist of a commercial derivative aircraft equipped with an Electro-optical/Infrared (EO/IR) sensor with Full Motion Video (FMV), a Communications Intelligence (COMINT) collection system, an Aerial Precision Geolocation (APG) system, tactical line-of-site (LOS) and beyond line-of-site (BLOS) communications suite, two DCGS-A enabled operator workstations and a self-protection suite. EMARSS is built to allow future capabilities to be integrated on platform with the addition of a third carry-on workstation.

EMARSS will operate in direct support of tactical missions. EMARSS, integrating elements of the DCGS-A, will provide efficient response to Combat Forces with Intelligence, Surveillance and Reconnaissance (ISR) tasking.

The Army Acquisition Objective for EMARSS is 36 systems, with an Army Procurement Objective of 24, to include the following variants: EMARSS-G (Constant Hawk & TACOP LiDAR); EMARSS-V (VaDER); EMARSS-M (Liberty Project Aircraft (LPA)); and EMARSS-S (Engineering and Manufacturing Development (EMD)) systems.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	18	5	-	-	-	-	-	-	-
	Total Obligation Authority	165.890	96.500	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	18	5	-	-	-	-	-	-	-
	Total Obligation Authority	165.890	96.500	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing **P-1 Line Item Number / Title:** A02005 / Aerial Common Sensor (ACS) (MIP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A02005 / Aerial Common Sensor (ACS) (MIP)	P-5a, P-21		3 / 82.700	18 / 165.890	5 / 96.500	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			3 / 82.700	18 / 165.890	5 / 96.500	- / -	- / -	- / -

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

There is no FY 2017 Funding on this line.

For FY 2016 forward, the overall EMARSS efforts are found in the following two lines; AZ2054 EMARSS Payloads (Project Manager Sensors - Aerial Intelligence (PM SAI)) and A02112 EMARSS SEMA (Project Manager Fixed Wing (PM FW)). Separate funding lines support the Army Acquisition Executive's directive, codified in the October 28, 2011 memorandum, to assign overall acquisition lead for manned airborne Intelligence systems to Program Executive Officer for Aviation (PEO-AVN); and overall sensor, processing, exploitation, and dissemination responsibilities to Program Executive Officer for Intelligence, Electronic Warfare, and Sensors (PEO-IEWs).

There is a quantity mismatch between the P-1/P-40 and the P-5 on this budget line due to an administrative error in the preparation of the justification materials. The P-5 reflects the correct aircraft quantity for this budget line. The P-5 and underlying budget exhibits have been updated to reflect: the FY 2015 reduction of one Liberty Project Aircraft to EMARSS-M due to a \$10 million rescission that was part of the FY 2016 Omnibus Appropriation and the back buy of one Liberty Project Aircraft to EMARSS-M in FY 2016 quantity that was enabled through a re-prioritization efforts within the program and program efficiencies. The buyback of the aircraft in FY 2016 was to maintain program schedule and ensure assets were available to support required forward deployed operations.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A02005 / Aerial Common Sensor (ACS) (MIP)	Item Number / Title [DODIC]: A02005 / Aerial Common Sensor (ACS) (MIP)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	3	18	5	-	-	-
Gross/Weapon System Cost (\$ in Millions)	82.700	165.890	96.500	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	82.700	165.890	96.500	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	82.700	165.890	96.500	-	-	-

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	27,566.667	9,216.111	19,300.000	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
ACFT & MEP Integ for QRC to POR Mods(G) ^(f)	27,566.667	3	82.700	28,100.000	2	56.200	15,650.000	4	62.600	-	-	-	-	-	-	-	-	-
ACFT & MEP Testing (G)	-	-	-	-	-	2.500	-	-	1.200	-	-	-	-	-	-	-	-	-
ACFT & MEP Integ for QRC to POR Mods(M) ^(f)	-	-	-	13,300.000	2	26.600	14,150.000	2	28.300	-	-	-	-	-	-	-	-	-
ACFT & MEP Testing (M)	-	-	-	-	-	2.500	-	-	0.800	-	-	-	-	-	-	-	-	-
ECPs - MEP/PED	-	-	-	-	-	1.000	-	-	-	-	-	-	-	-	-	-	-	-
Productization of EMARSS-S ^(f)	-	-	-	1,500.000	4	6.000	-	-	-	-	-	-	-	-	-	-	-	-
MEP/PED Reset	-	-	-	-	-	1.000	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	82.700	-	-	95.800	-	-	92.900	-	-	-	-	-	-	-	-	-
Non Recurring Cost																		
Non-Recurring Engineering	-	-	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-
FY15 Rescission	-	-	-	-	-	10.000	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	-	-	-	13.000	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A02005 / Aerial Common Sensor (ACS) (MIP)	Item Number / Title [DODIC]: A02005 / Aerial Common Sensor (ACS) (MIP)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Flyaway Cost</i>	-	-	82.700	-	-	108.800	-	-	92.900	-	-	-	-	-	-	-	-	-
Hardware Cost																		
Recurring Cost																		
Government Furnished Equipment (GFE)	-	-	-	-	-	13.500	-	-	-	-	-	-	-	-	-	-	-	-
Support Equipment	-	-	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	16.500	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware Cost</i>	-	-	-	-	-	16.500	-	-	-	-	-	-	-	-	-	-	-	-
Software Cost																		
Recurring Cost																		
Software Licenses	-	-	-	-	-	2.800	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	2.800	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Software Cost</i>	-	-	-	-	-	2.800	-	-	-	-	-	-	-	-	-	-	-	-
Logistics Cost																		
Recurring Cost																		
Initial Spares & Repairs	-	-	-	-	-	-	-	-	3.600	-	-	-	-	-	-	-	-	-
Data	-	-	-	-	-	4.900	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	4.900	-	-	3.600	-	-	-	-	-	-	-	-	-
Non Recurring Cost																		
Training Spt / Manuals / NET	-	-	-	-	-	6.800	-	-	-	-	-	-	-	-	-	-	-	-
Facilitization	-	-	-	-	-	4.600	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	11.400	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Logistics Cost</i>	-	-	-	-	-	16.300	-	-	3.600	-	-	-	-	-	-	-	-	-
Support - Program Management Cost																		
Contractor Management	-	-	-	-	-	9.500	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - Program Management Cost</i>	-	-	-	-	-	9.500	-	-	-	-	-	-	-	-	-	-	-	-
Support - System Test and Evaluation Cost																		
Test Facilities	-	-	-	-	-	3.600	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - System Test and Evaluation Cost</i>	-	-	-	-	-	3.600	-	-	-	-	-	-	-	-	-	-	-	-
Support - Training Cost																		

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A02005 / Aerial Common Sensor (ACS) (MIP)	Item Number / Title [DODIC]: A02005 / Aerial Common Sensor (ACS) (MIP)
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Equipment	-	-	-	-	-	8.390	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - Training Cost</i>	-	-	-	-	-	8.390	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	27,566.667	3	82.700	9,216.111	18	165.890	19,300.000	5	96.500	-	-	-	-	-	-	-	-	-

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity		18	5	-	-
	Total Obligation Authority		165.890	96.500	-	-
Total: Secondary Distribution	Quantity		18	5	-	-
	Total Obligation Authority		165.890	96.500	-	-

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10			P-1 Line Item Number / Title: A02005 / Aerial Common Sensor (ACS) (MIP)				Item Number / Title [DODIC]: A02005 / Aerial Common Sensor (ACS) (MIP)					

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
ACFT & MEP Integ for QRC to POR Mods(G) ^(†)		2014	L3 Communications / Greenville	SS / FPIF	ACC-Redstone	Feb 2015	Aug 2016	1	27,000.000			
ACFT & MEP Integ for QRC to POR Mods(G) ^(†)		2015	L3 Communications / Greenville	SS / CPFF	ACC-APG	Apr 2015	Oct 2016	2	28,100.000			
ACFT & MEP Integ for QRC to POR Mods(G) ^(†)		2016	L3 Communications / Greenville	SS / FFP	ACC-Redstone	Jan 2016	Jun 2017	4	15,650.000			
ACFT & MEP Integ for QRC to POR Mods(M)		2015	L3 Communications / Greenville	SS / FFP	ACC-Redstone	Apr 2015	Oct 2016	2	13,300.000			
ACFT & MEP Integ for QRC to POR Mods(M) ^(†)		2016	L3 Communications / Greenville	SS / FFP	ACC-Redstone	Jan 2016	Jun 2017	2	14,150.000			
Productization of EMARSS-S ^(†)		2015	L3 Communications / Greenville	C / CPIF	ACC-APG	Sep 2015	Jan 2016	4	1,500.000			

^(†) indicates the presence of a P-21

Remarks:
Multiple entries above per fiscal year are representative of separate acquisition and contracting efforts for Aircraft & Integration (PEO AVN/PM FW) and MEP & PED (PEO IEWS/PM SAI).

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Exhibit P-21, Production Schedule: PB 2017 Army															Date: February 2016														
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10										P-1 Line Item Number / Title: A02005 / Aerial Common Sensor (ACS) (MIP)										Item Number / Title [DODIC]: A02005 / Aerial Common Sensor (ACS) (MIP)									

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2017												Fiscal Year 2018												BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017												Calendar Year 2018												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P
ACFT & MEP Integ for QRC to POR Mods(G)																															
Prior Years Deliveries: 2																															
1		2014	ARMY	1	1	-																							-		
1		2015	ARMY	2	-	2	1																						1		
1		2016	ARMY	4	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ACFT & MEP Integ for QRC to POR Mods(M)																															
2		2016	ARMY	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
Productization of EMARSS-S																															
3		2015	ARMY	4	4	-																							-		

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Exhibit P-21, Production Schedule: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10		P-1 Line Item Number / Title: A02005 / Aerial Common Sensor (ACS) (MIP)
		Item Number / Title [DODIC]: A02005 / Aerial Common Sensor (ACS) (MIP)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)								
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder				
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	
1	L3 Communications - Greenville	1	1	10	-	-	-	-	-	-	-	-	-
2	L3 Communications - Greenville	1	1	10	-	-	-	-	-	-	-	-	-
3	L3 Communications - Greenville	1	1	10	-	-	-	-	-	-	-	-	-

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing **P-1 Line Item Number / Title:** A00005 / MQ-1 UAV

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0305204A, 0305219A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	122	19	17	-	-	-	-	-	-	-	-	158
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,323.704	238.081	286.973	55.388	-	55.388	10.806	-	-	-	-	2,914.952
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,323.704	238.081	286.973	55.388	-	55.388	10.806	-	-	-	-	2,914.952
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	2,323.704	238.081	286.973	55.388	-	55.388	10.806	-	-	-	-	2,914.952

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	19,046.754	12,530.579	16,880.765	-	-	-	-	-	-	-	-	18,449.063

Description:

The MQ-1C Gray Eagle provides reconnaissance, surveillance, intelligence, security, attack, and command and control missions providing dedicated mission configured Unmanned Aircraft System (UAS) support to assigned and other Army/Joint Force units based upon commander's priorities. The MQ-1C Gray Eagle is a dedicated, multi-mission UAS fielded to the 10 Army Combat Aviation Brigades (CAB), 3 Army Intelligence and Security Command (INSCOM) units, 1 Army Special Operations Forces (ARSOF) unit, and 1 company at the National Training Center (NTC). The Army Acquisition Objective (AAO) is 167 aircraft.

An MQ-1C Gray Eagle Company consists of either 9 or 12 Aircraft, Universal Ground Control Station (UGCS) equipment, Universal Ground Data Terminals, Satellite Ground Data Terminals (SGDT), Automatic Take-Off & Landing System (ATLS), standard equipment package, and payloads to include; Electro-Optical/Infrared Laser Range Finder/Laser Designator (EO/IR/LD HD), Synthetic Aperture Radar/Ground Moving Target Indicator (SAR/GMTI), communication relay, and up to 4 HELLFIRE missiles.

Beginning in FY 2015, the remaining 36 aircraft to be procured (17 aircraft in FY 2015 and 19 aircraft in FY 2017) will be delivered in the Improved Gray Eagle extended range configuration to support Echelons Above Division and meet Army Global Force Management Allocation Plan (GFMAP) requirements. This configuration change is in compliance with the \$49 million Congressional add in FY 2015 and the \$17 million Congressional add in FY 2016.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	19	17	-	-	-	-	-	-	-
	Total Obligation Authority	238.081	286.973	55.388	-	55.388	10.806	-	-	-
Total: Secondary Distribution	Quantity	19	17	-	-	-	-	-	-	-
	Total Obligation Authority	238.081	286.973	55.388	-	55.388	10.806	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing **P-1 Line Item Number / Title:** A00005 / MQ-1 UAV

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0305204A, 0305219A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A00005 / MQ-1 UAV	P-5a, P-21		122 / 2,323.704	19 / 238.081	17 / 286.973	- / 55.388	- / -	- / 55.388
P-40	Total Gross/Weapon System Cost			122 / 2,323.704	19 / 238.081	17 / 286.973	- / 55.388	- / -	- / 55.388

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 The FY 2017 MQ-1C Gray Eagle funding of \$55.388 million provides fielding and New Equipment Training (NET) for two units, Interim Contractor Logistics Support (ICLS), software modifications/updates, and engineering support.

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A00005 / MQ-1 UAV	Item Number / Title [DODIC]: A00005 / MQ-1 UAV

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	122	19	17	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2,323.704	238.081	286.973	55.388	-	55.388
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	2,323.704	238.081	286.973	55.388	-	55.388
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,323.704	238.081	286.973	55.388	-	55.388

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	19,046.754	12,530.579	16,880.765	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Aircraft ^(†)	4,504.156	122	549.507	6,742.158	19	128.101	6,662.294	17	113.259	-	-	-	-	-	-	-	-	-
Improved Gray Eagle/ Non Recurring	-	-	-	-	-	27.048	-	-	-	-	-	-	-	-	-	-	-	-
Portable/Mobile Ground Control Station	775.500	10	7.755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Control Station (GCS)	3,172.400	10	31.724	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Universal Ground Control Station (UGCS)	3,497.622	45	157.393	-	-	-	4,173.500	6	25.041	-	-	-	-	-	-	-	-	-
Ground Data Terminal (GDT)	1,229.071	14	17.207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Universal Ground Data Terminal (UGDT)	1,440.229	48	69.131	-	-	-	3,567.333	9	32.106	-	-	-	-	-	-	-	-	-
Portable Ground Data Terminal (PGDT)	379.250	4	1.517	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Automatic Take-Off & Landing Sys (ATLS)	1,024.667	33	33.814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ground Support Equipment Kits (GSE)	2,487.833	18	44.781	-	-	0.343	-	-	3.733	-	-	-	-	-	-	-	-	-
Satellite Ground Data Terminal (SGDT)	1,911.094	32	61.155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Army												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10						P-1 Line Item Number / Title: A00005 / MQ-1 UAV						Item Number / Title [DODIC]: A00005 / MQ-1 UAV					
ID Code (A=Service Ready, B=Not Service Ready) :												MDAP/MAIS Code:					

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
SATCOM Airborne Data Terminal(SADT)	768.421	114	87.600	800.053	19	15.201	839.706	17	14.275	-	-	-	-	-	-	-	-	-
Mobile GCS (MGCS)	1,127.889	18	20.302	-	-	-	3,157.333	3	9.472	-	-	-	-	-	-	-	-	-
Tower Trailers	-	-	16.746	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Initial Spares	11,160.111	18	200.882	-	-	6.712	-	-	29.903	-	-	-	-	-	-	-	-	-
Battle Loss Payloads (OCO)	-	-	6.452	-	-	-	-	-	2.105	-	-	-	-	-	-	-	-	-
Engineering Change Order	-	-	218.617	-	-	0.793	-	-	2.504	-	-	3.042	-	-	-	-	-	3.042
GA Prog Mgmt/ Integration/MMF	-	-	166.821	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Devices - UMS	-	-	81.332	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Data (Fielding Manuals)	-	-	2.486	-	-	-	-	-	1.283	-	-	0.872	-	-	-	-	-	0.872
Interim Contractor Logistics Support	-	-	7.041	-	-	11.665	-	-	11.840	-	-	24.280	-	-	-	-	-	24.280
Air Beam Shelter	-	-	6.403	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Safety Item	-	-	0.093	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hardware-Retrofit Platoon Configuration	-	-	104.316	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Recurring Production	-	-	20.587	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Government Furnished Equipment (GFE)	-	-	34.013	-	-	1.598	-	-	6.477	-	-	-	-	-	-	-	-	-
Other Government Agencies/Core	-	-	71.019	-	-	6.481	-	-	4.717	-	-	2.478	-	-	-	-	-	2.478
Engineering Support	-	-	50.129	-	-	7.777	-	-	5.660	-	-	6.119	-	-	-	-	-	6.119
Logistics Support	-	-	44.559	-	-	11.665	-	-	8.490	-	-	6.894	-	-	-	-	-	6.894
Universal Mission Simulators Spares	-	-	0.438	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
First Destination Transportation	-	-	0.442	-	-	0.316	-	-	0.168	-	-	1.714	-	-	-	-	-	1.714
Software Modifications	-	-	23.143	-	-	-	-	-	5.791	-	-	2.000	-	-	-	-	-	2.000
NET Training	-	-	49.650	-	-	15.000	-	-	9.650	-	-	7.489	-	-	-	-	-	7.489
Test and Evaluation	-	-	40.442	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Modifications	-	-	36.455	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10		P-1 Line Item Number / Title: A00005 / MQ-1 UAV
		Item Number / Title [DODIC]: A00005 / MQ-1 UAV
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Ground Base Sense and Avoid (GBSAA)	-	-	59.752	-	-	5.381	-	-	0.500	-	-	0.500	-	-	-	-	-	0.500
<i>Subtotal: Recurring Cost</i>	-	-	2,323.704	-	-	238.081	-	-	286.974	-	-	55.388	-	-	-	-	-	55.388
<i>Subtotal: Flyaway Cost</i>	-	-	2,323.704	-	-	238.081	-	-	286.974	-	-	55.388	-	-	-	-	-	55.388
Gross/Weapon System Cost	19,046.754	122	2,323.704	12,530.579	19	238.081	16,880.765	17	286.973	-	-	55.388	-	-	-	-	-	55.388

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	19	17	-	-	-
	Total Obligation Authority	238.081	286.973	55.388	-	55.388
Total: Secondary Distribution	Quantity	19	17	-	-	-
	Total Obligation Authority	238.081	286.973	55.388	-	55.388

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A00005 / MQ-1 UAV	Item Number / Title [DODIC]: A00005 / MQ-1 UAV
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Aircraft ^(†)		2011	GENERAL ATOMICS / ASI / SAN DIEGO	SS / FPIF	AMCOM	Apr 2011	Jan 2013	29	4,046.000	Y	Dec 2010	Dec 2010
Aircraft ^(†)		2012	GENERAL ATOMICS / ASI / SAN DIEGO	SS / FPIF	AMCOM	Jul 2012	Apr 2014	29	4,206.000	Y	Dec 2011	Dec 2011
Aircraft ^(†)		2013	GENERAL ATOMICS / ASI / SAN DIEGO	SS / FFP	AMCOM	Sep 2013	May 2015	15	5,130.733	Y	May 2012	May 2012
Aircraft ^(†)		2014	GENERAL ATOMICS / ASI / SAN DIEGO	SS / FFP	AMCOM	Mar 2014	Jun 2016	23	4,705.870	Y	Nov 2013	Nov 2013
Aircraft ^(†)		2015	GENERAL ATOMICS / ASI / SAN DIEGO	SS / FFP	AMCOM	Jun 2015	Oct 2017	19	6,742.158	Y	Mar 2015	Mar 2015
Aircraft ^(†)		2016	GENERAL ATOMICS / ASI / SAN DIEGO	SS / FFP	AMCOM	Sep 2016	Oct 2018	17	6,662.294	Y	Dec 2015	Dec 2015

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A00005 / MQ-1 UAV	Item Number / Title [DODIC]: A00005 / MQ-1 UAV
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2011												Fiscal Year 2012												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2010	BAL DUE AS OF 1 OCT	Calendar Year 2011												Calendar Year 2012												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Aircraft																															
Prior Years Deliveries: 26																															
1		2011	ARMY	29	-	29																							29		
1		2012	ARMY	29	-	29																							29		
1		2013	ARMY (I)	15	-	15																							15		
1		2014	ARMY (II)	23	-	23																							23		
1		2015	ARMY (III)	19	-	19																							19		
1		2016	ARMY (IV)	17	-	17																							17		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A00005 / MQ-1 UAV	Item Number / Title [DODIC]: A00005 / MQ-1 UAV
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Cost Elements <i>(Units in Each)</i>					Fiscal Year 2013												Fiscal Year 2014												BALANCE		
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2012	BAL DUE AS OF 1 OCT	Calendar Year 2013												Calendar Year 2014												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P
Aircraft																															
Prior Years Deliveries: 26																															
1		2011	ARMY	29	-	29	-	-	-	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-		
1		2012	ARMY	29	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	3	2	16
1		2013	ARMY ^(I)	15	-	15											A -	-	-	-	-	-	-	-	-	-	-	-	-	15	
1		2014	ARMY ^(II)	23	-	23																		A -	-	-	-	-	-	23	
1		2015	ARMY ^(III)	19	-	19																								19	
1		2016	ARMY ^(IV)	17	-	17																								17	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A00005 / MQ-1 UAV	Item Number / Title [DODIC]: A00005 / MQ-1 UAV
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Cost Elements <i>(Units in Each)</i>					Fiscal Year 2015													Fiscal Year 2016													BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015													Calendar Year 2016													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
Aircraft																																	
Prior Years Deliveries: 26																																	
1		2011	ARMY	29	29	-																							-				
1		2012	ARMY	29	13	16	3	2	2	2	2	3	2																-				
1		2013	ARMY ^(I)	15	-	15	-	-	-	-	-	-	-	2	2	1	1	1	1	1	1	1	1	1	1	1	1	-					
1		2014	ARMY ^(II)	23	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	2	16		
1		2015	ARMY ^(III)	19	-	19								A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19			
1		2016	ARMY ^(IV)	17	-	17																								17			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10 **P-1 Line Item Number / Title:** A00005 / MQ-1 UAV **Item Number / Title [DODIC]:** A00005 / MQ-1 UAV

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2017													Fiscal Year 2018													BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017													Calendar Year 2018													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
Aircraft																																	
Prior Years Deliveries: 26																																	
1		2011	ARMY	29	29	-																							-				
1		2012	ARMY	29	29	-																							-				
1		2013	ARMY ^(I)	15	15	-																							-				
1		2014	ARMY ^(II)	23	7	16	2	2	2	2	1	1	1	1	1	1	1												-				
1		2015	ARMY ^(III)	19	-	19	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2	1	1	1	1	-			
1		2016	ARMY ^(IV)	17	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17				
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A00005 / MQ-1 UAV	Item Number / Title [DODIC]: A00005 / MQ-1 UAV
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Cost Elements <i>(Units in Each)</i>					Fiscal Year 2019													Fiscal Year 2020													BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019													Calendar Year 2020													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
Aircraft																																	
Prior Years Deliveries: 26																																	
	1	2011	ARMY	29	29	-																											
	1	2012	ARMY	29	29	-																											
	1	2013	ARMY ^(I)	15	15	-																											
	1	2014	ARMY ^(II)	23	23	-																											
	1	2015	ARMY ^(III)	19	19	-																											
	1	2016	ARMY ^(IV)	17	-	17	2	2	2	2	2	2	2	2	1																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A00005 / MQ-1 UAV	Item Number / Title [DODIC]: A00005 / MQ-1 UAV
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	GENERAL ATOMICS / ASI - SAN DIEGO	12	24	60	8	7	23	30	8	8	24	32

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Service/Agency Suffixes:

- (I) BASE
- (II) BASE
- (III) BASE
- (IV) BASE

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing **P-1 Line Item Number / Title:** A00010 / RQ-11 (RAVEN)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0305204A, 0305232A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	6,525	-	-	-	-	-	-	-	-	-	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	244.007	3.964	-	-	-	-	6.929	7.069	7.208	6.986	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	244.007	3.964	-	-	-	-	6.929	7.069	7.208	6.986	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	244.007	3.964	-	-	-	-	6.929	7.069	7.208	6.986	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	37.396	-	-	-	-	-	-	-	-	-	Continuing	Continuing

Description:

The Rucksack Portable Small Unmanned Aircraft System (RPUAS) provides the battalion and below ground maneuver elements with an organic, on-demand, asset to develop situational awareness, enhance force protection, and secure routes, points, and areas. The system provides the small unit commander an organic and responsive tactical Reconnaissance, Surveillance, and Target Acquisition capability through the ability to view real-time Full Motion Video and sensor data via the system ground control stations. Other compatible receivers, such as the One System Remote Video Terminal and appropriately equipped manned platforms, may also receive the RPUAS products. The RPUAS includes a combination of three separate hand-launched mission specific configurable aircraft that do not require an improved launch/recovery location. The ground control equipment includes a hand controller interoperable with each of the system's aircraft. This equipment is fully transportable in or on rucksack type packs that are organic to the unit.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	3.964	-	-	-	-	4.136	4.221	4.303	4.170
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	2.095	2.136	2.179	2.112
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	0.698	0.712	0.726	0.704
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	3.964	-	-	-	-	6.929	7.069	7.208	6.986

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 10: Fixed Wing **P-1 Line Item Number / Title:** A00010 / RQ-11 (RAVEN)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0305204A, 0305232A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A00010 / RQ-11 (RAVEN)			6,525 / 244.007	- / 3.964	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			6,525 / 244.007	- / 3.964	- / -	- / -	- / -	- / -

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

Justification: No Program Funding in FY2017.

In accordance with 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A00010 / RQ-11 (RAVEN)	Item Number / Title [DODIC]: A00010 / RQ-11 (RAVEN)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	6,525	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	244.007	3.964	-	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	244.007	3.964	-	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	244.007	3.964	-	-	-	-

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	37.396	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
RQ-11 B Raven Air Vehicle, GCS/RVT, EO	10.010	6,525	65.316	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Initial Spares Package (ISP)	2.565	6,525	16.735	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other System Hardware	-	-	22.620	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Digital Data Link Retrofit	42.317	1,318	55.774	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gimbal Payload Retrofit	42.447	754	32.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operator Training	-	-	16.118	-	-	1.200	-	-	-	-	-	-	-	-	-	-	-	-
Government Furnished Equipment (GFE)	-	-	6.937	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Government Agencies/Core	-	-	11.449	-	-	1.189	-	-	-	-	-	-	-	-	-	-	-	-
Technical	-	-	8.760	-	-	0.940	-	-	-	-	-	-	-	-	-	-	-	-
Logistics	-	-	8.292	-	-	0.635	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	244.007	-	-	3.964	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Flyaway Cost</i>	-	-	244.007	-	-	3.964	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	37.396	6,525	244.007	-	-	3.964	-	-	-	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 10	P-1 Line Item Number / Title: A00010 / RQ-11 (RAVEN)	Item Number / Title [DODIC]: A00010 / RQ-11 (RAVEN)
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ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Secondary Distribution						
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	3.964	-	-	-	-
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	3.964	-	-	-	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:** A05001 / Helicopter, Light Utility (LUH)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	342	55	28	-	-	-	-	-	-	-	-	425
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,135.483	401.617	187.177	-	-	-	-	-	-	-	-	2,724.277
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,135.483	401.617	187.177	-	-	-	-	-	-	-	-	2,724.277
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	2,135.483	401.617	187.177	-	-	-	-	-	-	-	-	2,724.277

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	6,684.893	-	-	-	-	-	-	-	-	6,410.064

Description:

The UH-72A platform will provide the flexibility to respond to Homeland Security (HLS) requirements, conduct civil search and rescue operations, support damage assessment, support test and training centers, perform generating force missions, augment the HH-60 Medical Evacuation (MEDEVAC) aircraft, and provide support to CONUS counterdrug operations. The UH-72A will conduct general support utility helicopter missions and execute tasks as part of an integrated effort with other joint services, government agencies, and non-governmental organizations. The UH-72A provides time-sensitive transport of supplies or key personnel, air mobility to assist civil authorities through the execution of search and rescue or disaster relief operations, advanced warning/detection of external threats to include threats to our borders, augmentation of air ambulance capabilities, and limited command and control operations in the conduct of HLS. As part of the Aviation Restructure Initiative (ARI) the UH-72A will become the primary training aircraft at the US Army Aviation Center of Excellence (USAACE) in Ft. Rucker. The UH-72A program is currently in full rate production.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	55	28	-	-	-	-	-	-	-
Total Obligation Authority	401.617	187.177	-	-	-	-	-	-	-
Total:									
Secondary Distribution									
Quantity	55	28	-	-	-	-	-	-	-
Total Obligation Authority	401.617	187.177	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:** A05001 / Helicopter, Light Utility (LUH)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A05001 / Helicopter, Light Utility (LUH)	P-5a, P-21		342 / 2,135.483	55 / 401.617	28 / 187.177	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			342 / 2,135.483	55 / 401.617	28 / 187.177	- / -	- / -	- / -

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A05001 / Helicopter, Light Utility (LUH)	P-5a, P-21		- / -	- / -	- / -	- / -	- / -	425 / 2,724.277
P-40	Total Gross/Weapon System Cost			- / -	- / -	- / -	- / -	- / -	425 / 2,724.277

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05001 / Helicopter, Light Utility (LUH)	Item Number / Title [DODIC]: A05001 / Helicopter, Light Utility (LUH)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	342	55	28	-	-	-	-	-	-	-	-	425
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,135.483	401.617	187.177	-	-	-	-	-	-	-	-	2,724.277
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,135.483	401.617	187.177	-	-	-	-	-	-	-	-	2,724.277
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	2,135.483	401.617	187.177	-	-	-	-	-	-	-	-	2,724.277

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	6,684.893	-	-	-	-	-	-	-	-	6,410.064

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Airframes/Includes non-recurring ^(†)	5,110.015	342	1,747.625	5,500.000	55	302.500	5,757.036	28	161.197	-	-	-	-	-	-	-	-	-
B Kits (MEDEVAC & Hoist)	200.449	78	15.635	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Changes	-	-	193.784	-	-	87.649	-	-	14.700	-	-	-	-	-	-	-	-	-
System Engineering & Program Management	-	-	63.371	-	-	10.918	-	-	11.000	-	-	-	-	-	-	-	-	-
Systems Test & Evaluation	-	-	2.054	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Services	-	-	21.067	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Procedural Trainers	2,989.000	2	5.978	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fielding	-	-	85.945	-	-	0.550	-	-	0.280	-	-	-	-	-	-	-	-	-
Other program Requirements	-	-	0.024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	2,135.483	-	-	401.617	-	-	187.177	-	-	-	-	-	-	-	-	-
<i>Subtotal: Flyaway Cost</i>	-	-	2,135.483	-	-	401.617	-	-	187.177	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	342	2,135.483	-	55	401.617	6,684.893	28	187.177	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05001 / Helicopter, Light Utility (LUH)	Item Number / Title [DODIC]: A05001 / Helicopter, Light Utility (LUH)
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ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Airframes/Includes non-recurring ^(t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,203.111	425	2,211.322
B Kits (MEDEVAC & Hoist)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200.449	78	15.635
Engineering Changes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	296.133
System Engineering & Program Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85.289
Systems Test & Evaluation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.054
Engineering Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.067
Procedural Trainers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,989.000	2	5.978
Fielding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86.775
Other program Requirements	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.024
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,724.277
<i>Subtotal: Flyaway Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,724.277
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,410.064	425	2,724.277

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	55	28	-	-	-	-	-	-	-
	Total Obligation Authority	401.617	187.177	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	55	28	-	-	-	-	-	-	-
	Total Obligation Authority	401.617	187.177	-	-	-	-	-	-	-

(t) indicates the presence of a P-5a

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05001 / Helicopter, Light Utility (LUH)	Item Number / Title [DODIC]: A05001 / Helicopter, Light Utility (LUH)
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Airframes/Includes non-recurring ^(†)		2012	EADS-NA / Columbus MS	C / FFP	EADS-NA Columbus, MS	Dec 2011	Sep 2012	39	5,375.000			
Airframes/Includes non-recurring ^(†)		2013	EADS-NA / Columbus MS	C / FFP	EADS-NA Columbus, MS	Dec 2012	Sep 2013	35	5,090.000			
Airframes/Includes non-recurring ^(†)		2014	EADS-NA / Columbus MS	C / FFP	EADS-NA Columbus, MS	Dec 2013	Sep 2014	37	5,240.162			
Airframes/Includes non-recurring ^(†)		2015	EADS-NA / Columbus MS	C / FFP	EADS-NA Columbus, MS	Dec 2014	Dec 2015	55	5,500.000			
Airframes/Includes non-recurring ^(†)		2016	Airbus Helicopter Inc / Grand Prairie TX	C / FFP	AHI Grand Prairie, TX	Jun 2016	Aug 2017	28	5,757.036			

^(†) indicates the presence of a P-21

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20 **P-1 Line Item Number / Title:** A05001 / Helicopter, Light Utility (LUH) **Item Number / Title [DODIC]:** A05001 / Helicopter, Light Utility (LUH)

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2012												Fiscal Year 2013												BALANCE			
O C O #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2011	BAL DUE AS OF 1 OCT	Calendar Year 2012												Calendar Year 2013														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P		
Airframes/Includes non-recurring																																	
Prior Years Deliveries: 231																																	
1		2012	ARMY (V)	39	-	39				A -	-	-	-	-	-	-	-	4	2	3	3	3	3	3	3	4	3	4	3	3	-	1	
1		2013	ARMY (VI)	35	-	35																										3	32
1		2014	ARMY (VII)	37	-	37																											37
1		2015	ARMY (VIII)	55	-	55																											55
2		2016	ARMY (IX)	28	-	28																											28

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20 **P-1 Line Item Number / Title:** A05001 / Helicopter, Light Utility (LUH) **Item Number / Title [DODIC]:** A05001 / Helicopter, Light Utility (LUH)

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2014												Fiscal Year 2015												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014												Calendar Year 2015												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Airframes/Includes non-recurring																															
Prior Years Deliveries: 231																															
1		2012	ARMY (V)	39	38	1	-	1																					-		
1		2013	ARMY (VI)	35	3	32	3	3	3	3	2	3	3	3	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
1		2014	ARMY (VII)	37	-	37			A	-	-	-	-	-	-	-	1	2	1	3	2	3	1	2	2	4	4	2	2	8	
1		2015	ARMY (VIII)	55	-	55														A	-	-	-	-	-	-	-	-	-	55	
2		2016	ARMY (IX)	28	-	28																							28		

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20 **P-1 Line Item Number / Title:** A05001 / Helicopter, Light Utility (LUH) **Item Number / Title [DODIC]:** A05001 / Helicopter, Light Utility (LUH)

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2016												Fiscal Year 2017												BALANCE		
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016												Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P
Airframes/Includes non-recurring																															
Prior Years Deliveries: 231																															
1		2012	ARMY (V)	39	39	-																							-		
1		2013	ARMY (VI)	35	34	1	-	-	-	-	-	-	-	-	1														-		
1		2014	ARMY (VII)	37	29	8	2	2	4																				-		
1		2015	ARMY (VIII)	55	-	55	-	-	3	1	1	1	2	3	3	-	2	4	4	3	3	3	4	4	3	4	4	3	-		
2		2016	ARMY (IX)	28	-	28									A	-	-	-	-	-	-	-	-	-	-	-	-	1	3	24	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20 **P-1 Line Item Number / Title:** A05001 / Helicopter, Light Utility (LUH) **Item Number / Title [DODIC]:** A05001 / Helicopter, Light Utility (LUH)

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2018												Fiscal Year 2019												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018												Calendar Year 2019												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Airframes/Includes non-recurring																															
Prior Years Deliveries: 231																															
1		2012	ARMY (V)	39	39	-																							-		
1		2013	ARMY (VI)	35	35	-																							-		
1		2014	ARMY (VII)	37	37	-																							-		
1		2015	ARMY (VIII)	55	55	-																							-		
2		2016	ARMY (IX)	28	4	24	4	4	3	3	3	4	3																-		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05001 / Helicopter, Light Utility (LUH)	Item Number / Title [DODIC]: A05001 / Helicopter, Light Utility (LUH)
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	EADS-NA - Columbus MS	10	30	60	-	9	5	14	-	2	9	11
2	Airbus Helicopter Inc - Grand Prairie TX	10	30	60	-	9	5	14	-	2	9	11

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Service/Agency Suffixes:

- (V) 39
- (VI) 35
- (VII) 37
- (VIII) 55
- (IX) 28

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:** A05111 / AH-64 Apache Block IIIA Reman

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	123	48	64	48	4	52	58	59	57	49	124	634
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,574.064	1,116.940	1,300.799	1,013.014	78.040	1,091.054	1,070.594	1,177.809	1,142.539	1,012.488	2,541.859	13,028.146
Less PY Advance Procurement (<i>\$ in Millions</i>)	534.555	150.931	157.338	209.930	-	209.930	185.160	196.570	198.030	178.710	459.515	2,270.739
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,039.509	966.009	1,143.461	803.084	78.040	881.124	885.434	981.239	944.509	833.778	2,082.344	10,757.407
Plus CY Advance Procurement (<i>\$ in Millions</i>)	685.486	157.338	209.930	185.160	-	185.160	196.570	198.030	178.710	164.940	294.575	2,270.739
Total Obligation Authority (<i>\$ in Millions</i>)	2,724.995	1,123.347	1,353.391	988.244	78.040	1,066.284	1,082.004	1,179.269	1,123.219	998.718	2,376.919	13,028.146

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	20,927.350	23,269.583	20,324.984	21,104.458	19,510.000	20,981.808	18,458.517	19,962.864	20,044.544	20,663.020	20,498.863	20,549.126

Description:

AH-64E Reman is a complete remanufacture using a new airframe and meets all the requirements for Army and Joint interoperability goals for the future and adds significant combat capability while addressing obsolescence issues, ensuring the aircraft remains a viable combat multiplier beyond its lifecycle. The Army's only heavy attack helicopter, the AH-64E is fully digital with the latest technologies, adding significant combat capability to the aircraft. The AH-64E Apache is implementing an incremental design and fielding strategy as noted in the approved Capability Production Document (CPD). AH-64E Capability Version 1 includes Improved Drive and Propulsion System, Composite Main Rotor Blades (CMRB), Unmanned Aircraft System (UAS) Level III-IV Control, Improved Communications Suite, Improved Electronics / Modular Open Systems Approach, and Radar Electronics Unit (REU). Capability Version 4 includes Link 16, Air to Air to Ground (AAG) Video Relay, System Level Embedded Diagnostics (SLED), and provisions for Removable Crashworthy External Fuel Systems (RCEFS). Capability Version 6 includes Fire Control Radar (FCR) enhancements, Maritime Targeting Mode, Link-16 and Soldier Radio Waveform (SRW), Image Blending, Multi-Mode Laser (MML), and Interactive Electronic Technical Manual (IETM) Upgrade. Production Lots 1-4 are Version 1 capable, Production Lots 5-7 are Version 4 capable, and Version 6 is planned for inclusion into the remaining Production Lots beginning with Production Lot 8. Upgrades are integrated as incremental block modifications. The program addresses operational shortfalls identified during real-world combat missions, meets Apache Capability Production Document (CPD) requirements for modernization, and necessary training, initial spares, and Peculiar Ground Support Equipment (PGSE). AH-64E aircraft entered the fleet in 2012.

"In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities."

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:**
A05111 / AH-64 Apache Block IIIA Reman

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A05111 / AH-64 Apache Block IIIA Reman	P-5a, P-21		123 / 2,574.064	48 / 1,116.940	64 / 1,300.799	48 / 1,013.014	4 / 78.040	52 / 1,091.054
P-40	Total Gross/Weapon System Cost			123 / 2,574.064	48 / 1,116.940	64 / 1,300.799	48 / 1,013.014	4 / 78.040	52 / 1,091.054

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY17 Base procurement dollars supports Advance Procurement (AP), Full Rate Production (FRP) of AH-64E Apache Reman aircraft and associated support. This program was restructured in 2010 from the single AH-64E Apache (A05111) into two separate programs, AH-64E Apache Reman (A05111) and AH-64E Apache New Build (A05133).

The Apache Reman Program assumes a cost sharing with the New Build Program in accordance with the New Build Army Program Baseline (APB).

Funding goes to the Active component.

The current AH-64E Apache Remanufacture Acquisition Program Baseline procurement objective is 634 aircraft.

The Apache Reman Program quantities and associated funding assume approval for a Multi-year contract starting in FY17- FY21 and subsequent Multi-year contract in FY22 through the end of the program. The Apache Reman Program is planning continued production of aircraft through FY2024 to meet the Army Acquisition Objective (AAO).

Currently the total lead time (time from when first materials must be committed to aircraft delivery) is in excess of 24 months. The Apache Project Management Office (PMO) and Boeing are working to reduce all lead times to within the 24 month timeframe. The Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) utilized 18% to 22% for Advance Procurement (AP). Each year's AP can be divided into 2 segments: 1) Government Furnished Equipment (GFE) such as engines, sensors and avionics and 2) Contractor Furnished Equipment (CFE). Material includes production components to support deliveries, provisioning material, pre-modification effort, and any potential termination liability costs. Long lead items include, but not limited to, such items as the Main Rotor Drive Shaft, Composite Main Rotor Blade, Improved Drive System, and Composite Stabilator IAW Financial Management Regulation (FMR) 7000.14-R.

The Economical Production Rate of 84 aircraft per year is the maximum capacity at Full Rate Production assuming a 1-8-5 shift. This requirement is driven primarily by the production rate associated with current fuselage tooling capabilities. In order to increase the 1-8-5 (single shift) production rate, additional tooling must be procured. The minimum rate of 48 aircraft per year (min-sustainment rate) is based upon combined Remanufacture and New Build quantities.

FY17 OCO Procurement dollars in the amount of \$78.040 million will procure four AH-64E Apache Remanufacture aircraft and associated GFE, training, and support to replace Kiowa Warrior theater of operations combat losses. The Kiowa Warrior is being divested in accordance with the Army's Aircraft Restructure Initiative. The Apache, teamed with UAS (Manned-Unmanned Teaming), will execute the Armed Reconnaissance mission previously performed by the now divested Kiowa Warrior.

Note:
FY2015: The gap in the delivery schedule for 13 aircraft is due to being procured with funds received on the FY2015 Omnibus reprogramming, received for execution in October 2015.

Comments:
"In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities."

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05111 / AH-64 Apache Block IIIA Reman	Item Number / Title [DODIC]: A05111 / AH-64 Apache Block IIIA Reman

ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:				
Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (<i>Units in Each</i>)	123	48	64	48	4	52
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,574.064	1,116.940	1,300.799	1,013.014	78.040	1,091.054
Less PY Advance Procurement (<i>\$ in Millions</i>)	534.555	150.931	157.338	209.930	-	209.930
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,039.509	966.009	1,143.461	803.084	78.040	881.124
Plus CY Advance Procurement (<i>\$ in Millions</i>)	685.486	157.338	209.930	185.160	-	185.160
Total Obligation Authority (<i>\$ in Millions</i>)	2,724.995	1,123.347	1,353.391	988.244	78.040	1,066.284
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>						
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	20,927.350	23,269.583	20,324.984	21,104.458	19,510.000	20,981.808

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
CFE ^(†)	20,927.350	123	2,574.064	16,208.625	48	778.014	13,760.016	64	880.641	13,996.146	48	671.815	13,369.500	4	53.478	13,947.942	52	725.293
GFE	-	-	-	5,217.604	48	250.445	5,058.063	64	323.716	5,313.229	48	255.035	4,957.750	4	19.831	5,285.885	52	274.866
Non-Recurring Costs	-	-	-	-	-	2.623	-	-	2.663	-	-	2.411	-	-	-	-	-	2.411
Support Equipment	-	-	-	-	-	11.563	-	-	16.202	-	-	15.259	-	-	-	-	-	15.259
Other Costs	-	-	-	-	-	60.594	-	-	57.981	-	-	51.962	-	-	3.353	-	-	55.315
Initial Spares	-	-	-	-	-	13.702	-	-	19.596	-	-	16.532	-	-	1.378	-	-	17.910
<i>Subtotal: Recurring Cost</i>	-	-	2,574.064	-	-	1,116.941	-	-	1,300.799	-	-	1,013.014	-	-	78.040	-	-	1,091.054
<i>Subtotal: Flyaway Cost</i>	-	-	2,574.064	-	-	1,116.941	-	-	1,300.799	-	-	1,013.014	-	-	78.040	-	-	1,091.054
Gross/Weapon System Cost	20,927.350	123	2,574.064	23,269.583	48	1,116.940	20,324.984	64	1,300.799	21,104.458	48	1,013.014	19,510.000	4	78.040	20,981.808	52	1,091.054

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army							Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20			P-1 Line Item Number / Title: A05111 / AH-64 Apache Block IIIA Reman				Item Number / Title [DODIC]: A05111 / AH-64 Apache Block IIIA Reman				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
CFE ^(†)		2014	The Boeing Company / Mesa, AZ	SS / FPIF	AMCOM	Mar 2014	Feb 2015	35	15,570.229	Y		Jul 2012
CFE ^(†)		2015	The Boeing Company / Mesa, AZ	SS / FPIF	AMCOM	Mar 2015	Jan 2016	48	16,208.625	Y		Aug 2014
CFE ^(†)		2016	The Boeing Company / Mesa, AZ	SS / FPIF	AMCOM	Mar 2016	Jan 2017	64	13,760.016	Y		Aug 2014
CFE ^(†)		2017	The Boeing Company / Mesa, AZ	SS / FPIF	AMCOM	Jan 2017	May 2018	52	13,947.942	Y		Aug 2015

Advance Procurement												
CFE		2015	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2015	Jan 2016	24	4,487.884			
CFE		2016	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2016	Jan 2017	32	4,487.884			
CFE		2017	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2017	May 2018	26	4,487.884			
GFE		2015	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2015	Jan 2016	24	2,633.654			
GFE		2016	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2016	Jan 2017	32	2,633.654			
GFE		2017	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2017	May 2018	26	2,633.654			

^(†) indicates the presence of a P-21

Remarks:
Major Contractor Furnished Equipment (CFE) cost drivers include, but not limited to, the Fuselage, Transmission, and Composite Main Rotor Blades. Major Government Furnished Equipment (GFE) includes engines, Embedded Global Positioning System Inertial Navigation Systems (EGIs), Radar Electronics Unit (REU), Modernized Target Acquisition Designation System (MTADS)/Pilot Night Vision System (PNVS) and Manned/Unmanned Teaming Extended Capability (MUMT-X). Other Cost includes Support Equipment, Peculiar Ground Support Equipment (PGSE), and Government In-House.

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Exhibit P-21, Production Schedule: PB 2017 Army															Date: February 2016														
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20										P-1 Line Item Number / Title: A05111 / AH-64 Apache Block IIIA Reman										Item Number / Title [DODIC]: A05111 / AH-64 Apache Block IIIA Reman									

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2016															Fiscal Year 2017												BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016															Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
CFE																																		
Prior Years Deliveries: 88																																		
1		2014	ARMY ^(X)	35	26	9	3	3	3																				-					
1		2015	ARMY ^(XI)	48	-	48	-	-	-	3	3	3	2	3	2	3	2	2	2	3	4	3	-	-	-	-	-	-	-	13				
1		2016	ARMY ^(XII)	64	-	64							A	-	-	-	-	-	-	-	-	1	4	4	4	5	5	5	5	26				
1		2017	ARMY ^(XIII)	52	-	52																A	-	-	-	-	-	-	-	52				
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20		P-1 Line Item Number / Title: A05111 / AH-64 Apache Block IIIA Reman
		Item Number / Title [DODIC]: A05111 / AH-64 Apache Block IIIA Reman

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2018												Fiscal Year 2019												BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018												Calendar Year 2019												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P
CFE																															
Prior Years Deliveries: 88																															
1		2014	ARMY (X)	35	35	-																							-		
1		2015	ARMY (XI)	48	35	13	-	-	-	-	1	6	6																-		
1		2016	ARMY (XII)	64	38	26	5	5	5	6	5																	-			
1		2017	ARMY (XIII)	52	-	52	-	-	-	-	-	-	2	7	6	8	6	6	6	6	4	1								6	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20		P-1 Line Item Number / Title: A05111 / AH-64 Apache Block IIIA Reman
		Item Number / Title [DODIC]: A05111 / AH-64 Apache Block IIIA Reman

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	The Boeing Company - Mesa, AZ	48	84	144	-	11	13	24	-	6	12	18

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Service/Agency Suffixes:

- (X) BASE
- (XI) BASE
- (XII) BASE
- (XIII) BASE

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary	P-1 Line Item Number / Title: A05111 / AH-64 Apache Block IIIA Reman
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Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Gross/Weapon System Cost (<i>\$ in Millions</i>)	685.486	157.338	209.930	185.160	-	185.160	196.570	198.030	178.710	164.940	294.575	2,270.739
Net Procurement (P-1) (<i>\$ in Millions</i>)	685.486	157.338	209.930	185.160	-	185.160	196.570	198.030	178.710	164.940	294.575	2,270.739
Total Obligation Authority (<i>\$ in Millions</i>)	685.486	157.338	209.930	185.160	-	185.160	196.570	198.030	178.710	164.940	294.575	2,270.739

Description:

AH-64E Reman is a complete remanufacture using a new airframe and meets all the requirements for Army and Joint interoperability goals for the future and adds significant combat capability while addressing obsolescence issues, ensuring the aircraft remains a viable combat multiplier beyond its lifecycle. The Army's only heavy attack helicopter, the AH-64E is fully digital with the latest technologies, adding significant combat capability to the aircraft. The AH-64E Apache is implementing an incremental design and fielding strategy as noted in the approved Capability Production Document (CPD). AH-64E Capability Version 1 includes Improved Drive and Propulsion System, Composite Main Rotor Blades (CMRB), Unmanned Aircraft System (UAS) Level III-IV Control, Improved Communications Suite, Improved Electronics / Modular Open Systems Approach, and Radar Electronics Unit (REU). Capability Version 4 includes Link 16, Air to Air to Ground (AAG) Video Relay, System Level Embedded Diagnostics (SLED), and provisions for Removable Crashworthy External Fuel Systems (RCEFS). Capability Version 6 includes Fire Control Radar (FCR) enhancements, Maritime Targeting Mode, Link-16 and Soldier Radio Waveform (SRW), Image Blending, Multi-Mode Laser (MML), and Interactive Electronic Technical Manual (IETM) Upgrade. Production Lots 1-4 are Version 1 capable, Production Lots 5-7 are Version 4 capable, and Version 6 is planned for inclusion into the remaining Production Lots beginning with Production Lot 8. Upgrades are integrated as incremental block modifications. The program addresses operational shortfalls identified during real-world combat missions, meets Apache Capability Production Document (CPD) requirements for modernization, and necessary training, initial spares, and Peculiar Ground Support Equipment (PGSE). AH-64E aircraft entered the fleet in 2012

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary	P-1 Line Item Number / Title: A05111 / AH-64 Apache Block IIIA Reman
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Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-10	A05111 / AH-64 Apache Block IIIA Reman		123 / 685.486	48 / 157.338	64 / 209.930	48 / 185.160	4 / -	52 / 185.160
P-40	Total Gross/Weapon System Cost		123 / 685.486	48 / 157.338	64 / 209.930	48 / 185.160	4 / -	52 / 185.160

*Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY17 Base procurement dollars supports Advance Procurement (AP), Full Rate Production (FRP) of AH-64E Apache Reman aircraft and associated support. This program was restructured in 2010 from the single AH-64E Apache (A05111) into two separate programs, AH-64E Apache Reman (A05111) and AH-64E Apache New Build (A05133).

The Apache Reman Program assumes a cost sharing with the New Build Program in accordance with the New Build APB.

Funding goes to the Active component.

The current AH-64E Apache Remanufacture Acquisition Program Baseline procurement objective is 634 aircraft.

The Apache Reman Program quantities and associated funding assume approval for a Multi-year contract starting in FY17- FY21 and subsequent Multi-year contract in FY22 through the end of the program. The Apache Reman Program is planning continued production of aircraft through FY2025 to meet the Army Acquisition Objective (AAO).

Currently the total lead time (time from when first materials must be committed to aircraft delivery) is in excess of 24 months. The Apache Project Management Office (PMO) and Boeing are working to reduce all lead times to within the 24 month timeframe. The Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) utilized 18% to 22% for Advance Procurement (AP). Each year's AP can be divided into 2 segments: 1) Government Furnished Equipment (GFE) such as engines, sensors and avionics and 2) Contractor Furnished Equipment (CFE). Material includes production components to support deliveries, provisioning material, pre-modification effort, and any potential termination liability costs. Long lead items include, but not limited to, such items as the Main Rotor Drive Shaft, Composite Main Rotor Blade, Improved Drive System, and Composite Stabilator IAW Financial Management Regulation (FMR) 7000.14-R.

The Economical Production Rate of 84 aircraft per year is the maximum capacity at Full Rate Production assuming a 1-8-5 shift. This requirement is driven primarily by the production rate associated with current fuselage tooling capabilities. In order to increase the 1-8-5 (single shift) production rate, additional tooling must be procured. The minimum rate of 48 aircraft per year (min-sustainment rate) is based upon combined Remanufacture and New Build quantities.

Comments:

"In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities."

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Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2017 Army					Date: February 2016	
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20		P-1 Line Item Number / Title: A05111 / AH-64 Apache Block IIIA Reman			P-5 Number / Title: A05111 / AH-64 Apache Block IIIA Reman	
First System (2017) Award Date: July 2009		First System (2017) Completion Date: November 2011			Interval Between Systems: 1 Months	
AH-64 Apache Block IIIA Reman		Production Leadtime <i>(Months)</i>	Prior Years <i>(Each)</i>	FY 2015 <i>(Each)</i>	FY 2016 <i>(Each)</i>	FY 2017 <i>(Each)</i>
Quantity			123	48	64	52
Cost Elements		When Required <i>(Months)</i>	Prior Years <i>(\$ M)</i>	FY 2015 <i>(\$ M)</i>	FY 2016 <i>(\$ M)</i>	FY 2017 <i>(\$ M)</i>
Other						
CFE (†)		6	342.743	125.162	114.494	116.685
GFE (†)		6	342.743	32.176	95.436	68.475
<i>Total: Other</i>			<i>685.486</i>	<i>157.338</i>	<i>209.930</i>	<i>185.160</i>
Total Advance Procurement/Obligation Authority			685.486	157.338	209.930	185.160

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2017 Army						Date: February 2016	
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20		P-1 Line Item Number / Title: A05111 / AH-64 Apache Block IIIA Reman			P-5 Number / Title: A05111 / AH-64 Apache Block IIIA Reman		
		FY 2017					
Cost Elements	QPA (Each)	Production Leadtime (Months)	Unit Cost (\$ K)	Contract Forecast Date	2017 Qty (Each)	For FY	Total Cost Request (\$ M)
Other							
CFE (†)	26	6	4,487.884	Dec 2017	26		116.685
GFE (†)	26	6	2,633.654	Dec 2017	26		68.475
<i>Total: Other</i>							185.160
Total Advance Procurement/Obligation Authority							185.160

Description:
 Currently the total lead time (time from when first materials must be committed to aircraft delivery) is in excess of 24 months. The Apache Project Management Office (PMO) and Boeing are working to reduce all lead times to within the 24 month timeframe. The Cost Assessment and Program Evaluation (CAPE) Independent Cost Estimate (ICE) utilized 18% to 22% for Advance Procurement (AP) for single year contracts. Each year's AP can be divided into 2 segments: 1) Government Furnished Equipment (GFE) such as engines, sensors and avionics and 2) Contractor Furnished Equipment (CFE). Material includes production components to support deliveries, provisioning material, pre-modification effort, and any potential termination liability costs. Long lead items include the Main Rotor Drive Shaft, Composite Main Rotor Blade, Improved Drive System, and Composite Stabilator.

(†) indicates the presence of Contract Data presented in the associated P-5 Item's P-5a exhibit.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:** AA0005 / UH-60 Blackhawk M Model (MYP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	679	87	107	36	-	36	60	69	38	65	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	11,784.291	1,471.122	1,697.130	882.225	-	882.225	1,156.613	1,280.570	955.037	1,243.770	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	1,040.640	119.545	122.385	127.079	-	127.079	171.847	139.872	87.137	150.273	Continuing	Continuing
Net Procurement (P-1) (<i>\$ in Millions</i>)	10,743.651	1,351.577	1,574.745	755.146	-	755.146	984.766	1,140.698	867.900	1,093.497	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	1,149.415	117.138	127.079	174.107	-	174.107	144.953	85.683	144.386	141.725	Continuing	Continuing
Total Obligation Authority (<i>\$ in Millions</i>)	11,893.066	1,468.715	1,701.824	929.253	-	929.253	1,129.719	1,226.381	1,012.286	1,235.222	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	17,355.362	16,909.448	15,861.028	24,506.250	-	24,506.250	19,276.883	18,558.986	25,132.553	19,134.923	Continuing	Continuing

Description:

The UH-60M Black Hawk Helicopter serves as the Army's utility helicopter for the current and future force and is in line with the Army's Modernization Strategy, the National Military Strategy, and the National Defense Strategy. The UH-60M Black Hawk is a digital networked platform with greater range and lift to support maneuver Commanders through air assault, general support command and control, and aeromedical evacuation. Full rate production for this new build helicopter began in 2007. The UH-60M Black Hawk, with the integrated Medical Evacuation (MEDEVAC) Mission Equipment Package (MEP) kit, provides day/night and adverse weather emergency evacuation of casualties. The integration of the MEDEVAC MEP into the UH-60M changes the nomenclature to HH-60M.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	50	82	25	-	25	32	55	-	24
Total Obligation Authority	835.705	1,303.574	661.403	-	661.403	695.905	954.809	-	372.334
ANG	31	25	11	-	11	28	14	38	41
Total Obligation Authority	524.800	398.250	267.850	-	267.850	433.814	271.572	1,012.286	862.888
AR	6	-	-	-	-	-	-	-	-
Total Obligation Authority	108.210	-	-	-	-	-	-	-	-
Total: Secondary Distribution	87	107	36	-	36	60	69	38	65
Total Obligation Authority	1,468.715	1,701.824	929.253	-	929.253	1,129.719	1,226.381	1,012.286	1,235.222

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:**
AA0005 / UH-60 Blackhawk M Model (MYP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A05002 / UH-60 BLACK HAWK (MYP)	P-5a, P-21		679 / 11,784.291	87 / 1,471.122	107 / 1,697.130	36 / 882.225	- / -	36 / 882.225
P-40	Total Gross/Weapon System Cost			679 / 11,784.291	87 / 1,471.122	107 / 1,697.130	36 / 882.225	- / -	36 / 882.225

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.
 Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY 2017 Base procurement dollars in the amount of \$929.253 million supports procurement of 36 aircraft.

Note: The multi-year 8 contract versus 5 single year contracts yields a 10.9% cost avoidance (\$557.418 million) for FY 2012 through FY 2016. The multi-year 9 contract versus 5 single year contracts for FY 2017 through FY 2021 is projected to yield over 10% cost avoidance.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

In FY15 two additional aircraft were procured as a result of the Black Hawk Exchange and Sales Team (BEST) program which avoids demilitarization and divestment cost and applies proceeds from the divestiture of non-excess obsolete H-60 aircraft towards the procurement of replacement H-60M aircraft in accordance with 40 U.S.C. 503 and AR725-1 as approved by the Army Acquisition Executive (AAE).

"The FY2017 funding request was reduced \$12,000 million to account for the availability of prior year execution balances".

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Exhibit P-5, Cost Analysis: PB 2017 Army											Date: February 2016						
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20						P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)					Item Number / Title [DODIC]: A05002 / UH-60 BLACK HAWK (MYP)						
ID Code (A=Service Ready, B=Not Service Ready) :											MDAP/MAIS Code:						
Resource Summary				Prior Years		FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Procurement Quantity (<i>Units in Each</i>)				679		87		107		36		-		36			
Gross/Weapon System Cost (<i>\$ in Millions</i>)				11,784.291		1,471.122		1,697.130		882.225		-		882.225			
Less PY Advance Procurement (<i>\$ in Millions</i>)				1,040.640		119.545		122.385		127.079		-		127.079			
Net Procurement (P-1) (<i>\$ in Millions</i>)				10,743.651		1,351.577		1,574.745		755.146		-		755.146			
Plus CY Advance Procurement (<i>\$ in Millions</i>)				1,149.415		117.138		127.079		174.107		-		174.107			
Total Obligation Authority (<i>\$ in Millions</i>)				11,893.066		1,468.715		1,701.824		929.253		-		929.253			
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>																	
Initial Spares (<i>\$ in Millions</i>)				-		-		-		-		-		-		-	
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)				17,355.362		16,909.448		15,861.028		24,506.250		-		24,506.250			

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Airframes/CFE ^(†)	11,715.675	679	7,954.943	11,792.023	87	1,025.906	11,136.047	107	1,191.557	16,179.583	36	582.465	-	-	-	16,179.583	36	582.465
Engines/Accessories	680.962	1,358	924.746	770.121	174	134.001	774.738	214	165.794	864.903	72	62.273	-	-	-	864.903	72	62.273
Avionics (GFE)	-	-	458.896	-	-	56.665	-	-	66.616	-	-	20.928	-	-	-	-	-	20.928
Other GFE	-	-	289.856	-	-	26.758	-	-	31.422	-	-	11.404	-	-	-	-	-	11.404
ECO (All FLYAWAY Components)	-	-	266.937	-	-	40.278	-	-	43.133	-	-	25.395	-	-	-	-	-	25.395
Other Costs (Mission Equipment)	-	-	578.302	-	-	50.869	-	-	53.799	-	-	34.503	-	-	-	-	-	34.503
Tooling Equipment	-	-	91.996	-	-	2.013	-	-	1.964	-	-	10.000	-	-	-	-	-	10.000
Other Nonrecurring Cost	-	-	80.918	-	-	1.445	-	-	1.696	-	-	0.618	-	-	-	-	-	0.618
Peculiar Training Equipment	-	-	352.972	-	-	24.519	-	-	22.199	-	-	7.500	-	-	-	-	-	7.500
Publications/Tech Data	-	-	21.187	-	-	3.382	-	-	3.501	-	-	3.569	-	-	-	-	-	3.569
PM Administration	-	-	294.410	-	-	42.388	-	-	43.057	-	-	43.341	-	-	-	-	-	43.341
Fielding	-	-	469.128	-	-	62.898	-	-	72.392	-	-	80.229	-	-	-	-	-	80.229
<i>Subtotal: Recurring Cost</i>	-	-	<i>11,784.292</i>	-	-	<i>1,471.122</i>	-	-	<i>1,697.130</i>	-	-	<i>882.225</i>	-	-	-	-	-	<i>882.225</i>
<i>Subtotal: Flyaway Cost</i>	-	-	<i>11,784.292</i>	-	-	<i>1,471.122</i>	-	-	<i>1,697.130</i>	-	-	<i>882.225</i>	-	-	-	-	-	<i>882.225</i>
Gross/Weapon System Cost	17,355.362	679	11,784.291	16,909.448	87	1,471.122	15,861.028	107	1,697.130	24,506.250	36	882.225	-	-	-	24,506.250	36	882.225

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Exhibit P-5, Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)	Item Number / Title [DODIC]: A05002 / UH-60 BLACK HAWK (MYP)
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ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	50	82	25	-	25
	Total Obligation Authority	835.705	1,303.574	661.403	-	661.403
ANG	Quantity	31	25	11	-	11
	Total Obligation Authority	524.800	398.250	267.850	-	267.850
AR	Quantity	6	-	-	-	-
	Total Obligation Authority	108.210	-	-	-	-
Total: Secondary Distribution	Quantity	87	107	36	-	36
	Total Obligation Authority	1,471.122	1,697.130	882.225	-	882.225

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)	Item Number / Title [DODIC]: A05002 / UH-60 BLACK HAWK (MYP)
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
Airframes/CFE ^(†)		2015	Sikorsky Aircraft / Stratford CT	SS / FFP	AMCOM	Dec 2014	Jun 2015	87	11,792.023	Y		Jan 2010
Airframes/CFE ^(†)		2016	Sikorsky Aircraft / Stratford CT	SS / FFP	AMCOM	Dec 2015	Jul 2016	107	11,136.047	Y		Jan 2010
Airframes/CFE ^(†)		2017	Sikorsky Aircraft / Stratford CT	SS / FFP	AMCOM	Dec 2016	Jun 2017	36	16,179.583	Y		Apr 2014

Advance Procurement

CFE Airframe		2015	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2014	Jun 2015	70	3,138.200			
CFE Airframe		2016	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Jan 2015	Jul 2016	82	3,138.200			
CFE Airframe		2017	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2016	Jun 2017	36	3,138.200			
Auxiliary Power Unit		2015	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2014	Jun 2015	70	87.000			
Auxiliary Power Unit		2016	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Jan 2015	Jul 2016	82	87.000			
Auxiliary Power Unit		2017	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2016	Jun 2017	36	87.000			
Engines		2015	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2014	Jun 2015	140	666.000			
Engines		2016	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Jan 2015	Jul 2016	164	666.000			
Engines		2017	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2016	Jun 2017	72	666.000			
EGI		2015	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2014	Jun 2015	140	107.000			
EGI		2016	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Jan 2015	Jul 2016	164	107.000			
EGI		2017	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2016	Jun 2017	72	107.000			
Heads Up Display AVS-7		2015	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2014	Jun 2015	70	65.000			
Heads Up Display AVS-7		2016	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Jan 2015	Jul 2016	82	65.000			
Heads Up Display AVS-7		2017	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2016	Jun 2017	36	65.000			
Hover Infrared Suppressor		2015	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2014	Jun 2015	-	-			

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)	Item Number / Title [DODIC]: A05002 / UH-60 BLACK HAWK (MYP)
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Miscellaneous		2015	See End Item P-5A/ NA / See End Item P-5A	Various	See End Item P-5A	Dec 2014	Jun 2015	-	-			

^(†) indicates the presence of a P-21

Remarks:

FY 2012 began the current five (5) year multi-year (MY8), multi-service contract for the H-60Ms.

Delivery schedules appear to extend beyond the 12 month period for the following reasons:

Yearly procurements consist of UH-60M, HH-60M and supplemental aircraft. Each of the three are awarded on different contract line items. While each of these efforts deliver all of their aircraft within a 12 month span, they do not deliver within the same 12 month time period.

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)	Item Number / Title [DODIC]: A05002 / UH-60 BLACK HAWK (MYP)
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2015												Fiscal Year 2016												BALANCE		
O C O #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015												Calendar Year 2016													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P	
Airframes/CFE																																
Prior Years Deliveries: 679																																
1		2015	ARMY	87	-	87			A -	-	-	-	-	-	1	1	7	2	7	10	6	13	6	5	6	6	6	3	2	2	4	
1		2015	NAVY ^(‡)	37	-	37			A -	-	-	-	-	-	-	2	1	2	1	1	1	-	2	2	3	2	2	2	3	2	11	
1		2015	FMS ^(‡)	12	-	12			A -	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	
1		2015	Total	136	-	136			-	-	-	-	-	-	1	4	9	5	9	12	8	14	9	8	10	9	9	5	5	4	15	
1		2016	ARMY	107	-	107															A -	-	-	-	-	-	-	6	6	6	89	
1		2016	NAVY ^(‡)	29	-	29															A -	-	-	-	-	-	-	-	-	-	29	
1		2016	FMS ^(‡)	28	-	28															A -	-	-	-	-	-	-	1	1	1	25	
1		2016	Total	164	-	164															-	-	-	-	-	-	-	7	7	7	143	
1		2017	ARMY	36	-	36																									36	
									O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20 **P-1 Line Item Number / Title:** AA0005 / UH-60 Blackhawk M Model (MYP) **Item Number / Title [DODIC]:** A05002 / UH-60 BLACK HAWK (MYP)

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2017													Fiscal Year 2018												BALANCE			
O C O #	M F R #	FY	SERVICE	PROC QTY	ACCEPT TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017													Calendar Year 2018													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P		
Airframes/CFE																																	
Prior Years Deliveries: 679																																	
1	2015	ARMY	87	83	4	-	3	1	-																			-					
1	2015	NAVY ^(‡)	37	26	11	3	3	3	2																			-					
1	2015	FMS ^(‡)	12	12	-	-	-	-	-																			-					
1	2015	Total	136	121	15	3	6	4	2																			-					
1	2016	ARMY	107	18	89	6	6	6	2	6	11	11	10	11	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	
1	2016	NAVY ^(‡)	29	-	29	-	-	-	-	2	4	3	4	2	2	2	2	2	2	2	2	-	-	-	-	-	-	-	-	-	-		
1	2016	FMS ^(‡)	28	3	25	1	1	1	1	2	2	2	2	2	2	2	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-		
1	2016	Total	164	21	143	7	7	7	3	10	17	16	16	15	6	6	6	6	6	5	4	2	2	2	2								
1	2017	ARMY	36	-	36									4	3	4	3	3	2	2	4	3	3	3		2							
										O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)	Item Number / Title [DODIC]: A05002 / UH-60 BLACK HAWK (MYP)
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Sikorsky Aircraft - Stratford CT	18	96	120	8	3	6	9	-	3	6	9

(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule. "A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary	P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)
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Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,149.415	117.138	127.079	174.107	-	174.107	144.953	85.683	144.386	141.725	Continuing	Continuing
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,149.415	117.138	127.079	174.107	-	174.107	144.953	85.683	144.386	141.725	Continuing	Continuing
Total Obligation Authority (<i>\$ in Millions</i>)	1,149.415	117.138	127.079	174.107	-	174.107	144.953	85.683	144.386	141.725	Continuing	Continuing

Description:

The Advance Procurement for the UH-60 Black Hawk contains funding for the airframe and engine contracts as well as funding for Government Furnished Equipment (GFE) to support the UH-60 aircraft and mission kit production. GFE (in addition to the engine) currently requiring advance procurement includes numerous communication, navigation, and Aircraft Survivability Equipment items procured by the Communications and Electronics Command (CECOM).

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary	P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)
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Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-10	A05002 / UH-60 BLACK HAWK (MYP)		679 / 1,149.415	87 / 117.138	107 / 127.079	36 / 174.107	- / -	36 / 174.107
P-40	Total Gross/Weapon System Cost		679 / 1,149.415	87 / 117.138	107 / 127.079	36 / 174.107	- / -	36 / 174.107

*Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2017 procures long lead items such as T700-GE-701D engines and avionics components for the FY 2017-FY 2021 multi-year contract.

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Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2017 Army					Date: February 2016	
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20		P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)			P-5 Number / Title: A05002 / UH-60 BLACK HAWK (MYP)	
First System (2017) Award Date: May 2005		First System (2017) Completion Date: June 2006		Interval Between Systems: 18 Months		
UH-60 BLACK HAWK (MYP)		Production Leadtime <i>(Months)</i>	Prior Years <i>(Each)</i>	FY 2015 <i>(Each)</i>	FY 2016 <i>(Each)</i>	FY 2017 <i>(Each)</i>
Quantity			679	87	107	36
Cost Elements		When Required <i>(Months)</i>	Prior Years <i>(\$ M)</i>	FY 2015 <i>(\$ M)</i>	FY 2016 <i>(\$ M)</i>	FY 2017 <i>(\$ M)</i>
Other						
CFE Airframe ^(†)		6	555.772	31.940	76.875	112.975
Auxiliary Power Unit ^(†)		3	27.851	4.347	2.560	3.133
Engines ^(†)		3	432.920	66.798	39.368	47.953
EGI ^(†)		3	66.489	10.790	6.354	7.705
Heads Up Display AVS-7 ^(†)		3	21.773	3.263	1.922	2.341
Hover Infrared Suppressor ^(†)		1	28.959	-	-	-
Miscellaneous ^(†)		1	15.651	-	-	-
Total: Other			1,149.415	117.138	127.079	174.107
Total Advance Procurement/Obligation Authority			1,149.415	117.138	127.079	174.107

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2017 Army						Date: February 2016	
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20		P-1 Line Item Number / Title: AA0005 / UH-60 Blackhawk M Model (MYP)				P-5 Number / Title: A05002 / UH-60 BLACK HAWK (MYP)	
Cost Elements	QPA <i>(Each)</i>	FY 2017					
		Production Leadtime <i>(Months)</i>	Unit Cost <i>(\$ K)</i>	Contract Forecast Date	2017 Qty <i>(Each)</i>	For FY	Total Cost Request <i>(\$ M)</i>
Other							
CFE Airframe ^(†)	1	18	3,138.200	Dec 2016	36		112.975
Auxiliary Power Unit ^(†)	1	6	87.000	Dec 2016	36		3.133
Engines ^(†)	2	14	666.000	Dec 2016	72		47.953
EGI ^(†)	2	12	107.000	Dec 2016	72		7.705
Heads Up Display AVS-7 ^(†)	1	9	65.000	Dec 2016	36		2.341
Hover Infrared Suppressor ^(†)	-						-
Miscellaneous ^(†)	-						-
<i>Total: Other</i>							174.107
Total Advance Procurement/Obligation Authority							174.107

Description:

N/A

^(†) indicates the presence of Contract Data presented in the associated P-5 Item's P-5a exhibit.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:** A05009 / UH-60 BLACK HAWK A AND L MODELS

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	46	38	-	38	36	34	48	50	-	252
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	55.441	46.173	-	46.173	75.133	167.079	209.205	213.716	-	766.747
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	55.441	46.173	-	46.173	75.133	167.079	209.205	213.716	-	766.747
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	55.441	46.173	-	46.173	75.133	167.079	209.205	213.716	-	766.747

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	1,205.239	1,215.079	-	1,215.079	2,087.028	4,914.088	4,358.438	4,274.320	-	3,042.647

Description:

UH-60 A and L Models include UH-60 A to L conversions in FY16 through FY18 and UH-60L Digital, now designated as UH-60V, production starting in FY18. The UH-60 BLACKHAWK helicopter is the Army's utility helicopter in the future force. It is a twin engine, single rotor, four bladed utility helicopter used for air assault, general support, command & control, and aero-medical evacuations (MEDEVAC). The UH-60 is joint force capable, providing 24 hour/day support including operations at night and in adverse weather conditions. The UH-60 is designed to carry a crew of four plus eleven combat equipped troops or an external load up to 9,000 pounds. The UH-60 BLACK HAWK was fielded in 1978 as a replacement for the UH-1. From 1978 to 1988, UH-60As were produced. In 1989 production of UH-60Ls with improved engines and drive train began. In 2007, full rate production of UH-60Ms began which provided a digital cockpit, digital Flight Management System (FMS), improved engine, and wide-cord main rotor blades. The UH-60V provides an integrated digital map, integrated performance planning, common functionality and commonality of training with UH-60M.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	8	-	-	-	-	17	31	35
	Total Obligation Authority	-	9.567	-	-	-	-	83.539	135.112	149.601
ANG	Quantity	-	38	38	-	38	36	17	17	15
	Total Obligation Authority	-	45.874	46.173	-	46.173	75.133	83.540	74.093	64.115
Total: Secondary Distribution	Quantity	-	46	38	-	38	36	34	48	50
	Total Obligation Authority	-	55.441	46.173	-	46.173	75.133	167.079	209.205	213.716

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:**
A05009 / UH-60 BLACK HAWK A AND L MODELS

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A05009 / UH-60 A and L Models (A05009) (Operational)			- / -	- / -	46 / 55.441	38 / 46.173	- / -	38 / 46.173
P-40	Total Gross/Weapon System Cost			- / -	- / -	46 / 55.441	38 / 46.173	- / -	38 / 46.173

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A05009 / UH-60 A and L Models (A05009) (Operational)			36 / 75.133	34 / 167.079	48 / 209.205	50 / 213.716	- / -	252 / 766.747
P-40	Total Gross/Weapon System Cost			36 / 75.133	34 / 167.079	48 / 209.205	50 / 213.716	- / -	252 / 766.747

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY17 base procurement dollars in the amount of \$46.173M will procure 38 UH-60 A to L conversions. The UH-60 A to L conversion program expands the current UH-60 A to A recapitalization/rebuild program to a UH-60 A to L recapitalization/rebuild program. Effective in FY16, all A to L conversions and UH-60V conversions will be procured under this line, A05009. Prior to FY16 the funding for UH-60 A to L conversions was utilized under Black Hawk Modifications line AA0492.

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Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20				P-1 Line Item Number / Title: A05009 / UH-60 BLACK HAWK A AND L MODELS				Modification Number / Title: A05009 / UH-60 A and L Models (A05009)				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	46	38	-	38	36	34	48	50	-	252
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	55.441	46.173	-	46.173	75.133	167.079	209.205	213.716	-	766.747
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	55.441	46.173	-	46.173	75.133	167.079	209.205	213.716	-	766.747
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	55.441	46.173	-	46.173	75.133	167.079	209.205	213.716	-	766.747
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	1,205.239	1,215.079	-	1,215.079	2,087.028	4,914.088	4,358.438	4,274.320	-	3,042.647

Description:

UH-60 A and L Models includes UH-60 A to L conversions and the UH-60L Digital conversions, now designated as UH-60V.

UH-60V aircraft cost includes all digital components and their associated cost, as well as Engineering Changes, Systems Engineering and Program Management, Trainers, Data and Fielding.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	8	-	-	-	-	17	31	35
	Total Obligation Authority	-	9.567	-	-	-	-	83.539	135.112	149.601
ANG	Quantity	-	38	38	-	38	36	17	17	15
	Total Obligation Authority	-	45.874	46.173	-	46.173	75.133	83.540	74.093	64.115
Total: Secondary Distribution	Quantity	-	46	38	-	38	36	34	48	50
	Total Obligation Authority	-	55.441	46.173	-	46.173	75.133	167.079	209.205	213.716

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20				P-1 Line Item Number / Title: A05009 / UH-60 BLACK HAWK A AND L MODELS						Modification Number / Title: A05009 / UH-60 A and L Models (A05009)			
Models of Systems Affected: UH-60 A and L				Modification Type: Operational				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 2: UH-60A to UH-60L Conversions</i>													
A Kits													
Recurring													
Other													
	-	-	46 / 55.441	38 / 46.173	-	38 / 46.173	26 / 36.380	-	-	-	-	110 / 137.994	
<i>Subtotal: Recurring</i>													
	-	-	- / 55.441	-	-	-	-	-	-	-	-	-	
<i>Subtotal: UH-60A to UH-60L Conversions</i>													
	-	-	46 / 55.441	38 / 46.173	-	38 / 46.173	26 / 36.380	-	-	-	-	110 / 137.994	
<i>Modification Item 2 of 2: UH-60V</i>													
A Kits													
Recurring													
Other													
	-	-	-	-	-	-	10 / 33.147	34 / 147.637	48 / 181.208	50 / 183.970	-	142 / 545.962	
<i>Subtotal: Recurring</i>													
	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Subtotal: UH-60V</i>													
	-	-	-	-	-	-	10 / 33.147	34 / 147.637	48 / 181.208	50 / 183.970	-	142 / 545.962	
<i>Subtotal: Procurement, All Modification Items</i>													
	-	-	46 / 55.441	38 / 46.173	-	38 / 46.173	36 / 69.527	34 / 147.637	48 / 181.208	50 / 183.970	-	252 / 683.956	
Installation													
<i>Modification Item 1 of 2: UH-60A to UH-60L Conversions</i>													
	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Modification Item 2 of 2: UH-60V</i>													
	-	-	-	-	-	-	10 / 5.606	34 / 19.442	48 / 27.997	50 / 29.746	-	142 / 82.791	
<i>Subtotal: Installation</i>													
	-	-	-	-	-	-	10 / 5.606	34 / 19.442	48 / 27.997	50 / 29.746	-	142 / 82.791	
Total													
Total Cost (Procurement + Support + Installation)													
	-	-	55.441	46.173	-	46.173	75.133	167.079	209.205	213.716	-	766.747	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05009 / UH-60 BLACK HAWK A AND L MODELS	Modification Number / Title: A05009 / UH-60 A and L Models (A05009)

Modification Item 1 of 2: UH-60A to UH-60L Conversions

Manufacturer Information

Manufacturer Name: Corpus Christi Army Depot	Manufacturer Location: Corpus Christi Army Depot
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		Oct 2015	Oct 2016	Oct 2017			
Delivery Dates		Oct 2016	Oct 2017	Oct 2018			

Installation Information

Method of Implementation: Depot

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
In	-	-	-	-	-	12	12	12	10	10	10	9	9	7	7	7	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	-	-	-	-	-	-	-	-	-	12	12	12	10	10	10	9	9	7	7	7	5	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05009 / UH-60 BLACK HAWK A AND L MODELS	Modification Number / Title: A05009 / UH-60 A and L Models (A05009)

Modification Item 2 of 2: UH-60V

Manufacturer Information

Manufacturer Name: Corpus Christi Army Depot	Manufacturer Location: Corpus Christi Army Depot
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates				Oct 2017	Oct 2018	Oct 2019	Oct 2020
Delivery Dates				Oct 2018	Oct 2019	Oct 2020	Oct 2021

Installation Information

Method of Implementation: Depot

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	10 / 5.606	- / -	- / -	- / -	- / -	10 / 5.606
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	34 / 19.442	- / -	- / -	- / -	34 / 19.442
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	48 / 27.997	- / -	- / -	48 / 27.997
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	50 / 29.746	- / -	50 / 29.746
Total	- / -	- / -	- / -	- / -	- / -	- / -	10 / 5.606	34 / 19.442	48 / 27.997	50 / 29.746	- / -	142 / 82.791

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	9	9	9	7	12	12	12	12	13	13	12	12	613	755
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	9	9	9	7	12	12	12	12	663	755

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:** A05101 / CH-47 Helicopter

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	250	32	39	22	-	22	13 ^(a)	6	8	14	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	6,930.334	982.880	1,106.948	655.601	-	655.601	574.216 ^(b)	128.695	170.911	432.655	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	347.624	90.376	102.361	99.344	-	99.344	8.707	17.820	24.235	43.532	Continuing	Continuing
Net Procurement (P-1) (<i>\$ in Millions</i>)	6,582.710	892.504	1,004.587	556.257	-	556.257	565.509	110.875	146.676	389.123	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	438.000	102.361	99.344	8.707	-	8.707	17.820	24.235	43.532	37.792	Continuing	Continuing
Total Obligation Authority (<i>\$ in Millions</i>)	7,020.710	994.865	1,103.931	564.964	-	564.964	583.329	135.110	190.208	426.915	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	27,721.336	30,715.000	28,383.282	29,800.046	-	29,800.046	44,170.462	21,449.167	21,363.875	30,903.929	Continuing	Continuing

Description:

The CH-47F Chinook is a twin-turbine, tandem-rotor, heavy-lift transport helicopter with a useful load of up to 25,000 pounds. As the Army's only heavy lift helicopter, the CH-47F Improved Cargo helicopter is an essential component of the Army Future Force. The mission of the CH-47F is to transport troops (including air assault), supplies, weapons, and other cargo in general support operations. The CH-47F is vital to Overseas Contingency Operations and Homeland Security needs of our nation. Secondary missions include medical evacuation, aircraft recovery, parachute drops, disaster relief, and search and rescue. These aircraft are fielded to heavy helicopter companies and Special Operations Aviation. The CH-47F is expected to remain the Army's heavy lift helicopter until at least the 2038 timeframe. The CH-47F ReNew Program will provide a more reliable, less costly to operate aircraft compatible with Joint digital connectivity requirements in the Future Force. Key product improvements integrate a new-machined airframe, a performance capability, Common Avionics Architecture System, Air Warrior, Common Missile Warning System, enhanced air transportability, Digital Advance Flight Control System (DAFCS) and an Extended Range Fuel System II for self-deployment missions. The CH-47F program extends the Army's Chinook fleets useful life 20 years incorporating reliability and maintainability improvements including airframe tuning for vibration reduction, corrosion protection, digital source collectors, Transportable Flight Proficiency Simulators, Cargo Floor Handling System, Ballistic Protection System, Transformation Sets, Kits and Outfits, Aviation Training Devices, M240 Window/Door Gun Mounts and an automated maintenance program with a 400-hour phase interval. The ReNew program rebuilds and replaces CH-47Ds and 61 Special Operations Aviation MH-47s to the CH-47F/MH-47G configuration. The New Build program procures all CH-47F New Build aircraft and 8 Special Operations Aviation MH-47G New Build aircraft. The CH-47F PM is fielding and training Combat Aviation Brigades (CABs), NG/USAR units using a New Equipment Training team. The CH-47F program is currently in the fourth year of a second five-year Multiyear (MY) contract (FY13 to FY17) that was awarded on 10 Jun 2013.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	26	39	22	-	22	4	6	8	14
	Total Obligation Authority	843.420	1,103.931	564.964	-	564.964	132.804	135.110	190.208	426.915
AR	Quantity	6	-	-	-	-	9 ⁽ⁱ⁾	-	-	-
	Total Obligation Authority	151.445	-	-	-	-	450.525 ⁽ⁱ⁾	-	-	-
Total:	Quantity	32	39	22	-	22	13	6	8	14
Secondary Distribution	Total Obligation Authority	994.865	1,103.931	564.964	-	564.964	583.329	135.110	190.208	426.915

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
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Component Budget Years Quantity values do not sum to the represented total intentionally:
 (i) Army Reserve - FY 2018 Quantity Delta: 9

Component Budget Years Cost values do not sum to the represented total intentionally:
 (i) Army Reserve - FY 2018 Cost Delta: 450.525 million

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:** A05101 / CH-47 Helicopter

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A05008 / CH-47 NEW BUILD	P-5a, P-21		171 / 4,608.477	6 / 236.243	12 / 357.820	- / -	- / -	- / -
P-3a	A05105 / CH-47 SLEP (.)			79 / 2,321.855	26 / 746.637	27 / 749.128	22 / 655.601	- / -	22 / 655.601
P-40	Total Gross/Weapon System Cost			250 / 6,930.334	32 / 982.880	39 / 1,106.948	22 / 655.601	- / -	22 / 655.601

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A05008 / CH-47 NEW BUILD	P-5a, P-21		- / -	- / -	- / -	- / -	- / -	- / -
P-3a	A05105 / CH-47 SLEP (.)			4 / 123.691	6 / 128.695	8 / 170.911	14 / 432.655	Continuing	Continuing
P-40	Total Gross/Weapon System Cost			13 / 574.216	6 / 128.695	8 / 170.911	14 / 432.655	Continuing	Continuing

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY17 Base procurement dollars in the amount of \$564.964 million will procure 22 renew aircraft.

Note: By having a Multi-year contract versus 5 single year contracts yielded a cost avoidance (\$810M) FY13 through FY17.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

Efforts with funding starting in FY 2018 through FY 2021 are summarized on the P-40. Not all details of this funding are included in this P-40 exhibit set. A summary of the excepted details is as follows:

(a) FY 2018 Quantity Delta: 9

(b) FY 2018 Cost Delta: 450.525 million

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Exhibit P-5, Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter	Item Number / Title [DODIC]: A05008 / CH-47 NEW BUILD
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ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	171	6	12	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	4,608.477	236.243	357.820	-	-	-	-	-	-	-	-	-
Less PY Advance Procurement <i>(\$ in Millions)</i>	32.759	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	4,575.718	236.243	357.820	-	-	-	-	-	-	-	-	-
Plus CY Advance Procurement <i>(\$ in Millions)</i>	32.759	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	4,608.477	236.243	357.820	-	-	-	-	-	-	-	-	-

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	26,950.158	39,373.833	29,818.333	-	-	-	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Airframes/CFE ^(†)	17,741.540	171	3,033.804	22,098.333	6	132.590	21,982.583	12	263.791	-	-	-	-	-	-	-	-	-
Engine/Accessories	879.030	326	286.564	1,062.667	12	12.752	1,057.083	24	25.370	-	-	-	-	-	-	-	-	-
CFE Avionics	-	-	177.614	-	-	8.296	-	-	16.506	-	-	-	-	-	-	-	-	-
GFE	-	-	291.360	-	-	18.507	-	-	37.377	-	-	-	-	-	-	-	-	-
ECO (Flyaway)	-	-	66.541	-	-	6.541	-	-	-	-	-	-	-	-	-	-	-	-
Training/Data/Software/ECOs/SEPM	-	-	124.804	-	-	8.303	-	-	7.491	-	-	-	-	-	-	-	-	-
SOA Aircraft	-	-	161.295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PSE	-	-	19.281	-	-	0.939	-	-	0.518	-	-	-	-	-	-	-	-	-
Peculiar Training Equipment	-	-	32.856	-	-	2.428	-	-	4.109	-	-	-	-	-	-	-	-	-
Publications/Tech Data	-	-	8.081	-	-	0.122	-	-	0.202	-	-	-	-	-	-	-	-	-
ECO (Support Items)	-	-	3.249	-	-	0.202	-	-	0.112	-	-	-	-	-	-	-	-	-
NET	-	-	82.856	-	-	3.450	-	-	-	-	-	-	-	-	-	-	-	-
Other support costs	-	-	68.676	-	-	3.543	-	-	-	-	-	-	-	-	-	-	-	-
Post Production Modifications	-	-	228.167	-	-	37.408	-	-	-	-	-	-	-	-	-	-	-	-
Initial Spares	-	-	23.330	-	-	1.162	-	-	2.344	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	4,608.477	-	-	236.243	-	-	357.820	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter	Item Number / Title [DODIC]: A05008 / CH-47 NEW BUILD

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Flyaway Cost</i>	-	-	4,608.477	-	-	236.243	-	-	357.820	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	26,950.158	171	4,608.477	39,373.833	6	236.243	29,818.333	12	357.820	-	-	-	-	-	-	-	-	-

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)

Flyaway Cost																		
Recurring Cost																		
Airframes/CFE ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine/Accessories	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CFE Avionics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GFE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ECO (Flyaway)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training/Data/Software/ECOs/SEPM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOA Aircraft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Peculiar Training Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Publications/Tech Data	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ECO (Support Items)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other support costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Post Production Modifications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Initial Spares	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Flyaway Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	6	12	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter	Item Number / Title [DODIC]: A05008 / CH-47 NEW BUILD
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ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

	Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
	Total Obligation Authority	236.243	357.820	-	-	-	-	-	-	-
Total:	Quantity	6	12	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	236.243	357.820	-	-	-	-	-	-	-

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter	Item Number / Title [DODIC]: A05008 / CH-47 NEW BUILD
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Airframes/CFE ^(†)		2012	The Boeing Company / Ridley Park, PA	SS / FFP	AMCOM	Jan 2012	Oct 2014	25	16,080.000	N		Apr 2007
Airframes/CFE ^(†)		2013	The Boeing Company / Ridley Park, PA	SS / FFP	AMCOM	Jun 2013	Mar 2015	17	9,133.710	N		Jul 2011
Airframes/CFE ^(†)		2014	The Boeing Company / Ridley Park, PA	SS / FFP	AMCOM	Dec 2013	Mar 2016	17	9,133.710	N		Jul 2011
Airframes/CFE ^(†)		2015	The Boeing Company / Ridley Park, PA	SS / FFP	AMCOM	Mar 2015	Mar 2017	6	22,098.333	N		Jul 2011
Airframes/CFE ^(†)		2016	The Boeing Company / Ridley Park, PA	SS / FFP	AMCOM	Dec 2015	Mar 2018	12	21,982.583	N		Jul 2011

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter	Item Number / Title [DODIC]: A05008 / CH-47 NEW BUILD
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2012														Fiscal Year 2013														B A L A N C E	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 1	BAL D U E A S O F 1 O C T	Calendar Year 2012														Calendar Year 2013														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
Airframes/CFE																																			
Prior Years Deliveries: 112																																			
1		2012	ARMY	25	-	25				A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25					
1		2013	ARMY	17	-	17																					A	-	-	-	-	17			
1		2013	FMS (†)	14	-	14																					A	-	-	-	-	14			
1		2013	Total	31	-	31																					-	-	-	-	31				
1		2014	ARMY	17	-	17																									17				
1		2015	ARMY	6	-	6																									6				
1		2016	ARMY	12	-	12																									12				
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: PB 2017 Army															Date: February 2016														
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20										P-1 Line Item Number / Title: A05101 / CH-47 Helicopter										Item Number / Title [DODIC]: A05008 / CH-47 NEW BUILD									

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2014													Fiscal Year 2015													BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014													Calendar Year 2015													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
Airframes/CFE																																	
Prior Years Deliveries: 112																																	
1		2012	ARMY	25	-	25	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	23		
1		2013	ARMY	17	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	2	3	2	
1		2013	FMS (†)	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14		
1		2013	Total	31	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	2	3	2	16
1		2014	ARMY	17	-	17			A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17		
1		2015	ARMY	6	-	6																				A -	-	-	-	-	-	6	
1		2016	ARMY	12	-	12																									12		

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20 **P-1 Line Item Number / Title:** A05101 / CH-47 Helicopter **Item Number / Title [DODIC]:** A05008 / CH-47 NEW BUILD

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2016														Fiscal Year 2017												BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016														Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
Airframes/CFE																																	
Prior Years Deliveries: 112																																	
1		2012	ARMY	25	2	23																								23			
1		2013	ARMY	17	15	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1		2013	FMS (†)	14	-	14	-	-	-	-	-	1	1	1	2	3	2	1	2	1										-			
1		2013	Total	31	15	16	2	-	-	-	-	1	1	1	2	3	2	1	2	1										-			
1		2014	ARMY	17	-	17	-	-	-	-	-	2	2	2	1															10			
1		2015	ARMY	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2			2			
1		2016	ARMY	12	-	12			A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		12			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20 **P-1 Line Item Number / Title:** A05101 / CH-47 Helicopter **Item Number / Title [DODIC]:** A05008 / CH-47 NEW BUILD

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2018												Fiscal Year 2019												BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018												Calendar Year 2019												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P
Airframes/CFE																															
Prior Years Deliveries: 112																															
1		2012	ARMY	25	2	23																							23		
1		2013	ARMY	17	17	-																							-		
1		2013	FMS (†)	14	14	-																							-		
1		2013	Total	31	31	-																							-		
1		2014	ARMY	17	7	10																							10		
1		2015	ARMY	6	4	2																							2		
1		2016	ARMY	12	-	12	-	-	-	-	-	-	2	2	2	2	2	2	2										-		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter	Item Number / Title [DODIC]: A05008 / CH-47 NEW BUILD
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	The Boeing Company - Ridley Park, PA	24	24	72	5	5	28	33	-	-	-	-

(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule. "A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20			P-1 Line Item Number / Title: A05101 / CH-47 Helicopter				Modification Number / Title: A05105 / CH-47 SLEP				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	79	26	27	22	-	22	4	6	8	14	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,321.855	746.637	749.128	655.601	-	655.601	123.691	128.695	170.911	432.655	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	341.050	90.376	102.361	99.344	-	99.344	8.707	17.820	24.235	43.532	Continuing	Continuing
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,980.805	656.261	646.767	556.257	-	556.257	114.984	110.875	146.676	389.123	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	405.241	102.361	99.344	8.707	-	8.707	17.820	24.235	43.532	37.792	Continuing	Continuing
Total Obligation Authority (<i>\$ in Millions</i>)	2,386.046	758.622	746.111	564.964	-	564.964	132.804	135.110	190.208	426.915	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	29,390.570	28,716.808	27,745.482	29,800.046	-	29,800.046	30,922.750	21,449.167	21,363.875	30,903.929	Continuing	Continuing

Description:

The CH-47F Chinook is a twin-turbine, tandem-rotor, heavy lift transport helicopter with a useful load of up to 25,000 pounds. The ReNew program will provide a more reliable, less costly to operate aircraft compatible with Joint digital connectivity requirements in the Future Force. The ReNew Program produces an identical aircraft as the CH-47F New Build program with the exception of dynamic components including engine, transmission and drive train. During production, the aircraft receives a new airframe, cockpit, wiring and plumbing. The majority of the airframe build is exactly the same as a new build. The major differences are the RECAP of Dynamic Components, Fuel Pods, and some cockpit components.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	20	27	22	-	22	4	6	8	14
	Total Obligation Authority	607.177	746.111	564.964	-	564.964	132.804	135.110	190.208	426.915
AR	Quantity	6	-	-	-	-	-	-	-	-
	Total Obligation Authority	151.445	-	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	26	27	22	-	22	4	6	8	14
	Total Obligation Authority	746.637	749.128	655.601	-	655.601	123.691	128.695	170.911	432.655

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20					P-1 Line Item Number / Title: A05101 / CH-47 Helicopter					Modification Number / Title: A05105 / CH-47 SLEP			
Models of Systems Affected: CH-47				Modification Type: .				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1: CH-47 D to F Conversion</i>													
A Kits													
Recurring													
Recurring Production (Mods)	79 / 1,849.649	26 / 634.317	27 / 671.169	22 / 569.433	- / -	22 / 569.433	- / -	- / -	- / -	6 / 118.609	Continuing	Continuing	
MH-47G Common Funding (SOA)	- / -	- / -	- / -	- / -	- / -	- / -	4 / 72.000	6 / 110.160	8 / 149.818	8 / 152.814	Continuing	Continuing	
Other Flyaway	0 / 229.856	- / 171.386	- / 53.604	- / 51.799	- / -	- / 51.799	- / 1.317	- / -	- / 21.093	- / 51.709	Continuing	Continuing	
Other Support	0 / 141.107	- / 23.797	- / 13.995	- / 20.389	- / -	- / 20.389	- / -	- / -	- / -	- / 49.185	Continuing	Continuing	
Training	0 / 55.274	- / 8.035	- / 9.246	- / 13.980	- / -	- / 13.980	- / 50.374	- / 18.535	- / -	- / 14.250	Continuing	Continuing	
Support Equipment	0 / 16.169	- / 9.102	- / 1.114	- / -	- / -	- / -	- / -	- / -	- / -	- / 46.088	Continuing	Continuing	
Post Production (Mods)	0 / 29.800	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 29.800	
Subtotal: Recurring	- / 2,321.855	- / 746.637	- / 749.128	- / 655.601	- / -	- / 655.601	- / 123.691	- / 128.695	- / 170.911	- / 432.655	Continuing	Continuing	
Subtotal: CH-47 D to F Conversion	79 / 2,321.855	26 / 746.637	27 / 749.128	22 / 655.601	- / -	22 / 655.601	4 / 123.691	6 / 128.695	8 / 170.911	14 / 432.655	Continuing	Continuing	
Subtotal: Procurement, All Modification Items	79 / 2,321.855	26 / 746.637	27 / 749.128	22 / 655.601	- / -	22 / 655.601	4 / 123.691	6 / 128.695	8 / 170.911	14 / 432.655	Continuing	Continuing	
Installation													
<i>Modification Item 1 of 1: CH-47 D to F Conversion</i>	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Subtotal: Installation	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	2,321.855	746.637	749.128	655.601	-	655.601	123.691	128.695	170.911	432.655	Continuing	Continuing	

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter	Modification Number / Title: A05105 / CH-47 SLEP

Modification Item 1 of 1: CH-47 D to F Conversion

Manufacturer Information

Manufacturer Name: Boeing	Manufacturer Location: Ripley, PA
Administrative Leadtime (in Months): 5	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Jan 2015	Jan 2016	Jan 2017	Jan 2018	Jan 2019	Jan 2020	Jan 2021
Delivery Dates	Jan 2016	Jan 2017	Jan 2018	Jan 2019	Jan 2020	Jan 2021	Jan 2022

Installation Information

Method of Implementation: Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	73	6	7	7	7	7	6	7	7	7	6	7	7	2	1	1	1	1	1	2	1	2	2	2	2	2	2	2	2	53	233
Out	52	5	5	6	5	6	7	7	7	7	6	7	7	7	6	7	7	2	1	1	1	1	1	2	1	2	2	2	2	61	233

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter
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Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Gross/Weapon System Cost (<i>\$ in Millions</i>)	438.000	102.361	99.344	8.707	-	8.707	17.820	24.235	43.532	37.792	Continuing	Continuing
Net Procurement (P-1) (<i>\$ in Millions</i>)	438.000	102.361	99.344	8.707	-	8.707	17.820	24.235	43.532	37.792	Continuing	Continuing
Total Obligation Authority (<i>\$ in Millions</i>)	438.000	102.361	99.344	8.707	-	8.707	17.820	24.235	43.532	37.792	Continuing	Continuing

Description:

The CH-47F Chinook is a twin-turbine, tandem-rotor, heavy-lift transport helicopter with a useful load of up to 25,000 pounds. The CH-47F Improved Cargo Helicopter is an essential component of the Army Future Force. The CH-47F program fills the Army's Aviation Transformation Chinook requirement. Key product improvements integrate the CH-47F Common Avionics Architecture System (CAAS) digital cockpit which meets the Net-Ready Key Performance Parameters (KPPs) and also includes a digital data bus that permits installation of enhanced communication and navigation equipment for improved situational awareness, mission performance, and survivability. The new digital cockpit incorporates all new airframe components and modifies the aircraft to reduce vibration. New airframe structural components and modifications will reduce harmful vibrations, improving operation and support (O&S) efficiency and crew endurance. Other airframe modifications reduce by 60 percent the time required for aircraft tear down and build-up after C-5/C-17 deployment. These modifications significantly enhance the Chinook's strategic deployment capability.

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Exhibit P-40, Advance Procurement Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 01: Aircraft / BSA 20: Rotary **P-1 Line Item Number / Title:** A05101 / CH-47 Helicopter

Program Elements for Code B Items: N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-10	A05105 / CH-47 SLEP		79 / 405.241	26 / 102.361	27 / 99.344	22 / 8.707	- / -	22 / 8.707
P-40	Total Gross/Weapon System Cost		250 / 438.000	32 / 102.361	39 / 99.344	22 / 8.707	- / -	22 / 8.707

Exhibits Schedule			FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-10	A05105 / CH-47 SLEP		4 / 17.820	6 / 24.235	8 / 43.532	14 / 37.792	Continuing	Continuing
P-40	Total Gross/Weapon System Cost		13 / 17.820	6 / 24.235	8 / 43.532	14 / 37.792	Continuing	Continuing

*Title represents the P-10 Title for Advance Procurement.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY 17 Advanced procurement dollars in the amount of \$8.707 million will procure avionics and airframe advance procurement.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

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Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2017 Army										Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20			P-1 Line Item Number / Title: A05101 / CH-47 Helicopter							P-3a Number / Title: A05105 / CH-47 SLEP		
First System (2017) Award Date: December 2003		First System (2017) Completion Date: December 2006				Interval Between Systems: 2 Months						
CH-47 SLEP		Production Leadtime <i>(Months)</i>	Prior Years <i>(Each)</i>	FY 2015 <i>(Each)</i>	FY 2016 <i>(Each)</i>	FY 2017 <i>(Each)</i>	FY 2018 <i>(Each)</i>	FY 2019 <i>(Each)</i>	FY 2020 <i>(Each)</i>	FY 2021 <i>(Each)</i>	To Complete <i>(Each)</i>	Total <i>(Each)</i>
Quantity			79	26	27	22	4	6	8	14	-	-
Cost Elements		When Required <i>(Months)</i>	Prior Years <i>(\$ M)</i>	FY 2015 <i>(\$ M)</i>	FY 2016 <i>(\$ M)</i>	FY 2017 <i>(\$ M)</i>	FY 2018 <i>(\$ M)</i>	FY 2019 <i>(\$ M)</i>	FY 2020 <i>(\$ M)</i>	FY 2021 <i>(\$ M)</i>	To Complete <i>(\$ M)</i>	Total <i>(\$ M)</i>
Other												
Avionics		16	158.820	40.944	39.722	3.483	7.128	9.694	17.410	15.167	Continuing	Continuing
Airframe		14	246.421	61.417	59.622	5.224	10.692	14.541	26.122	22.625	Continuing	Continuing
<i>Total: Other</i>			405.241	102.361	99.344	8.707	17.820	24.235	43.532	37.792	<i>Continuing</i>	<i>Continuing</i>
Total Advance Procurement/Obligation Authority			405.241	102.361	99.344	8.707	17.820	24.235	43.532	37.792	Continuing	Continuing

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 01 / 20	P-1 Line Item Number / Title: A05101 / CH-47 Helicopter	P-3a Number / Title: A05105 / CH-47 SLEP
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Cost Elements	QPA <i>(Each)</i>	Production Leadtime <i>(Months)</i>	Unit Cost <i>(\$ K)</i>	FY 2017			Total Cost Request <i>(\$ M)</i>
				Contract Forecast Date	2017 Qty <i>(Each)</i>	For FY	
Other							
Avionics	1	15	1,161.000	Jan 2017	3		3.483
Airframe	1	13	1,045.000	Jan 2017	5		5.224
<i>Total: Other</i>							8.707
Total Advance Procurement/Obligation Authority							8.707

Description:
N/A

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	25.313	148.353	43.735	-	43.735	19.962	3.397	3.460	3.406	-	247.626
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	25.313	148.353	43.735	-	43.735	19.962	3.397	3.460	3.406	-	247.626
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	25.313	148.353	43.735	-	43.735	19.962	3.397	3.460	3.406	-	247.626

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	2,572.647	-	2,572.647	-	-	-	-	-	982.643

Description:

Funds in this program were realigned beginning in FY2015 from the shared MQ-1 Payload-UAS funding line (SSN A00020) for more efficient, effective program management. The funds were realigned into a new shared parent SSN, MQ-1 Payloads (MIP) (SSN A01001), which includes the MQ-1 sensor payloads: Synthetic Aperture Radar/Moving Target Indicator (SAR/MTI) (SSN A01003), Signal Intelligence (SIGINT) (SSN A01004), and Common Sensor Payload Full Motion Video (CSP FMV) (SSN A01005).

MQ-1 Payload (MIP) (A01001) budget line is shared between multiple Payload programs and two Program Managers (PM Terrestrial Sensors & PM Sensors - Aerial Intelligence). These Payload programs support the Army's transformation by procuring Reconnaissance, Surveillance and Target Acquisition (RSTA) and Intelligence, Surveillance and Reconnaissance (ISR) payload systems for Brigade Combat Teams, Divisions, and Corps Unmanned Aircraft Systems (UAS). This is in accordance with Headquarters Department of the Army (HQDA) and Training and Doctrine Command (TRADOC) UAS priorities. Common Sensor Payload (CSP), Small Tactical Radar - Lightweight (STARLite), and Tactical Signals Intelligence (SIGINT) Payload (TSP) are principal payloads for the Gray Eagle UAS. The Army Acquisition Objective (AAO) for STARLite and CSP is equivalent to aircraft/platform quantities, one system per Gray Eagle UAS - AAO is commensurate with aircraft quantity (one STARLite and one CSP payload per aircraft). The AAO for TSP is 112 systems.

Common Sensor Payload (CSP) Electro Optical / Infra Red / Laser Designator (EO/IR/LD) provides Full Motion Video (FMV) in both the Electro Optical and Mid Wave IR spectrums with day/night capability to collect and display continuous imagery with the ability to designate targets of interest for attack by laser guided precision weapons in Standard Definition (SD) as well as High Definition (HD) for a select subset of Gray Eagle platforms. CSP is the EO/IR/LD sensor for Gray Eagle UAS which supports intelligence gathering, force applications, battlespace awareness, force protection, and net-centric operations across the battlefield to provide wide area, near real time RSTA capabilities. Additional initiatives will continue to focus on the transition of technologies directly supporting emerging requirements and the Army's Current and Future Force. CSP is a Key Performance Parameter (KPP) for the Gray Eagle UAS to include the Combat Aviation Brigade (CAB), US Army Special Operations Aviation Command (ARSOAC) and Aerial Exploitation Battalion (AEB) companies.

Small Tactical Radar - Lightweight (STARLite) SAR/MTI is a lightweight, high performance, all weather, multi-functional radar system for the Gray Eagle Unmanned Aircraft System (UAS). The STARLite system provides wide area, near real time RSTA capabilities. It operates throughout the UAS flight mission profile in adverse weather and through battlefield obscurants. The SAR mode generates quality images for the battlefield commander for detection, classification and location of stationary commercial wheeled vehicle-size targets. The MTI mode detects moving ground targets, to include man-sized detection, and provides location information and performs cross-cue with the Electro-Optic/Infrared (EO/IR) sensors.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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The Tactical Signals Intelligence (SIGINT) Payload (TSP) is a SIGINT sensor, currently under development for the Gray Eagle that detects radio frequency (RF) emitters. The TSP system provides a SIGINT capability to the tactical commander. The TSP system is a modular, scalable payload using an architecture that is software reconfigurable to allow for growth and flexibility as technology, and as the adversaries use of technology changes. This flexible architecture allows for third party software applications to be integrated into the TSP system. The TSP system processing, control and data dissemination is integrated into the Distributed Common Ground System - Army (DCGS-A) via the Operational Ground Station. It supports Manned/Unmanned (MUM) teaming with Brigade Combat Team ground SIGINT Terminal Guidance (STG) teams and manned airborne assets. The TSP system improves situational awareness and shortens the targeting cycle by detecting and identifying emitters associated with high value targets (HVTs). The TSP system is capable of processing conventional signals, standard military signals, and modern signals of interest. This includes detection, recognition, identification, direction finding, and high confidence geo-location.

	Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	6	33	17	-	17	7	-	-	-
	Total Obligation Authority	25.313	148.353	43.735	-	43.735	19.962	3.397	3.460	3.406
Total:	Quantity	6	33	17	-	17	7	-	-	-
Secondary Distribution	Total Obligation Authority	25.313	148.353	43.735	-	43.735	19.962	3.397	3.460	3.406

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	A01003 / SAR/MTI (MIP)	P-5a, P-21		- / -	- / 3.686	18 / 30.220	- / 1.324	- / -	- / 1.324
P-5	A01004 / SIGINT (MIP)	P-5a, P-21		- / -	6 / 13.218	15 / 49.661	17 / 37.682	- / -	17 / 37.682
P-5	A01005 / CSP FMV (MIP)	P-5a, P-21		- / -	- / 8.409	- / 68.472	- / 4.729	- / -	- / 4.729
P-40	Total Gross/Weapon System Cost			- / -	- / 25.313	- / 148.353	- / 43.735	- / -	- / 43.735

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 CSP: FY 2017 base procurement dollars in the amount of \$4.729 million supports integration and initial fielding of eighteen (18) CSP High Definition (HD) payloads in accordance with the updated Gray Eagle requirement to add an additional AEB company and fielding seventy-eight (78) Standard Definition (SD) to HD payload upgrades to six (6) existing CAB companies. Funding also supports Interim Contractor Support (ICS) requirements.

STARLite: FY 2017 base procurement dollars in the amount of \$1.324 Million supports integration and fielding of eighteen (18) additional payloads and the continued interim contractor support.

TSP: FY 2017 base procurement dollars in the amount of \$37.682 Million supports procurement of seventeen (17) TSP payloads along with initial spares and contractor logistics support.

All Quantities are for the Active component.

Comments:
 In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for the homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01003 / SAR/MTI (MIP)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	18	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	3.686	30.220	1.324	-	1.324
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	3.686	30.220	1.324	-	1.324
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	3.686	30.220	1.324	-	1.324

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	1,678.889	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
STARLite System ^(t)	-	-	-	-	-	-	989.000	18	17.802	-	-	-	-	-	-	-	-	-
Spares	-	-	-	-	-	-	-	-	5.339	-	-	-	-	-	-	-	-	-
STARLite PMO Support	-	-	-	-	-	-	-	-	1.618	-	-	0.130	-	-	-	-	-	0.130
Engineering	-	-	-	-	-	1.891	-	-	3.563	-	-	-	-	-	-	-	-	-
ICS/Fielding Support	-	-	-	-	-	1.795	-	-	1.898	-	-	1.194	-	-	-	-	-	1.194
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	3.686	-	-	30.220	-	-	1.324	-	-	-	-	-	1.324
<i>Subtotal: Flyaway Cost</i>	-	-	-	-	-	3.686	-	-	30.220	-	-	1.324	-	-	-	-	-	1.324
Gross/Weapon System Cost	-	-	-	-	-	3.686	1,678.889	18	30.220	-	-	1.324	-	-	-	-	-	1.324

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	18	-	-	-
	Total Obligation Authority	3.686	30.220	1.324	-	1.324
Total:	Quantity	-	18	-	-	-
Secondary Distribution	Total Obligation Authority	3.686	30.220	1.324	-	1.324

^(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01003 / SAR/MTI (MIP)
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
STARLite System ^(†)		2016	Northrop Grumman / Linthicum	C / IDIQ	Linthicum, MD	Feb 2016	Jun 2017	18	989.000	Y		

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10 **P-1 Line Item Number / Title:** A01001 / MQ-1 Payload (MIP) **Item Number / Title [DODIC]:** A01003 / SAR/MTI (MIP)

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2016												Fiscal Year 2017												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016												Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
STARLite System																															
1		2016	ARMY	18	-	18																									

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01003 / SAR/MTI (MIP)
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Northrop Grumman - Linthicum	4	5	5	-	-	-	-	-	4	12	16

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01004 / SIGINT (MIP)

ID Code (A=Service Ready, B=Not Service Ready) :				MDAP/MAIS Code:			
Resource Summary		Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (<i>Units in Each</i>)		-	6	15	17	-	17
Gross/Weapon System Cost (<i>\$ in Millions</i>)		-	13.218	49.661	37.682	-	37.682
Less PY Advance Procurement (<i>\$ in Millions</i>)		-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)		-	13.218	49.661	37.682	-	37.682
Plus CY Advance Procurement (<i>\$ in Millions</i>)		-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)		-	13.218	49.661	37.682	-	37.682
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>							
Initial Spares (<i>\$ in Millions</i>)		-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)		-	2,203.000	3,310.733	2,216.588	-	2,216.588

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
TSP Systems ⁽¹⁾	-	-	-	1,566.000	6	9.396	1,566.000	15	23.490	1,566.000	17	26.622	-	-	-	1,566.000	17	26.622
TSP Engineering Change Proposals	-	-	-	-	-	0.390	-	-	1.301	-	-	0.836	-	-	-	-	-	0.836
TSP Contractor PMO/ System Engineering	-	-	-	-	-	1.412	-	-	1.800	-	-	1.349	-	-	-	-	-	1.349
TSP Government PMO/System Engineering	-	-	-	-	-	0.900	-	-	1.523	-	-	3.109	-	-	-	-	-	3.109
TSP System Test and Evaluation	-	-	-	-	-	0.810	-	-	1.420	-	-	-	-	-	-	-	-	-
TSP Data/Technical Data Package	-	-	-	-	-	0.310	-	-	1.350	-	-	-	-	-	-	-	-	-
TSP Improved Gray Eagle Integration	-	-	-	-	-	-	-	-	8.000	-	-	0.833	-	-	-	-	-	0.833
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	13.218	-	-	38.884	-	-	32.749	-	-	-	-	-	32.749
<i>Subtotal: Hardware Cost</i>	-	-	-	-	-	13.218	-	-	38.884	-	-	32.749	-	-	-	-	-	32.749
Logistics Cost																		
Recurring Cost																		
TSP Initial Spares	-	-	-	-	-	-	-	-	8.577	-	-	-	-	-	-	-	-	-
Interim Contrator Logistic Support	-	-	-	-	-	-	-	-	2.200	-	-	4.933	-	-	-	-	-	4.933
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	10.777	-	-	4.933	-	-	-	-	-	4.933

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Exhibit P-5, Cost Analysis: PB 2017 Army												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10						P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)						Item Number / Title [DODIC]: A01004 / SIGINT (MIP)					
ID Code (A=Service Ready, B=Not Service Ready) :												MDAP/MAIS Code:					

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Logistics Cost</i>	-	-	-	-	-	-	-	-	10.777	-	-	4.933	-	-	-	-	-	4.933
Gross/Weapon System Cost	-	-	-	2,203.000	6	13.218	3,310.733	15	49.661	2,216.588	17	37.682	-	-	-	2,216.588	17	37.682

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	6	15	17	-	17
	Total Obligation Authority	13.218	49.661	37.682	-	37.682
Total:	Quantity	6	15	17	-	17
Secondary Distribution	Total Obligation Authority	13.218	49.661	37.682	-	37.682

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01004 / SIGINT (MIP)
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
TSP Systems ^(†)		2015	BAE Systems / Nashua	SS / IDIQ	ACC APG	Apr 2015	Feb 2017	6	1,566.000	Y		
TSP Systems ^(†)		2016	BAE Systems / Nashua	SS / IDIQ	ACC APG	Sep 2016	Dec 2017	15	1,566.000	Y		
TSP Systems ^(†)		2017	BAE Systems / Nashua	SS / IDIQ	ACC APG	May 2017	Jul 2018	17	1,566.000	Y		

^(†) indicates the presence of a P-21

Remarks:

As a result of the reinstatement, a total of (18) TSPs were procured to obtain the economic procurement cost savings per system using FY13 funds for (12) systems to the sum of \$18.697 million and FY15 funds for (6) systems to the sum of \$9.399 million funds.

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01004 / SIGINT (MIP)
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2015												Fiscal Year 2016												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015												Calendar Year 2016												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
TSP Systems																															
	1	2015	ARMY	6	-	6																								6	
	1	2016	ARMY	15	-	15																								15	
	1	2017	ARMY	17	-	17																								17	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01004 / SIGINT (MIP)
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2017												Fiscal Year 2018												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017												Calendar Year 2018												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
TSP Systems																															
1		2015	ARMY	6	-	6	-	-	-	-	2	2	2																	-	
1		2016	ARMY	15	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2	1		-	
1		2017	ARMY	17	-	17								A	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	12	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10 **P-1 Line Item Number / Title:** A01001 / MQ-1 Payload (MIP) **Item Number / Title [DODIC]:** A01004 / SIGINT (MIP)

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2019												Fiscal Year 2020												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019												Calendar Year 2020												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
TSP Systems																															
	1	2015	ARMY	6	6	-																									
	1	2016	ARMY	15	15	-																									
	1	2017	ARMY	17	5	12	2	2	2	2	2	2																			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army									Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)					Item Number / Title [DODIC]: A01004 / SIGINT (MIP)			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)								
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder				
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	
1	BAE Systems - Nashua	1	2	2	3	9	12	21	-	3	12	15	

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01005 / CSP FMV (MIP)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	8.409	68.472	4.729	-	4.729
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	8.409	68.472	4.729	-	4.729
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	8.409	68.472	4.729	-	4.729

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
CSP HD Procurement ^(†)	-	-	-	-	-	-	1,098.000	15	16.470	-	-	-	-	-	-	-	-	-
CSP HD Initial Spares ^(†)	-	-	-	-	-	-	1,098.000	3	3.294	-	-	-	-	-	-	-	-	-
CSP Diode Pump Laser	-	-	-	-	-	-	165.000	57	9.405	-	-	-	-	-	-	-	-	-
CSP HD Platform Retrofit/Upgrades	-	-	-	-	-	2.810	454.000	60	27.240	-	-	-	-	-	-	-	-	-
CSP DMV-184 Processor Cards	-	-	-	-	-	-	21.000	135	2.835	-	-	-	-	-	-	-	-	-
CSP Diode Pump Laser Integration	-	-	-	-	-	-	-	-	2.490	-	-	-	-	-	-	-	-	-
CSP PMO Support	-	-	-	-	-	0.488	-	-	0.345	-	-	0.331	-	-	-	-	-	0.331
CSP Interim Contractor Support (SD)	-	-	-	-	-	3.101	-	-	3.194	-	-	-	-	-	-	-	-	-
CSP Interim Contractor Support (HD)	-	-	-	-	-	-	-	-	1.559	-	-	-	-	-	-	-	-	-
CSP Initial Fielding Support	-	-	-	-	-	2.010	-	-	1.640	-	-	4.398	-	-	-	-	-	4.398
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	8.409	-	-	68.472	-	-	4.729	-	-	-	-	-	4.729
<i>Subtotal: Flyaway Cost</i>	-	-	-	-	-	8.409	-	-	68.472	-	-	4.729	-	-	-	-	-	4.729

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Exhibit P-5, Cost Analysis: PB 2017 Army												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10						P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)						Item Number / Title [DODIC]: A01005 / CSP FMV (MIP)					
ID Code (A=Service Ready, B=Not Service Ready) :												MDAP/MAIS Code:					

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	-	-	-	8.409	-	-	68.472	-	-	4.729	-	-	-	-	-	4.729

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	8.409	68.472	4.729	-	4.729
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	8.409	68.472	4.729	-	4.729

(t) indicates the presence of a P-5a

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01005 / CSP FMV (MIP)
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
CSP HD Procurement ^(†)		2016	Raytheon / McKinney	C / FFP	ACC, APG	Mar 2016	Feb 2017	15	1,098.000	N		
CSP HD Initial Spares ^(†)		2016	Raytheon / McKinney	C / FFP	ACC, APG	Mar 2016	Jun 2017	3	1,098.000	N		

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10 **P-1 Line Item Number / Title:** A01001 / MQ-1 Payload (MIP) **Item Number / Title [DODIC]:** A01005 / CSP FMV (MIP)

Cost Elements (Units in Each)						Fiscal Year 2016														Fiscal Year 2017										B A L A N C E	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016														Calendar Year 2017										
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
CSP HD Procurement																															
	1	2016	ARMY	15	-	15																									
CSP HD Initial Spares																															
	2	2016	ARMY	3	-	3																									

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01001 / MQ-1 Payload (MIP)	Item Number / Title [DODIC]: A01005 / CSP FMV (MIP)
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)								
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder				
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	
1	Raytheon - McKinney	1	24	125	-	-	-	-	-	-	3	12	15
2	Raytheon - McKinney	1	24	125	-	-	-	-	-	-	3	12	15

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AZ2000 / Guardrail Mods (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	14.182	-	-	-	-	-	-	-	-	-	14.182
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	14.182	-	-	-	-	-	-	-	-	-	14.182
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	14.182	-	-	-	-	-	-	-	-	-	14.182

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Guardrail Common Sensor (GRCS), IAW the Aerial Layer 2020 Strategy, is a tactical fixed-wing, airborne, Signals Intelligence (SIGINT) collection and precision targeting location system. The GRCS systems are fielded to four Aerial Exploitation Battalions (AEBs) which are under the Intelligence and Security Command (INSCOM). GRCS provides near-real-time information to tactical commanders in the joint task force area supporting a full spectrum of operations (close in and deep look collections). It collects low-, mid-, and high-band radio signals; identifies and classifies them; determines source location; and provides near-real-time reporting, ensuring information dominance to commanders.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	14.182	-	-	-	-	-	-	-	-
Total:									
Secondary Distribution									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	14.182	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
AZ2000 / Guardrail Mods (MIP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AZ2000 / Guardrail MODS MIP (0)			- / -	- / 14.182	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 14.182	- / -	- / -	- / -	- / -

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AZ2000 / Guardrail MODS MIP (0)			- / -	- / -	- / -	- / -	- / -	- / 14.182
P-40	Total Gross/Weapon System Cost			- / -	- / -	- / -	- / -	- / -	- / 14.182

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
There is no FY17 funding request.

AZ2000 GRCS line transitioned to AZ2052 in FY16.

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Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AZ2000 / Guardrail Mods (MIP)				Modification Number / Title: AZ2000 / Guardrail MODS MIP				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	14.182	-	-	-	-	-	-	-	-	-	14.182
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	14.182	-	-	-	-	-	-	-	-	-	14.182
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	14.182	-	-	-	-	-	-	-	-	-	14.182

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The above represents Guardrail efforts over time. Individual efforts are described in detail under corresponding modifications.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	14.182	-	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	14.182	-	-	-	-	-	-	-	-

Development Status/Major Development Milestones

Date	Title	Description
Aug 2012	None	N/A

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AZ2000 / Guardrail Mods (MIP)					Modification Number / Title: AZ2000 / Guardrail MODS MIP			
Models of Systems Affected: 1-14				Modification Type: 0				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
Modification Item 1 of 2: Full Motion Video (FMV)													
A Kits													
Recurring													
Kit Quantity (Camera Upgrades)	- / -	2 / 0.754	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.754	
Fielding/Training	- / -	1 / 0.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.400	
PM Costs	- / -	- / 1.256	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.256	
Spares (Cameras)	- / -	5 / 1.885	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 1.885	
Subtotal: Recurring	- / -	- / 4.295	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.295	
Subtotal: Full Motion Video (FMV)	- / -	8 / 4.295	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 4.295	
Modification Item 2 of 2: Enhanced Situational Awareness (ESA) Subsystem													
A Kits													
Recurring													
NRE ESA	- / -	- / 0.245	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.245	
Recur ESA B-Kit	- / -	14 / 1.750	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / 1.750	
Spare ESA B-Kit	- / -	6 / 0.750	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.750	
System Integration	- / -	- / 1.367	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.367	
GATM	- / -	- / 2.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.000	
TSGS SW Updates	- / -	- / 0.480	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.480	
Manual Updates	- / -	- / 0.208	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.208	
Accreditation Supt	- / -	- / 0.200	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.200	
Subtotal: Recurring	- / -	- / 7.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 7.000	
Subtotal: Enhanced Situational Awareness (ESA) Subsystem	- / -	20 / 7.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 7.000	
Subtotal: Procurement, All Modification Items	- / -	28 / 11.295	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	28 / 11.295	
Installation													
Modification Item 1 of 2: Full Motion Video (FMV)													
	- / -	3 / 2.887	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.887	
Modification Item 2 of 2: Enhanced Situational Awareness (ESA) Subsystem													
	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Subtotal: Installation	- / -	3 / 2.887	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.887	
Total													
Total Cost (Procurement + Support + Installation)	-	14.182	-	-	-	-	-	-	-	-	-	14.182	

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2000 / Guardrail Mods (MIP)	Modification Number / Title: AZ2000 / Guardrail MODS MIP

Modification Item 1 of 2: Full Motion Video (FMV)

Manufacturer Information

Manufacturer Name: CACI Inc	Manufacturer Location: .
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 18

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates	Jul 2015						

Installation Information

Method of Implementation: .

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.000	- / 0.000
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	3 / 2.887	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.887
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	3 / 2.887	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.887

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	14
Out	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	14	

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2000 / Guardrail Mods (MIP)	Modification Number / Title: AZ2000 / Guardrail MODS MIP

Modification Item 2 of 2: Enhanced Situational Awareness (ESA) Subsystem

Manufacturer Information

Manufacturer Name: Northrop Grumman	Manufacturer Location: TBD
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 18

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: TBD

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.000	- / 0.000
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
Out	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	779.766	116.892	95.725	94.527	21.400	115.927	62.239	35.983	18.484	14.909	-	1,239.925
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	779.766	116.892	95.725	94.527	21.400	115.927	62.239	35.983	18.484	14.909	-	1,239.925
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	779.766	116.892	95.725	94.527	21.400	115.927	62.239	35.983	18.484	14.909	-	1,239.925

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

AZ2001 Multi Sensor ABN Recon (MIP) is the Parent Line to Airborne Reconnaissance Low - Enhanced (MIP)(ARL-E) (AZ2050),EMARSS Payloads (MIP)(AZ2054) and Guardrail Payloads (MIP) (AZ2052),IAW the Aerial Layer 2020 Strategy.

The Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) is the Army's next generation C-12 based, direct support, manned airborne intelligence collection, processing, and targeting support system. It provides a persistent capability to detect, locate, classify/identify, and track surface targets with a high degree of timeliness and accuracy. EMARSS will be assigned to the U.S. Army Intelligence and Security Command's Aerial Exploitation Battalions, providing Aerial Intelligence, Surveillance and Reconnaissance support to combatant commanders. The Army Acquisition Objective for EMARSS is 36 systems, with an Army Procurement Objective of 24, to include the following variants: eight (8) EMARSS-G (Geo-INT); four (4) EMARSS-V (Vehicle and Dismount Exploitation Radar, VaDER); eight (8) EMARSS-M (Multi-INT); and four (4) EMARSS-S (SIGINT).

Each variant will have a distinct Mission Equipment Package (MEP). This funding line supports the procurement and upgrade of the following sensor capabilities: Electro-optical/Infrared (EO/IR)/Full Motion Video (FMV); a Communications Intelligence (COMINT) to include Big Iron; Wide Area Aerial Surveillance (WAAS); Light Imaging Detection and Ranging (LiDAR) and improved Synthetic Aperture Radar / Moving Target Indicator (SAR/MTI) radar; line-of-site (LOS) and beyond line-of-site (BLOS) communications; and Processing Exploitation and Dissemination (PED) supporting two Distributed Common Ground System - Army (DCGS-A) enabled operator workstations. Lastly, this line supports future pre-planned product improvements.

The overall EMARSS procurement/modernization efforts are found in the following two lines; AZ2054 EMARSS Payloads (Project Manager Sensors - Aerial Intelligence) and A02112 EMARSS SEMA Mods (Fixed Wing Project Office). Separate funding lines support the Army Acquisition Executive's directive, codified in the October 28, 2011 memorandum, to assign overall acquisition lead for manned airborne Intelligence systems to Program Executive Officer for Aviation; and overall sensor, processing, exploitation, and dissemination responsibilities to Program Executive Officer for Intelligence, Electronic Warfare, and Sensors.

EMARSS transitioned from A02005.

Airborne Reconnaissance Low - Enhanced (ARL-E) is a worldwide self-deployable airborne Intelligence Surveillance Reconnaissance (ISR) system designed for timely, accurate, assured support to tactical forces over the full spectrum of operations. This system is a De Havilland DHC-8 aircraft replacing the DHC-7 IAW the Aerial ISR (AISR) 2020 Strategy. ARL-E will enhance the ARL-M sensor capability sets through the procurement of new and refurbished sensors to meet the ARL-E Capabilities Production Document (CPD) requirements. It provides a persistent capability to include: Broad-Area Surveillance and/

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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or Focused Stare on Target Areas of Interest (Point or Objective Targets), Electro-Optical/Infrared (EO/IR)/Full-Motion Video (FMV) , Multi-Mode Radar, Robust Communications Intelligence (COMINT), on-Board Collection, Analysis, Sensor Cross Cue and dissemination through Distributed Common Ground System-Army (DCGS-A) Enabled workstations. ARL-E will be assigned to the U.S. Army Intelligence and Security Command's Aerial ISR Brigade providing AISR support to combatant commanders. For the overall system, the Army Acquisition Objective and the Army Procurement Objective, is nine (9). The Mission Equipment Package (MEP) objective is eight (8).

This funding line supports the procurement and modernization of eight (8) complete MEP sets, which includes the following sensors: one (1) COMINT subsystem capable of supporting theater net centric geo-location efforts, two (2) High Definition FMV sensors and one (1) Improved Synthetic Aperture Radar / Ground Moving Target Indicator (SAR/GMTI) radar subsystem or one (1) SAR/Dismounted Moving Target Indicator (DMTI) subsystem. The MEP will also include four (4) DCGS-A workstations, one (1) set of communication equipment (mission radios, Beyond line of Site (BLOS) and Line of Site (LOS) Data links). ARL-E will be capable of rapid installation of sensors in a plug and play, quick connect/disconnect, mounting system to allow various combinations of sensor-types in support of a wide-range of theater operations. All MEPs will include the infrastructure to plug and play a Hyper-spectral imagery (HSI) Payload purchased under a QRC program. Future Growth capabilities include: Wide-Area Aerial Surveillance (WAAS), Light Detection and Ranging (LiDAR) and Foliage Penetration Radar (FOPEN).

The overall Airborne Reconnaissance Low-Enhanced (ARL-E) procurement/modernization efforts are found in the following three (3) lines; AZ2050 ARL Payloads (Project Manager Sensors - Aerial Intelligence), A02109, ARL-E SEMA (MIP) and A02110 ARL-E SEMA Mods (MIP) (Fixed Wing Project Office). Separate funding lines support the Army Acquisition Executive's directive, codified in the October 28, 2011 memorandum, to assign overall acquisition lead for manned airborne Intelligence systems to Program Executive Officer for Aviation; and overall sensor, processing, exploitation, and dissemination responsibilities to Program Executive Officer for Intelligence, Electronic Warfare, and Sensors.

The Guardrail Common Sensor (GRCS) is a RC-12 fixed-wing, airborne, Signals Intelligence (SIGINT) and Imagery Intelligence (IMINT) collection and precision targeting location system. It provides a persistent capability to detect, locate and classify/identify high value targets with a relevant degree of timeliness and accuracy. GRCS is assigned to two (2) U.S. Army Intelligence and Security Command's Aerial Exploitation Battalions, providing Aerial Intelligence, Surveillance and Reconnaissance (AISR) support to combatant commanders. In accordance with the Army's AISR 2020 strategy, the Army's Acquisition Objective/Army's Procurement Objective is 14 RC-12X+; seven (7) will be fielded to 3rd MI; and seven (7) will be fielded to the 204th MI. Additionally, there are five (5) trainers to support Force Generation.

This funding line supports the procurement and upgrade of the following sensor capabilities: Electro-Optical /Infrared (EO/IR)/Full Motion Video (FMV), communications intelligence (COMINT) and electronic intelligence (ELINT).

The overall GRCS procurement/modernization efforts are found in the following two lines: AZ2052 Guardrail Payloads (MIP) and A02111 GRCS SEMA MODS (MIP). Separate funding lines support the Army Acquisition Executive's directive, codified in the October 28, 2011 memorandum, to assign overall acquisition lead for manned airborne Intelligence systems to Program Executive Office for Aviation; and overall sensor, processing, exploitation, and dissemination responsibilities to Program Executive Officer for Intelligence, Electronic Warfare, and Sensors.

GRCS has transitioned from AZ2000.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	116.892	95.725	94.527	21.400	115.927	62.239	35.983	18.484	14.909
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	116.892	95.725	94.527	21.400	115.927	62.239	35.983	18.484	14.909

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
AZ2001 / Multi Sensor ABN Recon (MIP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AZ2050 / ARL Mod-In-Service (Operational)			- / 779.766	- / 116.892	- / 68.540	- / 74.380	- / -	- / 74.380
P-3a	AZ2052 / Guardrail MODS MIP (U)			- / -	- / -	- / 13.515	- / 6.950	- / 17.500	- / 24.450
P-3a	AZ2054 / EMARSS Payloads (x)			- / -	- / -	- / 13.670	- / 13.197	- / 3.900	- / 17.097
P-40	Total Gross/Weapon System Cost			- / 779.766	- / 116.892	- / 95.725	- / 94.527	- / 21.400	- / 115.927

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AZ2050 / ARL Mod-In-Service (Operational)			- / 53.365	- / 7.613	- / 8.215	- / -	- / -	- / 1,108.771
P-3a	AZ2052 / Guardrail MODS MIP (U)			- / 5.595	- / 7.232	- / 5.851	- / 8.927	- / -	- / 65.570
P-3a	AZ2054 / EMARSS Payloads (x)			- / 3.279	- / 21.138	- / 4.418	- / 5.982	- / -	- / 65.584
P-40	Total Gross/Weapon System Cost			- / 62.239	- / 35.983	- / 18.484	- / 14.909	- / -	- / 1,239.925

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2017 base funding to support the overall ARL-E and EMARSS efforts are found in the following four lines: AZ2050 ARL Payloads and AZ2054 EMARSS Payloads (per this form), and A02110 ARL SEMA Mods and A02112 EMARSS SEMA (separate form).

The purpose of AZ2050 is to procure, upgrade, test and integrate sensors; communications architecture for sensor information exploitation and dissemination; test, nonrecurring engineering, and integration in support of the ARL-E Payload program ensuring ARL-E is rapidly deployable world-wide against current, new, and emerging threats.

The purpose of AZ2054 is to support the procurement and upgrade of the following sensor payload capabilities: Electro-optical/Infrared (EO/IR)/Full Motion Video (FMV); a Communications Intelligence (COMINT) to include Big Iron; Wide Area Aerial Surveillance (WAAS); Light Imaging Detection and Ranging (LiDAR) and improved Synthetic Aperture Radar / Moving Target Indicator (SAR/MTI) radar; line-of-site (LOS) and beyond line-of-site (BLOS) communications; Processing Exploitation and Dissemination (PED) supporting two Distributed Common Ground System - Army (DCGS-A) enabled operator workstations; and pre-planned product improvements.

FY 2017 Base procurement dollars in the amount of \$74.380 million supports the procurement of ARL-E Mission Equipment Payloads (MEP) for aircraft 5, + 6. The systems procured will consist of four (4) sets of Distributed Common Ground Station-Army (DCGS-A) workstations, one (1) set of communication equipment (mission radios, Beyond line of Site (BLOS) and Line of Site (LOS) Data links), and two (2) COMINT subsystems. The funding will support System Integration Lab (SIL) testing and aircraft modification of one system - aircraft 5. The funding will also support aircraft integration and test of two systems - aircraft 2 and 3.

FY 2017 Base procurement dollars in the amount of \$13.197 million supports the conversion one (1) EMARSS-V quick reaction capability (QRC) system to an EMARSS Capabilities Production Document (CPD) compliant configuration.

FY 2017 OCO procurement dollars in the amount of \$3.900 million procures two (2) spare MX-15DiD cameras to maintain VaDER operational readiness for Operation Freedom's Sentinel (OFS). This plan can change based on the needs of the Warfighter. In the event the plan changes, available QRCs will be converted.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft		P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>The purpose of AZ2052 is to procure, upgrade, test and integrate sensors; communications architecture for sensor information exploitation and dissemination; test, nonrecurring engineering, and integration in support of the Guardrail payload program ensuring Guardrail is rapidly deployable world-wide against current, new, and emerging threats.</p> <p>FY 2017 Base procurement dollars in the amount of \$6.950 million supports MEP sensor procurement, integration, testing, engineering and program management to reset one (1) MX-15HDi camera, integrate two (2) FMV cameras, and field two (2) FMV capable aircraft. Quantities align to aircraft availability.</p> <p>FY 2017 OCO procurement dollars in the amount of \$17.5 million supports the integration of Lanshark (LS) capability on four (4) RC-12X+ aircraft systems to effectively prosecute high priority and emerging emitters for continued service in Aerial Exploitation Battalions (AEBs) as modular payload, multi-intelligence systems for Operation Freedom's Sentinel (OFS).</p> <p>Guardrail Common Sensor (GRCS) transitioned from AZ2000 (FY 2014/15). Beginning in FY 2016 forward, the overall GRCS efforts are found in the following two lines; AZ2052 GRCS Payloads (Project Manager Sensors - Aerial Intelligence (PM SAI)) and A02111 GRCS SEMA (Project Manager Fixed Wing (PM FW)).</p> <p>In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.</p> <p>All funding is in Active Component.</p>		

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Exhibit P-3a, Individual Modification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)	Modification Number / Title: AZ2050 / ARL Mod-In-Service
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	779.766	116.892	68.540	74.380	-	74.380	53.365	7.613	8.215	-	-	1,108.771
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	779.766	116.892	68.540	74.380	-	74.380	53.365	7.613	8.215	-	-	1,108.771
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	779.766	116.892	68.540	74.380	-	74.380	53.365	7.613	8.215	-	-	1,108.771

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY 2017 Base procurement dollars in the amount of \$74.380 million supports the procurement of Mission Equipment Payload (MEP) for aircraft 5, 6, and 7. The systems procured will consist of four (4) sets of Distributed Common Ground Station-Army (DCGS-A) workstations, one (1) set of communication equipment (mission radios, Beyond line of Site (BLOS) and Line of Site (LOS) Data links), and two (2) COMINT subsystems. The funding will support System Integration Lab (SIL) testing and aircraft modification of one system - aircraft 5.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	116.892	68.540	74.380	-	74.380	53.365	7.613	8.215	-
Total:									
Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution Total Obligation Authority	116.892	68.540	74.380	-	74.380	53.365	7.613	8.215	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)						Modification Number / Title: AZ2050 / ARL Mod-In-Service			
Models of Systems Affected: ARL				Modification Type: Operational				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: ARL Enhanced (ARL-E)													
A Kits													
Recurring													
DCGS-A Workstations	0 / 0.400	3 / 6.410	2 / 4.022	4 / 21.220	- / -	4 / 21.220	1 / 5.405	- / -	- / -	- / -	- / -	10 / 37.457	
Upgraded MX-20HD Sensors	- / -	3 / 2.100	2 / 1.400	- / -	- / -	- / -	- / 1.780	- / -	- / -	- / -	- / -	5 / 5.280	
MEP/PED System Integration Lab (SIL)	- / -	- / 8.982	- / -	1 / 6.700	- / -	1 / 6.700	2 / 15.215	- / -	- / -	- / -	- / -	3 / 30.897	
System Test & Eval support	- / -	- / 7.883	- / 7.802	- / -	- / -	- / -	- / 3.627	- / -	- / -	- / -	- / -	- / 19.312	
Program Mgt	0 / 0.600	- / 10.551	- / 6.169	- / 14.365	- / -	- / 14.365	- / 4.840	- / 10.688	- / 0.745	- / -	- / -	- / 27.958	
Spares	- / -	- / -	- / 4.763	- / -	- / -	- / -	- / 5.182	- / -	- / 0.500	- / -	- / -	- / 10.445	
Training and Documentation	- / -	- / 2.552	- / 0.950	- / -	- / -	- / -	- / 1.418	- / -	- / -	- / -	- / -	- / 4.920	
Field Support	0 / 1.167	- / -	- / -	- / -	- / -	- / -	- / 1.125	- / 6.925	- / 6.970	- / -	- / -	- / 16.187	
Subtotal: Recurring	- / 2.167	- / 38.478	- / 25.106	- / 32.285	- / -	- / 32.285	- / 38.592	- / 7.613	- / 8.215	- / -	- / -	- / 152.456	
Non-Recurring													
Non Recurring Engineering	0 / 1.000	- / 12.372	- / 6.558	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 19.930	
Subtotal: Non-Recurring	- / 1.000	- / 12.372	- / 6.558	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 19.930	
B Kits													
Recurring													
Aircraft Standardization	- / -	- / 13.791	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 13.791	
Aircraft Modification	- / -	- / -	- / -	1 / 2.485	- / -	1 / 2.485	2 / 7.813	- / -	- / -	- / -	- / -	3 / 10.298	
SAR/DMTI sensor	0 / 2.500	3 / 22.750	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 25.250	
Communications procurement	- / -	1 / 9.200	1 / 6.900	1 / 2.710	- / -	1 / 2.710	1 / 2.770	- / -	- / -	- / -	- / -	4 / 21.580	
COMINT	- / -	3 / 15.600	1 / 5.300	3 / 11.020	- / -	3 / 11.020	1 / 4.190	- / -	- / -	- / -	- / -	8 / 36.110	
HSI upgrade	- / -	3 / 1.701	2 / 1.134	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.835	
Upgrade MX-20D SWIR sensors	- / -	3 / 3.000	2 / 2.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 5.000	
Subtotal: Recurring	- / 2.500	- / 66.042	- / 15.334	- / 16.215	- / -	- / 16.215	- / 14.773	- / -	- / -	- / -	- / -	- / 114.864	
Subtotal: ARL Enhanced (ARL-E)	0 / 5.667	19 / 116.892	10 / 46.998	10 / 48.500	- / -	10 / 48.500	7 / 53.365	- / 7.613	- / 8.215	- / -	- / -	46 / 287.250	
Subtotal: Procurement, All Modification Items	0 / 5.667	19 / 116.892	10 / 46.998	10 / 48.500	- / -	10 / 48.500	7 / 53.365	- / 7.613	- / 8.215	- / -	- / -	46 / 287.250	
Installation													
Modification Item 1 of 1: ARL Enhanced (ARL-E)	0 / 774.099	- / -	- / 21.542	- / 25.880	- / -	- / 25.880	- / -	- / -	- / -	- / -	- / -	- / 821.521	
Subtotal: Installation	0 / 774.099	- / -	- / 21.542	- / 25.880	- / -	- / 25.880	- / -	- / -	- / -	- / -	- / -	- / 821.521	
Total													

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Exhibit P-3a, Individual Modification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)	Modification Number / Title: AZ2050 / ARL Mod-In-Service
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Models of Systems Affected: ARL	Modification Type: Operational	Related RDT&E PEs:
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Total Cost (Procurement + Support + Installation)	779.766	116.892	68.540	74.380	-	74.380	53.365	7.613	8.215	-	-	1,108.771

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)	Modification Number / Title: AZ2050 / ARL Mod-In-Service

Modification Item 1 of 1: ARL Enhanced (ARL-E)

Manufacturer Information

Manufacturer Name: Leidos	Manufacturer Location: Maryland
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 24

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		Nov 2015	Nov 2016				
Delivery Dates		Sep 2017	Sep 2017	Sep 2018	Sep 2019		

Installation Information

Method of Implementation: Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 1774.099	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 1774.099
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / 121.542	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 121.542
FY 2017	0 / 0.000	- / -	- / -	- / 25.880	- / -	- / 25.880	- / -	- / -	- / -	- / -	- / -	- / 25.880
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 1774.099	- / -	- / 121.542	- / 25.880	- / -	- / 25.880	- / -	- / -	- / -	- / -	- / -	- / 1821.521

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	2	1	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8
Out	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	2	8

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Exhibit P-3a, Individual Modification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)	Modification Number / Title: AZ2052 / Guardrail MODS MIP
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	13.515	6.950	17.500	24.450	5.595	7.232	5.851	8.927	-	65.570
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	13.515	6.950	17.500	24.450	5.595	7.232	5.851	8.927	-	65.570
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	13.515	6.950	17.500	24.450	5.595	7.232	5.851	8.927	-	65.570

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	12,225.000	-	12,225.000	-	-	-	-	-	260.198

Description:

FY 2017 Base procurement dollars in the amount of \$6.950 million supports MEP sensor procurement, integration, testing, engineering and program management to reset one (1) MX-15HDi camera, integrate two (2) FMV cameras, and field two (2) FMV capable aircraft.

FY 2017 OCO procurement dollars in the amount of \$17.5 million supports the integration of Lanshark (LS) capability on four (4) RC-12X+ aircraft systems to effectively prosecute high priority and emerging emitters for continued service in Aerial Exploitation Battalions (AEBs) as modular payload, multi-intelligence systems for Operation Freedom's Sentinel (OFS).

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	13.515	6.950	17.500	24.450	5.595	7.232	5.851	8.927
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	13.515	6.950	17.500	24.450	5.595	7.232	5.851	8.927

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)					Modification Number / Title: AZ2052 / Guardrail MODS MIP			
Models of Systems Affected: See individual Mods				Modification Type: U				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 2: Full Motion Video (FMV)													
A Kits													
Recurring													
Fielding/Training	- / -	- / -	- / 2.400	- / 0.200	- / -	- / 0.200	- / 0.200	- / 0.200	- / 0.200	- / 0.200	- / -	- / 3.400	
PM Costs	- / -	- / -	- / 1.216	- / 0.637	- / -	- / 0.637	- / 0.512	- / 0.656	- / 0.531	- / 0.810	- / -	- / 4.362	
Spares (Cameras)	- / -	- / -	- / 3.107	- / 0.393	- / -	- / 0.393	- / -	- / -	- / -	- / -	- / -	- / 3.500	
Subtotal: Recurring	- / -	- / -	- / 6.723	- / 1.230	- / -	- / 1.230	- / 0.712	- / 0.856	- / 0.731	- / 1.010	- / -	- / 11.262	
B Kits													
Recurring													
Kit Quantity (Camera Reset)	- / -	- / -	- / 3.016	1 / 0.393	- / -	1 / 0.393	- / -	- / -	- / -	- / -	- / -	1 / 3.409	
Subtotal: Recurring	- / -	- / -	- / 3.016	- / 0.393	- / -	- / 0.393	- / -	- / -	- / -	- / -	- / -	- / 3.409	
Subtotal: Full Motion Video (FMV)	- / -	- / -	- / 9.739	1 / 1.623	- / -	1 / 1.623	- / 0.712	- / 0.856	- / 0.731	- / 1.010	- / -	1 / 14.671	
Modification Item 2 of 2: Lanshark (LS)													
A Kits													
Recurring													
Fielding/Training	- / -	- / -	- / -	- / -	- / 10.750	- / 10.750	- / -	- / -	- / -	- / -	- / -	- / 10.750	
PM Costs	- / -	- / -	- / -	- / -	- / 11.575	- / 11.575	- / -	- / -	- / -	- / -	- / -	- / 11.575	
Integration/Test	- / -	- / -	- / -	- / -	- / 11.500	- / 11.500	- / -	- / -	- / -	- / -	- / -	- / 11.500	
Spares	- / -	- / -	- / -	- / -	- / 12.000	- / 12.000	- / -	- / -	- / -	- / -	- / -	- / 12.000	
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / 5.825	- / 5.825	- / -	- / -	- / -	- / -	- / -	- / 5.825	
Non-Recurring													
Software Development	- / -	- / -	- / -	- / -	- / 15.000	- / 15.000	- / -	- / -	- / -	- / -	- / -	- / 15.000	
Accreditation	- / -	- / -	- / -	- / -	- / 10.300	- / 10.300	- / -	- / -	- / -	- / -	- / -	- / 10.300	
OGS/PED	- / -	- / -	- / -	- / -	- / 11.000	- / 11.000	- / -	- / -	- / -	- / -	- / -	- / 11.000	
Subtotal: Non-Recurring	- / -	- / -	- / -	- / -	- / 6.300	- / 6.300	- / -	- / -	- / -	- / -	- / -	- / 6.300	
Subtotal: Lanshark (LS)	- / -	- / -	- / -	- / -	- / 12.125	- / 12.125	- / -	- / -	- / -	- / -	- / -	- / 12.125	
Subtotal: Procurement, All Modification Items	- / -	- / -	- / 9.739	1 / 1.623	- / 12.125	1 / 13.748	- / 0.712	- / 0.856	- / 0.731	- / 1.010	- / -	1 / 26.796	
Installation													
Modification Item 1 of 2: Full Motion Video (FMV)	3 / 0.000	- / -	- / 3.776	2 / 5.327	- / -	2 / 5.327	2 / 4.883	2 / 6.376	1 / 5.120	3 / 7.917	1 / -	14 / 33.399	
Modification Item 2 of 2: Lanshark (LS)	0 / 0.000	- / -	- / -	- / -	4 / 5.375	4 / 5.375	- / -	- / -	- / -	- / -	- / -	4 / 5.375	
Subtotal: Installation	3 / 0.000	- / -	- / 3.776	2 / 5.327	4 / 5.375	6 / 10.702	2 / 4.883	2 / 6.376	1 / 5.120	3 / 7.917	1 / -	18 / 38.774	
Total													

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)	Modification Number / Title: AZ2052 / Guardrail MODS MIP
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Models of Systems Affected: See individual Mods **Modification Type:** U **Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Total Cost (Procurement + Support + Installation)	-	-	13.515	6.950	17.500	24.450	5.595	7.232	5.851	8.927	-	65.570

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)	Modification Number / Title: AZ2052 / Guardrail MODS MIP

Modification Item 1 of 2: Full Motion Video (FMV)

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		May 2016			May 2019		
Delivery Dates		Sep 2016	Aug 2017	Aug 2018	Aug 2019	Apr 2020	Sep 2021

Installation Information

Method of Implementation: TBD

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	3 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / -
FY 2017	0 / 0.000	- / -	- / 3.776	2 / 5.327	- / -	2 / 5.327	- / -	- / -	- / -	- / -	- / -	2 / 9.103
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	2 / 4.883	- / -	- / -	- / -	- / -	2 / 4.883
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	2 / 6.376	- / -	- / -	- / -	2 / 6.376
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 5.120	- / -	- / -	1 / 5.120
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 7.917	- / -	3 / 7.917
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	1 / -
Total	3 / 0.000	- / -	- / 3.776	2 / 5.327	- / -	2 / 5.327	2 / 4.883	2 / 6.376	1 / 5.120	3 / 7.917	1 / -	14 / 33.399

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	-	-	1	1	1	-	1	14
Out	-	-	-	-	-	-	-	2	1	-	-	1	1	-	-	1	1	-	-	1	1	-	-	1	-	-	1	1	1	1	14

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)	Modification Number / Title: AZ2052 / Guardrail MODS MIP

Modification Item 2 of 2: Lanshark (LS)

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Nov 2016				
Delivery Dates			Aug 2017	Aug 2018			

Installation Information

Method of Implementation: TBD

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	4 / 5.375	4 / 5.375	- / -	- / -	- / -	- / -	- / -	4 / 5.375
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	4 / 5.375	4 / 5.375	- / -	- / -	- / -	- / -	- / -	4 / 5.375

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	-	-	-	-	-	-	-	-	-	1	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Out	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)	Modification Number / Title: AZ2054 / EMARSS Payloads
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	13.670	13.197	3.900	17.097	3.279	21.138	4.418	5.982	-	65.584
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	13.670	13.197	3.900	17.097	3.279	21.138	4.418	5.982	-	65.584
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	13.670	13.197	3.900	17.097	3.279	21.138	4.418	5.982	-	65.584

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	8,548.500	-	8,548.500	-	-	-	-	-	260.254

Description:

This funding line supports the procurement and upgrade of the following sensor payload capabilities: Electro-optical/Infrared (EO/IR)/Full Motion Video (FMV); a Communications Intelligence (COMINT) to include Big Iron; Wide Area Aerial Surveillance (WAAS); Light Imaging Detection and Ranging (LiDAR) and improved Synthetic Aperture Radar / Moving Target Indicator (SAR/MTI) radar; line-of-site (LOS) and beyond line-of-site (BLOS) communications; Processing Exploitation and Dissemination (PED) supporting two Distributed Common Ground System - Army (DCGS-A) enabled operator workstations; and pre-planned product improvements.

The APO quantity of 24 are funded by multiple funding lines as follows: Aerial Common Sensor (ACS) (MIP) (A02005) FY14-FY16 procured 16. The below input/output schedule reflects a combined effort between the EMARSS SEMA Mods (MIP) (A02112) and EMARSS Payloads (MIP) (AZ2054) funding lines in FY16 and forward.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	13.670	13.197	3.900	17.097	3.279	21.138	4.418	5.982
Total:									
Secondary Distribution									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	13.670	13.197	3.900	17.097	3.279	21.138	4.418	5.982

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)						Modification Number / Title: AZ2054 / EMARSS Payloads			
Models of Systems Affected: EMARSS				Modification Type: x				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1: EMARSS Payloads</i>													
A Kits													
Recurring													
MEP Contractor Testing	- / -	- / -	- / 1.000	- / 2.800	- / -	- / 2.800	- / -	- / -	- / -	- / -	- / -	- / 3.800	
GFE/Initial Spares	- / -	- / -	- / 1.200	- / 1.615	- / 3.900	- / 5.515	- / 0.656	- / -	- / -	- / -	- / -	- / 17.371	
PMO and SETA Support	- / -	- / -	- / 1.000	- / 1.332	- / -	- / 1.332	- / 1.229	- / 1.332	- / 1.332	- / 1.854	- / -	- / 18.079	
Engineering Support	- / -	- / -	- / 0.970	- / 0.650	- / -	- / 0.650	- / 1.394	- / 2.762	- / 0.620	- / 1.141	- / -	- / 17.537	
Mods in Service; SIGINT/COMINT Upgrade	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 13.844	- / 2.466	- / 2.987	- / -	- / 19.297	
TSA/OPT Integration	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.200	- / -	- / -	- / -	- / 3.200	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 4.170	- / 6.397	- / 3.900	- / 10.297	- / 3.279	- / 21.138	- / 4.418	- / 5.982	- / -	- / 49.284	
<i>Subtotal: EMARSS Payloads</i>	- / -	- / -	- / 4.170	- / 6.397	- / 3.900	- / 10.297	- / 3.279	- / 21.138	- / 4.418	- / 5.982	- / -	- / 49.284	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 4.170	- / 6.397	- / 3.900	- / 10.297	- / 3.279	- / 21.138	- / 4.418	- / 5.982	- / -	- / 49.284	
Installation													
<i>Modification Item 1 of 1: EMARSS Payloads</i>													
	0 / 0.000	- / -	2 / 9.500	2 / 6.800	- / -	2 / 6.800	- / -	- / -	- / -	- / -	- / -	4 / 16.300	
<i>Subtotal: Installation</i>	0 / 0.000	- / -	2 / 9.500	2 / 6.800	- / -	2 / 6.800	- / -	- / -	- / -	- / -	- / -	4 / 16.300	
Total													
Total Cost (Procurement + Support + Installation)	-	-	13.670	13.197	3.900	17.097	3.279	21.138	4.418	5.982	-	65.584	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AZ2001 / Multi Sensor ABN Recon (MIP)	Modification Number / Title: AZ2054 / EMARSS Payloads

Modification Item 1 of 1: EMARSS Payloads

Manufacturer Information

Manufacturer Name: L3 MID	Manufacturer Location: Greenville, TX
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 18

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		Nov 2015					
Delivery Dates			Sep 2017				

Installation Information

Method of Implementation: EMARSS Modifications

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	2 / 9.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 9.500
FY 2017	0 / 0.000	- / -	- / -	2 / 6.800	- / -	2 / 6.800	- / -	- / -	- / -	- / -	- / -	2 / 6.800
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	2 / 9.500	2 / 6.800	- / -	2 / 6.800	- / -	- / -	- / -	- / -	- / -	4 / 16.300

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA6605 / AH-64 MODS
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	177.897	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029	91.698	-	1,221.562
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	177.897	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029	91.698	-	1,221.562
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	177.897	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029	91.698	-	1,221.562

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AH-64 MODS (AA6606) program provides for modernization of the fielded AH-64D/AH-64E Apache fleet. AH-64D/AH-64E is a tandem cockpit, twin engine, single main rotor attack helicopter. The Apache aircraft incorporates the Longbow weapon system and provides the U.S. Army with significant target acquisition and firepower effectiveness, survivability, lethality, and fighting capabilities even during adverse weather conditions. The Apache is equipped with the Fire Control Radar/Radar Frequency Interferometer (FCR/RFI) mission kit and Fire and Forget Longbow HELLFIRE missiles. The Modernized Target Acquisition Designator Sight (MTADS) assembly is an Electro-Optical system that consists of a Day television (DTV), sensor, a Forward Looking Infrared (FLIR) sensor for day and night visibility as well as limited adverse weather operations, a Laser Spot Tracker (LST), and Laser Rangefinder/Designator (LRFD). The Modernized Pilot Night Vision Sensor (M-PNVS) is a FLIR system which allows Nap-of-Earth flight operations at night by the pilot independent of the co-pilot/gunner's FLIR. The Apache is armed with the HELLFIRE Antitank Missile, 2.75 inch rockets and a 30mm gun capable of defeating armor.

The AH-64 Mods Program allows for near-term operationally driven improvements to the Apache fleet, focusing on deployment lessons learned, reliability improvements, and solving obsolescence issues. Improvements will occur to the Airframe, Armament, Communications, Manned / Unmanned Teaming, Navigation, Sensors, Survivability, Support Elements, and Training Systems. Examples of modifications include Selected Component Recapitalization, Airframe and Sensor Obsolescence upgrades, procurement of Modernized Day Sensor Assembly Phase II components, initial procurement of Modernized Radio-Frequency Interferometer (M-RFI), Software upgrades, Condition Based Maintenance (CBM), Trainer upgrades, and Computer/Processing and Data Display and Control upgrades. The AH-64D/AH-64E inventory crossover point (approx.400 AH-64D / 400 AH-64E) will occur in 2021. These modernization efforts are required to ensure the Longbow Apache remains a ready and relevant Soldier asset.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
AA6605 / AH-64 MODS

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA6606 / AH-64 Modifications (Operational & Reliability Improvements and Resolve Obsolescence Issues)			- / 177.897	- / 181.869	- / 116.153	- / 137.883	- / -	- / 137.883
P-40	Total Gross/Weapon System Cost			- / 177.897	- / 181.869	- / 116.153	- / 137.883	- / -	- / 137.883

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA6606 / AH-64 Modifications (Operational & Reliability Improvements and Resolve Obsolescence Issues)			- / 238.141	- / 144.892	- / 133.029	- / 91.698	- / -	- / 1,221.562
P-40	Total Gross/Weapon System Cost			- / 238.141	- / 144.892	- / 133.029	- / 91.698	- / -	- / 1,221.562

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY17 Base funding supports modification and service life extension efforts for the Airframe, Armament, Mission Command, Sensors, Survivability, Support Elements, Training Systems, and Manned/Unmanned Teaming.

All COMPO 1 Active

"The FY 2017 funding request was reduced for \$61.217 million to account for the availability of prior year execution balances"

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Exhibit P-3a, Individual Modification: PB 2017 Army								Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA6605 / AH-64 MODS				Modification Number / Title: AA6606 / AH-64 Modifications				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	177.897	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029	91.698	-	1,221.562
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	177.897	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029	91.698	-	1,221.562
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	177.897	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029	91.698	-	1,221.562

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Airframe includes modifications to the Structural Subsystems, Propulsion/Drive/Rotor Systems, Health Monitoring System (CBM), and Recap Support/Kits. Structural Subsystems modifications include improvements to the assembled structural and aerodynamic components of the air vehicle to include the fuselage and associated manual flight control systems, rotor equipment, landing gear and associated equipment, environmental controls, racks, mounts, intersystem cables and distribution boxes. Propulsion/Drive/Rotor Systems together with Engine Electronic Digital Engine Control Unit (EDECU) and Common Hydro-Mechanical Unit (CHMU) provides the capability to carry a heavier combat payload and allow for enhanced performance in high-altitude, hot climates. Landing Gear improvements (High Performance Shock Struts (HPSS)) will improve the aircraft crash survivability and allows for a heavier aircraft with greater combat loads. The Health Monitoring System is associated with CBM support concept and the expansion of the Modernized Signal Processing Unit (MSPU) capabilities, which will continue to evolve, reduce ownership cost and improve the maintenance posture and burden of the Soldier.

Mission Command includes modifications and/or upgrades to the various Apache processors and displays. Mission Computer / Processing modifications and/or upgrades include improvements to the master data processing unit(s) responsible for coordinating and directing the major avionics mission systems. Displays and Controls modifications and/or upgrades includes improvements to the equipment which presents processed data by specially designed electronic devices through interconnection with computer or component equipment and the associated equipment needed to control the presentation of the necessary flight and tactical information to the crew for efficient management of the aircraft during all segments of the mission profile under day and night during all weather conditions. This equipment includes multifunction displays, control display units, display processors and on-board mission planning systems. Software Upgrades include critical software enhancements that will enable Apache commanders and aircrews to better perform their combat mission.

Sensors include modifications, operational improvements, and/or mitigation of obsolescence issues to the Apache Sensor suite, which includes the MTADS/PNVS, the Modernized Day Sensor Assembly (MDSA), and the Modernized Radar Frequency Interferometer (MRFI) Processor and Receiver. MTADS/PNVS operational and logistics improvements include accelerated application of outstanding Engineering Change Proposals and the sensors overhaul through the Arizona Support Center facility to allow for proper configuration. MDSA Phase I is the Modernized Laser Rangefinder/Designator (M-LFRD) which provides enhanced laser ranging, improved target designation, and target tracking capability by holding a stabilized laser beam on a distant stationary or moving point target for highly precise handoff to precision guided weapons. M-LFRD replaces the obsolete Laser Transceiver Unit, which mitigates ongoing obsolescence risks, improves reliability and maintainability, and reduces operations and support costs. MDSA Phase II replaces the remaining legacy DSA components, adding a laser pointer, eye safe laser, and high definition color-camera capability. MDSA funding enables software integration, tooling, and test equipment procurement and system production.

Support Elements include the modification and production of those items, which are not part of the aircraft system but are required to maintain, service, or calibrate the aircraft systems or portions of the aircraft system while not directly engaged in the performance of its mission and will not be in the inventory for support of other weapon systems. Post Production Organic support establishes Depot Pilot Programs at Corpus Christi Army Depot (CCAD) and Tobyhanna Army Depot (TYAD) for selected Depot Level Repairables (DLR) as part of the Original Equipment Manufacturer (OEM) to Depot Transition. Post Production Organic Support (PPOS) provides Depot Maintenance Plant Equipment, Special Tools and Test Equipment, labor training and associated technical data for future repairs once the DLR has transitioned to the depot. PPOS improves Repair Turn Around Time and retain depot maintenance capabilities.

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Exhibit P-3a, Individual Modification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA6605 / AH-64 MODS	Modification Number / Title: AA6606 / AH-64 Modifications
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Training Systems include deliverable training services, devices, accessories, aids, equipment, and parts used to facilitate instruction through which personnel will learn to operate and maintain the system with maximum efficiency. Examples include Operator / Maintainer Training (aircraft/classroom), obsolescence and training concurrency to training device systems, and updates to allow individual/team training tasks and collective training. Efforts include the production and upgrade of deliverable training equipment and associated software.

Modification to the MUMT system enable fully integrated Unmanned Aerial System Level of Interoperability 4 in the C, L, S, and Ku band using both Tactical Common Data Link and Bandwidth Efficient Tactical Common Data Link; processor updates ensure Information Assurance certification and Interoperability Protocol compatibility. MUMT funding will be used for both non-recurring and recurring engineering.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029	91.698
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029	91.698

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA6605 / AH-64 MODS					Modification Number / Title: AA6606 / AH-64 Modifications			
Models of Systems Affected: Longbow Apache				Modification Type: Operational & Reliability Improvements and Resolve Obsolescence Issues				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 5: Airframe													
A Kits													
Recurring													
Structural Subsystems	0 / 12.535	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.535	
Health Monitoring System	0 / 3.011	- / 5.320	- / 5.421	- / 5.524	- / -	- / 5.524	- / 5.629	- / 5.736	- / 5.845	- / 5.956	- / -	- / 42.442	
RESET / MEP Kits	0 / 47.151	- / 7.367	- / 5.934	- / 9.164	- / -	- / 9.164	- / 8.834	- / 11.559	- / 5.284	- / 2.400	- / -	- / 97.693	
Other Support	0 / 1.052	- / 0.385	- / 0.273	- / 0.312	- / -	- / 0.312	- / 0.763	- / 0.337	- / 0.358	- / 0.358	- / -	- / 3.838	
Subtotal: Recurring	- / 63.749	- / 13.072	- / 11.628	- / 15.000	- / -	- / 15.000	- / 15.226	- / 17.632	- / 11.487	- / 8.714	- / -	- / 156.508	
Subtotal: Airframe	0 / 63.749	- / 13.072	- / 11.628	- / 15.000	- / -	- / 15.000	- / 15.226	- / 17.632	- / 11.487	- / 8.714	- / -	- / 156.508	
Modification Item 2 of 5: Mission Command													
A Kits													
Recurring													
Processors	0 / 9.759	- / 22.420	- / 7.800	- / 13.100	- / -	- / 13.100	- / 8.000	- / 3.120	- / -	- / 1.520	- / -	- / 65.719	
Displays	0 / 8.886	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.886	
Other Support	0 / 0.576	- / 2.155	- / 0.691	- / 1.256	- / -	- / 1.256	- / 2.281	- / 0.862	- / 0.323	- / 0.236	- / -	- / 8.380	
Subtotal: Recurring	- / 19.221	- / 24.575	- / 8.491	- / 14.356	- / -	- / 14.356	- / 10.281	- / 3.982	- / 0.323	- / 1.756	- / -	- / 82.985	
Subtotal: Mission Command	0 / 19.221	- / 24.575	- / 8.491	- / 14.356	- / -	- / 14.356	- / 10.281	- / 3.982	- / 0.323	- / 1.756	- / -	- / 82.985	
Modification Item 3 of 5: Sensors													
A Kits													
Recurring													
MTADS/PNVS	0 / 11.468	- / 3.500	- / 5.000	- / 3.000	- / -	- / 3.000	- / -	- / -	- / -	- / -	- / -	- / 22.968	
M-RFI	0 / 14.584	18 / 24.431	9 / 10.593	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	27 / 49.608	
Other Support	0 / 0.355	- / 5.721	- / 4.333	- / 5.496	- / -	- / 5.496	- / 23.707	- / 6.408	- / 6.596	- / 4.279	- / -	- / 56.895	
Subtotal: Recurring	- / 26.407	- / 33.652	- / 19.926	- / 8.496	- / -	- / 8.496	- / 23.707	- / 6.408	- / 6.596	- / 4.279	- / -	- / 129.471	
B Kits													
Recurring													
M-LRFD	150 / 49.834	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	150 / 49.834	
M-DSA	- / -	15 / 51.157	35 / 70.510	81 / 94.384	- / -	81 / 94.384	57 / 174.937	60 / 109.099	62 / 107.746	40 / 71.198	130 / -	480 / 679.031	
Subtotal: Recurring	- / 49.834	- / 51.157	- / 70.510	- / 94.384	- / -	- / 94.384	- / 174.937	- / 109.099	- / 107.746	- / 71.198	- / -	- / 728.865	
Subtotal: Sensors	150 / 76.241	33 / 84.809	44 / 90.436	81 / 102.880	- / -	81 / 102.880	57 / 198.644	60 / 115.507	62 / 114.342	40 / 75.477	130 / -	657 / 858.336	
Modification Item 4 of 5: Training Systems													

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA6605 / AH-64 MODS					Modification Number / Title: AA6606 / AH-64 Modifications			
Models of Systems Affected: Longbow Apache				Modification Type: Operational & Reliability Improvements and Resolve Obsolescence Issues				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
A Kits													
Recurring													
Operator Devices	0 / 14.980	- / 6.475	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 21.455	
Maintainer Devices	0 / 3.706	- / 6.930	- / 10.550	- / 10.550	- / -	- / 10.550	- / 10.550	- / 10.550	- / 0.550	- / 0.550	- / 0.550	- / 13.936	
Other Support	- / -	- / 10.970	- / 15.048	- / 15.097	- / -	- / 15.097	- / 13.440	- / 17.221	- / 6.327	- / 5.201	- / -	- / 43.304	
Subtotal: Recurring	- / 18.686	- / 14.375	- / 15.598	- / 15.647	- / -	- / 15.647	- / 13.990	- / 17.771	- / 6.877	- / 5.751	- / -	- / 78.695	
Subtotal: Training Systems	0 / 18.686	- / 14.375	- / 15.598	- / 15.647	- / -	- / 15.647	- / 13.990	- / 17.771	- / 6.877	- / 5.751	- / -	- / 78.695	
Modification Item 5 of 5: Manned / Unmanned Teaming (MUM-T)													
A Kits													
Recurring													
Other	- / -	- / 3.038	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.038	
Subtotal: Recurring	- / -	- / 3.038	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.038	
Non-Recurring													
Aviation Restructure (MUMT-X)	- / -	9 / 42.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 42.000	
Subtotal: Non-Recurring	- / -	- / 42.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 42.000	
Subtotal: Manned / Unmanned Teaming (MUM-T)	- / -	9 / 45.038	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 45.038	
Subtotal: Procurement, All Modification Items	150 / 177.897	42 / 181.869	44 / 116.153	81 / 137.883	- / -	81 / 137.883	57 / 238.141	60 / 144.892	62 / 133.029	40 / 91.698	130 / -	666 / 1,221.562	
Installation													
Modification Item 1 of 5: Airframe	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Modification Item 2 of 5: Mission Command	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Modification Item 3 of 5: Sensors	150 / 0.000	66 / -	44 / -	81 / -	- / -	81 / -	57 / -	60 / -	62 / -	40 / -	130 / -	690 / -	
Modification Item 4 of 5: Training Systems	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Modification Item 5 of 5: Manned / Unmanned Teaming (MUM-T)	0 / 0.000	9 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / -	
Subtotal: Installation	150 / 0.000	75 / -	44 / -	81 / -	- / -	81 / -	57 / -	60 / -	62 / -	40 / -	130 / -	699 / -	
Total													
Total Cost (Procurement + Support + Installation)	177.897	181.869	116.153	137.883	-	137.883	238.141	144.892	133.029	91.698	-	1,221.562	

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA6605 / AH-64 MODS	Modification Number / Title: AA6606 / AH-64 Modifications

Modification Item 1 of 5: Airframe

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Various
Administrative Leadtime (in Months):	Production Leadtime (in Months):

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		May 2015	May 2016	May 2017	May 2018	May 2019	May 2020
Delivery Dates		Feb 2016	Feb 2017	Feb 2018	Feb 2019	Feb 2020	Feb 2021

Installation Information

Method of Implementation: Modifications

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA6605 / AH-64 MODS	Modification Number / Title: AA6606 / AH-64 Modifications

Modification Item 2 of 5: Mission Command

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Various
Administrative Leadtime (in Months):	Production Leadtime (in Months):

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Jan 2014	Jan 2015	Jan 2016	Jan 2017	Jan 2018	Jan 2019	Jan 2020
Delivery Dates	Jan 2014	Jan 2015	Jan 2016	Jan 2017	Jan 2018	Jan 2019	Jan 2020

Installation Information

Method of Implementation: .

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA6605 / AH-64 MODS	Modification Number / Title: AA6606 / AH-64 Modifications

Modification Item 3 of 5: Sensors

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Various
Administrative Leadtime (in Months):	Production Leadtime (in Months): 24

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Jul 2015	Dec 2015	Jan 2017	Jan 2018	Jan 2019	Jan 2020	Jan 2021
Delivery Dates	Jul 2017	Dec 2017	Jan 2019	Jan 2020	Mar 2021	Mar 2022	Mar 2023

Installation Information

Method of Implementation: Modifications

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	150 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	150 / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	33 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	33 / -
FY 2018	0 / 0.000	33 / -	44 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	77 / -
FY 2019	0 / 0.000	- / -	- / -	81 / -	- / -	81 / -	- / -	- / -	- / -	- / -	- / -	81 / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	57 / -	- / -	- / -	- / -	- / -	57 / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	60 / -	- / -	- / -	- / -	60 / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	62 / -	40 / -	130 / -	232 / -
Total	150 / 0.000	66 / -	44 / -	81 / -	- / -	81 / -	57 / -	60 / -	62 / -	40 / -	130 / -	690 / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	150	-	-	-	-	-	10	10	15	20	20	20	21	14	14	14	15	15	15	15	15	15	15	16	16	10	10	10	10	205	690
Out	150	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	15	20	20	20	21	14	14	14	15	15	15	15	15	307	690

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA6605 / AH-64 MODS	Modification Number / Title: AA6606 / AH-64 Modifications

Modification Item 4 of 5: Training Systems

Manufacturer Information

Manufacturer Name: Boeing / LSI Inc	Manufacturer Location: St. Louis, MO / Jacksonville, FL
Administrative Leadtime (in Months): 3	Production Leadtime (in Months):

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Field Retrofits

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA6605 / AH-64 MODS	Modification Number / Title: AA6606 / AH-64 Modifications

Modification Item 5 of 5: Manned / Unmanned Teaming (MUM-T)

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months):	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Aug 2015						
Delivery Dates		Aug 2016					

Installation Information

Method of Implementation: FY15 quantity of nine (9) will be unit-installed

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	9 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	9 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	3	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	-	-	-	-	-	-	-	3	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0607137A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,897.847	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,897.847	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	2,897.847	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The CH-47 Chinook is a twin-turbine, tandem-rotor, heavy lift transport helicopter with a useful load of up to 25,000 pounds. As the Army's only heavy lift helicopter, the mission of the CH-47 is to transport troops (including air assault), supplies, weapons and other cargo in general support operations. The CH-47 is vital to the Overseas Contingency Operations and Homeland Security needs of our nation. Secondary missions include medical evacuation, aircraft recovery, parachute drops, disaster relief and search and rescue. These aircraft are fielded to heavy helicopter companies and Special Operations Aviation. The major modifications to the H-47F/G include the Cargo On/Off Loading System (COOLS) with Ballistic Protection System (BPS), Advance Chinook Rotor Blades (ACRB), Systems Optimization and Payload restoration, Improved Troop Seats (ITS), Cargo Platform Health Environment (CPHE), Adjustable Pitch Change Link, Engine Improvement, Aircraft Component Parts-Marking, Safety Mods \$5M or Less, Improved Vibration Control System (IVCS), Training Aids, Devices, Simulators and Simulations (TADSS) and Special Tools and Test Equipment (STTE).

The Cargo On/Off Loading System (COOLS) with an under floor Ballistic Protection System (BPS) is a new floor integrated into the aircraft with panels that flip from a flat surface to rollers. This enables units to perform cargo and passenger missions without stopping to re-configure the aircraft to meet diverse mission requirements. The on-ground or in-flight re-configuration takes one Soldier no more than fifteen minutes to complete. The legacy system, Helicopter Internal Cargo Handling System (HICHS), is a cumbersome bolt-on system that is maintenance intensive and requires more than 8 man hours to install.

Advance Chinook Rotor Blade (ACRB) adds approximately 1800 pounds of payload performance to the H-47. The increase in Mission Equipment Packages (MEP) required for combat operations requires increasing cargo payload capability to reduce aircrew mission risk and decrease sortie requirements. The program goal is to restore payload capability, reduce Operations and Sustainment (O&S) costs, improve erosion protection and increase readiness by improving reliability. These blades are designed for user installation.

Systems Optimization and Payload Restoration is an airframe modification that is intended to increase payload and optimize electrical and fuel systems to decrease overall O&S cost and reduce subsystem weights. The use of newer advanced materials and machining processes will integrate lighter, more reliable materials that will increase reliability and lower aircraft weight. The aircraft electrical system will recover available power capacity while improving power distribution and reliability. Aircraft safety will be enhanced through electrical systems redundancy. Fuel system improvements will reduce parts and increase reliability.

The Improved Troop Seats (ITS) will replace the current H-47 passenger seats, initially designed in the 1960's for the initial fielding of the CH-47A, and do not offer significant crash protection. This effort will qualify and field H-47 improved passenger seats to increase passenger safety during hard or crash landings. The seats are being designed to not only withstand greater impact forces experienced during hard or crash landings, but also provide an improved restraint harness that will keep the occupants in the seats. The seats are being designed as individual seats that can be installed in any of the 32 seat positions

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft		P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0607137A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>available, providing greater flexibility for configuring the aircraft to support different mission requirements. This effort implements guidance received in the FY09 Department of Defense, Resource Management Decision (RMD) 700.</p> <p>Cargo Platform Health Environment (CPHE) is the Cargo PMO CH-47F Health and Usage Monitoring System (HUMS). The system provides the technology and aircraft specific tools to support Condition Based Maintenance (CBM) capability for the CH-47F fleet. CPHE will assist the user to troubleshoot and diagnose the aircraft's current condition, reducing aircrew's maintenance burden and the O&S costs through reductions in required maintenance flights, improved troubleshooting guidance, and improved aircraft reference data. CPHE provides improvements in the following areas: 1) Permanently installs sensors for Rotor Track and Balance; 2) Provides improved drive-train vibration monitoring and troubleshooting; 3) Records additional aircraft parametric data that provides additional information to assist the maintainer in trouble-shooting a signal or component failure on the aircraft; 4) Provides aircraft structural health monitoring which captures aircraft flight hours and accurate aircraft gross weight (within 500 LBS); 5) Provides the capability to automatically download the Engine Control Unit (ECU) reports which eliminates the need to connect a separate computer to get ECU information; 6) CPHE provides a reporting system of A/C data to quantify current A/C health and trends. In the near future, CPHE will allow for automatic population of computerized forms and records.</p> <p>Adjustable Pitch Change Link is a newly designed and qualified pitch change link with a weather protective boot assembly. The new, user installed link and boot will reduce field labor hours and provide ease of adjustment.</p> <p>Engine improvements for the T55-GA-714A focus on optimizing operational capability and reliability while decreasing O&S costs. The Electronic Control Unit (ECU) upgrade improves engine communication with the aircraft monitoring systems to increase the aircrew situational awareness and reduce workload. In addition, software enhancements provide the user with advanced troubleshooting capability and enhanced safety. Software upgrades will occur at designated intervals to allow efficient and expedient fielding of any improvements/enhancements. The engine program for Reliability Improvements thru Failure Investigation and Reporting (RIMFIRE) includes the investigation and reporting of engine failure data at the depot which provides key information that helps drive reliability, maintainability and O&S improvements. This information is key to improving the engine and reducing the cost and maintenance burden to the Soldiers. Each engine that is returned to the depot for overhaul goes through a series of visual inspections. The data from these inspections is then analyzed and used to help determine the root cause for the engine failure or the engine return. This effort covers the inspections, data collection, data retention, and data analysis for all T55 engines returned to Corpus Christi Army Depot (CCAD). The Chinook Cabin Information Panel provides the crew in the cabin of the aircraft the ability to see vital cockpit and engine information that is not currently available to anyone except the pilots. The panel will provide the Flight Engineer and crew members the ability to assist the pilots in monitoring aircraft systems as well as the diagnostics of emergency situations. Installation schedules vary.</p> <p>Aircraft Component Parts-Marking develops Unique Item Identification (UID) component markings and updates technical data packages for applicable CH-47 components. Also marks components not marked during production using mobile facilities.</p> <p>CH-47 Safety Mods \$5M or Less include Improved night vision goggle lighting for the cargo area; Integrated Lower Control Actuator (ILCA) Bench Test Set to reduce the large manpower and workload burden of the current system and reduce erroneous ILCA depot returns; Improved Engine Air Particle Separator (EAPS) to reduce mission weight; The integrated ILCA Bench Test Set (IIBTS) is the replacement bench test set, upgraded to digital technology to reduce operation and maintenance cost and complexity. The IIBTS will maintain the same testing capabilities as the original test sets and provide automated test functions in lieu of the existing manual test procedures which will enhance integrated lower control actuator troubleshooting and maintenance. The goals for redesign are: Combining the Electronic Unit (EU) and Electro-Hydraulic Test Fixture Assembly (EHTFA) into one box vs. current two boxes; Reduce procurement cost; Reduce costs of maintainability/sustainability; and Reduce complexity of operation. Installation schedules vary.</p> <p>The Improved Vibration Control System (IVCS) will provide an active vibration suppression system to minimize CH-47 aircraft vibrations and replaces the Self Tuned Vibration Absorbers (STVAs). The IVCS reduces aircraft weight by approximately 100 lbs., provides vibration dampening equal to/or better than the STVA, and reduces O&S costs and Soldier burden.</p> <p>Training Aids, Devices, Simulators, and Simulations (TADSS) funding ensures when changes are made to the materiel systems the CH-47F training enablers can remain current and stay relevant to the operating environment aligned with the CH-47F modernization strategy. Planned modifications or upgrades to the CH-47F necessitates the modification and upgrade of system Training Aids, Devices, Simulators, and Simulations (TADSS).</p> <p>Special Tools & Test Equipment provides for unique tooling and equipment for CH-47F. Procurement of these special tools and test equipment is through requisitions in the supply system.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0607137A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
AA0252 / CH-47 Cargo Helicopter Mods (MYP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0607137A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0252 / CH-47 Cargo Helicopter Mods (Unclassified)			- / 2,897.847	- / 32.092	- / 90.330	- / 102.943	- / -	- / 102.943
P-40	Total Gross/Weapon System Cost			- / 2,897.847	- / 32.092	- / 90.330	- / 102.943	- / -	- / 102.943

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0252 / CH-47 Cargo Helicopter Mods (Unclassified)			- / 188.968	- / 122.257	- / 89.884	- / 25.394	Continuing	Continuing
P-40	Total Gross/Weapon System Cost			- / 188.968	- / 122.257	- / 89.884	- / 25.394	Continuing	Continuing

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY17 Base procurement in the amount of \$102.943 million supports major modifications to include the Cargo On/Off Loading System (COOLS) with Ballistic Protection System (BPS), Advance Chinook Rotor Blades (ACRB), Systems Optimization and Payload restoration, Improved Troop Seats (ITS), Cargo Platform Health Environment (CPHE), Adjustable Pitch Change Link, Engine Improvement, Aircraft Component Parts-Marking, Safety Mods \$5M or Less, Improved Vibration Control System (IVCS), Training Aids, Devices, Simulators and Simulations (TADSS) and Special Tools and Test Equipment (STTE).

In accordance with Section 1815 of the 2009 National Defense Authorization Act (P.L 110-181), this item is necessary for use by the Active and Reserve Components of Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10			P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)				Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,897.847	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,897.847	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	2,897.847	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The major modifications include Cargo On/Off Loading System (COOLS) with Ballistic Protection System (BPS), Advance Chinook Rotor Blades (ACRB), Systems Optimization and Payload restoration, Improved Troop Seats (ITS), Cargo Platform Health Environment (CPHE), Adjustable Pitch Change Link, Engine Improvement, Aircraft Component Parts-Marking, Safety Mods \$5M or Less, Improved Vibration Control System (IVCS), Training Aids, Devices, Simulators and Simulations (TADSS) and Special Tools and Test Equipment (STTE).

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)					Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods			
Models of Systems Affected: CH-47				Modification Type: Unclassified					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
Modification Item 1 of 12: Cargo On/Off Loading System (COOLS) and COOLS BPS													
A Kits													
Recurring													
Cargo Handling Floor System	254 / 53.564	4 / 0.847	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	258 / 54.411	
Ballistic Protection System (BPS)	146 / 33.768	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	146 / 33.768	
PM Support	0 / 4.366	- / 0.042	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.408	
Cargo Handling Floor System (OCO)	26 / 29.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	26 / 29.300	
PM Support (OCO)	0 / 8.010	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.010	
Subtotal: Recurring	- / 129.008	- / 0.889	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 129.897	
Subtotal: Cargo On/Off Loading System (COOLS) and COOLS BPS	426 / 129.008	4 / 0.889	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	430 / 129.897	
Modification Item 2 of 12: Advanced Chinook Rotor Blade (ACRB)													
A Kits													
Recurring													
Rotor Blades	- / -	- / -	- / -	- / -	- / -	- / -	36 / 12.511	36 / 12.760	36 / 13.015	25 / 7.421	Continuing	Continuing	
PM Support	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.626	- / 0.638	- / 0.650	- / 0.471	Continuing	Continuing	
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / 13.137	- / 13.398	- / 13.665	- / 7.892	Continuing	Continuing	
Subtotal: Advanced Chinook Rotor Blade (ACRB)	- / -	- / -	- / -	- / -	- / -	- / -	36 / 13.137	36 / 13.398	36 / 13.665	25 / 7.892	Continuing	Continuing	
Modification Item 3 of 12: Systems Optimization and Payload Restoration													
A Kits													
Recurring													
PM Support	0 / 1.703	- / 0.559	- / 2.677	- / 2.914	- / -	- / 2.914	- / 3.801	- / 1.789	- / -	- / -	- / -	- / 13.443	
Subtotal: Recurring	- / 1.703	- / 0.559	- / 2.677	- / 2.914	- / -	- / 2.914	- / 3.801	- / 1.789	- / -	- / -	- / -	- / 13.443	
Non-Recurring													
NRE	0 / 34.063	- / 11.184	- / 53.541	- / 58.277	- / -	- / 58.277	- / 76.017	- / 35.783	- / -	- / -	- / -	- / 268.865	
Subtotal: Non-Recurring	- / 34.063	- / 11.184	- / 53.541	- / 58.277	- / -	- / 58.277	- / 76.017	- / 35.783	- / -	- / -	- / -	- / 268.865	
Subtotal: Systems Optimization and Payload Restoration	0 / 35.766	- / 11.743	- / 56.218	- / 61.191	- / -	- / 61.191	- / 79.818	- / 37.572	- / -	- / -	- / -	- / 282.308	
Modification Item 4 of 12: Improved Troop Seats (ITS)													
A Kits													

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)						Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods			
Models of Systems Affected: CH-47				Modification Type: Unclassified						Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Recurring													
Installation Kits	- / -	- / -	- / -	- / -	- / -	- / -	156 / 0.511	62 / 0.207	68 / 0.232	21 / 0.073	Continuing	Continuing	
PM Support	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.536	- / 0.217	- / 0.243	- / 0.076	Continuing	Continuing	
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.047	- / 0.424	- / 0.475	- / 0.149	Continuing	Continuing	
B Kits													
Recurring													
Seats SS (31 seats per SS)	- / -	- / -	- / -	- / -	- / -	- / -	156 / 10.214	62 / 4.140	68 / 4.632	21 / 1.436	Continuing	Continuing	
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / 10.214	- / 4.140	- / 4.632	- / 1.436	Continuing	Continuing	
Subtotal: Improved Troop Seats (ITS)	- / -	- / -	- / -	- / -	- / -	- / -	312 / 11.261	124 / 4.564	136 / 5.107	42 / 1.585	Continuing	Continuing	
Modification Item 5 of 12: Cargo Platform Health Environment (CPHE)													
A Kits													
Recurring													
Kits Type 1	13 / 6.950	8 / 4.272	8 / 4.357	- / -	- / -	- / -	10 / 5.511	- / -	- / -	- / -	- / -	39 / 21.090	
Kits Type 2	14 / 2.282	1 / 0.172	6 / 1.055	5 / 0.872	- / -	5 / 0.872	20 / 3.557	20 / 3.628	6 / 1.110	- / -	- / -	72 / 12.676	
CPHE Software Upgrade	0 / 0.315	- / 0.159	- / 0.162	- / 0.160	- / -	- / 0.160	- / 0.164	- / 0.167	- / 0.169	- / -	- / -	- / 1.296	
Services	0 / 1.446	- / 2.325	- / 1.904	- / 1.874	- / -	- / 1.874	- / 1.683	- / 1.717	- / 1.720	- / -	- / -	- / 12.669	
PM Support	0 / 0.614	- / 0.133	- / 0.321	- / 0.102	- / -	- / 0.102	- / 0.368	- / 0.094	- / 0.094	- / -	- / -	- / 1.726	
Subtotal: Recurring	- / 11.607	- / 7.061	- / 7.799	- / 3.008	- / -	- / 3.008	- / 11.283	- / 5.606	- / 3.093	- / -	- / -	- / 49.457	
Non-Recurring													
NRE	0 / 6.750	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.750	
Subtotal: Non-Recurring	- / 6.750	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.750	
Subtotal: Cargo Platform Health Environment (CPHE)	27 / 18.357	9 / 7.061	14 / 7.799	5 / 3.008	- / -	5 / 3.008	30 / 11.283	20 / 5.606	6 / 3.093	- / -	- / -	111 / 56.207	
Modification Item 6 of 12: Adjustable Pitch Change Link													
A Kits													
Recurring													
Pitch Change Links	- / -	- / -	- / -	30 / 2.311	- / -	30 / 2.311	30 / 2.357	30 / 2.404	30 / 2.452	24 / 2.000	Continuing	Continuing	
PM Support	0 / 0.042	- / -	- / -	- / 0.116	- / -	- / 0.116	- / 0.132	- / 0.120	- / 0.123	- / 0.125	Continuing	Continuing	
Subtotal: Recurring	- / 0.042	- / -	- / -	- / 2.427	- / -	- / 2.427	- / 2.489	- / 2.524	- / 2.575	- / 2.125	Continuing	Continuing	
Non-Recurring													
NRE	0 / 5.733	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 5.733	
Subtotal: Non-Recurring	- / 5.733	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 5.733	
Subtotal: Adjustable Pitch Change Link	0 / 5.775	- / -	- / -	30 / 2.427	- / -	30 / 2.427	30 / 2.489	30 / 2.524	30 / 2.575	24 / 2.125	Continuing	Continuing	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)						Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods			
Models of Systems Affected: CH-47				Modification Type: Unclassified						Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Modification Item 7 of 12: Enigne Improvement													
A Kits													
Recurring													
T55 Engine Control Unit Prog (ECU)	667 / 45.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	667 / 45.000	
New Engines	1,250 / 2,495.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1,250 / 2,495.000	
P3 Check Valve	373 / 4.900	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	373 / 4.900	
Next Generation Torque System	404 / 14.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	404 / 14.500	
Logistics	0 / 39.953	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 39.953	
ECU Upgrade	0 / 2.560	- / 0.836	- / 1.300	- / 1.064	- / -	- / 1.064	- / 0.824	- / -	- / -	- / -	- / -	- / 16.584	
RIMFIRE	0 / 0.865	- / 0.423	- / 0.431	- / 0.440	- / -	- / 0.440	- / 0.466	- / 0.476	- / 0.482	- / 0.427	Continuing	Continuing	
Chinook Cabin Information Panel	- / -	- / -	- / -	- / -	- / -	- / -	- / 5.700	- / 0.500	- / 0.500	- / -	Continuing	Continuing	
PM Admin Support	0 / 4.357	- / 0.076	- / 0.105	- / 0.075	- / -	- / 0.075	- / 0.350	- / 0.049	- / 0.049	- / 0.021	Continuing	Continuing	
Subtotal: Recurring	- / 2,607.135	- / 1.335	- / 1.836	- / 1.579	- / -	- / 1.579	- / 7.340	- / 1.025	- / 1.031	- / 0.448	Continuing	Continuing	
Non-Recurring													
ECP NRE/Incorporation	0 / 0.415	- / 0.275	- / 0.370	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.060	
Subtotal: Non-Recurring	- / 0.415	- / 0.275	- / 0.370	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.060	
Subtotal: Enigne Improvement	2,694 / 2,607.550	- / 1.610	- / 2.206	- / 1.579	- / -	- / 1.579	- / 7.340	- / 1.025	- / 1.031	- / 0.448	Continuing	Continuing	
Modification Item 8 of 12: Aircraft Component Parts-Marking (UID)													
A Kits													
Non-Recurring													
Component Markings	0 / 23.700	- / 4.900	- / 1.556	- / 4.050	- / -	- / 4.050	- / -	- / 4.200	- / -	- / 3.400	- / -	- / 41.806	
Subtotal: Non-Recurring	- / 23.700	- / 4.900	- / 1.556	- / 4.050	- / -	- / 4.050	- / -	- / 4.200	- / -	- / 3.400	- / -	- / 41.806	
Subtotal: Aircraft Component Parts-Marking (UID)	0 / 23.700	- / 4.900	- / 1.556	- / 4.050	- / -	- / 4.050	- / -	- / 4.200	- / -	- / 3.400	- / -	- / 41.806	
Modification Item 9 of 12: CH-47 Safety Mods \$5M or Less													
A Kits													
Recurring													
Voltage Standing Wave Ratio (VSWR)	0 / 2.239	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.239	
FACTS (FADEC & Aircraft Continuity Test)	0 / 2.015	- / -	- / 2.094	- / 2.321	- / -	- / 2.321	- / 2.179	- / -	- / -	- / -	- / -	- / 18.609	
Ground Spt Test Sets (IBTS)	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.634	- / 3.272	- / 3.246	- / -	- / -	- / 10.152	
Misc Mods	0 / 15.592	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.927	- / -	- / -	- / 18.519	
Swashplate Assembly	0 / 0.575	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.575	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army								Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)				Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods				
Models of Systems Affected: CH-47			Modification Type: Unclassified					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Hook Load Measuring System	0 / 10.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 10.000
Night Vision Goggle Internal Lighting	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.361	- / 2.055	- / 2.185	- / 0.748	Continuing	Continuing
Engine Air Particle Separator (EAPS)	0 / 11.948	- / 1.278	- / 4.431	- / 3.538	- / -	- / 3.538	- / 3.532	- / -	- / -	- / -	- / -	- / 24.727
Weapon Sys Spec Data Collection	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.153	- / 1.145	- / 1.193	- / 1.189	Continuing	Continuing
PM Support	0 / 10.819	- / 0.064	- / 0.326	- / 0.293	- / -	- / 0.293	- / 0.643	- / 0.324	- / 0.234	- / 0.097	Continuing	Continuing
Frangible Fuel Fitting	0 / 10.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 10.000
Subtotal: Recurring	- / 63.188	- / 1.342	- / 6.851	- / 6.152	- / -	- / 6.152	- / 13.502	- / 6.796	- / 9.785	- / 2.034	Continuing	Continuing
Subtotal: CH-47 Safety Mods \$5M or Less	0 / 63.188	- / 1.342	- / 6.851	- / 6.152	- / -	- / 6.152	- / 13.502	- / 6.796	- / 9.785	- / 2.034	Continuing	Continuing
Modification Item 10 of 12: Improved Vibration Control System (IVCS)												
A Kits												
Recurring												
Kits	- / -	- / -	35 / 7.549	70 / 14.979	- / -	70 / 14.979	92 / 20.078	95 / 21.147	96 / 21.798	21 / 4.864	Continuing	Continuing
PM Support	- / -	- / -	- / 0.378	- / 0.755	- / -	- / 0.755	- / 1.007	- / 1.064	- / 1.215	- / 0.245	Continuing	Continuing
Subtotal: Recurring	- / -	- / -	- / 7.927	- / 15.734	- / -	- / 15.734	- / 21.085	- / 22.211	- / 23.013	- / 5.109	Continuing	Continuing
Subtotal: Improved Vibration Control System (IVCS)	- / -	- / -	35 / 7.927	70 / 15.734	- / -	70 / 15.734	92 / 21.085	95 / 22.211	96 / 23.013	21 / 5.109	Continuing	Continuing
Modification Item 11 of 12: Training Aids Devices Simulators and Simulations												
A Kits												
Recurring												
TADSS	- / -	- / -	- / -	- / -	- / -	- / -	- / 20.330	- / 18.016	- / 23.452	- / -	Continuing	Continuing
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / 20.330	- / 18.016	- / 23.452	- / -	Continuing	Continuing
Subtotal: Training Aids Devices Simulators and Simulations	- / -	- / -	- / -	- / -	- / -	- / -	- / 20.330	- / 18.016	- / 23.452	- / -	Continuing	Continuing
Modification Item 12 of 12: Special Tools & Test Equipment												
B Kits												
Recurring												
Tools and Test Equipment	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.266	- / 2.335	Continuing	Continuing
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.266	- / 2.335	Continuing	Continuing
Subtotal: Special Tools & Test Equipment	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.266	- / 2.335	Continuing	Continuing
Subtotal: Procurement, All Modification Items	3,147 / 2,883.344	13 / 27.545	49 / 82.557	105 / 94.141	- / -	105 / 94.141	500 / 180.245	305 / 115.912	304 / 83.987	112 / 24.928	Continuing	Continuing
Installation												

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)	Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods

Models of Systems Affected: CH-47	Modification Type: Unclassified	Related RDT&E PEs:
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Modification Item 1 of 12: Cargo On/Off Loading System (COOLS) and COOLS BPS	114 / 8.347	50 / 3.701	50 / 3.774	50 / 3.745	- / -	50 / 3.745	44 / 3.428	- / -	- / -	- / -	- / -	308 / 22.995
Modification Item 4 of 12: Improved Troop Seats (ITS)	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	156 / 0.938	62 / 0.380	68 / 0.425	222 / 1.416	508 / 3.159
Modification Item 5 of 12: Cargo Platform Health Environment (CPHE)	59 / 2.856	16 / 0.846	73 / 3.936	53 / 4.931	- / -	53 / 4.931	54 / 5.126	54 / 5.229	54 / 5.334	- / -	- / -	363 / 28.258
Modification Item 9 of 12: CH-47 Safety Mods \$5M or Less	35 / 3.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	35 / 3.300
Modification Item 10 of 12: Improved Vibration Control System (IVCS)	0 / 0.000	- / -	35 / 0.063	70 / 0.126	- / -	70 / 0.126	92 / 0.169	95 / 0.178	96 / 0.183	21 / 0.041	141 / 0.280	550 / 1.040
<i>Subtotal: Installation</i>	<i>208 / 14.503</i>	<i>66 / 4.547</i>	<i>158 / 7.773</i>	<i>173 / 8.802</i>	<i>- / -</i>	<i>173 / 8.802</i>	<i>190 / 8.723</i>	<i>305 / 6.345</i>	<i>212 / 5.897</i>	<i>89 / 0.466</i>	<i>363 / 1.696</i>	<i>1,764 / 58.752</i>
Total												
Total Cost (Procurement + Support + Installation)	2,897.847	32.092	90.330	102.943	-	102.943	188.968	122.257	89.884	25.394	Continuing	Continuing

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)	Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods

Modification Item 1 of 12: Cargo On/Off Loading System (COOLS) and COOLS BPS

Manufacturer Information

Manufacturer Name: Boeing				Manufacturer Location: Ridley Park, PA			
Administrative Leadtime (in Months): 5				Production Leadtime (in Months): 5			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Dec 2014						
Delivery Dates	May 2015						

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	114 / 8.347	50 / 3.701	50 / 3.774	50 / 3.745	- / -	50 / 3.745	40 / 3.116	- / 0.000	- / 0.000	- / 0.000	- / 0.000	304 / 22.683
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	4 / 0.312	- / -	- / -	- / -	- / -	4 / 0.312
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	114 / 8.347	50 / 3.701	50 / 3.774	50 / 3.745	- / -	50 / 3.745	44 / 3.428	- / -	- / -	- / -	- / -	308 / 22.995

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4							
In	114	12	12	13	13	12	12	13	13	12	12	13	13	11	11	11	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	308
Out	114	12	12	13	13	12	12	13	13	12	12	13	13	11	11	11	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	308

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army					Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10			P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)		Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods		
Modification Item 2 of 12: Advanced Chinook Rotor Blade (ACRB)							
Manufacturer Information							
Manufacturer Name: Boeing				Manufacturer Location: Ridley Park, PA			
Administrative Leadtime (in Months): 4				Production Leadtime (in Months): 6			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates				Jan 2018	Jan 2019	Jan 2020	Jan 2021
Delivery Dates				Jul 2018	Jul 2019	Jul 2020	Jul 2021
Installation Information							
Method of Implementation (Organic): User Installed					Installation Quantity: 0		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)	Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods
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Modification Item 3 of 12: Systems Optimization and Payload Restoration

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
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Administrative Leadtime (in Months): 6	Production Leadtime (in Months):
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation (Organic): Various	Installation Quantity: 0
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UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)	Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods

Modification Item 4 of 12: Improved Troop Seats (ITS)

Manufacturer Information

Manufacturer Name: Boeing	Manufacturer Location: Ridley Park, PA
Administrative Leadtime (in Months): 4	Production Leadtime (in Months): 8

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates				Dec 2017	Dec 2018	Dec 2019	Dec 2020
Delivery Dates				Aug 2018	Aug 2019	Aug 2020	Aug 2021

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	156 / 0.938	- / -	- / -	- / -	156 / 0.938
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	62 / 0.380	- / -	- / -	62 / 0.380
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	68 / 0.425	- / -	68 / 0.425
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	222 / 1.416	222 / 1.416
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	156 / 0.938	62 / 0.380	68 / 0.425	222 / 1.416	508 / 3.159

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	31	31	31	31	31	31	-	31	38	-	-	222	508
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	31	31	31	31	31	31	-	31	38	-	-	222	508

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)	Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods

Modification Item 5 of 12: Cargo Platform Health Environment (CPHE)

Manufacturer Information

Manufacturer Name: Boeing	Manufacturer Location: Ridley Park, PA
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 6

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Jan 2016	Mar 2016	Jan 2017	Jan 2018	Jan 2019	Jan 2020	
Delivery Dates	Jul 2016	Dec 2016	Jul 2017	Jul 2018	Jul 2019	Jul 2020	

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	59 / 2.856	16 / 0.846	64 / 3.451	44 / 4.093	- / -	44 / 4.093	49 / 4.651	4 / 0.387	28 / 2.766	- / 0.000	- / 0.000	264 / 19.050
FY 2015	0 / 0.000	- / -	9 / 0.485	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 0.485
FY 2016	0 / 0.000	- / -	- / -	9 / 0.838	- / -	9 / 0.838	- / -	- / -	- / -	- / -	- / -	9 / 0.838
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	5 / 0.475	- / -	- / -	- / -	- / -	5 / 0.475
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	50 / 4.842	- / -	- / -	- / -	50 / 4.842
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 1.975	- / -	- / -	20 / 1.975
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.593	- / -	- / -	6 / 0.593
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	59 / 2.856	16 / 0.846	73 / 3.936	53 / 4.931	- / -	53 / 4.931	54 / 5.126	54 / 5.229	54 / 5.334	- / -	- / -	363 / 28.258

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	59	4	4	4	4	18	18	18	19	13	13	13	14	13	13	14	14	13	13	14	14	13	13	14	14	-	-	-	-	-	363
Out	59	4	4	4	4	18	18	18	19	13	13	13	14	13	13	14	14	13	13	14	14	13	13	14	14	-	-	-	-	-	363

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)	Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods
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Modification Item 6 of 12: Adjustable Pitch Change Link

Manufacturer Information

Manufacturer Name: Boeing	Manufacturer Location: Ridley Park, PA
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Administrative Leadtime (<i>in Months</i>): 6	Production Leadtime (<i>in Months</i>): 6
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Mar 2017	Mar 2018	Mar 2019	Mar 2020	Mar 2021
Delivery Dates			Sep 2017	Sep 2018	Sep 2019	Sep 2020	Sep 2021

Installation Information

Method of Implementation (Organic): User Installed	Installation Quantity: 0
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Exhibit P-3a, Individual Modification: PB 2017 Army						Date: February 2016	
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10			P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)			Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods	
Modification Item 7 of 12: Enigne Improvement							
Manufacturer Information							
Manufacturer Name: Honeywell Inc				Manufacturer Location: Phoenix, AZ			
Administrative Leadtime (in Months):				Production Leadtime (in Months):			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): Various					Installation Quantity: 0		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army					Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10			P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)			Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods	
Modification Item 8 of 12: Aircraft Component Parts-Marking (UID)							
Manufacturer Information							
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (<i>in Months</i>):				Production Leadtime (<i>in Months</i>):			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): Various					Installation Quantity: 0		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)	Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods

Modification Item 9 of 12: CH-47 Safety Mods \$5M or Less

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months):	Production Leadtime (in Months):

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	35 / 2.300	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	35 / 2.300
FY 2015	0 / 1.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.000
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	35 / 3.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	35 / 3.300

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35
Out	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)	Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods

Modification Item 10 of 12: Improved Vibration Control System (IVCS)

Manufacturer Information

Manufacturer Name: Boeing	Manufacturer Location: Ridley Park PA
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 6

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		Dec 2015	Oct 2016	Oct 2017	Oct 2018	Oct 2019	Oct 2020
Delivery Dates		Jun 2016	Jan 2017	Jan 2018	Jan 2019	Jan 2020	Jan 2021

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	35 / 0.063	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	35 / 0.063
FY 2017	0 / 0.000	- / -	- / -	70 / 0.126	- / -	70 / 0.126	- / -	- / -	- / -	- / -	- / -	70 / 0.126
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	92 / 0.169	- / -	- / -	- / -	- / -	92 / 0.169
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	95 / 0.178	- / -	- / -	- / -	95 / 0.178
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	96 / 0.183	- / -	- / -	96 / 0.183
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	21 / 0.041	- / -	21 / 0.041
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	141 / 0.280	141 / 0.280
Total	0 / 0.000	- / -	35 / 0.063	70 / 0.126	- / -	70 / 0.126	92 / 0.169	95 / 0.178	96 / 0.183	21 / 0.041	141 / 0.280	550 / 1.040

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	17	18	-	-	35	35	-	30	31	31	-	31	32	32	-	32	32	32	-	-	10	11	141	550
Out	-	-	-	-	-	-	-	17	18	-	-	35	35	-	30	31	31	-	31	32	32	-	32	32	32	-	-	10	11	141	550

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army					Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10			P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)		Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods		
Modification Item 11 of 12: Training Aids Devices Simulators and Simulations							
Manufacturer Information							
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (<i>in Months</i>): 6				Production Leadtime (<i>in Months</i>): 12			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates				Mar 2018	Mar 2019	Mar 2020	Mar 2021
Delivery Dates				Mar 2019	Mar 2020	Mar 2021	Mar 2022
Installation Information							
Method of Implementation (Organic): Various					Installation Quantity: 0		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army					Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10			P-1 Line Item Number / Title: AA0252 / CH-47 Cargo Helicopter Mods (MYP)			Modification Number / Title: AA0252 / CH-47 Cargo Helicopter Mods	
Modification Item 12 of 12: Special Tools & Test Equipment							
Manufacturer Information							
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months):				Production Leadtime (in Months):			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): VARIOUS					Installation Quantity: 0		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A02111 / GRCS SEMA Mods (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976	-	27.913
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976	-	27.913
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976	-	27.913

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Description:
The Guardrail Common Sensor (GRCS) is a RC-12 fixed-wing, airborne, Signals Intelligence (SIGINT) and Imagery Intelligence (IMINT) collection and precision targeting location system. It provides a persistent capability to detect, locate and classify/identify high value targets with a relevant degree of timeliness and accuracy. GRCS is assigned to two (2) U.S. Army Intelligence and Security Command's Aerial Exploitation Battalions, providing Aerial Intelligence, Surveillance and Reconnaissance (AISR) support to combatant commanders. In accordance with the Army's AISR 2020 strategy, the Army's Acquisition Objective/Army's Procurement Objective is 14 RC-12X+; seven (7) will be fielded to 3rd MI; and seven (7) will be fielded to the 204th MI. Additionally, there are five (5) trainers to support Force Generation.

This funding line supports the Army Fixed Wing aircraft in support of the Guardrail Common Sensor (GRCS) RC-12X aircraft, Intelligence, Surveillance and Reconnaissance (ISR) mission. It provides for the following: the procurement of replacement and spare engines; procurement and associated testing of civil and military aircraft equipment, and future integration efforts. These modifications address all Department of Defense (DoD) mandated safety equipment to current and evolving international and Army Standards. These modifications ensure continued worldwide deployment capability and safe operations. Lastly, this line supports future pre-planned product improvements.

The overall GRCS procurement/modernization efforts are found in the following two lines: AZ2052 Guardrail Payloads (MIP) and A02111 GRCS SEMA MODS (MIP). Separate funding lines support the Army Acquisition Executive's directive, codified in the October 28, 2011 memorandum, to assign overall acquisition lead for manned airborne intelligence systems to Program Executive Office for Aviation; and overall sensor, processing, exploitation, and dissemination responsibilities to Program Executive Officer for Intelligence, Electronic Warfare, and Sensors.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976
Total:									
Secondary Distribution									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
A02111 / GRCS SEMA Mods (MIP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A02111 / Guardrail Common Sensor SEMA Modifications (Unclassified)			- / -	- / -	- / 4.019	- / 4.055	- / -	- / 4.055
P-40	Total Gross/Weapon System Cost			- / -	- / -	- / 4.019	- / 4.055	- / -	- / 4.055

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A02111 / Guardrail Common Sensor SEMA Modifications (Unclassified)			- / 5.514	- / 5.622	- / 5.727	- / 2.976	- / -	- / 27.913
P-40	Total Gross/Weapon System Cost			- / 5.514	- / 5.622	- / 5.727	- / 2.976	- / -	- / 27.913

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY17 base procurement dollars in the amount of \$4.055 million will support two (2) aircraft military/civilian modifications to include: Automatic Dependent Surveillance- Broadcast, (ADS-B) to provide digital interfacing for aircraft positioning; Universal Link-801 (UL-801) data link communications management unit that provides digital communication between pilots and air traffic control, communication radio upgrade to High Frequency/ Automatic Link Establishment (HF/ALE), beyond line of sight communication with automatic flight following; and APX-119 Mode 5 to establish the ability to Identify Friend or Foe (IFF). Non-Compliance of GATM Increment 2, CIVIL CNS/CPD dated 23 Sept 2010 and Mode 5 IFF/CID Mark X11A QDM, dated 19 March 2007, will result in the aircraft loss of entry into International Airspace

All COMPO 1. In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: A02111 / GRCS SEMA Mods (MIP)				Modification Number / Title: A02111 / Guardrail Common Sensor SEMA Modifications				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976	-	27.913
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976	-	27.913
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976	-	27.913
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This funding line supports the Army Fixed Wing aircraft in support of the Guardrail Common Sensor (GRCS) RC-12X aircraft, Intelligence, Surveillance and Reconnaissance (ISR) mission. It provides for the following: the procurement of replacement and spare engines; procurement and associated testing of civil and military aircraft equipment, and future integration efforts. These modifications address all Department of Defense (DoD) mandated safety equipment to current and evolving international and Army Standards. These modifications ensure continued worldwide deployment capability and safe operations. Lastly, this line supports future pre-planned product improvements.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: A02111 / GRCS SEMA Mods (MIP)					Modification Number / Title: A02111 / Guardrail Common Sensor SEMA Modifications			
Models of Systems Affected: RC-12				Modification Type: Unclassified				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1: Guardrail Common Sensor SEMA Modifications</i>													
A Kits													
Recurring													
PM Costs	- / -	- / -	- / 1.748	- / 1.782	- / -	- / 1.782	- / 1.900	- / 1.938	- / 1.976	- / 1.843	- / -	- / 11.187	
Fielding/Training	- / -	- / -	- / 0.104	- / 0.103	- / -	- / 0.103	- / 0.138	- / 0.139	- / 0.140	- / 0.077	- / -	- / 0.701	
Subtotal: Recurring	- / -	- / -	- / 1.852	- / 1.885	- / -	- / 1.885	- / 2.038	- / 2.077	- / 2.116	- / 1.920	- / -	- / 11.888	
Subtotal: Guardrail Common Sensor SEMA Modifications	- / -	- / -	- / 1.852	- / 1.885	- / -	- / 1.885	- / 2.038	- / 2.077	- / 2.116	- / 1.920	- / -	- / 11.888	
Subtotal: Procurement, All Modification Items	- / -	- / -	- / 1.852	- / 1.885	- / -	- / 1.885	- / 2.038	- / 2.077	- / 2.116	- / 1.920	- / -	- / 11.888	
Installation													
<i>Modification Item 1 of 1: Guardrail Common Sensor SEMA Modifications</i>													
Subtotal: Installation	- / -	- / -	- / 2.167	2 / 2.170	- / -	2 / 2.170	6 / 3.476	6 / 3.545	5 / 3.611	- / 1.056	- / -	19 / 16.025	
Total													
Total Cost (Procurement + Support + Installation)	-	-	4.019	4.055	-	4.055	5.514	5.622	5.727	2.976	-	27.913	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A02111 / GRCS SEMA Mods (MIP)	Modification Number / Title: A02111 / Guardrail Common Sensor SEMA Modifications

Modification Item 1 of 1: Guardrail Common Sensor SEMA Modifications

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Various
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 8

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates		Sep 2016	Sep 2017	Sep 2018	Sep 2019	Sep 2020	Sep 2021

Installation Information

Method of Implementation: Guardrail Common Sensor SEMA Modifications

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / 2.167	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.167
FY 2017	- / -	- / -	- / -	2 / 2.170	- / -	2 / 2.170	- / -	- / -	- / -	- / -	- / -	2 / 2.170
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	6 / 3.476	- / -	- / -	- / -	- / -	6 / 3.476
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 3.545	- / -	- / -	- / -	6 / 3.545
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 3.611	- / -	- / -	5 / 3.611
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.056	- / -	- / 1.056
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / 2.167	2 / 2.170	- / -	2 / 2.170	6 / 3.476	6 / 3.545	5 / 3.611	- / 1.056	- / -	19 / 16.025

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	-	-	-	-	-	-	-	-	-	2	-	-	-	6	-	-	-	6	-	-	-	5	-	-	-	-	-	-	-	-	-	19
Out	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	6	-	-	-	6	-	-	-	5	-	-	-	-	-	-	19

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A02110 / ARL SEMA Mods (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-	-	114.977
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-	-	114.977
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-	-	114.977

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Airborne Reconnaissance Low - Enhanced (ARL-E) is a worldwide self-deployable airborne Intelligence Surveillance Reconnaissance (ISR) system designed for timely, accurate, assured support to tactical forces over the full spectrum of operations. This system is a De Havilland DHC-8 aircraft replacing the DHC-7 IAW the Aerial ISR (AISR) 2020 Strategy. ARL-E will enhance the ARL-M sensor capability sets through the procurement of new and refurbished sensors to meet the ARL-E Capabilities Production Document (CPD) requirements. It provides a persistent capability to include: Broad-Area Surveillance and/or Focused Stare on Target Areas of Interest (Point or Objective Targets), Electro-Optical/Infrared (EO/IR)/Full-Motion Video (FMV), Multi-Mode Radar, Robust Communications Intelligence (COMINT), on-Board Collection, Analysis, Sensor Cross Cue and dissemination through Distributed Common Ground System-Army (DCGS-A) Enabled workstations. ARL-E will be assigned to the U.S. Army Intelligence and Security Command's Aerial ISR Brigade providing AISR support to combatant commanders. For the overall system, the Army Acquisition Objective and the Army Procurement Objective, is nine (9). The Mission Equipment Package (MEP) objective is eight (8).

The funding line supports the conversion of Government Owned Contractor Operated (GOCO) Quick Reaction Capability (QRC) DeHavilland (DHC) 8-315 Aerial Intelligence Surveillance & Reconnaissance (AISR) aircraft systems, four (4) Saturn Arch (SA) and two (2) Desert Owl (DO), and the conversion of three (3) DHC 8-315 commercially procured aircraft beyond FY19. It provides for the following: the procurement of replacement and spare engines; procurement and associated testing of civil and military aircraft equipment, and future integration efforts. These modifications address all Department of Defense (DoD) mandated safety equipment to current and evolving international and Army Standards. These modifications ensure continued worldwide deployment capability and safe operations. Lastly, this line supports future pre-planned product improvements.

Separate funding lines support the Army Acquisition Executive's directive, codified in the October 28, 2011 memorandum, to assign overall acquisition lead for manned airborne Intelligence systems to Program Executive Officer for Aviation; and overall sensor, processing, exploitation, and dissemination responsibilities to Program Executive Officer for Intelligence, Electronic Warfare, and Sensors. This budget line provides for aircraft modification and AZ2050 provides for sensors.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-
Total:									
Quantity	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A02110 / ARL SEMA Mods (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Secondary Distribution	Total Obligation Authority	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
A02110 / ARL SEMA Mods (MIP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A02110 / ARL SEMA Modifications (Unclassified)			- / -	- / -	- / 48.302	- / 6.793	- / -	- / 6.793
P-40	Total Gross/Weapon System Cost			- / -	- / -	- / 48.302	- / 6.793	- / -	- / 6.793

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A02110 / ARL SEMA Modifications (Unclassified)			- / 18.223	- / 19.636	- / 22.023	- / -	- / -	- / 114.977
P-40	Total Gross/Weapon System Cost			- / 18.223	- / 19.636	- / 22.023	- / -	- / -	- / 114.977

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The FY 2017 base procurement funding in the amount of \$6.793 million will be utilized to execute the additional Production Acceptance Testing (PAT) of cockpit and Aircraft Survivability Equipment (ASE) modifications for the DHC 8-315, #3, #4, #5 & #6 aircraft.

All COMPO 1 Active. In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: A02110 / ARL SEMA Mods (MIP)						Modification Number / Title: A02110 / ARL SEMA Modifications		

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-	-	114.977
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-	-	114.977
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-	-	114.977

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The funding line supports the conversion of Government Owned Contractor Operated (GOCO) Quick Reaction Capability (QRC) DeHavilland (DHC) 8-315 Aerial Intelligence Surveillance & Reconnaissance (AISR) aircraft systems, four (4) Saturn Arch (SA) and two (2) Desert Owl (DO). It provides for the following: the procurement of replacement and spare engines; procurement and associated testing of civil and military aircraft equipment, and future integration efforts. These modifications address all Department of Defense (DoD) mandated safety equipment to current and evolving international and Army Standards. These modifications ensure continued worldwide deployment capability and safe operations. Lastly, this line supports future pre-planned product improvements. Funding in FY2019 and FY 2020 is for the conversion of three (3) DHC 8-315 commercially procured aircraft beyond FY19.

FY15 funding for two (2) aircraft Cockpit and ASE Mods was executed from the PM SAI funding line AZ2050 under the base ASE and Cockpit Contract at ACC-APG.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: A02110 / ARL SEMA Mods (MIP)					Modification Number / Title: A02110 / ARL SEMA Modifications			
Models of Systems Affected: ARL SEMA Modifications				Modification Type: Unclassified					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1: ASE and Cockpit Mods</i>													
A Kits													
Recurring													
PMO	- / -	- / -	- / 8.799	- / 2.186	- / -	- / 2.186	- / 2.230	- / 2.274	- / 2.320	- / -	- / -	- / 17.809	
Spares	- / -	- / -	- / 17.042	- / -	- / -	- / -	- / -	- / 1.610	- / 1.642	- / -	- / -	- / 10.294	
System T&E Support	- / -	- / -	- / 2.399	- / 4.584	- / -	- / 4.584	- / 8.756	- / 1.084	- / -	- / -	- / -	- / 16.823	
Training and Documentation	- / -	- / -	- / -	- / 0.023	- / -	- / 0.023	- / 0.036	- / 0.037	- / 0.037	- / -	- / -	- / 0.133	
Sensors Integration	- / -	- / -	- / -	- / -	- / -	- / -	- / 17.201	- / 17.094	- / 10.336	- / -	- / -	- / 24.631	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 18.240	- / 6.793	- / -	- / 6.793	- / 18.223	- / 12.099	- / 14.335	- / -	- / -	- / 69.690	
<i>Subtotal: ASE and Cockpit Mods</i>	- / -	- / -	- / 18.240	- / 6.793	- / -	- / 6.793	- / 18.223	- / 12.099	- / 14.335	- / -	- / -	- / 69.690	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 18.240	- / 6.793	- / -	- / 6.793	- / 18.223	- / 12.099	- / 14.335	- / -	- / -	- / 69.690	
Installation													
<i>Modification Item 1 of 1: ASE and Cockpit Mods</i>													
	- / -	- / -	4 / 30.062	- / -	- / -	- / -	- / -	1 / 7.537	1 / 7.688	- / -	1 / -	7 / 45.287	
<i>Subtotal: Installation</i>	- / -	- / -	4 / 30.062	- / -	- / -	- / -	- / -	1 / 7.537	1 / 7.688	- / -	1 / -	7 / 45.287	
Total													
Total Cost (Procurement + Support + Installation)	-	-	48.302	6.793	-	6.793	18.223	19.636	22.023	-	-	114.977	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A02110 / ARL SEMA Mods (MIP)	Modification Number / Title: A02110 / ARL SEMA Modifications

Modification Item 1 of 1: ASE and Cockpit Mods

Manufacturer Information

Manufacturer Name: Adams Communications Engineering Technology	Manufacturer Location: Aberdeen, MD
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Jun 2015				Jan 2019		
Delivery Dates		Jul 2016	Jul 2017			Jan 2020	Apr 2021

Installation Information

Method of Implementation: ARL-E ASE & Cockpit Modifications

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	4 / 30.062	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 30.062
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 7.537	- / -	- / -	- / -	1 / 7.537
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 7.688	- / -	- / -	1 / 7.688
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	1 / -
Total	- / -	- / -	4 / 30.062	- / -	- / -	- / -	- / -	1 / 7.537	1 / 7.688	- / -	1 / -	7 / 45.287

Installation Schedule

PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	-	-	-	2	-	-	-	4	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	9
Out	-	-	-	-	-	-	2	-	-	-	-	4	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	1	9	

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A02112 / EMARSS SEMA Mods (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981	-	104.381
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981	-	104.381
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981	-	104.381

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) is the Army's next generation C-12 based, direct support, manned airborne intelligence collection, processing, and targeting support system. It provides a persistent capability to detect, locate, classify/identify, and track surface targets with a high degree of timeliness and accuracy. EMARSS will be assigned to the U.S. Army Intelligence and Security Command's Aerial Exploitation Battalions, providing Aerial Intelligence, Surveillance and Reconnaissance support to combatant commanders. The Army Acquisition Objective for EMARSS is 36 systems, with an Army Procurement Objective of 24, to include the following variants: eight (8) EMARSS-G (Geo-INT); four (4) EMARSS-V (Vehicle and Dismount Exploitation Radar, VaDER); eight (8) EMARSS-M (Multi-INT); and four (4) EMARSS-S (SIGINT).

The budget line supports the conversion of Special Electronic Mission Aircraft (SEMA) Government-owned Quick Reaction Capability (QRC) Aerial Intelligence Surveillance & Reconnaissance (AISR) systems: Liberty Project Aircraft (LPA), Constant Hawk (CH) and Tactical Operations (TACOP), VaDER (Vehicle and Dismount exploitation Radar) into Enhanced Medium Altitude Reconnaissance and Surveillance Systems (EMARSS) Capabilities Production Document (CPD) compliant systems. It provides for the following: the procurement of replacement and spare engines; procurement and associated testing of civil and military aircraft equipment; and integration/installation of ISR Mission Equipment Package (MEP). These modifications address all Department of Defense (DoD) mandated safety equipment to current and evolving international and Army Standards. These modifications ensure continued worldwide deployment capability and safe operations. Lastly, this line supports future pre-planned product improvements.

The overall EMARSS procurement/modernization efforts are found in the following two lines; AZ2054 EMARSS Payloads (Project Manager Sensors - Aerial Intelligence) and A02112 EMARSS SEMA Mods (Fixed Wing Project Office). Separate funding lines support the Army Acquisition Executive's directive, codified in the October 28, 2011 memorandum, to assign overall acquisition lead for manned airborne intelligence systems to Program Executive Officer for Aviation; and overall sensor, processing, exploitation, and dissemination responsibilities to Program Executive Officer for Intelligence, Electronic Warfare, and Sensors.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981
Total:									
Quantity	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A02112 / EMARSS SEMA Mods (MIP)
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Secondary Distribution	Total Obligation Authority	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
A02112 / EMARSS SEMA Mods (MIP)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A02112 / EMARSS SEMA Modifications (Unclassified)			- / -	- / -	- / 13.669	- / 13.197	- / 42.700	- / 55.897
P-40	Total Gross/Weapon System Cost			- / -	- / -	- / 13.669	- / 13.197	- / 42.700	- / 55.897

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A02112 / EMARSS SEMA Modifications (Unclassified)			- / 3.279	- / 21.139	- / 4.416	- / 5.981	- / -	- / 104.381
P-40	Total Gross/Weapon System Cost			- / 3.279	- / 21.139	- / 4.416	- / 5.981	- / -	- / 104.381

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY17 Base Procurement dollars in the amount of \$13.197 million supports the conversion of one (1) U.S. Air Force Liberty Project Aircraft (LPA) to an EMARSS-M Capabilities Production Document (CPD) compliant configuration.

FY17 OCO Procurement dollars in the amount of \$42.700 million are required to reset and recapitalize three (3) King Air 350ER Quick Reaction Capability (QRC) systems for future service in Aerial Exploitation Battalions (AEBs) as manned Multi-Intelligence Airborne Intelligence Surveillance and Reconnaissance (AISR) systems for OFS. Specifically, funds provide integration of upgraded mission equipment package (MEP), thus bringing the QRC system into compliance with Enhanced Medium Altitude Reconnaissance and Surveillance System-G (EMARSS-G) Capability Production Document compliant variant (i.e. program of record configuration). Current plan, as of the date of this form, is to convert two (2) Constant Hawk and one (1) VaDER QRC systems into EMARSS CPD compliant configuration. This plan can change based on the needs of the Warfighter. In the event the plan changes, available QRCs will be converted.

All COMPO 1 Active. In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: A02112 / EMARSS SEMA Mods (MIP)				Modification Number / Title: A02112 / EMARSS SEMA Modifications				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981	-	104.381
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981	-	104.381
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981	-	104.381

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The budget line supports the conversion of Special Electronic Mission Aircraft (SEMA) Government-owned Quick Reaction Capability (QRC) Aerial Intelligence Surveillance & Reconnaissance (AISR) systems: Liberty Project Aircraft (LPA), Constant Hawk (CH) and Tactical Operations (TACOP), VaDER (Vehicle and Dismount exploitation Radar) into Enhanced Medium Altitude Reconnaissance and Surveillance Systems (EMARSS) Capabilities Production Document (CPD) compliant systems. It provides for the following: the procurement of replacement and spare engines; procurement and associated testing of civil and military aircraft equipment; and integration of ISR Mission Equipment Package (MEP). These modifications address all Department of Defense (DoD) mandated safety equipment to current and evolving international and Army Standards. These modifications ensure continued worldwide deployment capability and safe operations. Lastly, this line supports future pre-planned product improvements.

The APO quantity of 24 are funded as follows: Aerial Common Sensor (ACS) (MIP) (A02005) FY14-FY16 procured 16. EMARSS SEMA Mods (MIP) (A02112) and EMARSS Payloads (MIP) (AZ2054) FY17 forward, will procure the remaining 8.

The below input/output schedule reflects a combined effort between AZ2054 (PM SAI) and A02112 (FW PO).

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: A02112 / EMARSS SEMA Mods (MIP)						Modification Number / Title: A02112 / EMARSS SEMA Modifications		
Models of Systems Affected: EMARSS				Modification Type: Unclassified				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
<i>Modification Item 1 of 1: EMARSS SEMA Modifications</i>												
A Kits												
Recurring												
PMO and SETA Support	- / -	- / -	- / 4.676	- / 2.182	- / -	- / 2.182	- / 3.279	- / 2.270	- / 2.315	- / 2.362	- / -	- / 17.084
GFE/ Initial Spares	- / -	- / -	- / 0.330	- / 0.394	- / 1.181	- / 1.575	- / -	- / 0.485	- / 0.031	- / 0.084	- / -	- / 2.505
Contractor Testing	- / -	- / -	- / 0.255	- / 0.260	- / 1.065	- / 1.325	- / -	- / 0.466	- / 0.068	- / 0.069	- / -	- / 2.183
Mods in Service	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 17.918	- / 2.002	- / 3.466	- / -	- / 23.386
<i>Subtotal: Recurring</i>	- / -	- / -	- / 5.261	- / 2.836	- / 2.246	- / 5.082	- / 3.279	- / 21.139	- / 4.416	- / 5.981	- / -	- / 45.158
<i>Subtotal: EMARSS SEMA Modifications</i>	- / -	- / -	- / 5.261	- / 2.836	- / 2.246	- / 5.082	- / 3.279	- / 21.139	- / 4.416	- / 5.981	- / -	- / 45.158
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 5.261	- / 2.836	- / 2.246	- / 5.082	- / 3.279	- / 21.139	- / 4.416	- / 5.981	- / -	- / 45.158
Installation												
<i>Modification Item 1 of 1: EMARSS SEMA Modifications</i>	- / -	- / -	2 / 8.408	2 / 10.361	3 / 40.454	5 / 50.815	- / -	- / -	- / -	- / -	1 / -	8 / 59.223
<i>Subtotal: Installation</i>	- / -	- / -	2 / 8.408	2 / 10.361	3 / 40.454	5 / 50.815	- / -	- / -	- / -	- / -	1 / -	8 / 59.223
Total												
Total Cost (Procurement + Support + Installation)	-	-	13.669	13.197	42.700	55.897	3.279	21.139	4.416	5.981	-	104.381

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A02112 / EMARSS SEMA Mods (MIP)	Modification Number / Title: A02112 / EMARSS SEMA Modifications

Modification Item 1 of 1: EMARSS SEMA Modifications

Manufacturer Information

Manufacturer Name: L3 MID	Manufacturer Location: Greenville, TX
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 18

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		Dec 2015					
Delivery Dates			Jun 2017				

Installation Information

Method of Implementation: EMARSS Modifications

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	2 / 8.408	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 8.408
FY 2017	- / -	- / -	- / -	2 / 10.361	3 / 40.454	5 / 50.815	- / -	- / -	- / -	- / -	- / -	5 / 50.815
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	1 / -
Total	- / -	- / -	2 / 8.408	2 / 10.361	3 / 40.454	5 / 50.815	- / -	- / -	- / -	- / -	1 / -	8 / 59.223

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4							
In	-	-	-	-	-	-	2	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8
Out	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0270 / Utility/Cargo Airplane Mods
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	253.620	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470	14.692	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	253.620	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470	14.692	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	253.620	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470	14.692	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The budget line supports the updates and modernization of Army fixed wing aircraft communication, navigation, surveillance, survivability equipment, and Department of Defense (DoD) mandated safety equipment to current and evolving international and Army standards. The budget line provides for the procurement of replacement and spare engines for fixed wing aircraft. In addition, it provides for the procurement and associated testing of civil and military aircraft modification equipment. This budget line will also be used to modify fixed wing aircraft to include Engineer, Furnish and Install (EF&I) of modifications as a complete contractual effort. It also leverages Federal Aviation Administration (FAA) supplemental type certificates (STC) that are already in existence and applies STCs to aircraft modifications. These modifications ensure continued worldwide deployment capability and safe operations.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	15.029	8.809	7.421	-	7.421	16.106	10.921	9.474
ANG	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	7.357	5.053	-	5.053	-	-	2.398
AR	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	5.052	-	5.052	-	5.521	3.598
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
AA0270 / Utility/Cargo Airplane Mods

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0270 / Fixed Wing Aircraft Modifications (Rationalization, Standardization, Interoperability, Compatibility, Simplification)			- / 253.620	- / 15.029	- / 16.166	- / 17.526	- / -	- / 17.526
P-40	Total Gross/Weapon System Cost			- / 253.620	- / 15.029	- / 16.166	- / 17.526	- / -	- / 17.526

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0270 / Fixed Wing Aircraft Modifications (Rationalization, Standardization, Interoperability, Compatibility, Simplification)			- / 16.106	- / 16.442	- / 15.470	- / 14.692	Continuing	Continuing
P-40	Total Gross/Weapon System Cost			- / 16.106	- / 16.442	- / 15.470	- / 14.692	Continuing	Continuing

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY17 Base procurement dollars in the amount of \$17.526 million support aircraft modifications to Communications, Navigation, and Surveillance (CNS) and Aircraft Survivability Equipment (ASE) that meets current and future air traffic management requirements.

In addition, equipment included in the modifications will enhance the safety of passengers and crew. The upgrades will also permit the Army fixed wing aircraft to operate in compliance with other existing and emerging regulations. As requirement for new avionics equipment continue, aircraft delays and airspace exclusions are likely for aircraft not properly equipped. Upgrade of communication and navigation systems will enhance reliability and maintainability, thereby improving aircraft availability for mission requirements. The associated aircraft modifications will assure worldwide deployability for those required to deploy.

Comments:
In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

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Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10			P-1 Line Item Number / Title: AA0270 / Utility/Cargo Airplane Mods				Modification Number / Title: AA0270 / Fixed Wing Aircraft Modifications				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	253.620	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470	14.692	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	253.620	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470	14.692	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	253.620	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470	14.692	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

P-40m Modification Description:

The budget line supports the updates and modernization of Army fixed wing aircraft communication, navigation, surveillance, survivability equipment, and Department of Defense (DoD) mandated safety equipment to current and evolving international and Army standards. The budget line provides for the procurement of replacement and spare engines for fixed wing aircraft. In addition, it provides for the procurement and associated testing of civil and military aircraft modification equipment including integration of Intelligence, Surveillance and Reconnaissance (ISR) Mission Equipment Packages (MEP). This budget line will also be used to modify fixed wing aircraft to include Engineer, Furnish and Install (EF&I) of modifications as a complete contractual effort. It also leverages Federal Aviation Administration (FAA) supplemental type certificates (STC) that are already in existence and applies STCs to aircraft modifications. These modifications ensure continued worldwide deployment capability and safe operations.

FY17 Base procurement dollars in the amount of \$17.526 million support aircraft modifications to Communications, Navigation, and Surveillance (CNS) and Aircraft Survivability Equipment (ASE) that meets current and future air traffic management requirements.

In addition, equipment included in the modifications will enhance the safety of passengers and crew. The upgrades will also permit the Army fixed wing aircraft to operate in compliance with other existing and emerging regulations. As requirement for new avionics equipment continue, aircraft delays and airspace exclusions are likely for aircraft not properly equipped. Upgrade of communication and navigation systems will enhance reliability and maintainability, thereby improving aircraft availability for mission requirements. The associated aircraft modifications will assure worldwide deployability for those required to deploy.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	15.029	8.809	7.421	-	7.421	16.106	10.921	9.474	10.137
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	7.357	5.053	-	5.053	-	-	2.398	-
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	5.052	-	5.052	-	5.521	3.598	4.555
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470	14.692

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0270 / Utility/Cargo Airplane Mods						Modification Number / Title: AA0270 / Fixed Wing Aircraft Modifications			
Models of Systems Affected: All series Army fixed wing aircraft				Modification Type: Rationalization, Standardization, Interoperability, Compatibility, Simplification						Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1: Fixed Wing Aircraft Modifications</i>													
A Kits													
Recurring													
Installation Kits	236 / 150.904	8 / 8.942	20 / 9.619	7 / 10.428	- / -	7 / 10.428	6 / 9.583	11 / 9.783	13 / 9.205	15 / 8.742	Continuing	Continuing	
Data	0 / 1.268	- / 0.075	- / 0.081	- / 0.088	- / -	- / 0.088	- / 0.081	- / 0.082	- / 0.077	- / 0.073	Continuing	Continuing	
<i>Subtotal: Recurring</i>	<i>- / 152.172</i>	<i>- / 9.017</i>	<i>- / 9.700</i>	<i>- / 10.516</i>	<i>- / -</i>	<i>- / 10.516</i>	<i>- / 9.664</i>	<i>- / 9.865</i>	<i>- / 9.282</i>	<i>- / 8.815</i>	<i>Continuing</i>	<i>Continuing</i>	
<i>Subtotal: Fixed Wing Aircraft Modifications</i>	<i>236 / 152.172</i>	<i>8 / 9.017</i>	<i>20 / 9.700</i>	<i>7 / 10.516</i>	<i>- / -</i>	<i>7 / 10.516</i>	<i>6 / 9.664</i>	<i>11 / 9.865</i>	<i>13 / 9.282</i>	<i>15 / 8.815</i>	<i>Continuing</i>	<i>Continuing</i>	
<i>Subtotal: Procurement, All Modification Items</i>	<i>236 / 152.172</i>	<i>8 / 9.017</i>	<i>20 / 9.700</i>	<i>7 / 10.516</i>	<i>- / -</i>	<i>7 / 10.516</i>	<i>6 / 9.664</i>	<i>11 / 9.865</i>	<i>13 / 9.282</i>	<i>15 / 8.815</i>	<i>Continuing</i>	<i>Continuing</i>	
Installation													
<i>Modification Item 1 of 1: Fixed Wing Aircraft Modifications</i>	236 / 101.448	8 / 6.012	20 / 6.466	7 / 7.010	- / -	7 / 7.010	6 / 6.442	11 / 6.577	13 / 6.188	15 / 5.877	- / -	316 / 146.020	
<i>Subtotal: Installation</i>	<i>236 / 101.448</i>	<i>8 / 6.012</i>	<i>20 / 6.466</i>	<i>7 / 7.010</i>	<i>- / -</i>	<i>7 / 7.010</i>	<i>6 / 6.442</i>	<i>11 / 6.577</i>	<i>13 / 6.188</i>	<i>15 / 5.877</i>	<i>- / -</i>	<i>316 / 146.020</i>	
Total													
Total Cost (Procurement + Support + Installation)	253.620	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470	14.692	Continuing	Continuing	

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0270 / Utility/Cargo Airplane Mods	Modification Number / Title: AA0270 / Fixed Wing Aircraft Modifications

Modification Item 1 of 1: Fixed Wing Aircraft Modifications

Manufacturer Information

Manufacturer Name: Multiple Commercial Vendors	Manufacturer Location: TBD
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 6

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020
Delivery Dates	Jun 2015	Jun 2016	Jun 2017	Jun 2018	Jun 2019	Jun 2020	Jun 2021

Installation Information

Method of Implementation: Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	236 / 101.448	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	236 / 101.448
FY 2015	0 / 0.000	8 / 6.012	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 6.012
FY 2016	0 / 0.000	- / -	20 / 6.466	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 6.466
FY 2017	0 / 0.000	- / -	- / -	7 / 7.010	- / -	7 / 7.010	- / -	- / -	- / -	- / -	- / -	7 / 7.010
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	6 / 6.442	- / -	- / -	- / -	- / -	6 / 6.442
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	11 / 6.577	- / -	- / -	- / -	11 / 6.577
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 6.188	- / -	- / -	13 / 6.188
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 5.877	- / -	15 / 5.877
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	236 / 101.448	8 / 6.012	20 / 6.466	7 / 7.010	- / -	7 / 7.010	6 / 6.442	11 / 6.577	13 / 6.188	15 / 5.877	- / -	316 / 146.020

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	236	2	2	2	2	5	5	5	5	1	2	2	2	1	2	2	1	2	3	3	3	3	3	3	4	3	4	4	4	-	316
Out	231	2	2	2	2	2	2	2	2	2	1	2	2	2	1	2	2	1	2	3	3	3	3	3	3	4	3	4	4	19	316

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,294.478	76.515	16.893	10.807	-	10.807	5.900	5.903	5.901	-	-	1,416.397
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,294.478	76.515	16.893	10.807	-	10.807	5.900	5.903	5.901	-	-	1,416.397
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,294.478	76.515	16.893	10.807	-	10.807	5.900	5.903	5.901	-	-	1,416.397

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Utility Helicopter Mods include modifications to the UH-60 Black Hawk and the UH-72A Lakota helicopters. The UH-60 Black Hawk helicopter is the Army's utility helicopter in the future force. It is a twin engine, single rotor, four bladed utility helicopter used for air assault, general support, command & control, and aero-medical evacuations (MEDEVAC). The UH-60 is joint force capable, providing 24 hour/day support including operations at night and in adverse weather conditions. The UH-60 is designed to carry a crew of four plus eleven combat equipped troops or an external load up to 9,000 pounds. The UH-60 Black Hawk was fielded in 1978 as a replacement for the UH-1. From 1978 to 1988, UH-60As were produced. In 1989 production of UH-60Ls with improved engines and drive train began. In 2007, full rate production of UH-60Ms began which provided a digital cockpit, digital Flight Management System (FMS), improved engine, and wide-cord main rotor blades. The UH-72A Lakota helicopter provides general aviation support for aviation units in the active and reserve components.

FY17 Base procurement dollars in the amount of \$10.807 million will procure External High Speed Hoists. The External High Speed Hoist is a modification to UH-60A/L aircraft developed to supplement and eventually replace the internal rescue hoist currently in use. The existing internal hoist has significant obsolescence issues and takes up valuable cabin space in the aircraft thus the Army decided to standardize the external hoist configuration as employed on the HH-60A/L/M. The UH-60 A to L Conversion program expands the current UH-60 A to A recapitalization/rebuild. Effective in FY16 all A to L conversions and UH-60L Digital, now designated as UH-60V, conversions will be procured under line A05009. Prior to FY16 the funding for UH-60 A to L conversions was conducted under this line AA0492.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	51.921	16.893	10.807	-	10.807	5.900	5.903	5.901
ANG	Quantity	-	-	-	-	-	-	-	-
	Total Obligation Authority	24.594	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Secondary Distribution	Total Obligation Authority	76.515	16.893	10.807	-	10.807	5.900	5.903	5.901	-

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UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0492 / Utility Helicopter Modifications (Operational)			- / 1,294.478	- / 76.515	- / 16.893	- / 10.807	- / -	- / 10.807
P-40	Total Gross/Weapon System Cost			- / 1,294.478	- / 76.515	- / 16.893	- / 10.807	- / -	- / 10.807

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0492 / Utility Helicopter Modifications (Operational)			- / 5.900	- / 5.903	- / 5.901	- / -	- / -	- / 1,416.397
P-40	Total Gross/Weapon System Cost			- / 5.900	- / 5.903	- / 5.901	- / -	- / -	- / 1,416.397

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

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Exhibit P-3a, Individual Modification: PB 2017 Army								Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods				Modification Number / Title: AA0492 / Utility Helicopter Modifications				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,294.478	76.515	16.893	10.807	-	10.807	5.900	5.903	5.901	-	-	1,416.397
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,294.478	76.515	16.893	10.807	-	10.807	5.900	5.903	5.901	-	-	1,416.397
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,294.478	76.515	16.893	10.807	-	10.807	5.900	5.903	5.901	-	-	1,416.397

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Utility Helicopter Mods include modifications to the UH-60 Black Hawk and the UH-72A Lakota helicopter. FY17 Base procurement dollars in the amount of \$10.807 million will procure External High Speed Hoists. The External High Speed Hoist is a modification to UH-60A/L aircraft developed to supplement and eventually replace the internal rescue hoist currently in use. The existing internal hoist has significant obsolescence issues and takes up valuable cabin space in the aircraft thus the Army decided to standardize the external hoist configuration as employed on the HH-60A/L/M. The UH-60 A to L Conversion program expands the current UH-60 A to A recapitalization/rebuild. Effective in FY16 all A to L conversions and UH-60L Digital, now designated as UH-60V, conversions will be procured under line A05009. Prior to FY16 the funding for UH-60 A to L conversions was conducted under this line AA0492.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	51.921	16.893	10.807	-	10.807	5.900	5.903	5.901	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	24.594	-	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	76.515	16.893	10.807	-	10.807	5.900	5.903	5.901	-

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods					Modification Number / Title: AA0492 / Utility Helicopter Modifications			
Models of Systems Affected: UH-60L				Modification Type: Operational				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
Modification Item 1 of 6: Crashworthy External Fuel System (CEFS)													
A Kits													
Recurring													
A-Kits (A/L)	822 / 45.857	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	822 / 45.857	
A-Kits (GFE to Production)	32 / 2.700	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	32 / 2.700	
A-Kits (GFE to SAR Acft)	10 / 0.600	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 0.600	
B-kits	431 / 56.200	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	431 / 56.200	
Support Equipment/Other	0 / 32.935	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 32.935	
Subtotal: Recurring	- / 138.292	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 138.292	
Subtotal: Crashworthy External Fuel System (CEFS)	1,295 / 138.292	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1,295 / 138.292	
Modification Item 2 of 6: UH-60A to UH-60L Conversion													
A Kits													
Recurring													
other	221 / 313.763	55 / 61.485	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	276 / 375.248	
Subtotal: Recurring	- / 313.763	- / 61.485	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 375.248	
Non-Recurring													
other	0 / 776.553	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 776.553	
Subtotal: Non-Recurring	- / 776.553	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 776.553	
Subtotal: UH-60A to UH-60L Conversion	221 / 1,090.316	55 / 61.485	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	276 / 1,151.801	
Modification Item 3 of 6: External High Speed Hoist													
A Kits													
Recurring													
Other	132 / 42.330	44 / 12.291	55 / 16.893	29 / 10.807	- / -	29 / 10.807	- / -	- / -	- / -	- / -	- / -	260 / 82.321	
Subtotal: Recurring	- / 42.330	- / 12.291	- / 16.893	- / 10.807	- / -	- / 10.807	- / -	- / -	- / -	- / -	- / -	- / 82.321	
Subtotal: External High Speed Hoist	132 / 42.330	44 / 12.291	55 / 16.893	29 / 10.807	- / -	29 / 10.807	- / -	- / -	- / -	- / -	- / -	260 / 82.321	
Modification Item 4 of 6: Enhanced Ballistics Armor Protections System													
A Kits													
Recurring													
Kit Quantity	- / -	- / -	- / -	- / -	- / -	- / -	48 / 5.900	48 / 5.903	48 / 5.901	- / -	- / -	144 / 17.704	
Other	0 / 15.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.000	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods					Modification Number / Title: AA0492 / Utility Helicopter Modifications				
Models of Systems Affected: UH-60L				Modification Type: Operational				Related RDT&E PEs:						
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total		
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>		
<i>Subtotal: Recurring</i>	- / 5.000	- / -	- / -	- / -	- / -	- / -	- / 5.900	- / 5.903	- / 5.901	- / -	- / -	- / 22.704		
<i>Subtotal: Enhanced Ballistics Armor Protections System</i>	0 / 5.000	- / -	- / -	- / -	- / -	- / -	48 / 5.900	48 / 5.903	48 / 5.901	- / -	- / -	144 / 22.704		
Modification Item 5 of 6: Upturned Exhaust System (UES)														
A Kits														
Non-Recurring														
Non Recurring	- / -	- / 1.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.000		
<i>Subtotal: Non-Recurring</i>	- / -	- / 1.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.000		
<i>Subtotal: Upturned Exhaust System (UES)</i>	- / -	- / 1.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.000		
Modification Item 6 of 6: Backup Altitude Indicators														
A Kits														
Recurring														
Kit Quantity	265 / 14.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	265 / 14.000		
<i>Subtotal: Recurring</i>	- / 14.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 14.000		
<i>Subtotal: Backup Altitude Indicators</i>	265 / 14.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	265 / 14.000		
<i>Subtotal: Procurement, All Modification Items</i>	1,913 / 1,289.938	99 / 74.776	55 / 16.893	29 / 10.807	- / -	29 / 10.807	48 / 5.900	48 / 5.903	48 / 5.901	- / -	- / -	2,240 / 1,410.118		
Installation														
Modification Item 1 of 6: Crashworthy External Fuel System (CEFS)	315 / 4.540	116 / 1.739	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	431 / 6.279		
Modification Item 2 of 6: UH-60A to UH-60L Conversion	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -		
Modification Item 3 of 6: External High Speed Hoist	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -		
Modification Item 4 of 6: Enhanced Ballistics Armor Protections System	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -		
Modification Item 5 of 6: Upturned Exhaust System (UES)	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -		
Modification Item 6 of 6: Backup Altitude Indicators	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -		
<i>Subtotal: Installation</i>	315 / 4.540	116 / 1.739	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	431 / 6.279		
Total														
Total Cost (Procurement + Support + Installation)	1,294.478	76.515	16.893	10.807	-	10.807	5.900	5.903	5.901	-	-	1,416.397		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods	Modification Number / Title: AA0492 / Utility Helicopter Modifications

Modification Item 1 of 6: Crashworthy External Fuel System (CEFS)

Manufacturer Information

Manufacturer Name: Robertson Fuel Systems, LLC	Manufacturer Location: Tempe, AZ
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 2

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	81 / 1.200	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	81 / 1.200
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	234 / 3.340	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	234 / 3.340
FY 2017	0 / 0.000	116 / 1.739	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	116 / 1.739
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	315 / 4.540	116 / 1.739	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	431 / 6.279

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	431	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	431
Out	431	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	431

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods	Modification Number / Title: AA0492 / Utility Helicopter Modifications

Modification Item 2 of 6: UH-60A to UH-60L Conversion

Manufacturer Information

Manufacturer Name: Corpus Christi Army Depot	Manufacturer Location: Corpus Christi Army Depot
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Oct 2014	Oct 2015	Oct 2016				
Delivery Dates	Oct 2015	Oct 2017	Oct 2017				

Installation Information

Method of Implementation: Depot

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4						
In	221	14	14	14	13	10	11	12	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	322
Out	181	10	10	10	10	14	14	14	13	10	11	12	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	322

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods	Modification Number / Title: AA0492 / Utility Helicopter Modifications

Modification Item 3 of 6: External High Speed Hoist

Manufacturer Information

Manufacturer Name: Breeze Eastern, Inc	Manufacturer Location: Whippany, NJ
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 4

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	May 2015	May 2016	May 2017				
Delivery Dates	Sep 2015	Sep 2016	Sep 2017				

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	132	11	11	11	11	14	14	14	13	8	7	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	115	17	11	11	11	11	14	14	14	13	8	7	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods	Modification Number / Title: AA0492 / Utility Helicopter Modifications

Modification Item 4 of 6: Enhanced Ballistics Armor Protections System

Manufacturer Information

Manufacturer Name: TPG	Manufacturer Location: Miami Lakes, Florida
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 5

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates				May 2018	May 2019	May 2020	
Delivery Dates				Oct 2018	Oct 2019	Oct 2020	

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	-	-	-	-	-	144
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	-	-	-	144

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods	Modification Number / Title: AA0492 / Utility Helicopter Modifications

Modification Item 5 of 6: Upturned Exhaust System (UES)

Manufacturer Information

Manufacturer Name: Undetermined	Manufacturer Location: Undetermined
Administrative Leadtime (in Months):	Production Leadtime (in Months):

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
In	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0480 / Utility Helicopter Mods	Modification Number / Title: AA0492 / Utility Helicopter Modifications

Modification Item 6 of 6: Backup Altitude Indicators

Manufacturer Information

Manufacturer Name: PIF				Manufacturer Location: Redstone Arsenal Alabama			
Administrative Leadtime (in Months): 6				Production Leadtime (in Months): 6			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Jul 2014						
Delivery Dates	Nov 2015						

Installation Information

Method of Implementation: Various

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	265	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	265
Out	133	66	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	265	

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0712 / Network And Mission Plan
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604201A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	307.040	102.930	108.807	74.752	-	74.752	139.458	144.555	120.898	135.305	-	1,133.745
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	307.040	102.930	108.807	74.752	-	74.752	139.458	144.555	120.898	135.305	-	1,133.745
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	307.040	102.930	108.807	74.752	-	74.752	139.458	144.555	120.898	135.305	-	1,133.745

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	294.299	-	294.299	-	-	-	-	-	4,498.988

Description:

The Network and Mission Plan budget line includes the Aviation Mission Planning System (AMPS), the Improved Data Modem (IDM), the Aviation Data Exploitation Capability (ADEC), and the Aircraft Notebook (ACN).

The AMPS is a decision support and battle synchronization system for automated mission planning, risk assessment and transfer of mission data to aviation platforms in support of Mission Command functions within Aviation units. The AMPS system supports pre-mission planning and rehearsal, including route planning, communications planning, and aircraft configuration. The AMPS provides the pre-mission and geospatial data required by the aviation platforms. AMPS has the ability to generate mission data in either hard (paper) copy or electronic formats. Electronic formats are loaded onto the aircraft platforms utilizing a Data Transfer Device (DTC) initializing the communication, navigation, and weapons systems on the aircraft. Supported aircraft include the AH-64D/E, CH-47D/F, UH-60A/L/M/Q/V, HH-60L, LUH-72, Enhanced Medium Altitude Reconnaissance Surveillance System (EMARSS), and Unmanned Aircraft Systems (UAS). The AMPS program includes management of the Commander's Aviation Risk Tool (CART) and the Centralized Aviation Flight Records System (CAFRS). To accommodate rapid commercial technology changes, the overall system hardware is replaced after five years of use.

The IDM is the common solution for digitizing Army Aviation. It performs as an internet controller and gateway to Tactical Internet (TI) and Fire Support (FS) internet for Army aircraft. With interfaces supporting a transmit/receive terminal, the IDM provides radio connectivity to the ARC-201D/231, ARC-186, ARC-164, and the Blue Force Tracker transceiver, as well as providing 1553 and Ethernet portals for rapid data transfer. This hardware/software solution also provides a flexible, software-driven digital messaging system that is interoperable with existing Army and Joint forces battlefield operating systems. The IDM provides Situational Awareness and Joint Variable Message Format messages capability to the cockpit. The IDM is currently utilized by the AH-64D/E, CH-47F and UH/HH-60M.

The ADEC is an Army aviation program providing specific capabilities needed at the aviation unit level to implement and support improvements within aviation operations, safety, and training to increase operational effectiveness and situational awareness at all command echelons. ADEC provides a common and interoperable capability required to implement the DoD mandated Military Flight Operations Quality Assurance processes. ADEC will standardize flight scheduling/management, risk management, mission approval, and flight data analysis and visualization. ADEC provides interfaces to CAFRS to reduce data entry and information technology footprint while enabling disconnected and split based operations.

The ACN is an Army aviation program required to streamline the completion of aviation maintenance activities and the documentation required to maintain airworthiness for all Army aircraft. ACN implements The Army Maintenance Management System - Aviation (TAMMS-A) digital logbook functionality and integrates with CAFRS to reduce manual entries and increase data accuracy. ACN reduces the information technology footprint within an aviation unit by integrating multiple software applications such as platform software applications and condition based maintenance plus tools onto one hardware platform. The ACN will be fielded to units equipped with Utility Helicopter (UH)-72, Fixed Wing and Unmanned Aerial Systems (UAS) platforms.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0712 / Network And Mission Plan
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604201A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	59.700	63.108	43.356	-	43.356	80.886	83.842	70.121	78.477
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	39.113	41.346	28.406	-	28.406	52.994	54.931	45.942	51.415
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	4.117	4.353	2.990	-	2.990	5.578	5.782	4.835	5.413
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	102.930	108.807	74.752	-	74.752	139.458	144.555	120.898	135.305

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0712 / Network And Mission Plan
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604201A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0712 / Network and Mission Plan (Rationalization, Standardization, Interoperability, Compatibility, Simplification)			- / 307.040	- / 102.930	- / 108.807	- / 74.752	- / -	- / 74.752
P-40	Total Gross/Weapon System Cost			- / 307.040	- / 102.930	- / 108.807	- / 74.752	- / -	- / 74.752

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0712 / Network and Mission Plan (Rationalization, Standardization, Interoperability, Compatibility, Simplification)			- / 139.458	- / 144.555	- / 120.898	- / 135.305	- / -	- / 1,133.745
P-40	Total Gross/Weapon System Cost			- / 139.458	- / 144.555	- / 120.898	- / 135.305	- / -	- / 1,133.745

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2017 Base procurement dollars in the amount of \$27.274 million supports AMPS upgrades to system software to support aviation fleet modernization programs, support of CAFRS Individual Aircrew Training Folder software modification and provide Senior Leader Access to CAFRS data. AMPS hardware (B-Kits) is being replaced on a 5-year cycle to maintain pace with technology. FY 2018 is the first year of the next cycle of hardware replacement.

FY 2017 Base procurement dollars in the amount of \$21.833 million supports the procurement of IDM-401 B Kits to mitigate parts obsolescence concerns and to provide a technology refresh to the IDM hardware. These B Kits support production line programs for the AH-64D/E, CH-47F, HH/UH-60M helicopters. The IDM enhances Army Aviation's interoperability, lethality, and operational tempo by providing a common solution for fast and accurate data-burst communications via the TI and FS internet networks. The IDM provides a capability to communicate across the digital battlefield while also providing the flexibility to adapt to technology change.

FY 2017 Base procurement dollars in the amount of \$16.224 million supports the procurement, fielding, and training of ADEC systems for Army aviation units. ADEC will provide Army commanders and users the necessary operation, safety, and training information to ensure efficient mission management, reduce operations and support costs, and improve operational readiness. Fielding of ADEC is to Headquarters and Battalions of the Combat Aviation Brigades, Expeditionary Combat Aviation Brigades, Theater Aviation Brigades, and the Special Operations Aviation Regiment. ADEC is also fielded to the aviation training installations and flight detachments.

FY 2017 Base procurement dollars in the amount of \$9.421 million supports the fielding and training of ACN systems for Army aviation units. ACN will replace paper based processes with the digital aircraft notebook providing necessary maintenance and airworthiness record keeping to ensure efficient and effective aircraft maintenance, integration with Interactive Electronic Technical Manuals and CBM tools, accurate record keeping and safe aircraft operations, reduced operations and support costs, and improved operational readiness. Initial fielding of the ACN is to UH-72A, Fixed Wing, and UAS aircraft.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

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Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0712 / Network And Mission Plan				Modification Number / Title: AA0712 / Network and Mission Plan				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	307.040	102.930	108.807	74.752	-	74.752	139.458	144.555	120.898	135.305	-	1,133.745
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	307.040	102.930	108.807	74.752	-	74.752	139.458	144.555	120.898	135.305	-	1,133.745
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	307.040	102.930	108.807	74.752	-	74.752	139.458	144.555	120.898	135.305	-	1,133.745
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	294.299	-	294.299	-	-	-	-	-	4,498.988

Description:

The Network and Mission Plan budget line includes the Aviation Mission Planning System (AMPS), the Improved Data Modem (IDM), the Aviation Data Exploitation Capability (ADEC), and the Aircraft Notebook (ACN).

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0712 / Network And Mission Plan	Modification Number / Title: AA0712 / Network and Mission Plan

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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
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ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	39.113	41.346	28.406	-	28.406	52.994	54.931	45.942	51.415
AR	Quantity	-	-	-	-	-	-	-	-	-
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Total:	Quantity	-	-	-	-	-	-	-	-	-
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UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA0712 / Network And Mission Plan					Modification Number / Title: AA0712 / Network and Mission Plan				
Models of Systems Affected: AH-64D/E, CH-47D/F, UH-60A/L/M/Q/V, HH-60L/M, LUH, EMARSS, UH72,UAS					Modification Type: Rationalization, Standardization, Interoperability, Compatibility, Simplification					Related RDT&E PEs:				
Financial Plan														
	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Procurement														
Modification Item 1 of 4: Aviation Mission Planning System (AMPS)														
B Kits														
Recurring														
Kit Quantity- (Computer)	128 / 16.132	- / 0.344	30 / 0.347	30 / 0.354	- / -	30 / 0.354	1,214 / 12.711	218 / 2.373	- / -	30 / 0.391	- / -	1,650 / 32.652		
ECPs	0 / 48.048	- / 19.355	- / 15.900	- / 17.424	- / -	- / 17.424	- / 16.444	- / 17.965	- / 16.007	- / 18.252	- / -	- / 169.395		
Systems Engineering	0 / 3.108	- / 0.869	- / 1.187	- / 1.210	- / -	- / 1.210	- / 1.234	- / 1.259	- / 1.284	- / 1.309	- / -	- / 11.460		
System Test and Eval	0 / 5.538	- / 1.696	- / 1.856	- / 1.416	- / -	- / 1.416	- / 1.662	- / 1.606	- / 1.678	- / 2.017	- / -	- / 17.469		
Fielding/Training	0 / 21.547	- / 8.070	- / 8.054	- / 15.181	- / -	- / 15.181	- / 8.491	- / 8.460	- / 8.503	- / 7.558	- / -	- / 75.864		
Other- PM Admin	0 / 5.020	- / 1.910	- / 1.593	- / 1.689	- / -	- / 1.689	- / 1.677	- / 1.411	- / 1.182	- / 1.234	- / -	- / 15.716		
Subtotal: Recurring	- / 99.393	- / 32.244	- / 28.937	- / 27.274	- / -	- / 27.274	- / 42.219	- / 33.074	- / 28.654	- / 30.761	- / -	- / 322.556		
Subtotal: Aviation Mission Planning System (AMPS)	128 / 99.393	- / 32.244	30 / 28.937	30 / 27.274	- / -	30 / 27.274	1,214 / 42.219	218 / 33.074	- / 28.654	30 / 30.761	- / -	1,650 / 322.556		
Modification Item 2 of 4: Improved Data Modem (IDM)														
B Kits														
Recurring														
Kit Quantity- IDM	412 / 9.776	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	412 / 9.776		
Kit Quantity- IDM OSA	334 / 17.850	51 / 11.509	50 / 9.733	50 / 3.636	- / -	50 / 3.636	355 / 27.296	326 / 26.538	374 / 31.084	368 / 31.255	- / -	1,908 / 158.901		
Aircraft Integration	0 / 103.994	- / 32.927	- / 22.239	- / -	- / -	- / -	- / 9.290	- / 26.601	- / 11.396	- / 23.008	- / -	- / 229.455		
ECP (SW)	0 / 35.690	- / 16.796	- / 8.695	- / 9.000	- / -	- / 9.000	- / 9.283	- / 9.561	- / 9.931	- / 10.131	- / -	- / 109.087		
Systems Engineering	0 / 5.296	- / 1.743	- / 1.343	- / 1.368	- / -	- / 1.368	- / 1.394	- / 1.421	- / 1.448	- / 1.477	- / -	- / 15.490		
System Test & Eval	0 / 26.797	- / 2.804	- / 8.748	- / 4.607	- / -	- / 4.607	- / 9.154	- / 9.392	- / 9.557	- / 9.723	- / -	- / 80.782		
Fielding/Training	0 / 0.835	- / 0.309	- / 0.361	- / 0.324	- / -	- / 0.324	- / 0.360	- / 0.333	- / 0.372	- / 0.345	- / -	- / 3.239		
Other- PM Admin	0 / 7.409	- / 4.598	- / 3.377	- / 2.898	- / -	- / 2.898	- / 2.895	- / 3.071	- / 2.837	- / 2.706	- / -	- / 29.791		
Subtotal: Recurring	- / 207.647	- / 70.686	- / 54.496	- / 21.833	- / -	- / 21.833	- / 59.672	- / 76.917	- / 66.625	- / 78.645	- / -	- / 636.521		
Subtotal: Improved Data Modem (IDM)	746 / 207.647	51 / 70.686	50 / 54.496	50 / 21.833	- / -	50 / 21.833	355 / 59.672	326 / 76.917	374 / 66.625	368 / 78.645	- / -	2,320 / 636.521		
Modification Item 3 of 4: Aviation Data Exploitation Capability (ADEC)														
B Kits														
Recurring														
Kit Quantity- Workstation	- / -	- / -	441 / 1.971	154 / 0.702	- / -	154 / 0.702	441 / 2.049	441 / 2.090	496 / 2.570	497 / 2.562	- / -	2,470 / 11.944		
Kit Quantity- Server	- / -	- / -	57 / 2.105	20 / 0.909	- / -	20 / 0.909	57 / 2.456	57 / 2.450	63 / 2.992	64 / 2.999	- / -	318 / 13.911		

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA0712 / Network And Mission Plan					Modification Number / Title: AA0712 / Network and Mission Plan			
Models of Systems Affected: AH-64D/E, CH-47D/F, UH-60A/L/M/Q/V, HH-60L/M, LUH, EMARSS, UH72,UAS					Modification Type: Rationalization, Standardization, Interoperability, Compatibility, Simplification					Related RDT&E PEs:			
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
ECP (SW)	- / -	- / -	- / -	- / 14.270	- / -	- / 14.270	- / 14.355	- / 12.201	- / 12.245	- / 12.290	- / -	- / 15.361	
Data	- / -	- / -	- / -	- / -	- / -	- / -	- / 10.129	- / 0.021	- / 0.021	- / 0.049	- / -	- / 10.220	
Systems Engineering	- / -	- / -	- / 10.199	- / 11.065	- / -	- / 11.065	- / 11.147	- / 1.169	- / 1.193	- / 1.217	- / -	- / 15.990	
System Test & Eval	- / -	- / -	- / -	- / 10.158	- / -	- / 10.158	- / 1.198	- / 0.381	- / 0.388	- / 0.650	- / -	- / 12.775	
Fielding/Training	- / -	- / -	- / 12.565	- / 17.322	- / -	- / 17.322	- / 15.060	- / 15.275	- / 17.960	- / 8.099	- / -	- / 66.281	
Other- PM Admin	- / -	- / -	- / 11.008	- / 11.798	- / -	- / 11.798	- / 1.653	- / 1.641	- / 1.695	- / 1.737	- / -	- / 19.532	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 17.848	- / 16.224	- / -	- / 16.224	- / 28.047	- / 25.228	- / 19.064	- / 19.603	- / -	- / 126.014	
<i>Subtotal: Aviation Data Exploitation Capability (ADEC)</i>	- / -	- / -	498 / 17.848	174 / 16.224	- / -	174 / 16.224	498 / 28.047	498 / 25.228	559 / 19.064	561 / 19.603	- / -	2,788 / 126.014	
Modification Item 4 of 4: Aircraft Notebook (ACN)													
B Kits													
Recurring													
ECP (SW)	- / -	- / -	- / 10.792	- / 12.018	- / -	- / 12.018	- / 1.852	- / 1.470	- / 1.396	- / 1.104	- / -	- / 18.632	
Data	- / -	- / -	- / 10.049	- / 10.193	- / -	- / 10.193	- / 10.175	- / 10.157	- / 10.204	- / 10.164	- / -	- / 10.942	
Systems Engineering	- / -	- / -	- / 10.843	- / 12.674	- / -	- / 12.674	- / 12.745	- / 12.867	- / 12.962	- / 12.959	- / -	- / 15.050	
System Test	- / -	- / -	- / -	- / 10.255	- / -	- / 10.255	- / 10.267	- / 10.320	- / 10.164	- / 10.283	- / -	- / 11.289	
Fielding/Training	- / -	- / -	- / 15.158	- / 13.494	- / -	- / 13.494	- / 13.802	- / 13.741	- / 1.174	- / 1.197	- / -	- / 18.566	
Other- PM Admin	- / -	- / -	- / 10.684	- / 10.787	- / -	- / 10.787	- / 10.679	- / 10.781	- / 10.655	- / 10.589	- / -	- / 14.175	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 17.526	- / 19.421	- / -	- / 19.421	- / 19.520	- / 19.336	- / 16.555	- / 16.296	- / -	- / 48.654	
<i>Subtotal: Aircraft Notebook (ACN)</i>	- / -	- / -	- / 17.526	- / 19.421	- / -	- / 19.421	- / 19.520	- / 19.336	- / 16.555	- / 16.296	- / -	- / 48.654	
<i>Subtotal: Procurement, All Modification Items</i>	874 / 307.040	51 / 102.930	578 / 108.807	254 / 74.752	- / -	254 / 74.752	2,067 / 139.458	1,042 / 144.555	933 / 120.898	959 / 135.305	- / -	6,758 / 1,133.745	
Installation													
Modification Item 1 of 4: Aviation Mission Planning System (AMPS)	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Modification Item 2 of 4: Improved Data Modem (IDM)	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Modification Item 3 of 4: Aviation Data Exploitation Capability (ADEC)	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Modification Item 4 of 4: Aircraft Notebook (ACN)	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
<i>Subtotal: Installation</i>	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	307.040	102.930	108.807	74.752	-	74.752	139.458	144.555	120.898	135.305	-	1,133.745	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0712 / Network And Mission Plan	Modification Number / Title: AA0712 / Network and Mission Plan

Modification Item 1 of 4: Aviation Mission Planning System (AMPS)

Manufacturer Information

Manufacturer Name: VT Miltope	Manufacturer Location: Hope Hull, AL
Administrative Leadtime (in Months): 8	Production Leadtime (in Months): 7

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		Jun 2016	Jun 2017	Jun 2018	Jun 2019		Jun 2021
Delivery Dates		Dec 2016	Dec 2017	Dec 2018	Dec 2019		Dec 2021

Installation Information

Method of Implementation: Not applicable

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0712 / Network And Mission Plan	Modification Number / Title: AA0712 / Network and Mission Plan

Modification Item 2 of 4: Improved Data Modem (IDM)

Manufacturer Information

Manufacturer Name: AMRDEC Software Engineering Directorate	Manufacturer Location: Redstone Arsenal, AL
Administrative Leadtime (in Months):	Production Leadtime (in Months):

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Not Applicable

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0712 / Network And Mission Plan	Modification Number / Title: AA0712 / Network and Mission Plan

Modification Item 3 of 4: Aviation Data Exploitation Capability (ADEC)

Manufacturer Information

Manufacturer Name: AMRDEC Software Engineering Directorate	Manufacturer Location: Redstone Arsenal, AL
Administrative Leadtime (in Months):	Production Leadtime (in Months):

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Not Applicable

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0712 / Network And Mission Plan	Modification Number / Title: AA0712 / Network and Mission Plan

Modification Item 4 of 4: Aircraft Notebook (ACN)

Manufacturer Information

Manufacturer Name: AMRDEC Software Engineering Directorate	Manufacturer Location: Redstone Arsenal, AL
Administrative Leadtime (in Months):	Production Leadtime (in Months):

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Not Applicable

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604201A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	283.492	115.795	82.904	69.960	-	69.960	94.516	85.628	77.985	72.766	-	883.046
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	283.492	115.795	82.904	69.960	-	69.960	94.516	85.628	77.985	72.766	-	883.046
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	283.492	115.795	82.904	69.960	-	69.960	94.516	85.628	77.985	72.766	-	883.046

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The current Navigation Systems provide Army Aviation with extremely accurate and secure navigation and timing, assists in situational awareness, and aids in prevention of fratricide. The Global Positioning System (GPS) is installed in two configurations based upon mission profile, operational requirements, and avionics architecture of the aircraft. The Doppler GPS Navigation Set (DGNS) is used for the Non-bussed Utility and Cargo helicopters. The Embedded GPS Inertial Navigation System (EGI) is integrated into the Modernized Cargo, Utility, Attack, and Special Operations fleets of helicopters. The Preplanned Product Improvement (P3I) DGNS is being installed on the Blackhawk (UH-60A/L and HH-60A/L) and Chinook (CH-47D) aircraft. The P3I EGI is being installed on UH/HH-60M, CH-47F, Apache (AH-64E), and Special Operations Aircraft (SOA). GPS based navigation systems are required as the primary means of navigation in civil airspace. The modification program to the DGNS Computer Display Unit (CDU) and software upgrade is being conducted to reduce pilot workload and fatigue through a user friendly interface as well as provide maps and charts to augment tactical and Instrument Flight Rules navigational operations.

The Aviation Tactical Communication Systems (ATCS) is an Army Aviation Program to procure A and B Kits to meet Army Aviation Communications requirements. The ATCS B-Kits include the ARC-201D and the ARC-231 radio sets along with associated power amplifiers and mounts. A-Kit hardware and software is planned to be procured through the prime contractor for each platform.

The Aviation Maritime Fixed - Aviation (AMF-A) Radio Integration Program installs and qualifies Small Airborne Networking Radio (SANR) hardware and software for production line and fielded Army Aviation Aircraft, SOA, and Unmanned Aircraft Systems (UAS) platforms to enable the operation of AMF certified radios with SINCGARS, Soldier Radio Waveform, mid-tier wideband networking waveforms, or other advanced networking waveforms. This program also provides for the procurement and installation of AMF Radio retrofit A-Kits for use on platforms that were fielded without these capabilities. AMF Radios and ancillaries are procured by PM Tactical Radios and are not part of the AMF Radio Integration effort.

The Blue Force Tracking - Aviation (BFT-A) Program integrates, qualifies, and manages the installation of BFT-2 system installation kits (A-Kit) for Army Rotary Wing Aircraft. The A-Kit utilizes the BFT-2 transceiver and KGV-72 boxes provided by PM Mission Command (MC).

The FY 2017 funding request was reduced by \$1.497 million to account for the availability of prior year execution balances.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604201A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
	Total Obligation Authority	63.687	45.597	33.984	-	33.984	51.986	47.095	42.892	40.022
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	46.318	33.162	31.979	-	31.979	37.808	34.251	31.194	29.106
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.790	4.145	3.997	-	3.997	4.722	4.282	3.899	3.638
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	115.795	82.904	69.960	-	69.960	94.516	85.628	77.985	72.766

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance
--	--

ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604201A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0723 / Communications, Navigation, and Surveillance (New or Improved Operational Capability)			- / 283.492	- / 115.795	- / 82.904	- / 69.960	- / -	- / 69.960
P-40	Total Gross/Weapon System Cost			- / 283.492	- / 115.795	- / 82.904	- / 69.960	- / -	- / 69.960

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0723 / Communications, Navigation, and Surveillance (New or Improved Operational Capability)			- / 94.516	- / 85.628	- / 77.985	- / 72.766	- / -	- / 883.046
P-40	Total Gross/Weapon System Cost			- / 94.516	- / 85.628	- / 77.985	- / 72.766	- / -	- / 883.046

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY 2017 Base Procurement dollars in the amount of \$3.000 million supports procurement of EGI P3I B-Kits.
 FY 2017 Base Procurement dollars in the amount of \$28.240 million supports procurement of ATCS B-Kits and installation of A-Kits for the AH-64D/E, CH-47F, UH/HH-60L/M/V, LUH, UAS and SOA.
 FY 2017 Base Procurement dollars in the amount of \$8.774 million provides for procurement of AMF-A A-Kits for Shadow UAS installs and engineering services.
 FY 2017 Base Procurement dollars in the amount of \$29.946 million provides for the procurement and installation BFT-2 A-Kits.
 In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities

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Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance				Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	283.492	115.795	82.904	69.960	-	69.960	94.516	85.628	77.985	72.766	-	883.046
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	283.492	115.795	82.904	69.960	-	69.960	94.516	85.628	77.985	72.766	-	883.046
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	283.492	115.795	82.904	69.960	-	69.960	94.516	85.628	77.985	72.766	-	883.046
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The current Navigation Systems provide Army Aviation with extremely accurate and secure navigation and timing, assists in situational awareness, and aids in prevention of fratricide. The Global Positioning System (GPS) is installed in two configurations based upon mission profile, operational requirements, and avionics architecture of the aircraft. The Doppler GPS Navigation Set (DGNS) is used for the Non-bussed Utility and Cargo helicopters. The Embedded GPS Inertial Navigation System (EGI) is integrated into the Modernized Cargo, Utility, Attack, and Special Operations fleets of helicopters. The Preplanned Product Improvement (P3I) DGNS is being installed on the Blackhawk (UH-60A/L and HH-60A/L) and Chinook (CH-47D) aircraft. The P3I EGI is being installed on UH/HH-60M, CH-47F, Apache (AH-64E), and Special Operations Aircraft (SOA). GPS based navigation systems are required as the primary means of navigation in civil airspace. The modification program to the DGNS Computer Display Unit (CDU) and software upgrade is being conducted to reduce pilot workload and fatigue through a user friendly interface as well as provide maps and charts to augment tactical and Instrument Flight Rules navigational operations.

The Aviation Tactical Communication Systems (ATCS) is an Army Aviation Program to procure A and B Kits to meet Army Aviation Communications requirements. The ATCS B-Kits include the ARC-201D and the ARC-231 radio sets along with associated power amplifiers and mounts. A-Kit hardware and software is planned to be procured through the prime contractor for each platform.

The Aviation Maritime Fixed - Aviation (AMF-A) Radio Integration Program installs and qualifies Small Airborne Networking Radio (SANR) hardware and software for production line and fielded Army Aviation Aircraft, SOA, and Unmanned Aircraft Systems (UAS) platforms to enable the operation of AMF certified radios with SINCGARS, Soldier Radio Waveform, mid-tier wideband networking waveforms, or other advanced networking waveforms. This program also provides for the procurement and installation of AMF Radio retrofit A-Kits for use on platforms that were fielded without these capabilities. AMF Radios and ancillaries are procured by PM Tactical Radios and are not part of the AMF Radio Integration effort.

The Blue Force Tracking - Aviation (BFT-A) Program integrates, qualifies, and manages the installation of BFT-2 system installation kits (A-Kit) for Army Rotary Wing Aircraft. The A-Kit utilizes the BFT-2 transceiver and KGV-72 boxes provided by PM Mission Command (MC).

The FY 2017 funding request was reduced by \$1.497 million to account for the availability of prior year execution balances.

FY 2017 Base Procurement dollars in the amount of \$3.000 million supports procurement of EGI P3I B-Kits.

FY 2017 Base Procurement dollars in the amount of \$28.240 million supports procurement of ATCS B-Kits and installation of A-Kits for the AH-64D/E, CH-47F, UH/HH-60L/M/V, LUH, UAS and SOA.

FY 2017 Base Procurement dollars in the amount of \$8.774 million provides for procurement of AMF-A A-Kits for Shadow UAS installs and engineering services.

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance	Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance

FY 2017 Base Procurement dollars in the amount of \$29.946 million provides for the procurement and installation BFT-2 A-Kits.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	63.687	45.597	33.984	-	33.984	51.986	47.095	42.892	40.022
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	46.318	33.162	31.979	-	31.979	37.808	34.251	31.194	29.106
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.790	4.145	3.997	-	3.997	4.722	4.282	3.899	3.638
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	115.795	82.904	69.960	-	69.960	94.516	85.628	77.985	72.766

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance	Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance

Models of Systems Affected: UH/HH-60A/L, UH/HH/MH-60M, CH-47D, CH/MH-47F, AH-64D/E, LUH, UAS	Modification Type: New or Improved Operational Capability	Related RDT&E PEs:
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)

Procurement

Modification Item 1 of 6: DGNS (AN/ASN-128D) P3I												
A Kits												
Recurring												
Engineering Change Orders	0 / 2.800	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.800
Data	0 / 1.712	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.712
Training Equipment	0 / 6.800	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.800
Systems Engineering	0 / 8.931	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.931
Other - PM Admin	0 / 1.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.500
Subtotal: Recurring	- / 21.743	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 21.743
Subtotal: DGNS (AN/ASN-128D) P3I	0 / 21.743	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 21.743
Modification Item 2 of 6: DGNS (AN/ASN-128D) CDU/ Software Upgrade ECP												
A Kits												
Recurring												
Data/Training	- / -	- / 0.850	- / 2.252	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.102
Systems Engineering	0 / 0.816	- / 0.896	- / 0.902	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.614
Other - PM Admin	0 / 0.112	- / 0.513	- / 0.299	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.924
Subtotal: Recurring	- / 0.928	- / 2.259	- / 3.453	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.640
Non-Recurring												
Aircraft Integ-Nonrecurring	0 / 1.077	- / 1.728	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.805
Systems Test & Evaluation	- / -	- / -	- / 0.289	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.289
Subtotal: Non-Recurring	- / 1.077	- / 1.728	- / 0.289	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.094
B Kits												
Recurring												
Kit Quantity - B-Kit	- / -	4 / 0.230	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 0.230
Subtotal: Recurring	- / -	- / 0.230	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.230
Subtotal: DGNS (AN/ASN-128D) CDU/Software Upgrade ECP	0 / 2.005	4 / 4.217	- / 3.742	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 9.964
Modification Item 3 of 6: Embedded GPS Inertial Navigation System (EGI) P3I												
A Kits												

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance					Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance				
Models of Systems Affected: UH/HH-60A/L, UH/HH/MH-60M, CH-47D, CH/MH-47F, AH-64D/E, LUH, UAS					Modification Type: New or Improved Operational Capability					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total		
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		
Recurring														
Aircraft Integration	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 5.361	- / -	- / -	- / -	- / 5.361		
Engineering Change Orders	0 / 0.800	- / -	- / 0.546	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.346		
Systems Test & Evaluation	- / -	- / 0.200	- / 0.015	- / -	- / -	- / -	- / -	- / -	- / 1.500	- / 1.573	- / -	- / 3.288		
Fielding / Training	- / -	- / -	- / 1.364	- / -	- / -	- / -	- / -	- / -	- / 2.247	- / 2.474	- / -	- / 6.085		
Data	0 / 0.716	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.716		
Training Equipment	0 / 0.777	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.777		
Systems Engineering	0 / 5.220	- / -	- / 2.177	- / 1.913	- / -	- / 1.913	- / 1.500	- / 3.150	- / 3.360	- / 4.065	- / -	- / 21.385		
Other - PM Admin	0 / 1.945	- / -	- / 0.726	- / 0.640	- / -	- / 0.640	- / -	- / 1.050	- / 1.120	- / 1.355	- / -	- / 6.836		
Subtotal: Recurring	- / 9.458	- / 0.200	- / 4.828	- / 2.553	- / -	- / 2.553	- / 1.500	- / 9.561	- / 8.227	- / 9.467	- / -	- / 45.794		
B Kits														
Recurring														
Kit Quantity - B-Kit	20 / 2.000	- / -	87 / 14.232	- / -	- / -	- / -	- / -	- / -	10 / 1.334	- / -	910 / -	1,027 / 17.566		
Subtotal: Recurring	- / 2.000	- / -	- / 14.232	- / -	- / -	- / -	- / -	- / -	- / 1.334	- / -	- / -	- / 17.566		
Subtotal: Embedded GPS Inertial Navigation System (EGI) P31	20 / 11.458	- / 0.200	87 / 19.060	- / 2.553	- / -	- / 2.553	- / 1.500	- / 9.561	10 / 9.561	- / 9.467	910 / -	1,027 / 63.360		
Modification Item 4 of 6: Aviation Tactical Communication Systems (ATCS)														
A Kits														
Recurring														
Kit Quantity-A-Kit	303 / 9.600	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	62 / 1.004	3,335 / -	3,700 / 10.604	
Systems Engineering	0 / 8.102	- / 1.945	- / 4.920	- / 4.985	- / -	- / 4.985	- / 4.841	- / 5.529	- / 6.051	- / 5.204	- / -	- / 41.577		
System Test & Evaluation	0 / 4.404	- / 2.750	- / 2.783	- / -	- / -	- / -	- / 2.269	- / 2.557	- / 1.841	- / 0.285	- / -	- / 14.889		
Fielding/Training	0 / 10.942	- / 1.280	- / 0.528	- / 0.278	- / -	- / 0.278	- / 0.336	- / 3.351	- / 3.128	- / 0.349	- / -	- / 20.192		
Other - PM Admin SEPM	0 / 12.306	- / 3.326	- / 1.640	- / 1.662	- / -	- / 1.662	- / 1.614	- / 1.831	- / 2.017	- / 1.734	- / -	- / 26.130		
Subtotal: Recurring	- / 45.354	- / 9.301	- / 9.871	- / 6.925	- / -	- / 6.925	- / 7.060	- / 13.268	- / 13.037	- / 8.576	- / -	- / 113.392		
Non-Recurring														
ECPs - Nonrecurring	0 / 44.209	- / 49.900	- / 0.544	- / 10.788	- / -	- / 10.788	- / -	- / -	- / -	- / -	- / -	- / 105.441		
Subtotal: Non-Recurring	- / 44.209	- / 49.900	- / 0.544	- / 10.788	- / -	- / 10.788	- / -	- / -	- / -	- / -	- / -	- / 105.441		
B Kits														
Recurring														

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance					Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance				
Models of Systems Affected: UH/HH-60A/L, UH/HH/MH-60M, CH-47D, CH/MH-47F, AH-64D/E, LUH, UAS					Modification Type: New or Improved Operational Capability					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total		
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>		
Kit Quantity-B-Kit (ARC-231)	1,263 / 97.180	65 / 3.618	265 / 15.175	150 / 10.527	- / -	150 / 10.527	422 / 33.433	366 / 34.545	332 / 35.927	316 / 34.482	8,514 / -	11,693 / 264.887		
Kit Quantity-B-Kit (ARC201D)	707 / 21.574	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	707 / 21.574		
Kit Quantity-B-Kit (IFM)	480 / 9.922	122 / 3.082	122 / 3.289	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	724 / 16.293		
<i>Subtotal: Recurring</i>	<i>- / 128.676</i>	<i>- / 6.700</i>	<i>- / 18.464</i>	<i>- / 10.527</i>	<i>- / -</i>	<i>- / 10.527</i>	<i>- / 33.433</i>	<i>- / 34.545</i>	<i>- / 35.927</i>	<i>- / 34.482</i>	<i>- / -</i>	<i>- / 302.754</i>		
<i>Subtotal: Aviation Tactical Communication Systems (ATCS)</i>	<i>2,753 / 218.239</i>	<i>187 / 65.901</i>	<i>387 / 28.879</i>	<i>150 / 28.240</i>	<i>- / -</i>	<i>150 / 28.240</i>	<i>422 / 40.493</i>	<i>366 / 47.813</i>	<i>332 / 48.964</i>	<i>378 / 43.058</i>	<i>11,849 / -</i>	<i>16,824 / 521.587</i>		
Modification Item 5 of 6: Airborne Maritime Fixed (AMF-A) Radio Integration														
A Kits														
Recurring														
Kit Quantity - A-Kit	12 / 0.837	16 / 1.130	20 / 1.431	20 / 1.459	- / -	20 / 1.459	24 / 1.786	24 / 1.821	64 / 3.652	64 / 3.725	2,133 / -	2,377 / 15.841		
Support Equipment	0 / 0.416	- / 0.505	- / 0.429	- / 0.437	- / -	- / 0.437	- / 0.946	- / 0.946	- / 0.864	- / 0.973	- / -	- / 15.516		
System Test and Evaluation	0 / 4.000	- / -	- / -	- / -	- / -	- / -	- / 0.866	- / 1.325	- / -	- / -	- / -	- / 16.191		
System Eng/Prog Mgmt (SEPM)	- / -	- / 2.351	- / 1.358	- / 2.386	- / -	- / 2.386	- / 2.434	- / 2.463	- / 2.512	- / 2.685	- / -	- / 16.189		
<i>Subtotal: Recurring</i>	<i>- / 5.253</i>	<i>- / 3.986</i>	<i>- / 3.218</i>	<i>- / 4.282</i>	<i>- / -</i>	<i>- / 4.282</i>	<i>- / 6.032</i>	<i>- / 6.555</i>	<i>- / 7.028</i>	<i>- / 7.383</i>	<i>- / -</i>	<i>- / 43.737</i>		
Non-Recurring														
NRE Aircraft Integration	0 / 18.594	- / -	- / -	- / 4.397	- / -	- / 4.397	- / 22.055	- / 8.821	- / 4.388	- / 2.348	- / -	- / 60.603		
<i>Subtotal: Non-Recurring</i>	<i>- / 18.594</i>	<i>- / -</i>	<i>- / -</i>	<i>- / 4.397</i>	<i>- / -</i>	<i>- / 4.397</i>	<i>- / 22.055</i>	<i>- / 8.821</i>	<i>- / 4.388</i>	<i>- / 2.348</i>	<i>- / -</i>	<i>- / 60.603</i>		
<i>Subtotal: Airborne Maritime Fixed (AMF-A) Radio Integration</i>	<i>12 / 23.847</i>	<i>16 / 3.986</i>	<i>20 / 3.218</i>	<i>20 / 8.679</i>	<i>- / -</i>	<i>20 / 8.679</i>	<i>24 / 28.087</i>	<i>24 / 15.376</i>	<i>64 / 11.416</i>	<i>64 / 9.731</i>	<i>2,133 / -</i>	<i>2,377 / 104.340</i>		
Modification Item 6 of 6: Blue Force Tracking-Aviation (BFT-A)														
A Kits														
Recurring														
BFT-A A-Kits	454 / 0.000	512 / 11.986	334 / 7.830	236 / 6.190	- / -	236 / 6.190	321 / 8.602	27 / 0.072	- / -	- / -	935 / -	2,819 / 34.680		
Test / Engineering	- / -	- / 6.655	- / 4.301	- / 4.903	- / -	- / 4.903	- / 3.498	- / 4.386	- / 2.837	- / 2.826	- / -	- / 29.406		
Fielding / Training	- / -	- / 2.594	- / 1.637	- / 1.784	- / -	- / 1.784	- / 1.113	- / 1.536	- / 0.903	- / 1.176	- / -	- / 10.743		
SEPM	- / -	- / 3.194	- / 2.000	- / 2.480	- / -	- / 2.480	- / 1.828	- / 2.318	- / 1.481	- / 1.364	- / -	- / 14.665		
<i>Subtotal: Recurring</i>	<i>- / 0.000</i>	<i>- / 24.429</i>	<i>- / 15.768</i>	<i>- / 15.357</i>	<i>- / -</i>	<i>- / 15.357</i>	<i>- / 15.041</i>	<i>- / 8.312</i>	<i>- / 5.221</i>	<i>- / 5.366</i>	<i>- / -</i>	<i>- / 89.494</i>		
Non-Recurring														
NRE-Test / Engineering	- / -	- / 5.465	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.465		
<i>Subtotal: Non-Recurring</i>	<i>- / -</i>	<i>- / 5.465</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / 15.465</i>		

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance					Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance				
Models of Systems Affected: UH/HH-60A/L, UH/HH/MH-60M, CH-47D, CH/MH-47F, AH-64D/E, LUH, UAS					Modification Type: New or Improved Operational Capability					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total		
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>		
<i>Subtotal: Blue Force Tracking-Aviation (BFT-A)</i>	454 / 0.000	512 / 29.894	334 / 15.768	236 / 15.357	- / -	236 / 15.357	321 / 15.041	27 / 8.312	- / 5.221	- / 5.366	935 / -	2,819 / 94.959		
<i>Subtotal: Procurement, All Modification Items</i>	3,239 / 277.292	719 / 104.198	828 / 70.667	406 / 54.829	- / -	406 / 54.829	767 / 85.121	417 / 81.062	406 / 75.162	442 / 67.622	15,827 / -	23,051 / 815.953		
Installation														
Modification Item 1 of 6: DGNS (AN/ASN-128D) P3I	46 / 0.295	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	46 / 0.295		
Modification Item 2 of 6: DGNS (AN/ASN-128D) CDU/ Software Upgrade ECP	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -		
Modification Item 3 of 6: Embedded GPS Inertial Navigation System (EGI) P3I	0 / 0.000	- / -	- / -	87 / 0.447	- / -	87 / 0.447	- / -	- / -	- / -	10 / 0.042	930 / -	1,027 / 0.489		
Modification Item 4 of 6: Aviation Tactical Communication Systems (ATCS)	112 / 5.905	24 / 1.031	47 / 2.610	- / -	- / -	- / -	23 / 1.757	23 / 1.757	34 / 2.702	40 / 3.242	3,397 / -	3,700 / 19.004		
Modification Item 5 of 6: Airborne Maritime Fixed (AMF-A) Radio Integration	0 / 0.000	12 / 0.055	16 / 0.074	20 / 0.095	- / -	20 / 0.095	20 / 0.097	24 / 0.118	24 / 0.121	64 / 1.860	2,197 / -	2,377 / 2.420		
Modification Item 6 of 6: Blue Force Tracking-Aviation (BFT-A)	0 / 0.000	300 / 10.511	269 / 9.553	525 / 14.589	- / -	525 / 14.589	312 / 7.541	107 / 2.691	- / -	- / -	834 / -	2,347 / 44.885		
<i>Subtotal: Installation</i>	158 / 6.200	336 / 11.597	332 / 12.237	632 / 15.131	- / -	632 / 15.131	355 / 9.395	154 / 4.566	58 / 2.823	114 / 5.144	7,358 / -	9,497 / 67.093		
Total														
Total Cost (Procurement + Support + Installation)	283.492	115.795	82.904	69.960	-	69.960	94.516	85.628	77.985	72.766	-	883.046		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance	Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance

Modification Item 1 of 6: DGNS (AN/ASN-128D) P3I

Manufacturer Information

Manufacturer Name: BAE International Incorporated	Manufacturer Location: Wayne, NJ
Administrative Leadtime (in Months):	Production Leadtime (in Months):

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Modification Work Order (MWO) - Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	46 / 0.295	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	46 / 0.295
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	46 / 0.295	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	46 / 0.295

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46
Out	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance	Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance

Modification Item 2 of 6: DGNS (AN/ASN-128D) CDU/Software Upgrade ECP

Manufacturer Information

Manufacturer Name: BAE International Incorporated				Manufacturer Location: Wayne, NJ			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 12			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Modification Work Order (MWO) - Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance	Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance

Modification Item 3 of 6: Embedded GPS Inertial Navigation System (EGI) P3I

Manufacturer Information

Manufacturer Name: Honeywell, Incorporated	Manufacturer Location: Clearwater, FL
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		Dec 2015				Dec 2019	
Delivery Dates		Nov 2016				Nov 2020	

Installation Information

Method of Implementation: Aircraft Platform Funded Installation

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	87 / 0.447	- / -	87 / 0.447	- / -	- / -	- / -	- / -	- / -	87 / 0.447
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 0.042	- / -	10 / 0.042
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	930 / -	930 / -
Total	0 / 0.000	- / -	- / -	87 / 0.447	- / -	87 / 0.447	- / -	- / -	- / -	10 / 0.042	930 / -	1,027 / 0.489

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
In	-	-	-	-	-	-	-	-	-	-	-	43	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	930	1,027	
Out	-	-	-	-	-	-	-	-	-	-	-	-	43	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	935	1,027

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance	Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance

Modification Item 4 of 6: Aviation Tactical Communication Systems (ATCS)

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Various
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 10

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							Dec 2020
Delivery Dates							Sep 2021

Installation Information

Method of Implementation: Modification Work Order (MWO) - Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	112 / 5.905	24 / 1.031	47 / 2.610	- / 0.000	- / -	- / 0.000	23 / 1.757	23 / 1.757	34 / 2.702	40 / 3.242	- / 0.000	303 / 19.004
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	62 / -	62 / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3,335 / -	3,335 / -
Total	112 / 5.905	24 / 1.031	47 / 2.610	- / -	- / -	- / -	23 / 1.757	23 / 1.757	34 / 2.702	40 / 3.242	3,397 / -	3,700 / 19.004

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	112	6	6	6	6	11	12	12	12	-	-	-	-	5	6	6	6	5	6	6	6	8	8	9	9	10	10	10	10	3,397	3,700
Out	105	7	6	6	6	6	11	12	12	12	-	-	-	-	5	6	6	6	5	6	6	6	8	8	9	9	10	10	10	3,407	3,700

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance	Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance

Modification Item 5 of 6: Airborne Maritime Fixed (AMF-A) Radio Integration

Manufacturer Information

Manufacturer Name: Textron Systems	Manufacturer Location: Hunt Valley, MD
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 6

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Apr 2015	Apr 2016	Apr 2017	Apr 2018	Apr 2019	Apr 2020	Apr 2021
Delivery Dates	Sep 2015	Sep 2016	Sep 2017	Sep 2018	Sep 2019	Sep 2020	Sep 2021

Installation Information

Method of Implementation: Modification Work Order (MWO) - Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	12 / 0.055	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	12 / 0.055
FY 2015	0 / 0.000	- / -	16 / 0.074	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 0.074
FY 2016	0 / 0.000	- / -	- / -	20 / 0.095	- / -	20 / 0.095	- / -	- / -	- / -	- / -	- / -	20 / 0.095
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	20 / 0.097	- / -	- / -	- / -	- / -	20 / 0.097
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	24 / 0.118	- / -	- / -	- / -	24 / 0.118
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	24 / 0.121	- / -	- / -	24 / 0.121
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	64 / 1.860	- / -	64 / 1.860
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	64 / -	64 / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2,133 / -	2,133 / -
Total	0 / 0.000	12 / 0.055	16 / 0.074	20 / 0.095	- / -	20 / 0.095	20 / 0.097	24 / 0.118	24 / 0.121	64 / 1.860	2,197 / -	2,377 / 2.420

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	3	3	3	3	4	4	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	16	16	16	16	2,197	2,377
Out	-	-	3	3	3	3	4	4	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	16	16	16	2,213	2,377

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0723 / Comms, Nav Surveillance	Modification Number / Title: AA0723 / Communications, Navigation, and Surveillance

Modification Item 6 of 6: Blue Force Tracking-Aviation (BFT-A)

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Various
Administrative Leadtime (in Months): 8	Production Leadtime (in Months): 10

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Jun 2015	Jun 2016	Jun 2017	Jun 2018	Jun 2019		
Delivery Dates	Mar 2016	Mar 2017	Mar 2018	Mar 2019	Mar 2020		

Installation Information

Method of Implementation: Modification Work Order (MWO) - Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	300 / 10.511	154 / 5.469	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	454 / 15.980
FY 2015	0 / 0.000	- / -	115 / 4.084	341 / 9.476	- / -	341 / 9.476	- / -	- / -	- / -	- / -	- / -	456 / 13.560
FY 2016	0 / 0.000	- / -	- / -	184 / 5.113	- / -	184 / 5.113	114 / 2.755	- / -	- / -	- / -	- / -	298 / 7.868
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	198 / 4.786	12 / 0.302	- / -	- / -	- / -	210 / 5.088
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	95 / 2.389	- / -	- / -	- / -	95 / 2.389
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	834 / -	834 / -
Total	0 / 0.000	300 / 10.511	269 / 9.553	525 / 14.589	- / -	525 / 14.589	312 / 7.541	107 / 2.691	- / -	- / -	834 / -	2,347 / 44.885

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	150	150	67	67	67	68	131	131	131	132	78	78	78	78	27	27	27	26	-	-	-	-	-	-	-	-	834	2,347
Out	-	-	-	-	150	150	67	67	67	68	131	131	131	132	78	78	78	78	27	27	27	26	-	-	-	-	-	-	-	834	2,347

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0711 / GATM Rollup
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	390.602	54.277	33.890	45.302	-	45.302	60.647	29.808	30.131	18.920	-	663.577
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	390.602	54.277	33.890	45.302	-	45.302	60.647	29.808	30.131	18.920	-	663.577
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	390.602	54.277	33.890	45.302	-	45.302	60.647	29.808	30.131	18.920	-	663.577

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	21.938	-	21.938	-	-	-	-	-	2,633.242

Description:

This budget line supports procurement of Global Air Traffic Management equipment for both Fixed Wing (FW) and Rotary Wing (RW) aircraft.

Global Air Traffic Management (GATM) is the military equivalent of the International Civil Aviation architecture known as Communications, Navigation and Surveillance (CNS) and air traffic management programs. GATM is a Department of Defense term that describes the equipment, training, and procedures mandated by Civilian Air Traffic Control (ATC) authorities in order to operate within 21st century airspace. Most ground based navigation aids will be phased out of service as the world transitions to a modernized air traffic management system. The modernization is designed to meet the current and future service demands posed by aviation growth. The advanced architecture will provide improved safety, accessibility, flexibility, predictability, reliability, capacity, efficiency, and security. Military aircraft will face significant flight restrictions if not GATM equipped.

GATM fixed wing requirements cannot be met with a single piece of avionics equipment. Meeting worldwide GATM fixed wing requirements will entail complete modifications that may include portions of military modifications and the upgrading of some existing avionics and displays and the procurement of new systems for the fixed wing fleet to include Engineer, Furnish and Install as a complete contractual effort. It also leverages Federal Aviation Administration Supplemental Type Certificates (STC) that are already in existence and applies STCs to aircraft modifications. These modifications ensure continued worldwide deployment capability and safe operations.

Meeting worldwide GATM requirements will entail the upgrading of some existing avionics and the procurement of new systems for rotary wing and Unmanned Aircraft System (UAS) fleets. Included in the GATM Program is the European mandated Mode S requirement which is being met with the fielding of the APX-118, an upgrade to the Identification Friend or Foe (IFF) to add Mode 5 capability which will be achieved through the fielding of the APX-123, worldwide mandated Automatic Dependant Surveillance-Broadcast (ADS-B) Out, which will be a Preplanned Product Improvement (P3I) to the APX-123, and upgrades to meet requirements for 8.33 kHz channel spacing being met with the ARC-231. ADS-B Out is an upgrade of the Mode S self-reporting format. The modification of the Embedded GPS Inertial (EGI) Navigation System is being conducted to provide a GPS Primary Means Instrument Flight Rules navigation (en-route through non-precision approach) in civil and military controlled airspace, and navigational requirements for ADS-B Out.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	-	-	-	-	-	-	-	-	-
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	54.277	18.640	19.881	-	19.881	33.086	16.395	16.573	14.426

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: AA0711 / GATM Rollup
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	13.556	22.596	-	22.596	24.499	11.923	12.052	3.995
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	1.694	2.825	-	2.825	3.062	1.490	1.506	0.499
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	54.277	33.890	45.302	-	45.302	60.647	29.808	30.131	18.920

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
AA0711 / GATM Rollup

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0703 / GATM - Fixed Wing Aircraft (Rationalization, Standardization, Interoperability, Compatibility, Simplification)			- / 194.796	- / 12.456	- / -	- / -	- / -	- / -
P-3a	AA0704 / GATM Rotary Wing Aircraft (New or Improved Operational Capability)			- / 195.806	- / 41.821	- / 33.890	- / 45.302	- / -	- / 45.302
P-40	Total Gross/Weapon System Cost			- / 390.602	- / 54.277	- / 33.890	- / 45.302	- / -	- / 45.302

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	AA0703 / GATM - Fixed Wing Aircraft (Rationalization, Standardization, Interoperability, Compatibility, Simplification)			- / -	- / -	- / -	- / -	- / -	- / 207.252
P-3a	AA0704 / GATM Rotary Wing Aircraft (New or Improved Operational Capability)			- / 60.647	- / 29.808	- / 30.131	- / 18.920	- / -	- / 456.325
P-40	Total Gross/Weapon System Cost			- / 60.647	- / 29.808	- / 30.131	- / 18.920	- / -	- / 663.577

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY 2017 Base Procurement dollars in the amount of \$13.679 million supports procurement of APX-123 B-Kits and procurement and installation of APX-123 A-Kits for the UH-60A/L/M, CH-47F, MH-47G, MH-60M, A/MH-6, AH-64D/E and UAS to provide these aircraft with enhanced IFF Mode 5 capabilities.
 FY 2017 Base Procurement dollars in the amount of \$0.715 million supports the installation of APX-118 Upgrade Kits.
 FY 2017 Base Procurement dollars in the amount of \$16.575 million supports procurement of A & B Kits and the associated Non-Recurring Engineering (NRE) integration which will facilitate an enhanced GPS in support of ADS-B for mandated ATC services for the applicable aviation platforms.
 FY 2017 Base Procurement dollars in the amount of \$14.333 million supports procurement of EGI Navigational System B-Kits and associated aircraft integration costs to meet GATM requirements.
 In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0711 / GATM Rollup	Modification Number / Title: AA0703 / GATM - Fixed Wing Aircraft
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	194.796	12.456	-	-	-	-	-	-	-	-	-	207.252
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	194.796	12.456	-	-	-	-	-	-	-	-	-	207.252
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	194.796	12.456	-	-	-	-	-	-	-	-	-	207.252

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Global Air Traffic Management (GATM) is the military equivalent of the International Civil Aviation architecture known as Communications, Navigation and Surveillance (CNS) and air traffic management programs. Current ground based navigation aids will be phased out of service as the world transitions to digital, data (non-voice), and space based navigation systems. Military aircraft will face some level (altitude and location dependent) of flight restrictions if not GATM equipped. GATM requirements cannot be met with a single piece of avionics equipment. Meeting worldwide GATM requirements will entail complete modifications that may include portions of military modifications and the upgrading of some existing avionics and displays and the procurement of new system for the fixed wing fleet to include Engineer, Furnish and Install (EF&I) as a complete contractual effort. It also leverages Federal Aviation Administration (FAA) supplemental type certificates (STC) that are already in existence and applies STCs to aircraft modifications. These modifications ensure continued worldwide deployment capability and safe operations.

FY16 Future FW GATM modifications will be funded in the FW Utility Cargo Airplane Mods line (AA0270).

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	12.456	-	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	12.456	-	-	-	-	-	-	-	-

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0711 / GATM Rollup	Modification Number / Title: AA0703 / GATM - Fixed Wing Aircraft

Models of Systems Affected: All series of Army fixed wing aircraft	Modification Type: Rationalization, Standardization, Interoperability, Compatibility, Simplification	Related RDT&E PEs:
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)

Procurement

Modification Item 1 of 1: Global Air Traffic Management - FW												
A Kits												
Recurring												
Installation Kits	234 / 135.956	2 / 8.585	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	236 / 144.541
Data	0 / 0.500	- / 0.100	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.600
<i>Subtotal: Recurring</i>	- / 136.456	- / 8.685	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 145.141
<i>Subtotal: Global Air Traffic Management - FW</i>	234 / 136.456	2 / 8.685	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	236 / 145.141
<i>Subtotal: Procurement, All Modification Items</i>	234 / 136.456	2 / 8.685	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	236 / 145.141

Installation

Modification Item 1 of 1: Global Air Traffic Management - FW	234 / 58.340	2 / 3.771	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	236 / 62.111
<i>Subtotal: Installation</i>	234 / 58.340	2 / 3.771	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	236 / 62.111

Total

Total Cost (Procurement + Support + Installation)	194.796	12.456	-	-	-	-	-	-	-	-	-	207.252
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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0711 / GATM Rollup	Modification Number / Title: AA0703 / GATM - Fixed Wing Aircraft

Modification Item 1 of 1: Global Air Traffic Management - FW

Manufacturer Information

Manufacturer Name: Multiple Commercial Lenders				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 6			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Dec 2013	Dec 2014					
Delivery Dates	May 2014	May 2015					

Installation Information

Method of Implementation: Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	185 / 48.292	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.000	185 / 48.292
FY 2015	34 / 4.319	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	34 / 4.319
FY 2016	15 / 5.729	2 / 3.771	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 9.500
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	234 / 58.340	2 / 3.771	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	236 / 62.111

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	234	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	236
Out	233	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	236

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0711 / GATM Rollup				Modification Number / Title: AA0704 / GATM Rotary Wing Aircraft				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	195.806	41.821	33.890	45.302	-	45.302	60.647	29.808	30.131	18.920	-	456.325
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	195.806	41.821	33.890	45.302	-	45.302	60.647	29.808	30.131	18.920	-	456.325
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	195.806	41.821	33.890	45.302	-	45.302	60.647	29.808	30.131	18.920	-	456.325
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	21.938	-	21.938	-	-	-	-	-	1,810.813

Description:

Global Air Traffic Management (GATM) is the military equivalent of the International Civil Aviation architecture known as Communications, Navigation, Surveillance, and Air Traffic Management programs. GATM is a Department of Defense (DoD) term that describes the equipment, training, and procedures mandated by Civilian Air Traffic Control (ATC) authorities in order to operate within 21st century airspace. Most ground based navigation aids will be phased out of service as the world transitions to a modernized air traffic management system. The modernization is designed to meet the current and future service demands posed by aviation growth. The advanced architecture will provide improved safety, accessibility, flexibility, predictability, reliability, capacity, efficiency, and security. Military aircraft will face significant flight restrictions if not GATM equipped. GATM requirements are driven by civil aviation authorities and are not under DoD control. Meeting worldwide GATM requirements will entail the upgrading of some existing avionics and the procurement of new systems for rotary wing and Unmanned Aircraft System (UAS) fleets. Included in the GATM Program is the European mandated Mode S requirement which is being met with the fielding of the APX-118, an upgrade to the Identification Friend or Foe (IFF) to add Mode 5 capability which will be achieved through the fielding of the APX-123, worldwide mandated Automatic Dependent Surveillance-Broadcast (ADS-B) Out, which will be a Preplanned Product Improvement (P3I) to the APX-123, and upgrades to meet requirements for 8.33 kHz channel spacing being met with the ARC-231. ADS-B Out is an upgrade of the Mode S self-reporting format. The modification of the Embedded GPS Inertial (EGI) Navigation System is being conducted to provide a GPS Primary Means Instrument Flight Rules navigation (en-route through non-precision approach) in civil and military controlled airspace, and navigational requirements for ADS-B Out.

GATM provides Army aircraft improved capabilities to allow them to continue to operate in civil controlled airspace without threat of exclusion. IFF Mode 5 provides enhanced security and greatly improved performance over Mode 4. It also improves compatibility with civil ATC by providing less interference. The Full Operational Capability for Mode 5 is 2020. Europe currently mandates Mode S and plans expansion of 8.33 kHz Very High Frequency - Amplitude Modulation (VHF-AM) in controlled airspace to ground level in high volume traffic areas. The Federal Aviation Administration (FAA) has mandated the use of ADS-B Out by 2020. Army aircraft will not be allowed to transit through or operate in European airspace affected by these mandates unless the necessary Mode S upgrades are made. The Mode S transponder impacts European based aircraft as well as those deploying to Europe. ADS-B Out will also impact access in worldwide airspace. The recurring procurement of Mode S kits started in FY02 and procurement and installations continue. Benefits of GATM include direct routing through civil airspace resulting in significant savings in both time and money. It allows for operations in worldwide civil controlled airspace and improves safety and operational efficiency while meeting the new worldwide frequency spectrum requirements.

FY 2017 Base Procurement dollars in the amount of \$13.679 million supports procurement of APX-123 B-Kits and procurement and installation of APX-123 A-Kits for the UH-60A/L/M, CH-47F, MH-47G, MH-60M, A/MH-6, AH-64D/E and UAS to provide these aircraft with enhanced IFF Mode 5 capabilities.

FY 2017 Base Procurement dollars in the amount of \$0.715 million supports the installation of APX-118 Upgrade Kits.

FY 2017 Base Procurement dollars in the amount of \$16.575 million supports procurement of A & B Kits and the associated Non-Recurring Engineering (NRE) integration which will facilitate an enhanced GPS in support of ADS-B for mandated ATC services for the applicable aviation platforms.

FY 2017 Base Procurement dollars in the amount of \$14.333 million supports procurement of EGI Navigational System B-Kits and associated aircraft integration costs to meet GATM requirements.

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0711 / GATM Rollup	Modification Number / Title: AA0704 / GATM Rotary Wing Aircraft

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	41.821	18.640	19.881	-	19.881	33.086	16.395	16.573	14.426
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	13.556	22.596	-	22.596	24.499	11.923	12.052	3.995
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	1.694	2.825	-	2.825	3.062	1.490	1.506	0.499
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	41.821	33.890	45.302	-	45.302	60.647	29.808	30.131	18.920

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: AA0711 / GATM Rollup					Modification Number / Title: AA0704 / GATM Rotary Wing Aircraft				
Models of Systems Affected: UH&HH60A/L, CH47D/F, UH60M, MH47G, MH60M, A/MH6, AH64A/D/E, UAS					Modification Type: New or Improved Operational Capability					Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total		
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>		
Procurement														
Modification Item 1 of 4: Global Air Traffic Mgmt RW APX-123														
A Kits														
Recurring														
Kit Quantity - APX-123 A-Kits	425 / 1.631	168 / 0.600	82 / 0.300	82 / 0.310	- / -	82 / 0.310	- / -	- / -	- / -	- / -	- / -	757 / 2.841		
Aircraft Integ/RCUs/KIV77	0 / 16.933	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 16.933		
ECP	0 / 5.100	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 5.100		
Systems Eng/Prog Mgt (SEPM)	0 / 12.891	- / 2.393	- / 2.645	- / 1.597	- / -	- / 1.597	- / 2.153	- / 0.610	- / 0.309	- / -	- / -	- / 22.598		
Other PM Admin	0 / 4.350	- / 0.256	- / 1.100	- / 1.045	- / -	- / 1.045	- / 1.054	- / 0.764	- / 0.674	- / -	- / -	- / 19.243		
Subtotal: Recurring	- / 40.905	- / 3.249	- / 4.045	- / 2.952	- / -	- / 2.952	- / 3.207	- / 1.374	- / 0.983	- / -	- / -	- / 56.715		
B Kits														
Recurring														
Kit Quantity - APX-123 B-Kits	1,265 / 31.900	410 / 14.024	- / -	240 / 8.450	- / -	240 / 8.450	257 / 8.531	- / -	- / -	- / -	- / -	2,172 / 62.905		
APX-123 B Kits Upgrade	- / -	6 / 0.074	871 / 10.794	77 / 0.960	- / -	77 / 0.960	521 / 6.464	282 / 3.391	179 / 2.153	- / -	- / -	1,936 / 23.836		
Fielding/Training	- / -	- / -	- / 4.749	- / 1.200	- / -	- / 1.200	- / 10.998	- / 0.511	- / 0.170	- / -	- / -	- / 17.628		
Subtotal: Recurring	- / 31.900	- / 14.098	- / 15.543	- / 10.610	- / -	- / 10.610	- / 15.993	- / 3.902	- / 2.323	- / -	- / -	- / 94.369		
Non-Recurring														
B Kit	0 / 23.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 23.400		
Subtotal: Non-Recurring	- / 23.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 23.400		
Subtotal: Global Air Traffic Mgmt RW APX-123														
1,690 / 96.205														
584 / 17.347														
953 / 19.588														
399 / 13.562														
- / -														
399 / 13.562														
778 / 19.200														
282 / 5.276														
179 / 3.306														
- / -														
- / -														
4,865 / 174.484														
Modification Item 2 of 4: Global Air Traffic Mgmt RW APX-118 Upgrade Kits														
A Kits														
Recurring														
Kit Qty- Upgrade A-Kits	772 / 3.976	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	772 / 3.976		
Engineering Change Orders	0 / 1.123	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.123		
System Eng/Prog Mgt (SEPM)	0 / 9.100	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 9.100		
Subtotal: Recurring	- / 14.199	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 14.199		
B Kits														
Recurring														
Kit Qty- Upgrade B-Kits	2,587 / 21.402	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2,587 / 21.402		
Subtotal: Recurring	- / 21.402	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 21.402		

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Exhibit P-3a, Individual Modification: PB 2017 Army								Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0711 / GATM Rollup				Modification Number / Title: AA0704 / GATM Rotary Wing Aircraft				
Models of Systems Affected: UH&HH60A/L, CH47D/ F, UH60M, MH47G, MH60M, A/MH6, AH64A/D/E, UAS				Modification Type: New or Improved Operational Capability				Related RDT&E PEs:				
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Non-Recurring												
B-Kits Nonrecurring	0 / 1.200	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.200
<i>Subtotal: Non-Recurring</i>	- / 1.200	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.200
<i>Subtotal: Global Air Traffic Mgmt RW APX-118 Upgrade Kits</i>	3,359 / 36.801	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3,359 / 36.801
Modification Item 3 of 4: Global Air Traffic Mgmt RW ADS-B												
A Kits												
Recurring												
Kit Qty: ADS-B A-Kits	- / -	- / -	- / -	828 / 4.140	- / -	828 / 4.140	1,848 / 9.425	679 / 3.532	538 / 2.851	27 / 0.143	26 / -	3,946 / 20.091
Engineering Change Orders	0 / 1.150	- / 1.454	- / -	- / 1.475	- / -	- / 1.475	- / 2.465	- / 0.523	- / 0.423	- / -	- / -	- / 7.490
Data	0 / 0.945	- / 1.500	- / -	- / 1.017	- / -	- / 1.017	- / 1.267	- / 0.056	- / 0.118	- / -	- / -	- / 4.903
Training Equipment	0 / 2.140	- / 1.325	- / -	- / 0.420	- / -	- / 0.420	- / 0.216	- / 0.214	- / 0.150	- / -	- / -	- / 4.465
Fielding	0 / 0.425	- / 0.200	- / -	- / 0.220	- / -	- / 0.220	- / 0.119	- / 0.114	- / 0.200	- / -	- / -	- / 1.278
System Eng/Prog Mgt (SEPM)	0 / 2.300	- / 2.200	- / 1.000	- / 1.042	- / -	- / 1.042	- / 2.548	- / 0.223	- / 0.408	- / -	- / -	- / 9.721
System Test & Eval (ST&E)	0 / 0.400	- / 0.180	- / 0.015	- / 0.211	- / -	- / 0.211	- / 2.245	- / 0.063	- / 0.175	- / -	- / -	- / 3.289
Other- PM Admin	0 / 2.800	- / 1.100	- / -	- / 1.245	- / -	- / 1.245	- / 2.263	- / 1.062	- / 0.702	- / -	- / -	- / 9.172
<i>Subtotal: Recurring</i>	- / 10.160	- / 7.959	- / 1.015	- / 9.770	- / -	- / 9.770	- / 20.548	- / 5.787	- / 5.027	- / 0.143	- / -	- / 60.409
Non-Recurring												
Non-Recurring Engineering	0 / 13.314	- / 6.265	- / 4.600	- / 1.009	- / -	- / 1.009	- / 2.635	- / 0.740	- / 0.958	- / -	- / -	- / 29.521
<i>Subtotal: Non-Recurring</i>	- / 13.314	- / 6.265	- / 4.600	- / 1.009	- / -	- / 1.009	- / 2.635	- / 0.740	- / 0.958	- / -	- / -	- / 29.521
B Kits												
Recurring												
Kit Qty: ADS-B B-Kits	- / -	- / -	- / -	828 / 5.796	- / -	828 / 5.796	1,848 / 13.195	679 / 4.957	538 / 3.981	27 / 0.205	26 / -	3,946 / 28.134
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / 5.796	- / -	- / 5.796	- / 13.195	- / 4.957	- / 3.981	- / 0.205	- / -	- / 28.134
<i>Subtotal: Global Air Traffic Mgmt RW ADS-B</i>	0 / 23.474	- / 14.224	- / 5.615	1,656 / 16.575	- / -	1,656 / 16.575	3,696 / 36.378	1,358 / 11.484	1,076 / 9.966	54 / 0.348	52 / -	7,892 / 118.064
Modification Item 4 of 4: Embedded GPS Inertial (EGI) Navigation System ECP												
A Kits												
Recurring												
Aircraft Integration	1 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.867	- / -	- / -	- / -	1 / 6.867
Data	0 / 0.500	- / 0.075	- / -	- / 1.070	- / -	- / 1.070	- / 0.086	- / -	- / -	- / -	- / -	- / 1.731
Systems Engineering	0 / 1.000	- / 0.100	- / -	- / -	- / -	- / -	- / 1.687	- / -	- / -	- / -	- / -	- / 2.787

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Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: AA0711 / GATM Rollup						Modification Number / Title: AA0704 / GATM Rotary Wing Aircraft			
Models of Systems Affected: UH&HH60A/L, CH47D/F, UH60M, MH47G, MH60M, A/MH6, AH64A/D/E, UAS				Modification Type: New or Improved Operational Capability				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Other	0 / 0.500	- / 0.082	- / -	- / -	- / -	- / -	- / 1.062	- / -	- / -	- / -	- / -	- / 1.644	
<i>Subtotal: Recurring</i>	- / 2.000	- / 0.257	- / -	- / 1.070	- / -	- / 1.070	- / 2.835	- / 6.867	- / -	- / -	- / -	- / 13.029	
B Kits													
Recurring													
Kit Quantity -- B-Kit	349 / 25.095	- / -	- / -	87 / 11.167	- / -	87 / 11.167	8 / 0.687	17 / 3.888	105 / 15.820	122 / 18.030	2,394 / -	3,082 / 74.687	
<i>Subtotal: Recurring</i>	- / 25.095	- / -	- / -	- / 11.167	- / -	- / 11.167	- / 0.687	- / 3.888	- / 15.820	- / 18.030	- / -	- / 74.687	
Non-Recurring													
Non-Recurring Engineering	0 / 5.165	- / 8.493	- / 6.980	- / 2.096	- / -	- / 2.096	- / -	- / -	- / -	- / -	- / -	- / 22.734	
<i>Subtotal: Non-Recurring</i>	- / 5.165	- / 8.493	- / 6.980	- / 2.096	- / -	- / 2.096	- / -	- / -	- / -	- / -	- / -	- / 22.734	
<i>Subtotal: Embedded GPS Inertial (EGI) Navigation System ECP</i>	350 / 32.260	- / 8.750	- / 6.980	87 / 14.333	- / -	87 / 14.333	8 / 3.522	17 / 10.755	105 / 15.820	122 / 18.030	2,394 / -	3,083 / 110.450	
<i>Subtotal: Procurement, All Modification Items</i>	5,399 / 188.740	584 / 40.321	953 / 32.183	2,142 / 44.470	- / -	2,142 / 44.470	4,482 / 59.100	1,657 / 27.515	1,360 / 29.092	176 / 18.378	2,446 / -	19,199 / 439.799	
Installation													
<i>Modification Item 1 of 4: Global Air Traffic Mgmt RW APX-123</i>	225 / 0.260	200 / 0.268	168 / 0.232	82 / 0.117	- / -	82 / 0.117	62 / 0.091	20 / 0.030	- / -	- / -	- / -	757 / 0.998	
<i>Modification Item 2 of 4: Global Air Traffic Mgmt RW APX-118 Upgrade Kits</i>	1,795 / 6.806	300 / 1.232	360 / 1.455	132 / 0.715	- / -	132 / 0.715	- / -	- / -	- / -	- / -	- / -	2,587 / 10.208	
<i>Modification Item 3 of 4: Global Air Traffic Mgmt RW ADS-B</i>	0 / 0.000	- / -	- / -	- / -	- / -	- / -	828 / 1.000	1,848 / 2.218	679 / 0.815	538 / 0.059	53 / -	3,946 / 4.092	
<i>Modification Item 4 of 4: Embedded GPS Inertial (EGI) Navigation System ECP</i>	0 / 0.000	- / -	349 / 0.020	- / -	- / -	- / -	87 / 0.456	8 / 0.045	17 / 0.224	105 / 0.483	2,516 / -	3,082 / 1.228	
<i>Subtotal: Installation</i>	2,020 / 7.066	500 / 1.500	877 / 1.707	214 / 0.832	- / -	214 / 0.832	977 / 1.547	1,876 / 2.293	696 / 1.039	643 / 0.542	2,569 / -	10,372 / 16.526	
Total													
Total Cost (Procurement + Support + Installation)	195.806	41.821	33.890	45.302	-	45.302	60.647	29.808	30.131	18.920	-	456.325	

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Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0711 / GATM Rollup	Modification Number / Title: AA0704 / GATM Rotary Wing Aircraft

Modification Item 1 of 4: Global Air Traffic Mgmt RW APX-123

Manufacturer Information

Manufacturer Name: BAE Systems, Incorporated				Manufacturer Location: Greenlawn, NY			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 15			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Dec 2014	Dec 2015	Dec 2016				
Delivery Dates	Feb 2016						

Installation Information

Method of Implementation: Modification Work Order (MWO) - Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	225 / 0.260	200 / 0.268	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	425 / 0.528
FY 2015	0 / 0.000	- / -	168 / 0.232	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	168 / 0.232
FY 2016	0 / 0.000	- / -	- / -	82 / 0.117	- / -	82 / 0.117	- / -	- / -	- / -	- / -	- / -	82 / 0.117
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	62 / 0.091	20 / 0.030	- / -	- / -	- / -	82 / 0.121
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	225 / 0.260	200 / 0.268	168 / 0.232	82 / 0.117	- / -	82 / 0.117	62 / 0.091	20 / 0.030	- / -	- / -	- / -	757 / 0.998

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
In	225	50	50	50	50	42	42	42	42	20	20	21	21	16	16	15	15	5	5	5	5	-	-	-	-	-	-	-	-	-	-	-	-
Out	113	112	50	50	50	50	42	42	42	42	20	20	21	21	16	16	15	15	5	5	5	5	-	-	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0711 / GATM Rollup	Modification Number / Title: AA0704 / GATM Rotary Wing Aircraft

Modification Item 2 of 4: Global Air Traffic Mgmt RW APX-118 Upgrade Kits

Manufacturer Information

Manufacturer Name: BAE Systems, Incorporated	Manufacturer Location: Greenlawn, NY
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 14

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Modification Work Order (MWO) - Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	1,795 / 6.806	300 / 1.232	360 / 1.455	132 / 0.715	- / -	132 / 0.715	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	2,587 / 10.208
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	1,795 / 6.806	300 / 1.232	360 / 1.455	132 / 0.715	- / -	132 / 0.715	- / -	- / -	- / -	- / -	- / -	2,587 / 10.208

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
In	1,795	75	75	75	75	90	90	90	90	33	33	33	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,587
Out	1,795	-	75	75	75	75	90	90	90	90	33	33	33	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,587	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0711 / GATM Rollup	Modification Number / Title: AA0704 / GATM Rotary Wing Aircraft

Modification Item 3 of 4: Global Air Traffic Mgmt RW ADS-B

Manufacturer Information

Manufacturer Name: BAE Systems, Incorporated	Manufacturer Location: Greenlawn, NY
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 16

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020
Delivery Dates			Mar 2018	Mar 2019	Mar 2020	Mar 2021	Mar 2022

Installation Information

Method of Implementation: Modification Work Order (MWO) - Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	828 / 1.000	- / -	- / -	- / -	- / -	828 / 1.000
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	1,848 / 2.218	- / -	- / -	- / -	1,848 / 2.218
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	679 / 0.815	- / -	- / -	679 / 0.815
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	538 / 0.059	- / -	538 / 0.059
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	27 / -	27 / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	26 / -	26 / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	828 / 1.000	1,848 / 2.218	679 / 0.815	538 / 0.059	53 / -	3,946 / 4.092

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	414	414	462	462	462	462	169	170	170	170	134	134	135	135	53	3,946
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	414	414	462	462	462	462	169	170	170	170	134	134	135	188	3,946

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: AA0711 / GATM Rollup	Modification Number / Title: AA0704 / GATM Rotary Wing Aircraft

Modification Item 4 of 4: Embedded GPS Inertial (EGI) Navigation System ECP

Manufacturer Information

Manufacturer Name: Honeywell, Incorporated	Manufacturer Location: Clearwater, FL
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020
Delivery Dates			Dec 2017	Dec 2018	Dec 2019	Dec 2020	Dec 2021

Installation Information

Method of Implementation: Modification Work Order (MWO) - Contractor

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	349 / 0.020	- / 0.000	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	349 / 0.020
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	87 / 0.456	- / -	- / -	- / -	- / -	87 / 0.456
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.045	- / -	- / -	- / -	8 / 0.045
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 0.224	- / -	- / -	17 / 0.224
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	105 / 0.483	- / -	105 / 0.483
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	122 / -	122 / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2,394 / -	2,394 / -
Total	0 / 0.000	- / -	349 / 0.020	- / -	- / -	- / -	87 / 0.456	8 / 0.045	17 / 0.224	105 / 0.483	2,516 / -	3,082 / 1.228

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	87	87	87	88	-	-	-	-	-	-	43	44	2	2	2	2	4	4	4	5	26	26	26	27	2,516	3,082
Out	-	-	-	-	-	-	87	87	87	88	-	-	-	-	-	-	43	44	2	2	2	2	4	4	4	5	26	26	26	2,543	3,082

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0305204A, 0305233A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	1,510.822	125.380	89.694	71.169	1.775	72.944	89.160	74.463	5.404	-	-	1,967.867
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	1,510.822	125.380	89.694	71.169	1.775	72.944	89.160	74.463	5.404	-	-	1,967.867
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	1,510.822	125.380	89.694	71.169	1.775	72.944	89.160	74.463	5.404	-	-	1,967.867

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The TUAS provides Army Brigade Combat Teams, Aviation Brigades, and Special Operation Groups situational awareness, improved wide-area target acquisition, Laser Designation, and high value target (HVT) tracking to conduct both shaping and decisive operations with greatly increased lethality. The TUAS meets the need for a day/night, multi sensor collection system with improved connectivity to joint forces that provides real time battle information that cannot be observed from standoff airborne sensor systems, ground collection systems, and scouts. The key performance parameters are blocked into RQ-7B (production) thresholds and subsequent upgrade objectives. The RQ-7B system is a Reconnaissance Surveillance Target Acquisition (RSTA), Command, Control, Communications, and Intelligence (C3I) system that supports Brigade, Battalion, and lower level elements. The RQ-7B Shadow has logged over 975,000 flight hours in support of Overseas Contingency Operations (OCO).

The TUAS RQ-7B completed production of 104 Army systems in 2011 (FY 2009 Funding) and entered a modifications phase. These modifications are divided into three primary sections: RQ-7B v2, System Modifications, and Payload Modifications. The RQ-7B v2 or Shadow v2 effort incorporates Type 1 Encryption, STANAG 4586 Compliant Software, a Universal Ground Control Station (UGCS), a Universal Ground Data Terminal (UGDT), a STANAG 4586 compliant Portable Ground Control Station, and standardizes modifications introduced during the wars in Iraq and Afghanistan. System Modifications and Payload Modifications consolidate development activities not included in the Shadow v2 Block Modification.

In 2009, the Product Office placed the last of the authorized 104 systems on contract, ending the Production phase of the acquisition. In 2010, the Army G8 established a RQ-7B UAV MODS Aircraft Procurement Exhibit approving several modifications for development and production. These modifications will be incrementally integrated, tested, and fielded in accordance with the technology readiness and funding profile. The major modifications are grouped as follows: (1) v2 Modifications (includes TCDL and Encryption), (2) Payload Modifications, and (3) System Modifications. Threshold requirements include a Heavy Fuel Engine, increased reliability, redundant avionics, electronic shielding, and Synthetic Aperture Radar (SAR)/Ground Moving Target Indicator (GMTI). The RQ-7B v2 will be compliant with STANAG 4586 and the Joint Interoperability Profiles. To achieve this, the system incorporates the UGCS and UGDT along with an upgraded Air Data Terminal, Airborne Computer, and onboard software.

The RQ-7B v2 Shadow upgrade program complies with the congressionally mandated Tactical Control Data Link (TCDL) and North Atlantic Treaty Organization (NATO) Standardization Agreement 4586 in order to meet requirements in the Operational Requirements Document, provide a secure data link, an enhanced propulsion system, payload improvements, avionics improvements, and ground equipment improvements.

OSRVT: The One System Remote Video Terminal (OSRVT) systems modifications were funded on this Program Element (PE) prior to FY2017. Starting in FY2017 the OSRVT modification line is A00121.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0305204A, 0305233A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	91.255	89.694	61.169	1.775	62.944	79.160	70.463	3.404	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	34.125	-	10.000	-	10.000	10.000	4.000	2.000	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	125.380	89.694	71.169	1.775	72.944	89.160	74.463	5.404	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
A00018 / RQ-7 UAV MODS

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0305204A, 0305233A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A00018 / RQ-7 UAV MODS (UNCLASSIFIED)			- / 1,510.822	- / 125.380	- / 89.694	- / 71.169	- / 1.775	- / 72.944
P-40	Total Gross/Weapon System Cost			- / 1,510.822	- / 125.380	- / 89.694	- / 71.169	- / 1.775	- / 72.944

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A00018 / RQ-7 UAV MODS (UNCLASSIFIED)			- / 89.160	- / 74.463	- / 5.404	- / -	- / -	- / 1,967.867
P-40	Total Gross/Weapon System Cost			- / 89.160	- / 74.463	- / 5.404	- / -	- / -	- / 1,967.867

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY 2017 Base funding of \$71.169 million provides for production of 8 Launchers, 8 Mobile Maintenance Facility (MMF) spares kits, 6 Universal Mission Simulators (UMS), and fielding of Shadow hardware procured in prior years. FY2017 funds 80 mission Computers, 120 Block III Engines, 50 Weatherization Kits, and 18 Electro Optical / Infrared / Laser Designator (EO/IR/LD) Universal Interface Assemblies, 18 EO/IR/LD Payloads and 11 EO/IR/LD Boresight Tools. Also, procures Engineering, Logistics, Fielding and New Equipment Training (NET). FY 2017 Base funding was cut \$8.640 million due to under execution.
 FY 2017 OCO funding of \$1.775 million provides for production of 1 Air Vehicle with LD/HD payload to replace battle loss in Operation Freedom's Sentinel (OFS).
 In accordance with 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS				Modification Number / Title: A00018 / RQ-7 UAV MODS				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,510.822	125.380	89.694	71.169	1.775	72.944	89.160	74.463	5.404	-	-	1,967.867
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,510.822	125.380	89.694	71.169	1.775	72.944	89.160	74.463	5.404	-	-	1,967.867
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,510.822	125.380	89.694	71.169	1.775	72.944	89.160	74.463	5.404	-	-	1,967.867

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

SHADOW VERSION 2 (V2):

Implements Shadow v2: Tactical Common Data Link (TCDL) with Type 1 Encryption and NATO interoperability solves obsolescence associated with legacy computer hardware and the SOLARIS operating system. This modification includes a Universal Ground Control Station (UGCS); Universal Ground Data Terminal (UGDT) supporting TCDL; a Portable Ground Control Station (PGCS) supporting congressionally mandated STANAG 4586; a longer wing which provides nine hours of endurance, and improved reliability. Government Furnished Equipment (GFE) and spares are also included. Shadow v2 retrofit unit cost varies based on MOD configuration.

Justification: FY2017 Base funding of \$40.113M procures 8 Launchers, 8 Mobile Maintenance Facility (MMF) spares kits, 6 Universal Mission Simulators (UMS), New Equipment Training (NET), and fielding of Shadow hardware procured in prior years.

SHADOW SYSTEM MODIFICATIONS:

Air Vehicle Modifications include weatherization kits, a new mission computer and a Block III engine. The Mission computer is an onboard computer that provides airborne processing power. It manifests a fifty-fold increase in computing capability over the existing mission computer. Additionally, it supports multiple security enclaves and up to .5 terabytes of non-volatile mass storage. The Block III engine improves reliability over the current engine and increases power.

Justification: FY2017 Base funding of \$15.268M procures 80 Mission Computers, 120 Block III Engines, 50 Weatherization kits. FY 2017 OCO funding of \$1.007M provides for production of 1 Air Vehicle to replace battle loss in Operation Freedom's Sentinel (OFS).

SHADOW PAYLOAD UPGRADES/MODIFICATIONS:

Each system includes two Electro Optical/Infrared (EO/IR) payloads (POP 300) with a LASER target indicator, two Electro Optical/Infrared (EO/IR) payloads (POP 300D) with a LASER target designator, and four Communications Relay payloads. Each Aviation Brigade system will require four EO/IR/LD payloads to support Manned Unmanned Teaming (MUM-T), and qualification is ongoing for a second source payload to meet this requirement. Product Improvement efforts include enhancements to the Communications Relay payload that will allow use of the Soldier Radio Waveform. These capabilities will be modular designs, capable of installation at unit level. Procurement and fielding of these payloads will be through an incremental acquisition approach.

Installation of the mission computer is performed at the Original Equipment Manufacturer (OEM) and is included in the unit price of modification kit.

Justification: FY2017 Base funding of \$15.788M procures 18 Laser Designator Payloads. FY 2017 OCO funding of \$.768M provides for production of 1 LD/HD payload to replace battle loss in Operation Freedom's Sentinel (OFS).

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS	Modification Number / Title: A00018 / RQ-7 UAV MODS
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OSRVT MODIFICATIONS:

The One System Remote Video Terminal (OSRVT) systems modifications were funded on this Program Element (PE) prior to FY2017. Starting in FY2017 the OSRVT modification line is A00121.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	91.255	89.694	61.169	1.775	62.944	79.160	70.463	3.404	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	34.125	-	10.000	-	10.000	10.000	4.000	2.000	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	125.380	89.694	71.169	1.775	72.944	89.160	74.463	5.404	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS						Modification Number / Title: A00018 / RQ-7 UAV MODS			
Models of Systems Affected: N/A				Modification Type: UNCLASSIFIED				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 4: SHADOW Version 2 (v2)													
A Kits													
Recurring													
Software	0 / 11.648	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 11.648	
Pubs/Tech Data	0 / 3.747	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.747	
GFE	0 / 45.503	- / 17.934	- / -	- / 17.170	- / -	- / 17.170	- / 1.463	- / -	- / -	- / -	- / -	- / 62.070	
Training Equipment	40 / 33.006	- / -	- / -	6 / 4.509	- / -	6 / 4.509	8 / 6.132	- / -	- / -	- / -	- / -	54 / 43.647	
Training (NET)	0 / 26.610	- / 9.361	- / 4.842	- / 8.307	- / -	- / 8.307	- / 8.472	- / 8.318	- / -	- / -	- / -	- / 65.910	
Program Management	0 / 35.218	- / 4.003	- / 1.103	- / 1.767	- / -	- / 1.767	- / 1.202	- / 0.762	- / -	- / -	- / -	- / 44.055	
Engineering	0 / 17.306	- / 3.273	- / 0.167	- / 1.133	- / -	- / 1.133	- / 0.825	- / 0.605	- / -	- / -	- / -	- / 23.309	
Logistics	0 / 19.007	- / 6.545	- / -	- / 2.265	- / -	- / 2.265	- / 1.650	- / 1.210	- / -	- / -	- / -	- / 30.677	
Subtotal: Recurring	- / 192.045	- / 31.116	- / 6.112	- / 25.151	- / -	- / 25.151	- / 19.744	- / 10.895	- / -	- / -	- / -	- / 285.063	
Non-Recurring													
Nonrecurring Engineering Obsolesence	0 / 65.906	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 65.906	
Subtotal: Non-Recurring	- / 65.906	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 65.906	
B Kits													
Recurring													
Shadow v2 Retrofit Kits	76 / 635.307	20 / 76.064	4 / 21.593	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	100 / 732.964	
UGCS Only System Retrofit	28 / 89.763	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	28 / 89.763	
Launchers	50 / 15.450	- / -	4 / 2.000	8 / 4.004	- / -	8 / 4.004	18 / 9.189	20 / 10.415	- / -	- / -	- / -	100 / 41.058	
MMF Retrofit Kits	21 / 16.846	- / -	- / -	8 / 10.958	- / -	8 / 10.958	5 / 6.985	- / -	- / -	- / -	- / -	34 / 34.789	
Subtotal: Recurring	- / 757.366	- / 76.064	- / 23.593	- / 14.962	- / -	- / 14.962	- / 16.174	- / 10.415	- / -	- / -	- / -	- / 898.574	
Subtotal: SHADOW Version 2 (v2)	215 / 1,015.317	20 / 107.180	8 / 29.705	22 / 40.113	- / -	22 / 40.113	31 / 35.918	20 / 21.310	- / -	- / -	- / -	316 / 1,249.543	
Modification Item 2 of 4: SHADOW SYSTEM MODIFICATIONS													
A Kits													
Recurring													
Weatherization	- / -	- / -	150 / 6.081	50 / 2.096	- / -	50 / 2.096	100 / 4.215	100 / 4.299	- / -	- / -	- / -	400 / 16.691	
Nonrecurring Engineering (NRE)	0 / 2.150	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.150	
GPS Denied	- / -	- / -	- / -	- / -	- / -	- / -	- / -	115 / 5.030	- / -	- / -	- / -	115 / 5.030	
Program Management	0 / 3.711	- / -	- / 0.529	- / 0.671	- / -	- / 0.671	- / 0.684	- / 1.141	- / -	- / -	- / -	- / 6.736	
Engineering	0 / 1.295	- / -	- / 0.339	- / 0.430	- / -	- / 0.430	- / 0.353	- / 0.550	- / -	- / -	- / -	- / 2.967	
Logistics	0 / 1.717	- / -	- / 0.678	- / 0.861	- / -	- / 0.861	- / 0.877	- / 1.463	- / -	- / -	- / -	- / 5.596	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS					Modification Number / Title: A00018 / RQ-7 UAV MODS			
Models of Systems Affected: N/A				Modification Type: UNCLASSIFIED				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
<i>Subtotal: Recurring</i>	- / 8.873	- / -	- / 7.627	- / 4.058	- / -	- / 4.058	- / 6.129	- / 12.483	- / -	- / -	- / -	- / 39.170	
B Kits													
Recurring													
Attrition Air Vehicles	71 / 56.223	- / -	- / -	- / -	1 / 1.007	1 / 1.007	- / -	- / -	- / -	- / -	- / -	72 / 57.230	
Mission Computer	- / -	- / -	- / -	80 / 4.793	- / -	80 / 4.793	140 / 8.555	220 / 13.712	- / -	- / -	- / -	440 / 27.060	
Block III Engine	- / -	- / -	- / -	120 / 6.417	- / -	120 / 6.417	80 / 4.363	- / -	- / -	- / -	- / -	200 / 10.780	
<i>Subtotal: Recurring</i>	- / 56.223	- / -	- / -	- / 11.210	- / 1.007	- / 12.217	- / 12.918	- / 13.712	- / -	- / -	- / -	- / 95.070	
<i>Subtotal: SHADOW SYSTEM MODIFICATIONS</i>	71 / 65.096	- / -	150 / 7.627	250 / 15.268	1 / 1.007	251 / 16.275	320 / 19.047	435 / 26.195	- / -	- / -	- / -	1,227 / 134.240	
Modification Item 3 of 4: SHADOW PAYLOAD UPGRADES/MODIFICATIONS													
A Kits													
Recurring													
Program Management	0 / 3.506	- / -	- / 1.970	- / 0.695	- / -	- / 0.695	- / 1.225	- / 1.174	- / 1.849	- / -	- / -	- / 10.419	
Engineering	0 / 1.399	- / -	- / -	- / 0.446	- / -	- / 0.446	- / 0.786	- / 0.753	- / 1.180	- / -	- / -	- / 4.564	
Logistics	0 / 2.698	- / -	- / -	- / 0.892	- / -	- / 0.892	- / 1.485	- / 1.324	- / 2.375	- / -	- / -	- / 18.774	
<i>Subtotal: Recurring</i>	- / 7.603	- / -	- / 1.970	- / 2.033	- / -	- / 2.033	- / 3.496	- / 3.251	- / 5.404	- / -	- / -	- / 23.757	
B Kits													
Recurring													
Laser Designator	106 / 108.850	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	106 / 108.850	
EO/IR/LD Upgrade Payloads	- / -	- / -	32 / 19.844	18 / 11.611	1 / 0.607	19 / 12.218	26 / 15.417	22 / 13.306	- / -	- / -	- / -	99 / 60.785	
EO/IR/LD Universal Interface Assembly	- / -	- / -	32 / 2.144	18 / 1.230	1 / 0.071	19 / 1.301	200 / 13.935	130 / 9.239	- / -	- / -	- / -	381 / 26.619	
Boresight Tools	- / -	- / -	19 / 1.594	11 / 0.914	1 / 0.090	12 / 1.004	16 / 1.347	13 / 1.162	- / -	- / -	- / -	60 / 5.107	
Training	0 / 5.700	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 5.700	
<i>Subtotal: Recurring</i>	- / 114.550	- / -	- / 23.582	- / 13.755	- / 0.768	- / 14.523	- / 30.699	- / 23.707	- / -	- / -	- / -	- / 207.061	
<i>Subtotal: SHADOW PAYLOAD UPGRADES/ MODIFICATIONS</i>	106 / 122.153	- / -	83 / 25.552	47 / 15.788	3 / 0.768	50 / 16.556	242 / 34.195	165 / 26.958	- / 5.404	- / -	- / -	646 / 230.818	
Modification Item 4 of 4: OSRVT MODIFICATIONS													
A Kits													
Recurring													
Army TIES Retrofit Kits	470 / 56.900	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	470 / 56.900	
Program Management	0 / 13.415	- / 1.485	- / 0.863	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 15.763	
Logistics/TPF/NET	0 / 4.771	- / 3.611	- / 3.904	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.286	
<i>Subtotal: Recurring</i>	- / 75.086	- / 5.096	- / 4.767	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 84.949	
Non-Recurring													

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10 **P-1 Line Item Number / Title:** A00018 / RQ-7 UAV MODS **Modification Number / Title:** A00018 / RQ-7 UAV MODS

Models of Systems Affected: N/A **Modification Type:** UNCLASSIFIED **Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Non Recurring Engineering	0 / 1.692	- / 0.208	- / 0.670	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.570
OSRVT Software License	0 / 2.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.000
Engineering/Technical Services	0 / 6.405	- / 1.485	- / 0.863	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 18.753
Subtotal: Non-Recurring	- / 10.097	- / 1.693	- / 1.533	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 13.323
B Kits												
Recurring												
OSRVT System	- / -	20 / 2.858	50 / 8.250	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	70 / 11.108
OSRVT Retrofit Kits	2,937 / 212.900	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2,937 / 212.900
OSRVT MDAS Antennas	148 / 10.173	125 / 8.553	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	273 / 18.726
BI-Directional Retrofit Kits	- / -	- / -	280 / 12.260	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	280 / 12.260
Subtotal: Recurring	- / 223.073	- / 11.411	- / 20.510	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 254.994
Subtotal: OSRVT MODIFICATIONS	3,555 / 308.256	145 / 18.200	330 / 26.810	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4,030 / 353.266
Subtotal: Procurement, All Modification Items	3,947 / 1,510.822	165 / 125.380	571 / 89.694	319 / 71.169	4 / 1.775	323 / 72.944	593 / 89.160	620 / 74.463	- / 5.404	- / -	- / -	6,219 / 1,967.867
Installation												
Modification Item 1 of 4: SHADOW Version 2 (v2)	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 2 of 4: SHADOW SYSTEM MODIFICATIONS	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 3 of 4: SHADOW PAYLOAD UPGRADES/MODIFICATIONS	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 4 of 4: OSRVT MODIFICATIONS	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Installation	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total												
Total Cost (Procurement + Support + Installation)	1,510.822	125.380	89.694	71.169	1.775	72.944	89.160	74.463	5.404	-	-	1,967.867

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS	Modification Number / Title: A00018 / RQ-7 UAV MODS

Modification Item 1 of 4: SHADOW Version 2 (v2)

Manufacturer Information

Manufacturer Name: AAI	Manufacturer Location: Hunt Valley, MD
Administrative Leadtime (in Months): 7	Production Leadtime (in Months): 18

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Feb 2015	Jun 2016	May 2017	May 2018	May 2019		
Delivery Dates	May 2016	Dec 2017	Nov 2018	Nov 2019	Nov 2020		

Installation Information

Method of Implementation: FFP Contract

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS	Modification Number / Title: A00018 / RQ-7 UAV MODS

Modification Item 2 of 4: SHADOW SYSTEM MODIFICATIONS

Manufacturer Information

Manufacturer Name: AAI	Manufacturer Location: Hunt Valley, MD
Administrative Leadtime (in Months): 18	Production Leadtime (in Months): 18

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			May 2017	May 2018	May 2019		
Delivery Dates			Nov 2018	Nov 2019	Jul 2020		

Installation Information

Method of Implementation: FFP Contract

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS	Modification Number / Title: A00018 / RQ-7 UAV MODS

Modification Item 3 of 4: SHADOW PAYLOAD UPGRADES/MODIFICATIONS

Manufacturer Information

Manufacturer Name: AAI	Manufacturer Location: Hunt Valley, MD
Administrative Leadtime (in Months): 6	Production Leadtime (in Months): 6

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Apr 2017	Apr 2018	Apr 2019		
Delivery Dates			Oct 2017	Oct 2018	Oct 2019		

Installation Information

Method of Implementation: FFP Contract

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A00018 / RQ-7 UAV MODS	Modification Number / Title: A00018 / RQ-7 UAV MODS

Modification Item 4 of 4: OSRVT MODIFICATIONS

Manufacturer Information

Manufacturer Name: AAI				Manufacturer Location: Hunt Valley, MD			
Administrative Leadtime (in Months): 4				Production Leadtime (in Months): 12			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Jan 2015	Jul 2016					
Delivery Dates	Feb 2015	Jul 2017					

Installation Information

Method of Implementation: FFP Contract

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft	P-1 Line Item Number / Title: A01002 / UAS MODS
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-	-	88.054
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-	-	88.054
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-	-	88.054

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	641.294	-	641.294	-	-	-	-	-	349.421

Description:

The One System Remote Video Terminal (OSRVT) systems require an update to an Increment II OSRVT. The OSRVT Increment II Upgrade Program of Record (POR) began in FY 2012. The OSRVT Increment II consists of a Remote Operations Video Enhanced Receiver (ROVER), Miltope tablet, Antennas, UHF Modem, Type I encryption, and an extended range Mobile Directional Antennas System (MDAS). Software supports decoding Telemetry Data from multiple Unmanned Aircraft Systems (UASs), provides Electro-Optical (EO)/Infrared (IR) payload control, and supports off-target calculations.

The OSRVT MODS APE A000121000, begins in FY 2017. Prior to FY2017, OSRVT Procurement funds were provided via the SHADOW MODS APE A00018000.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-
Total:									
Secondary Distribution									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 02: Modification of Aircraft / BSA 10: Modification of Aircraft

P-1 Line Item Number / Title:
A01002 / UAS MODS

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A00121 / OSRVT (UNCLASSIFIED)			- / -	- / -	- / -	- / 21.804	- / 4.420	- / 26.224
P-40	Total Gross/Weapon System Cost			- / -	- / -	- / -	- / 21.804	- / 4.420	- / 26.224

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	A00121 / OSRVT (UNCLASSIFIED)			- / 21.434	- / 21.840	- / 18.556	- / -	- / -	- / 88.054
P-40	Total Gross/Weapon System Cost			- / 21.434	- / 21.840	- / 18.556	- / -	- / -	- / 88.054

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY 2017 Base funding of \$21.804 million provides for production of 28 OSRVT systems, as part of an Army Procurement Objective (APO) increase to support the Army Airborne Command and Control System (A2C2S), and the production of 750 BD-Retrofit Kits. The FY 2017 Base funding also supports Installation, Recurring Engineering, Systems Engineering, Logistics, Fielding, New Equipment Training (NET), and Program Management (PM). FY2017 Overseas Contingency Operations (OCO) funding of \$4.420 million provides for the production of 27 OSRVT systems in support of the European Resistance Initiative (ERI).

In accordance with 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10				P-1 Line Item Number / Title: A01002 / UAS MODS						Modification Number / Title: A00121 / OSRVT		

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-	-	88.054
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-	-	88.054
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-	-	88.054

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	641.294	-	641.294	-	-	-	-	-	349.421

Description:

The One System Remote Video Terminal (OSRVT) systems requires an update to an Increment II OSRVT. The OSRVT Increment II Upgrade Program of Record (POR) began in FY 2012. The OSRVT Increment II consists of a Remote Operations Video Enhanced Receiver (ROVER), Miltope tablet, Antennas, UHF Modem, Type I encryption, and an extended range Mobile Directional Antennas System (MDAS). Software supports decoding Telemetry Data from multiple Unmanned Aircraft Systems (UASs), provides Electro-Optical (EO)/ Infrared (IR) payload control, and supports off target calculations.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10					P-1 Line Item Number / Title: A01002 / UAS MODS					Modification Number / Title: A00121 / OSRVT			
Models of Systems Affected: N/A				Modification Type: UNCLASSIFIED				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1: OSRVT MODS</i>													
A Kits													
Recurring													
OSRVT Systems	- / -	- / -	- / -	28 / 4.587	27 / 4.420	55 / 9.007	23 / 3.843	23 / 3.920	54 / 9.387	- / -	- / -	155 / 26.157	
Bi-Directional Retrofit Kits	- / -	- / -	- / -	750 / 10.030	- / -	750 / 10.030	750 / 10.230	738 / 10.268	- / -	- / -	- / -	2,238 / 30.528	
Non Recurring Engineering	- / -	- / -	- / -	- / 0.802	- / -	- / 0.802	- / 0.849	- / 1.010	- / 2.394	- / -	- / -	- / 5.055	
Program Management	- / -	- / -	- / -	- / 0.868	- / -	- / 0.868	- / 0.885	- / 0.903	- / 0.921	- / -	- / -	- / 3.577	
Engineering	- / -	- / -	- / -	- / 0.868	- / -	- / 0.868	- / 0.885	- / 0.903	- / 0.921	- / -	- / -	- / 3.577	
Logistics	- / -	- / -	- / -	- / 4.649	- / -	- / 4.649	- / 4.742	- / 4.836	- / 4.933	- / -	- / -	- / 19.160	
<i>Subtotal: Recurring</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / 21.804</i>	<i>- / 4.420</i>	<i>- / 26.224</i>	<i>- / 21.434</i>	<i>- / 21.840</i>	<i>- / 18.556</i>	<i>- / -</i>	<i>- / -</i>	<i>- / 88.054</i>	
<i>Subtotal: OSRVT MODS</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>778 / 21.804</i>	<i>27 / 4.420</i>	<i>805 / 26.224</i>	<i>773 / 21.434</i>	<i>761 / 21.840</i>	<i>54 / 18.556</i>	<i>- / -</i>	<i>- / -</i>	<i>2,393 / 88.054</i>	
<i>Subtotal: Procurement, All Modification Items</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>778 / 21.804</i>	<i>27 / 4.420</i>	<i>805 / 26.224</i>	<i>773 / 21.434</i>	<i>761 / 21.840</i>	<i>54 / 18.556</i>	<i>- / -</i>	<i>- / -</i>	<i>2,393 / 88.054</i>	
Installation													
<i>Modification Item 1 of 1: OSRVT MODS</i>													
<i>Subtotal: Installation</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	
Total													
Total Cost (Procurement + Support + Installation)	-	-	-	21.804	4.420	26.224	21.434	21.840	18.556	-	-	88.054	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 02 / 10	P-1 Line Item Number / Title: A01002 / UAS MODS	Modification Number / Title: A00121 / OSRVT

Modification Item 1 of 1: OSRVT MODS

Manufacturer Information

Manufacturer Name: Textron/AAI	Manufacturer Location: Hunt Valley, MD
Administrative Leadtime (in Months): 4	Production Leadtime (in Months): 12

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Mar 2017	Mar 2018	Mar 2019	Mar 2020	
Delivery Dates			Mar 2018	Mar 2019	Mar 2020	Mar 2021	

Installation Information

Method of Implementation: FFP Contract

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 0.000	- / 0.000
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 10: Ground Support Avionics

P-1 Line Item Number / Title:
AZ3504 / Aircraft Survivability Equipment

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	463.805	89.059	56.215	67.377	-	67.377	63.237	47.092	80.488	63.790	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	463.805	89.059	56.215	67.377	-	67.377	63.237	47.092	80.488	63.790	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	463.805	89.059	56.215	67.377	-	67.377	63.237	47.092	80.488	63.790	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	5,614.750	-	5,614.750	-	-	-	-	Continuing	Continuing

Description:

The Aircraft Survivability Equipment (ASE) budget line includes ASE Trainers (AZ3506), ASE Laser Countermeasures (AZ3508), and ASE Radio Frequency Countermeasures (AZ3511).

AZ3506 ASE Trainers

The Man-portable Aircraft Survivability Trainer (MAST) is a systems trainer for the Common Missile Warning System (CMWS). MAST provides force-on-force training by stimulation of the onboard CMWS at the Maneuver Combat Training Centers (MCTC).

AZ3508 ASE Laser CM

Army Procurement Objective (APO) = 1,332 (APO based on B-Kits)

The AN/AVR-2B Laser Detecting Set (LDS) installed on Army rotary-wing aircraft passively detects laser-aided weapons targeting the aircraft and alerts aircrews, allowing them to engage the threat or maneuver to break the targeting. The system detects aircraft illumination by laser rangefinders, laser target designators, and laser beam rider surface-to-air missiles. The system provides the aircrew visual and aural warnings prioritized by threat lethality using 360 degree azimuth and 90 degree elevation field of view coverage.

AZ3511 Radio Frequency CM

APO = 1,200 (APO based on B-Kits)

The objective of the Aircraft Survivability Equipment (ASE) Development project is to improve Radio Frequency (RF) ASE for Army aviation. The APR-39 Radar Warning Receiver (RWR) detects, categorizes, and prioritizes Radio Frequency (RF) emitters and provides a visual / aural alert to aircrew members warning them of targeting by RF-guided weapons. The Milestone Decision Authority (MDA) approved Phases 1 and 2 of a 3-phased path forward.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 10: Ground Support Avionics		P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	

Phase 1 serves as an obsolescence / sustainment upgrade to the Processor Line Replaceable Unit (LRU) of the AN/APR-39A(V) Radar Warning Receiver (RWR) implemented to ensure that the currently fielded system remains viable until affordable improved RF ASE capability can be pursued in Phases 2 and 3.

Phase 2, RWR Modernization, adopts the ongoing United States Navy Class I RWR Engineering Change Proposal (ECP), commonly referred to as the APR-39D(V)2 system. APR-39D(V)2 will significantly improve the RF threat coverage, automatic detection and identification of threat types, bearing, and lethality. Under Phase 2, the Army will develop enhancements to the APR-39D(V)2 as hardware upgrades needed to keep the APR-39D(V)2 technically relevant and address emerging Low Probability Intercept (LPI) and frequency agile threats.

Phase 3 adds active Electronic Countermeasures (ECM) jamming capability for selected aircraft; Materiel Development Decision (MDD) for this ECM jamming capability phase is not expected until later in the Future Years Defense Program (FYDP).

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	12	-	12	24	24	24	24
	Total Obligation Authority	89.059	56.215	67.377	-	67.377	63.237	47.092	80.488	63.790
Total: Secondary Distribution	Quantity	-	-	12	-	12	24	24	24	24
	Total Obligation Authority	89.059	56.215	67.377	-	67.377	63.237	47.092	80.488	63.790

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 10: Ground Support Avionics

P-1 Line Item Number / Title:
 AZ3504 / Aircraft Survivability Equipment

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AZ3508 / ASE Laser CM	P-5a, P-21		- / 365.209	- / 32.896	- / 27.485	- / 16.952	- / -	- / 16.952
P-5	AZ3511 / Radio Frequency CM	P-5a, P-21		- / 98.596	- / 56.163	- / 28.730	12 / 50.425	- / -	12 / 50.425
P-40	Total Gross/Weapon System Cost			- / 463.805	- / 89.059	- / 56.215	- / 67.377	- / -	- / 67.377

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

AZ3506 ASE Trainers: There is no Fiscal Year (FY) 2017 Base Procurement dollar funding requirement due to the transition of MAST to sustainment.

AZ3508 ASE Laser CM: Fiscal Year (FY) 2017 Base procurement dollars in the amount of \$16.952 million procures AN/AVR-2B A-Kits for CH-47F aircraft and funds A-Kit installation on UH-60L and CH-47F aircraft in support of required operational capabilities and integration of AN/AVR-2B LDS with other ASE systems.

AZ3511 Radio Frequency CM: Fiscal Year (FY) 2017 Base Procurement dollars in the amount of \$50.425 million supports procurement of B-Kit integration assets for Rotary and Fixed Wing aircraft, A-Kits, Non-recurring Engineering and Government System Test and Evaluation.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment	Item Number / Title [DODIC]: AZ3508 / ASE Laser CM

ID Code (A=Service Ready, B=Not Service Ready) :				MDAP/MAIS Code:					
Resource Summary				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)				-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)				365.209	32.896	27.485	16.952	-	16.952
Less PY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)				365.209	32.896	27.485	16.952	-	16.952
Plus CY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)				365.209	32.896	27.485	16.952	-	16.952
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>									
Initial Spares (\$ in Millions)				-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)				-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Recurring Production	-	-	172.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non Recurring Engineering (A-Kit)	-	-	11.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-Kit Procurement ^(†)	65.899	405	26.689	68.838	37	2.547	54.840	225	12.339	54.978	225	12.370	-	-	-	54.978	225	12.370
A-Kit Installation	85.057	318	27.048	58.023	88	5.106	67.331	145	9.763	86.000	18	1.548	-	-	-	86.000	18	1.548
A-Kit filters	2.908	770	2.239	6.855	131	0.898	-	-	-	-	-	-	-	-	-	-	-	-
B-Kit Procurement	62.474	1,332	83.216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Production (Brackets)	-	-	4.051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prime Contractor Program Mgt	-	-	4.119	-	-	1.714	-	-	1.702	-	-	1.309	-	-	-	-	-	1.309
Systems Engineering	-	-	11.493	-	-	1.588	-	-	1.276	-	-	0.797	-	-	-	-	-	0.797
Program Management	-	-	3.472	-	-	1.701	-	-	1.247	-	-	0.898	-	-	-	-	-	0.898
Systems Test and Evaluation	-	-	7.931	-	-	0.866	-	-	1.128	-	-	-	-	-	-	-	-	-
Training	-	-	8.375	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support Equipment	-	-	-	-	-	3.951	-	-	-	-	-	-	-	-	-	-	-	-
Fielding	-	-	2.845	-	-	0.025	-	-	0.030	-	-	0.030	-	-	-	-	-	0.030
Other Procurement	-	-	-	-	-	14.500	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	365.209	-	-	32.896	-	-	27.485	-	-	16.952	-	-	-	-	-	16.952
<i>Subtotal: Flyaway Cost</i>	-	-	365.209	-	-	32.896	-	-	27.485	-	-	16.952	-	-	-	-	-	16.952

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Exhibit P-5, Cost Analysis: PB 2017 Army												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10						P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment						Item Number / Title [DODIC]: AZ3508 / ASE Laser CM					
ID Code (A=Service Ready, B=Not Service Ready) :												MDAP/MAIS Code:					

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	365.209	-	-	32.896	-	-	27.485	-	-	16.952	-	-	-	-	-	16.952

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	32.896	27.485	16.952	-	16.952
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	32.896	27.485	16.952	-	16.952

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment	Item Number / Title [DODIC]: AZ3508 / ASE Laser CM
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
A-Kit Procurement ^(†)		2016	Lockheed Martin / Blue Grass Army Depot, KY	C / FFP	SOFSA, Blue Grass Army Depot	May 2016	Dec 2016	225	54.840			
A-Kit Procurement ^(†)		2017	Lockheed Martin / Blue Grass Army Depot, KY	C / FFP	SOFSA, Blue Grass Army Depot	May 2017	Dec 2017	225	54.978			

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment	Item Number / Title [DODIC]: AZ3508 / ASE Laser CM
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2016												Fiscal Year 2017												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 5	BAL D U E A S O F 1 O C T	Calendar Year 2016												Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
A-Kit Procurement																															
Prior Years Deliveries: 405																															
1		2016	ARMY	225	-	225																								35	
1		2017	ARMY	225	-	225																								225	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment	Item Number / Title [DODIC]: AZ3508 / ASE Laser CM
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2018												Fiscal Year 2019												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 7	BAL D U E A S O F 1 O C T	Calendar Year 2018												Calendar Year 2019												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
A-Kit Procurement																															
Prior Years Deliveries: 405																															
	1	2016	ARMY	225	190	35	20	15																							
	1	2017	ARMY	225	-	225	-	-	10	20	20	20	20	20	20	20	20	20	20	15											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment	Item Number / Title [DODIC]: AZ3508 / ASE Laser CM
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Lockheed Martin - Blue Grass Army Depot, KY	10	125	300	-	3	7	10	-	3	7	10

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-5, Cost Analysis: PB 2017 Army					Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10			P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment			Item Number / Title [DODIC]: AZ3511 / Radio Frequency CM			
ID Code (A=Service Ready, B=Not Service Ready) :				MDAP/MAIS Code:					
Resource Summary				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)				-	-	-	12	-	12
Gross/Weapon System Cost (\$ in Millions)				98.596	56.163	28.730	50.425	-	50.425
Less PY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)				98.596	56.163	28.730	50.425	-	50.425
Plus CY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)				98.596	56.163	28.730	50.425	-	50.425
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>									
Initial Spares (\$ in Millions)				-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)				-	-	-	4,202.083	-	4,202.083

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Non Recurring Cost																		
A-Kit NRE	-	-	98.596	-	-	12.946	-	-	10.759	-	-	3.815	-	-	-	-	-	3.815
<i>Subtotal: Non Recurring Cost</i>	-	-	98.596	-	-	12.946	-	-	10.759	-	-	3.815	-	-	-	-	-	3.815
Subtotal: Flyaway Cost	-	-	98.596	-	-	12.946	-	-	10.759	-	-	3.815	-	-	-	-	-	3.815
Hardware Cost																		
Recurring Cost																		
A-Kit Procurement ^(†)	-	-	-	-	-	-	40.000	225	9.000	68.260	50	3.413	-	-	-	68.260	50	3.413
A-Kit Installs	-	-	-	-	-	-	-	-	-	-	-	6.371	-	-	-	-	-	6.371
B-Kit Procurement ^(†)	-	-	-	921.600	20	18.432	-	-	-	956.833	12	11.482	-	-	-	956.833	12	11.482
Replacement Flight Line Test Sets	-	-	-	-	-	2.278	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	20.710	-	-	9.000	-	-	21.266	-	-	-	-	-	21.266
Non Recurring Cost																		
System Test and Evaluation	-	-	-	-	-	0.874	-	-	0.525	-	-	5.432	-	-	-	-	-	5.432
Other	-	-	-	-	-	8.300	-	-	-	-	-	3.266	-	-	-	-	-	3.266
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	9.174	-	-	0.525	-	-	8.698	-	-	-	-	-	8.698
Subtotal: Hardware Cost	-	-	-	-	-	29.884	-	-	9.525	-	-	29.964	-	-	-	-	-	29.964
Software Cost																		
Non Recurring Cost																		

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10		P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment
		Item Number / Title [DODIC]: AZ3511 / Radio Frequency CM

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Mission Data Set (MDS)	-	-	-	-	-	0.234	-	-	1.805	-	-	6.506	-	-	-	-	-	6.506
Other	-	-	-	-	-	8.359	-	-	0.750	-	-	3.348	-	-	-	-	-	3.348
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	8.593	-	-	2.555	-	-	9.854	-	-	-	-	-	9.854
<i>Subtotal: Software Cost</i>	-	-	-	-	-	8.593	-	-	2.555	-	-	9.854	-	-	-	-	-	9.854
Logistics Cost																		
Recurring Cost																		
Training	-	-	-	-	-	0.304	-	-	0.350	-	-	0.446	-	-	-	-	-	0.446
Fielding	-	-	-	-	-	0.292	-	-	0.682	-	-	0.302	-	-	-	-	-	0.302
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	0.596	-	-	1.032	-	-	0.748	-	-	-	-	-	0.748
Non Recurring Cost																		
Other	-	-	-	-	-	0.317	-	-	2.073	-	-	0.894	-	-	-	-	-	0.894
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	0.317	-	-	2.073	-	-	0.894	-	-	-	-	-	0.894
<i>Subtotal: Logistics Cost</i>	-	-	-	-	-	0.913	-	-	3.105	-	-	1.642	-	-	-	-	-	1.642
Support - Program Management Cost																		
Contractor Management	-	-	-	-	-	2.209	-	-	1.209	-	-	2.413	-	-	-	-	-	2.413
Government Management	-	-	-	-	-	1.059	-	-	1.577	-	-	1.908	-	-	-	-	-	1.908
<i>Subtotal: Support - Program Management Cost</i>	-	-	-	-	-	3.268	-	-	2.786	-	-	4.321	-	-	-	-	-	4.321
Support - System Engineering Cost																		
System Engineering	-	-	-	-	-	0.559	-	-	-	-	-	0.829	-	-	-	-	-	0.829
<i>Subtotal: Support - System Engineering Cost</i>	-	-	-	-	-	0.559	-	-	-	-	-	0.829	-	-	-	-	-	0.829
Gross/Weapon System Cost	-	-	98.596	-	-	56.163	-	-	28.730	4,202.083	12	50.425	-	-	-	4,202.083	12	50.425

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	-	12	-	12
	Total Obligation Authority	56.163	28.730	50.425	-	50.425
Total: Secondary Distribution	Quantity	-	-	12	-	12
	Total Obligation Authority	56.163	28.730	50.425	-	50.425

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment	Item Number / Title [DODIC]: AZ3511 / Radio Frequency CM
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
A-Kit Procurement ^(†)		2016	Various / Various	C / FFP	TBD	Aug 2016	Jun 2017	225	40.000			
A-Kit Procurement ^(†)		2017	Various / Various	C / FFP	TBD	Aug 2017	Jun 2018	50	68.260			
B-Kit Procurement ^(†)		2015	Northrop Grumman / Rolling Meadows, IL	SS / IDIQ	TBD	Aug 2015	Jan 2017	20	921.600			
B-Kit Procurement ^(†)		2017	Northrop Grumman / Rolling Meadows, IL	SS / IDIQ	TBD	Jun 2017	Nov 2018	12	956.833			

^(†) indicates the presence of a P-21

Remarks:
Fiscal Year (FY) 2017 leverages Navy contract for B-Kit procurements.

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment	Item Number / Title [DODIC]: AZ3511 / Radio Frequency CM
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Cost Elements <i>(Units in Each)</i>					Fiscal Year 2017														Fiscal Year 2018												BALANCE		
O C O #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017														Calendar Year 2018												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
A-Kit Procurement																																	
	1	2016	ARMY	225	-	225	-	-	-	-	-	-	-	-	-	30	30	30	30	30	30	30	30	15					-				
	1	2017	ARMY	50	-	50											A	-	-	-	-	-	-	-	-	-	-	-	-	-			
B-Kit Procurement																																	
	2	2015	ARMY	20	-	20	-	-	-	2	2	4	6	6																-			
	2	2017	ARMY	12	-	12										A	-	-	-	-	-	-	-	-	-	-	-	-	-	12			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10 **P-1 Line Item Number / Title:** AZ3504 / Aircraft Survivability Equipment **Item Number / Title [DODIC]:** AZ3511 / Radio Frequency CM

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2019												Fiscal Year 2020												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019												Calendar Year 2020												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
A-Kit Procurement																															
	1	2016	ARMY	225	225	-																									
	1	2017	ARMY	50	50	-																									
B-Kit Procurement																															
	2	2015	ARMY	20	20	-																									
	2	2017	ARMY	12	-	12	-	2	2	2	2	2	2																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10		P-1 Line Item Number / Title: AZ3504 / Aircraft Survivability Equipment
		Item Number / Title [DODIC]: AZ3511 / Radio Frequency CM

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Various - Various	30	125	300	-	3	9	12	-	3	9	12
2	Northrop Grumman - Rolling Meadows, IL	24	125	250	-	3	15	18	-	3	15	18

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 10: Ground Support Avionics

P-1 Line Item Number / Title:
AZ3507 / Survivability CM

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	56.412	7.800	8.917	9.565	-	9.565	1.112	6.076	3.915	-	-	93.797
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	56.412	7.800	8.917	9.565	-	9.565	1.112	6.076	3.915	-	-	93.797
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	56.412	7.800	8.917	9.565	-	9.565	1.112	6.076	3.915	-	-	93.797

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Advanced Threat Infrared Countermeasure (ATIRCM) is an infrared (IR) countermeasure system that interfaces with the Common Missile Warning System (CMWS) to provide near spherical protection of the host aircraft platform in order to defeat IR threat missiles. The US Army's concept of ATIRCM is part of the Suite of Integrated Infrared Countermeasures (SIIRCM). The core components of the SIIRCM concept are: a Missile Warning System (MWS), expendable countermeasures (flares) and a laser based IR countermeasure (IRCM). The CMWS detects, declares, and initiates IRCM against IR-guided Surface-to-Air Missiles (SAM) or Air-to-Air Missiles (AAM).

The A-Kit for ATIRCM includes mounting hardware, wiring harnesses, and other components necessary to install and interface the mission kit on host aircraft. The ATIRCM B-Kit is the mission kit (laser, optical coupler, infrared jam head, and jam head control unit) required to achieve near spherical coverage for an aircraft.

The ATIRCM program is a post-Milestone C, Acquisition Category (ACAT) 1C program of record fielded on CH-47F aircraft.

The approved Army Acquisition Objective (AAO) for ATIRCM is 340 A-Kits and 120 B-Kits.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.800	8.917	9.565	-	9.565	1.112	6.076	3.915	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.800	8.917	9.565	-	9.565	1.112	6.076	3.915	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 10: Ground Support Avionics
P-1 Line Item Number / Title: AZ3507 / Survivability CM

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AZ3507 / Survivability CM			- / 56.412	- / 7.800	- / 8.917	- / 9.565	- / -	- / 9.565
P-40	Total Gross/Weapon System Cost			- / 56.412	- / 7.800	- / 8.917	- / 9.565	- / -	- / 9.565

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 Fiscal Year (FY) 2017 Base Procurement dollars in the amount of \$9.565 million funds ATIRCM A-Kit installation, fielding, and Jam Code update testing to counter emerging Man-Portable Air Defense System (MANPADS) threats, and support across the CH-47F aircraft fleet to include integration work requiring recurring modification work order activities.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic responses, and providing military support to civil authorities.

All COMPO 1 Active

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3507 / Survivability CM	Item Number / Title [DODIC]: AZ3507 / Survivability CM

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	56.412	7.800	8.917	9.565	-	9.565
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	56.412	7.800	8.917	9.565	-	9.565
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	56.412	7.800	8.917	9.565	-	9.565

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
ATIRCM Recurring Production/Installation	-	-	5.266	-	-	7.600	-	-	5.273	-	-	4.457	-	-	-	-	-	-
ATIRCM System Engineering/Program Mgt	-	-	51.146	-	-	0.200	-	-	0.675	-	-	0.828	-	-	-	-	-	0.828
ATIRCM System Test and Evaluation	-	-	-	-	-	-	-	-	2.969	-	-	4.280	-	-	-	-	-	4.280
<i>Subtotal: Recurring Cost</i>	-	-	56.412	-	-	7.800	-	-	8.917	-	-	9.565	-	-	-	-	-	9.565
<i>Subtotal: Flyaway Cost</i>	-	-	56.412	-	-	7.800	-	-	8.917	-	-	9.565	-	-	-	-	-	9.565
Gross/Weapon System Cost	-	-	56.412	-	-	7.800	-	-	8.917	-	-	9.565	-	-	-	-	-	9.565

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	7.800	8.917	9.565	-	9.565
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	7.800	8.917	9.565	-	9.565

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 10: Ground Support Avionics

P-1 Line Item Number / Title:
 AZ3517 / CMWS

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0605051A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	332.521	201.912	104.348	41.626	56.115	97.741	37.225	32.719	18.775	10.917	49.608	885.766
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	332.521	201.912	104.348	41.626	56.115	97.741	37.225	32.719	18.775	10.917	49.608	885.766
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	332.521	201.912	104.348	41.626	56.115	97.741	37.225	32.719	18.775	10.917	49.608	885.766

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Army Procurement Objective (APO) = 1,351

The US Army operational requirements concept for Aviation Infrared (IR) countermeasure systems is known as the Suite of Integrated Infrared Countermeasures (SIIRCM). SIIRCM is an integrated warning and countermeasure system to enhance aircraft survivability against IR-guided threat missile systems. The Common Missile Warning System (CMWS) is a core element of the SIIRCM concept. CMWS is an integrated ultraviolet (UV) missile warning system, with an Improved Countermeasure Dispenser (ICMD) serving as a subsystem to a host aircraft.

The CMWS program is a UV missile warning system that cues both flare and laser-based countermeasures to defeat incoming IR-seeking missiles and will alert aircrews to the presence of certain incoming unguided munitions. The B-Kit consists of the components which perform the missile detection and aircrew notification, unguided munitions detection and aircrew notification, false alarm rejection, and countermeasure employment/cueing functions of the system. The CMWS Electronic Control Unit (ECU) receives UV missile detection data from Electro-Optic Missile Sensors (EOMS) and sends a missile alert signal to warn aircrews via on-board avionics. Tier 1 threat missiles detected and tracked by the CMWS are subsequently defeated by a combination of missile seeker countermeasures, including decoy flares and IR Laser Jamming (currently Advanced Threat Infrared Countermeasures (ATIRCM)-equipped CH-47 platform only). In addition, the CMWS ECU receives from the EOMS unguided munitions detection data which is also passed to the aircrew through aural and visual cues. The aircrew then applies the appropriate Tactics, Techniques and Procedures (TTPs) to break contact or engage the enemy with on-ship ordnance. The CMWS Generation 3 (Gen 3) ECU in conjunction with ongoing software development efforts will address outstanding material release conditions to achieve a Full Material Release (FMR) for CMWS and ensure protection against emerging IR-guided missile threats.

The A-Kit for CMWS includes mounting hardware, wiring harnesses, cables, and other components necessary to install and interface the mission kit on host aircraft. The A-Kit ensures the mission kit is functionally and physically operational with a specific host aircraft type.

Joint Urgent Operational Needs Statement (JUONS) SO-0010 will integrate the Department of the Navy Large Aircraft Infrared Countermeasure (DoN LAIRCM) system on a select number of Army and Special Operations Command (SOCOM) aircraft in the threat area of responsibility. The purpose of this JUONS is to detect and defeat proliferate Surface-to-Air Missiles (SAM) threats. Headquarters Department of the Army (HQDA) has provided a follow up Directed Requirement to this JUONS to reduce Space, Weight and Power (SWaP) and accelerate delivery of Common Infrared Countermeasures (CIRCMs).

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 10: Ground Support Avionics		P-1 Line Item Number / Title: AZ3517 / CMWS

ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: 0605051A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	201.912	104.348	41.626	56.115	97.741	37.225	32.719	18.775	10.917
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	201.912	104.348	41.626	56.115	97.741	37.225	32.719	18.775	10.917

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 10: Ground Support Avionics

P-1 Line Item Number / Title:
 AZ3517 / CMWS

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0605051A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AZ3517 / CMWS	P-5a, P-21		- / 332.521	- / 201.912	- / 104.348	- / 41.626	- / 56.115	- / 97.741
P-40	Total Gross/Weapon System Cost			- / 332.521	- / 201.912	- / 104.348	- / 41.626	- / 56.115	- / 97.741

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

Fiscal Year (FY) 2017 Base procurement dollars in the amount of \$41.626 million supports CMWS A-Kit Installations and modifications on multiple platforms of fixed and rotary wing aircraft, software modifications, system test and evaluation efforts and integration with other ASE systems.

FY 2017 Overseas Contingency Operations (OCO) Aircraft Procurement Army (APA) dollars in the amount of \$32.960 million supports installation of the JUONs SO-0010 A/B-Kits, provides field support and Program Management.

FY 2017 OCO APA dollars in the amount of \$23.155 million supports the procurement of JUONS SO-0010 B-Kits.

Joint Staff, J-8 Deputy Director for Requirements (DDR) memorandum, April 24, 2015

SOCOM JUONs SO-0010, Joint Rapid Acquisition Cell (JRAC) memorandum, May 29, 2015

Directed Requirement for the Advanced Threat Warner and Common Infrared Countermeasure Quick Reaction Capability (ATW & CIRCM QRC) to Support Joint Urgent Operational Need (JUON) SO-0010, CIRCM Critical Intelligence Parameters Breach, 18 December 2015

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

All COMPO 1 Active

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3517 / CMWS	Item Number / Title [DODIC]: AZ3517 / CMWS

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	332.521	201.912	104.348	41.626	56.115	97.741
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	332.521	201.912	104.348	41.626	56.115	97.741
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	332.521	201.912	104.348	41.626	56.115	97.741

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
CMWS A-Kit Fixed Wing Installation	-	-	32.030	486.222	9	4.376	600.000	5	3.000	922.222	9	8.300	-	-	-	922.222	9	8.300
CMWS A-Kit Rotary Wing Installation	-	-	5.730	84.000	10	0.840	-	-	2.343	-	-	-	-	-	-	-	-	-
CMWS Gen 3 ECU Hardware ^(†)	523.343	216	113.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CMWS Gen 3 User Data Module (UDM)	-	-	-	-	-	-	-	-	9.924	-	-	-	-	-	-	-	-	-
Other Recurring Prod (Software/Engineer)	-	-	92.520	-	-	23.944	-	-	38.944	-	-	14.065	-	-	-	-	-	14.065
Systems Engineering	-	-	16.719	-	-	2.990	-	-	3.720	-	-	2.310	-	-	-	-	-	2.310
Program Management	-	-	13.679	-	-	2.446	-	-	3.224	-	-	1.890	-	-	-	-	-	1.890
Systems Test and Evaluation	-	-	37.702	-	-	12.363	-	-	10.206	-	-	10.894	-	-	-	-	-	10.894
JUONS SO-0010 A-Kit Procurement	-	-	-	329.400	10	3.294	342.373	59	20.200	-	-	-	-	-	-	-	-	-
JUONS SO-0010 A-Kit Installation	-	-	-	250.000	6	1.500	-	-	-	-	-	-	250.794	63	15.800	250.794	63	15.800
JUONS SO-0010 B-Kit Procurement	-	-	-	3,007.933	45	135.357	-	-	-	-	-	-	3,307.857	7	23.155	3,307.857	7	23.155
JUONS SO-0010 Systems Engineering	-	-	-	-	-	-	-	-	1.260	-	-	-	-	-	2.035	-	-	2.035

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3517 / CMWS	Item Number / Title [DODIC]: AZ3517 / CMWS

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
JUONS SO-0010 Program Management	-	-	-	-	-	-	-	-	1.540	-	-	-	-	-	1.670	-	-	1.670
JUONS SO-0010 Systems Test & Evaluation	-	-	-	-	-	1.361	-	-	3.000	-	-	-	-	-	3.000	-	-	3.000
JUONS SO-0010 Fielding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.455	-	-	10.455
<i>Subtotal: Recurring Cost</i>	-	-	311.422	-	-	188.471	-	-	97.361	-	-	37.459	-	-	56.115	-	-	93.574
Non Recurring Cost																		
Other Modifications (5th Sensor and P3I)	-	-	2.073	-	-	-	-	-	2.963	-	-	1.558	-	-	-	-	-	1.558
Other Procurement	-	-	3.176	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Non Recurring Cost</i>	-	-	5.249	-	-	-	-	-	2.963	-	-	1.558	-	-	-	-	-	1.558
<i>Subtotal: Hardware Cost</i>	-	-	316.671	-	-	188.471	-	-	100.324	-	-	39.017	-	-	56.115	-	-	95.132
Support - Fielding Cost																		
Fielding	-	-	15.850	-	-	7.826	-	-	2.424	-	-	1.044	-	-	-	-	-	1.044
<i>Subtotal: Support - Fielding Cost</i>	-	-	15.850	-	-	7.826	-	-	2.424	-	-	1.044	-	-	-	-	-	1.044
Support - Training Cost																		
Equipment	-	-	-	-	-	5.615	-	-	1.600	-	-	1.565	-	-	-	-	-	1.565
<i>Subtotal: Support - Training Cost</i>	-	-	-	-	-	5.615	-	-	1.600	-	-	1.565	-	-	-	-	-	1.565
Gross/Weapon System Cost	-	-	332.521	-	-	201.912	-	-	104.348	-	-	41.626	-	-	56.115	-	-	97.741

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	201.912	104.348	41.626	56.115	97.741
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	201.912	104.348	41.626	56.115	97.741

(t) indicates the presence of a P-5a

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3517 / CMWS	Item Number / Title [DODIC]: AZ3517 / CMWS
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
CMWS Gen 3 ECU Hardware ^(†)		2014	BAE Systems / Nashua, NH	SS / FFP	AMCOM Contracting Command, RSA	May 2014	Feb 2015	216	158.796			

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10 **P-1 Line Item Number / Title:** AZ3517 / CMWS **Item Number / Title [DODIC]:** AZ3517 / CMWS

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2014												Fiscal Year 2015												BALANCE	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014												Calendar Year 2015												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
CMWS Gen 3 ECU Hardware																															
	1	2014	ARMY	216	-	216																									

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10 **P-1 Line Item Number / Title:** AZ3517 / CMWS **Item Number / Title [DODIC]:** AZ3517 / CMWS

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2016												Fiscal Year 2017												BALANCE	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016												Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
CMWS Gen 3 ECU Hardware																															
	1	2014	ARMY	216	120	96	15	15	15	15	15	15	6																-		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army								Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10				P-1 Line Item Number / Title: AZ3517 / CMWS				Item Number / Title [DODIC]: AZ3517 / CMWS				
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	BAE Systems - Nashua, NH	24	600	1,000	-	3	9	12	-	3	9	12

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 10: Ground Support Avionics

P-1 Line Item Number / Title:
 AZ3537 / CIRCM

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	-	108.721	108.721	6.337	55.460	115.625	120.851	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	-	108.721	108.721	6.337	55.460	115.625	120.851	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	-	108.721	108.721	6.337	55.460	115.625	120.851	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	1,510.014	-	1,510.014	-	-	-	-	Continuing	Continuing

Description:

Army Procurement Objective (APO) = 1,076 (B-Kits only)

The Common Infrared Countermeasure (CIRCM) is an infrared (IR) countermeasure system that interfaces with a Missile Warning System (MWS) to provide near spherical protection of the host platform in order to defeat IR threat missiles. The CIRCM will provide the sole acquisition of future laser-based IR countermeasure systems for all rotary-wing, tilt-rotor, and small fixed-wing aircraft across the Department of Defense. The Army's concept of CIRCM is part of the Suite of Integrated Infrared Countermeasures (SIIRCM). The core components of the SIIRCM concept are: a MWS, IR expendables countermeasures (flares) and a laser-based Infrared Countermeasure (IRCM). The SIIRCM detects, declares and initiates IRCM against IR-guided Surface-to-Air Missiles (SAM) or Air-to-Air Missiles (AAM). The CIRCM is the next generation of the laser-based IRCM component and will interface with both the Army's Common Missile Warning System (CMWS) and future missile warning systems.

The A-Kit for CIRCM includes mounting hardware, wiring harnesses, and other components necessary to install and interface the mission kit on host aircraft. The A-Kit ensures the mission kit is functionally and physically operational with a specific host aircraft type. The CIRCM B-Kit is the mission kit (laser, pointer tracker, and controller) required to achieve near spherical coverage for an aircraft.

Joint Urgent Operational Needs Statement (JUONS) SO-0010 will integrate the Department of the Navy Large Aircraft Infrared Countermeasure (DoN LAIRCM) system on a select number of Army and Special Operations Command (SOCOM) aircraft in the threat area of responsibility. The purpose of this JUONS is to detect and defeat proliferate Surface-to-Air Missiles (SAM) threats. Headquarters Department of the Army (HQDA) has provided a follow up Directed Requirement to this JUONS to reduce Space, Weight and Power (SWaP) and accelerate delivery of Common Infrared Countermeasures (CIRCMs).

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	24	48	48
	Total Obligation Authority	-	-	-	108.721	108.721	6.337	55.460	115.625	120.851
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	24	48	48
	Total Obligation Authority	-	-	-	108.721	108.721	6.337	55.460	115.625	120.851

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 10: Ground Support Avionics
P-1 Line Item Number / Title: AZ3537 / CIRCM

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AZ3537 / CIRCM	P-5a, P-21		- / -	- / -	- / -	- / -	- / 108.721	- / 108.721
P-40	Total Gross/Weapon System Cost			- / -	- / -	- / -	- / -	- / 108.721	- / 108.721

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 Fiscal Year 2017 OCO APA funding in the amount of \$108.721 million is required for the HQDA Directed Requirement in support of Space, Weight and Power-Cooling (SWaP-C) reduction of the Joint Urgent Operational Need Statement (JUONS) SO-0010 Phase 2a solution. Specifically, the funding is required to procure B-kits for Army and Special Operations Forces.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

All COMPO 1 Active

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3537 / CIRCM	Item Number / Title [DODIC]: AZ3537 / CIRCM

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	-	108.721	108.721
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	-	108.721	108.721
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	-	108.721	108.721

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	1,510.014	-	1,510.014

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
B-Kit ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	1,215.961	76	92.413	1,215.961	76	92.413
Systems Engineering/ Program Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.154	-	-	8.154
Training	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.718	-	-	2.718
Fielding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.436	-	-	5.436
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<i>108.721</i>	-	-	<i>108.721</i>
<i>Subtotal: Flyaway Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<i>108.721</i>	-	-	<i>108.721</i>
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	1,510.014	-	-	-	-	108.721	1,510.014	-	108.721

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	-	-	-	108.721	108.721
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	-	108.721	108.721

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3537 / CIRCM	Item Number / Title [DODIC]: AZ3537 / CIRCM
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
B-Kit ^(†)	✓	2017	Northrop Grumman Systems Corp / Rolling Meadows	C / FPIF	HQ ACC, Redstone Arsenal, AL	Jan 2017	Nov 2017	76	1,215.961			

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10 **P-1 Line Item Number / Title:** AZ3537 / CIRCM **Item Number / Title [DODIC]:** AZ3537 / CIRCM

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2017												Fiscal Year 2018												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017												Calendar Year 2018												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
B-Kit																															
✓	1	2017	ARMY	76	-	76				A	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10	10	10	10	6	-	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 10	P-1 Line Item Number / Title: AZ3537 / CIRCM	Item Number / Title [DODIC]: AZ3537 / CIRCM
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Northrop Grumman Systems Corp - Rolling Meadows	30	72	200	-	10	-	10	-	-	-	-

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 30: Other Support

P-1 Line Item Number / Title:
AZ3000 / Avionics Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	12,056	820	800	718	-	718	704	118	129	130	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	517.048	6.847	6.937	7.007	-	7.007	7.038	1.964	1.968	1.985	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	517.048	6.847	6.937	7.007	-	7.007	7.038	1.964	1.968	1.985	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	517.048	6.847	6.937	7.007	-	7.007	7.038	1.964	1.968	1.985	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	42.887	8.350	8.671	9.759	-	9.759	9.997	16.644	15.256	15.269	Continuing	Continuing

Description:

The AN/AVS-6, Aviator's Night Vision Imaging System (ANVIS), supports the Army's objectives by permitting superior tactical mobility of rotary wing aircraft during darkness and low light conditions. The AN/AVS-6 also supports Fixed Wing Lift permitting loading/unloading and flight during darkness and low light conditions. The AN/AVS-6 is a binocular, helmet-mounted system for Aviation crew members. The AN/AVS-6(V)3 is a night vision goggle that significantly expands the input dynamic range to support operations in conditions that vary from below starlight illumination levels through strong urban lighting situations. The increased capability of the AN/AVS-6(V)3 yields enhanced mission performance and improved safety of flight, compared to what is now possible using previous AN/AVS-6 systems. The AN/AVS-6(V)3 enhances the survivability, lethality, and tactical mobility for aviators.

The Approved Acquisition Objective (AAO) is 16,686.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	820	800	718	-	718	704	118	129	130
	Total Obligation Authority	6.847	6.937	7.007	-	7.007	7.038	1.964	1.968	1.985
Total: Secondary Distribution	Quantity	820	800	718	-	718	704	118	129	130
	Total Obligation Authority	6.847	6.937	7.007	-	7.007	7.038	1.964	1.968	1.985

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 30: Other Support

P-1 Line Item Number / Title:
 AZ3000 / Avionics Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	K35601 / ANVIS	P-5a, P-21	A	12,056 / 517.048	820 / 6.847	800 / 6.937	718 / 7.007	- / -	718 / 7.007
P-40	Total Gross/Weapon System Cost			12,056 / 517.048	820 / 6.847	800 / 6.937	718 / 7.007	- / -	718 / 7.007

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY 2017 Base procurement dollars in the amount of \$7.070 million supports the procurement of 718 AN/AVS-6(V)3 systems for fielding to Active Units.

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AZ3000 / Avionics Support Equipment	Item Number / Title [DODIC]: K35601 / ANVIS

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	12,056	820	800	718	-	718
Gross/Weapon System Cost (\$ in Millions)	517.048	6.847	6.937	7.007	-	7.007
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	517.048	6.847	6.937	7.007	-	7.007
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	517.048	6.847	6.937	7.007	-	7.007

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	42.887	8.350	8.671	9.759	-	9.759

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
ANVIS ^(†)	41.798	12,056	503.919	6.724	820	5.514	6.719	800	5.375	7.954	718	5.711	-	-	-	7.954	718	5.711
Engineering Support	-	-	4.406	-	-	0.302	-	-	0.556	-	-	0.247	-	-	-	-	-	0.247
Project Management Admin	-	-	6.830	-	-	0.869	-	-	0.875	-	-	0.762	-	-	-	-	-	0.762
Engineering Change Orders	-	-	0.426	-	-	-	-	-	-	-	-	0.055	-	-	-	-	-	0.055
Fielding	-	-	1.467	-	-	0.162	-	-	0.131	-	-	0.232	-	-	-	-	-	0.232
<i>Subtotal: Recurring Cost</i>	-	-	517.046	-	-	6.847	-	-	6.937	-	-	7.007	-	-	-	-	-	7.007
<i>Subtotal: Flyaway Cost</i>	-	-	517.046	-	-	6.847	-	-	6.937	-	-	7.007	-	-	-	-	-	7.007
Gross/Weapon System Cost	42.887	12,056	517.048	8.350	820	6.847	8.671	800	6.937	9.759	718	7.007	-	-	-	9.759	718	7.007

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	820	800	718	-	718
	Total Obligation Authority	6.847	6.937	7.007	-	7.007
Total:	Quantity	820	800	718	-	718
Secondary Distribution	Total Obligation Authority	6.847	6.937	7.007	-	7.007

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AZ3000 / Avionics Support Equipment	Item Number / Title [DODIC]: K35601 / ANVIS
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
ANVIS ^(†)		2015	L-3 / Tempe, AZ	C / IDIQ	ACC APG	Nov 2014	Feb 2015	820	6.724	Y		
ANVIS ^(†)		2016	L-3 / Tempe, AZ	C / IDIQ	ACC/APG	Dec 2015	Feb 2016	800	6.719	Y		
ANVIS ^(†)		2017	TBS / TBD	C / IDIQ	ACC/APG	Nov 2016	Feb 2017	718	7.954	Y		

^(†) indicates the presence of a P-21

Remarks:

Each delivery order made under these contracts is competed among the 2 manufacturers on the basis of best cost, available schedule, and performance. Therefore, a determination of the quantity per manufacturer to be awarded to each is made after reviewing this information at the time of each delivery order.

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30 **P-1 Line Item Number / Title:** AZ3000 / Avionics Support Equipment **Item Number / Title [DODIC]:** K35601 / ANVIS

Cost Elements <i>(Units in Each)</i>				Fiscal Year 2015														Fiscal Year 2016														BALANCE			
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015														Calendar Year 2016														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
ANVIS																																			
Prior Years Deliveries: 12056																																			
1		2015	ARMY ^(XIV)	820	-	820		A	-	-	-	50	50	75	75	75	75	75	75	70	70	70	60												-
1		2016	ARMY ^(XV)	800	-	800																													280
2		2017	ARMY ^(XVI)	718	-	718																													718
								O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30 **P-1 Line Item Number / Title:** AZ3000 / Avionics Support Equipment **Item Number / Title [DODIC]:** K35601 / ANVIS

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2017													Fiscal Year 2018												BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017													Calendar Year 2018												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P	
ANVIS																																
Prior Years Deliveries: 12056																																
	1	2015	ARMY (XIV)	820	820	-																							-			
	1	2016	ARMY (XV)	800	520	280	70	70	70	70																			-			
	2	2017	ARMY (XVI)	718	-	718		A	-	-	-	65	65	65	65	65	65	65	65	65	66	66	66						-			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AZ3000 / Avionics Support Equipment	Item Number / Title [DODIC]: K35601 / ANVIS
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	L-3 - Tempe, AZ	25	125	250	4	1	4	5	4	1	4	5
2	TBS - TBD	25	125	250	4	2	2	4	4	1	3	4

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Service/Agency Suffixes:

- (XIV) BASE
- (XV) BASE
- (XVI) BASE

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 30: Other Support

P-1 Line Item Number / Title:
AZ3100 / Common Ground Equipment

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0603801A, 0605830A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,155.605	31.681	58.067	48.234	-	48.234	47.404	37.529	37.154	34.795	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,155.605	31.681	58.067	48.234	-	48.234	47.404	37.529	37.154	34.795	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,155.605	31.681	58.067	48.234	-	48.234	47.404	37.529	37.154	34.795	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	70.621	-	70.621	-	-	-	-	Continuing	Continuing

Description:

Aviation Ground Support Equipment (AGSE) acquires, fields, and modernizes aviation equipment within cost, schedule, and performance parameters, allowing Army Aviation Soldiers to carry out peacetime and wartime missions. AGSE provides life cycle systems management for Aviation Ground Power Unit, Aviation Light Utility Mobile Maintenance Cart, Aviation Unit Maintenance (AVUM) Shop Sets (A92), Modernized Maintenance Stands (formerly known as Modernized Maintenance Platforms), Common Aviation Tool System, Modernized Flexible Engine Diagnostic System (formerly known as the Digital Flexible Engine Diagnostic System), Self-propelled Crane Aircraft Maintenance and Positioning Increment II (SCAMP II), Unit Maintenance Aerial Recovery Kit (UMARK), Non-Destructive Test Equipment (NDTE), Tactical Rinse System and Corrosion Mitigation Covers. AGSE is critical to achieving operational readiness requirements of Army Aviation Units.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	-	-	-	-	-	-	-	-	-
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	12.187	27.791	26.620	-	26.620	20.481	16.445	16.198	15.538
ANG	-	-	-	-	-	-	-	-	-
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	16.225	27.065	20.067	-	20.067	25.023	19.572	19.458	17.801
AR	-	-	-	-	-	-	-	-	-
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	3.269	3.211	1.547	-	1.547	1.900	1.512	1.498	1.456
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-
Total Obligation Authority	31.681	58.067	48.234	-	48.234	47.404	37.529	37.154	34.795

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 30: Other Support

P-1 Line Item Number / Title:
 AZ3100 / Common Ground Equipment

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0603801A, 0605830A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AZ3520 / AVIATION GROUND SUPPORT EQUIPMENT			- / 1,155.605	- / 31.681	- / 58.067	- / 48.234	- / -	- / 48.234
P-40	Total Gross/Weapon System Cost			- / 1,155.605	- / 31.681	- / 58.067	- / 48.234	- / -	- / 48.234

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2017 Base procurement dollars in the amount of \$48.234 million acquires, fields, and modernizes ground support equipment critical to maintaining the operational readiness of all Army Aviation rotary wing aircraft. AGSE also provides the capability to correct safety-of-flight discrepancies which endanger both life and property utilizing test and diagnostic equipment. The Self-propelled Crane Aircraft Maintenance and Positioning Increment II provides lifting capabilities required during contact maintenance and Downed Aircraft Recovery Team operations in unimproved environments. Modernized Flexible Engine Diagnostic Systems provide Army Aviation maintainers with the capability to test rotary-wing engines off-wing after major repairs, eliminating the risk of damaging airframes in the case of engine failures during test. The Aviation Light Utility Mobile Maintenance Cart enhances flexibility of maintenance operations on the airfield and forward operating bases. The Unit Maintenance Aerial Recovery Kit provides capabilities to quickly rig disabled or crash damaged rotary wing and unmanned aircraft systems for aerial evacuation using standardized recovery procedures. Modernized Maintenance Stands provide a stable work platform for Army rotorcraft maintenance activities and enhances the occupational safety environment for maintainers. Aviation Unit Maintenance (AVUM) Shop Sets (A92) modernization provides Class 7 shop sets in new or refurbished expandable International Organization for Standardization (ISO) compliant shelters. Non-Destructive Test Equipment modernization upgrades electronic test equipment to the latest technology.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AZ3100 / Common Ground Equipment	Item Number / Title [DODIC]: AZ3520 / AVIATION GROUND SUPPORT EQUIPMENT

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	1,155.605	31.681	58.067	48.234	-	48.234
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,155.605	31.681	58.067	48.234	-	48.234
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,155.605	31.681	58.067	48.234	-	48.234

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	70.621	-	70.621

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Corrosion Mitigation Covers	-	-	-	-	-	-	-	-	2.658	-	-	-	-	-	-	-	-	-
Tactical Rinse System	-	-	-	2,450.000	1	2.450	-	-	-	-	-	-	-	-	-	-	-	-
Aviation Ground Power Unit	131.738	8,236	1,084.993	357.900	10	3.579	-	-	-	-	-	-	-	-	-	-	-	-
Avn Light Utility Mobile Maint	61.000	150	9.150	51.943	141	7.324	56.458	227	12.816	31.627	351	11.101	-	-	-	31.627	351	11.101
Modernized Maintenance Stands	-	-	5.827	-	-	-	34.902	102	3.560	31.369	160	5.019	-	-	-	31.369	160	5.019
Common Aviation Tool System	3.000	5,264	15.793	1.962	5,268	10.334	82.253	79	6.498	-	-	-	-	-	-	-	-	-
Mod Flexible Engine Diagnostics Sys	-	-	36.484	1,000.000	1	1.000	1,253.250	4	5.013	3,777.500	2	7.555	-	-	-	3,777.500	2	7.555
SCAMP II Expeditionary Type 2	-	-	-	-	-	-	-	-	495.167	12	5.942	-	-	-	495.167	12	5.942	-
Unit Maint Aerial Recovery Kit	-	-	-	-	-	-	323.000	34	10.982	34.690	113	3.920	-	-	-	34.690	113	3.920
Non-Destructive Test Equipment	-	-	-	-	-	-	453.939	33	14.980	164.049	41	6.726	-	-	-	164.049	41	6.726
Avn Unit Maint. (AVUM)/(A92)	-	-	-	34.739	165	5.732	-	-	-	1,560.250	4	6.241	-	-	-	1,560.250	4	6.241
Subtotal: Recurring Cost	-	-	1,152.247	-	-	30.421	-	-	56.507	-	-	46.504	-	-	-	-	-	46.504

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AZ3100 / Common Ground Equipment	Item Number / Title [DODIC]: AZ3520 / AVIATION GROUND SUPPORT EQUIPMENT

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Flyaway Cost</i>	-	-	1,152.247	-	-	30.421	-	-	56.507	-	-	46.504	-	-	-	-	-	46.504
Support - Program Management Cost																		
Government Management	-	-	3.358	-	-	1.263	-	-	1.560	-	-	1.730	-	-	-	-	-	1.730
<i>Subtotal: Support - Program Management Cost</i>	-	-	3.358	-	-	1.263	-	-	1.560	-	-	1.730	-	-	-	-	-	1.730
Gross/Weapon System Cost	-	-	1,155.605	-	-	31.681	-	-	58.067	70.621	-	48.234	-	-	-	70.621	-	48.234

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	12.187	27.791	26.620	-	26.620
ANG	Quantity	-	-	-	-	-
	Total Obligation Authority	16.225	27.065	20.067	-	20.067
AR	Quantity	-	-	-	-	-
	Total Obligation Authority	3.269	3.211	1.547	-	1.547
Total: Secondary Distribution	Quantity	-	-	-	-	-
	Total Obligation Authority	31.681	58.067	48.234	-	48.234

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 30: Other Support

P-1 Line Item Number / Title:
 AZ3110 / Aircrew Integrated Systems

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0603827A, 0604601A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	125.747	48.081	44.085	30.297	-	30.297	47.066	30.896	32.684	30.457	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	125.747	48.081	44.085	30.297	-	30.297	47.066	30.896	32.684	30.457	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	125.747	48.081	44.085	30.297	-	30.297	47.066	30.896	32.684	30.457	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	31.406	-	31.406	-	-	-	-	Continuing	Continuing

Description:

Air Warrior survival and mission equipment improves the combat effectiveness of Army aircrew members. Components include Clothing and Individual Equipment; a Microclimate Cooling System; an Aircrew Integrated Helmet System; laser eye protection and chemical-biological protection; tailored body armor; overwater survival gear; survival, escape, and evasion tools; the Electronic Data Manager (EDM) which provides a digital moving map w/tactical overlays and an interface to Blue Force Tracking (BFT) in the form of a digital kneeboard; the Encrypted Aircraft Wireless Intercom System (EAWIS); a Portable Helicopter Oxygen Delivery System (PHODS) worn by the crewmember to safely conduct high altitude missions; a grab-and-go Survival Kit, Ready Access, Modular (SKRAM); and a Communication Enhancement/Protection System (CEPS) that provides an external audio capability without the need to remove the flight helmet. The phased Air Warrior replacement is the Air Soldier System (Air SS), a systems-level approach to significantly reduce weight and bulk and enhance safety, survivability, mission duration, and situational awareness. The Air SS enhances situational awareness and safety through an improved helmet mounted display with three dimensional symbology to provide situational awareness for flight in Degraded Visual Environments (DVE). Select components of the Air Warrior program will be modified through Engineering Change Proposals (ECP) and integrated into the Air Soldier baseline.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	48.081	44.085	30.297	-	30.297	47.066	30.896	32.684	30.457
Total:									
Secondary Distribution									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	48.081	44.085	30.297	-	30.297	47.066	30.896	32.684	30.457

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 30: Other Support

P-1 Line Item Number / Title:
 AZ3110 / Aircrew Integrated Systems

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0603827A, 0604601A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AZ3110 / Aircrew Integrated Systems	P-5a, P-21		- / 125.747	- / 48.081	- / 44.085	- / 30.297	- / -	- / 30.297
P-40	Total Gross/Weapon System Cost			- / 125.747	- / 48.081	- / 44.085	- / 30.297	- / -	- / 30.297

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY2017 Base procurement dollars in the amount of \$30.297 million supports production and fielding of Air SS capability consisting of improved flight helmets; a Mission Display Module for UH-60L aviators; improved lightweight body armor; improved environmental protective clothing and personal survival equipment; and a day/night helmet-mounted display with head tracking and three dimensional DVE flight symbology for UH-60 and CH-47 aviators. These funds also procure Air Soldier platform-mounted components necessary for airframe interface with the Air Soldier; the integration and procurement of Air Warrior ECPs; and installation of airframe integration kits. Funding procures equipment and materiel to support a balanced investment strategy in support of the Army Acquisition Objective.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2017 Army						Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30			P-1 Line Item Number / Title: AZ3110 / Aircrew Integrated Systems			Item Number / Title [DODIC]: AZ3110 / Aircrew Integrated Systems		
ID Code (A=Service Ready, B=Not Service Ready) :				MDAP/MAIS Code:				
Resource Summary			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)			-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)			125.747	48.081	44.085	30.297	-	30.297
Less PY Advance Procurement (\$ in Millions)			-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)			125.747	48.081	44.085	30.297	-	30.297
Plus CY Advance Procurement (\$ in Millions)			-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)			125.747	48.081	44.085	30.297	-	30.297
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>								
Initial Spares (\$ in Millions)			-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)			-	-	-	31.406	-	31.406

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Air Warrior ECPs Supporting Air SS Rqmts	-	-	-	-	-	3.774	-	-	1.329	-	-	1.329	-	-	-	-	-	1.329
Air SS Soldier Kits ^(f)	10.542	448	4.723	11.077	1,677	18.576	11.207	1,347	15.096	1.920	766	1.471	-	-	-	1.920	766	1.471
Air SS Airframe Kits ^(f)	62.027	185	11.475	62.667	168	10.528	62.728	217	13.612	117.277	137	16.067	-	-	-	117.277	137	16.067
Airframe Kit Install	-	-	3.925	-	-	1.500	-	-	1.699	-	-	0.946	-	-	-	-	-	0.946
Manual	-	-	13.803	-	-	0.239	-	-	-	-	-	-	-	-	-	-	-	-
New Equipment Training	-	-	2.558	-	-	0.318	-	-	0.323	-	-	0.357	-	-	-	-	-	0.357
Initial Spares	-	-	6.259	-	-	1.554	-	-	1.431	-	-	0.804	-	-	-	-	-	0.804
Support Equipment	-	-	8.299	-	-	0.236	-	-	0.143	-	-	0.149	-	-	-	-	-	0.149
Systems Test and Evaluation	-	-	14.705	-	-	0.956	-	-	0.302	-	-	0.298	-	-	-	-	-	0.298
Nonrecurring Engineering (NRE)	-	-	27.414	-	-	2.603	-	-	0.485	-	-	0.362	-	-	-	-	-	0.362
Engineering Changes	-	-	6.836	-	-	0.415	-	-	2.372	-	-	1.633	-	-	-	-	-	1.633
Systems Integration Engineering	-	-	6.003	-	-	0.318	-	-	0.412	-	-	0.383	-	-	-	-	-	0.383
Program Management & Matrix Support	-	-	15.618	-	-	5.756	-	-	5.961	-	-	5.601	-	-	-	-	-	5.601
Total Package Fielding	-	-	2.097	-	-	0.062	-	-	0.096	-	-	0.109	-	-	-	-	-	0.109

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30		P-1 Line Item Number / Title: AZ3110 / Aircrew Integrated Systems
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Contract Logistics Support	-	-	2.032	-	-	1.246	-	-	0.824	-	-	0.788	-	-	-	-	-	0.788
<i>Subtotal: Recurring Cost</i>	-	-	125.747	-	-	48.081	-	-	44.085	-	-	30.297	-	-	-	-	-	30.297
<i>Subtotal: Flyaway Cost</i>	-	-	125.747	-	-	48.081	-	-	44.085	-	-	30.297	-	-	-	-	-	30.297
Gross/Weapon System Cost	-	-	125.747	-	-	48.081	-	-	44.085	31.406	-	30.297	-	-	-	31.406	-	30.297

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	48.081	44.085	30.297	-	30.297
Total: Secondary Distribution	Quantity	-	-	-	-	-
	Total Obligation Authority	48.081	44.085	30.297	-	30.297

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AZ3110 / Aircrew Integrated Systems	Item Number / Title [DODIC]: AZ3110 / Aircrew Integrated Systems
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Air SS Soldier Kits ^(†)		2014	Various / Various	C / FFP	Redstone Arsenal, AL	Aug 2015	Dec 2015	448	10.542	Y		
Air SS Soldier Kits ^(†)		2015	Various / Various	C / FFP	Redstone Arsenal, AL	Aug 2015	Dec 2015	1,677	11.077	Y		
Air SS Soldier Kits ^(†)		2016	Various / Various	C / FFP	Redstone Arsenal, AL	Mar 2016	Sep 2016	1,347	11.207	N		
Air SS Soldier Kits ^(†)		2017	Various / Various	C / FFP	Redstone Arsenal, AL	Jan 2017	May 2017	766	1.920	N		
Air SS Airframe Kits ^(†)		2014	Support Systems Assoc, Inc / Huntsville, AL	C / FFP	Redstone Arsenal, AL	Mar 2014	Oct 2014	185	62.027	Y		
Air SS Airframe Kits ^(†)		2015	Various / Various	C / FFP	Redstone Arsenal, AL	Aug 2015	Mar 2016	168	62.667	Y		
Air SS Airframe Kits ^(†)		2016	Various / Various	C / FFP	Redstone Arsenal, AL	Mar 2016	Sep 2016	217	62.728	N		
Air SS Airframe Kits ^(†)		2017	Various / Various	C / FFP	Redstone Arsenal, AL	Jan 2017	Jul 2017	137	117.277	N		

^(†) indicates the presence of a P-21

Remarks:

The FY17 unit costs were adjusted to realign the cost of the Head Tracker device from the Air SS Soldier Kit to the Air SS Airframe Kit. The increase for platform kits is also due to the inclusion of the UH-60L platform with the associated additional items required for non-digitized aircraft.

Please note: the FY17 unit cost adjustments also apply to the unit cost reflected on the P-5.

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AZ3110 / Aircrew Integrated Systems	Item Number / Title [DODIC]: AZ3110 / Aircrew Integrated Systems
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2014												Fiscal Year 2015												B A L A N C E	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 3	BAL D U E A S O F 1 O C T	Calendar Year 2014												Calendar Year 2015												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Air SS Soldier Kits																															
1		2014	ARMY	448	-	448																							A -	-	448
1		2015	ARMY	1,677	-	1,677																							A -	-	1,677
1		2016	ARMY	1,347	-	1,347																									1,347
1		2017	ARMY	766	-	766																									766
Air SS Airframe Kits																															
2		2014	ARMY	185	-	185																									-
3		2015	ARMY	168	-	168																									168
3		2016	ARMY	217	-	217																									217
3		2017	ARMY	137	-	137																									137
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AZ3110 / Aircrew Integrated Systems	Item Number / Title [DODIC]: AZ3110 / Aircrew Integrated Systems
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Cost Elements <i>(Units in Each)</i>					Fiscal Year 2016														Fiscal Year 2017										BALANCE		
O C O #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016														Calendar Year 2017										
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P
Air SS Soldier Kits																															
1	2014	ARMY		448	-	448	-	-	37	37	37	37	38	38	38	38	38	38	34								-				
1	2015	ARMY		1,677	-	1,677	-	-	139	139	139	139	139	142	142	142	142	142	130								-				
1	2016	ARMY		1,347	-	1,347							A -	-	-	-	-	-	112	134	134	134	137	138	138	138	138	144			-
1	2017	ARMY		766	-	766														A -	-	-	-	64	64	64	64	64	64	446	
Air SS Airframe Kits																															
2	2014	ARMY		185	185	-																				-					
3	2015	ARMY		168	-	168	-	-	-	-	-	14	15	15	15	17	18	18	18	18	20						-				
3	2016	ARMY		217	-	217						A -	-	-	-	-	-	20	20	20	30	40	40	47				-			
3	2017	ARMY		137	-	137														A -	-	-	-	-	-	12	12	12	101		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30 **P-1 Line Item Number / Title:** AZ3110 / Aircrew Integrated Systems **Item Number / Title [DODIC]:** AZ3110 / Aircrew Integrated Systems

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2018												Fiscal Year 2019												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018												Calendar Year 2019												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Air SS Soldier Kits																															
1		2014	ARMY	448	448	-																							-		
1		2015	ARMY	1,677	1,677	-																							-		
1		2016	ARMY	1,347	1,347	-																							-		
1		2017	ARMY	766	320	446	86	86	86	86	86	86	16																-		
Air SS Airframe Kits																															
2		2014	ARMY	185	185	-																							-		
3		2015	ARMY	168	168	-																							-		
3		2016	ARMY	217	217	-																							-		
3		2017	ARMY	137	36	101	12	12	12	12	12	12	12	5															-		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AZ3110 / Aircrew Integrated Systems	Item Number / Title [DODIC]: AZ3110 / Aircrew Integrated Systems
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Various - Various	12	400	1,000	6	19	4	23	5	7	4	11
2	Support Systems Assoc, Inc - Huntsville, AL	20	50	100	2	6	6	12	2	3	6	9
3	Various - Various	12	400	1,000	6	19	4	23	5	7	4	11

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
30: Other Support

P-1 Line Item Number / Title:
AA0050 / Air Traffic Control

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604633A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,248.780	127.232	94.545	50.405	-	50.405	111.890	91.119	53.269	54.922	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,248.780	127.232	94.545	50.405	-	50.405	111.890	91.119	53.269	54.922	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,248.780	127.232	94.545	50.405	-	50.405	111.890	91.119	53.269	54.922	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	1,421.964	-	1,421.964	-	-	-	-	Continuing	Continuing

Description:

Funds described herein support the acquisition of modernized tactical and fixed base Air Traffic Control (ATC) systems that will enable safety of aircraft operations. ATC systems are required to achieve or maintain compliance with civil, military, domestic and international air traffic control mandates and combat identification requirements. Efforts funded include the Tactical Airspace Integration System (TAIS), Air Traffic Navigation Integration and Coordination System (ATNAVICs), the Mobile Tower System (MOTS), the Tactical Terminal Control System (TTCS), the ATC Common Simulator (ACS), and Fixed Base systems, such as the DoD Advanced Automation System (DAAS), the Digital Airport Surveillance Radar (DASR), and other navigational control aids to include the Army Airfield Automation System (AAAS), National Air Space (NAS) voice switch and the Doppler VHF Omnidirectional Range (DVOR) system.

TAIS, the Army's system of record for Airspace Control (AC) and enroute Air Traffic Services (ATS) within the Army Mission Command Information System (MCIS) system of systems, performs ATS and AC at brigade and theater commands. TAIS Airspace Workstation (AWS) provides for AC planning and execution at the Brigade Combat Team and above. It is the Army's link to the Theater Battle Management Core System for Joint Airspace Management. TAIS and TAIS AWS provide an automated AC and ATS capability for current requirements and Mission Command interfaces. ATNAVICs provides all-weather instrument flight capabilities to include terminal, and radar precision approach and landing services to all Army, Joint, and Allied aircraft. The TTCS is a mobile ATC communications system that provides initial ATS at remote landing sites and drop zones. It enables secure ground-to-air and ground-to-ground communications between Army aircraft, other services and Allied aircraft, and ground stations. TTCS also provides aircraft separation and ground control capabilities, a meteorological measuring system for basic weather information, and precision location capability. MOTs provides ATC and aircraft separation for both air and ground operations at tactical or remote landing sites. It replaces the 1970's era 7A mobile tower system. MOTs capabilities include weather information, secure and anti-jam communications across all required frequency bands and ranges, and precision location. ATNAVICs, TAIS, TTCS, and MOTs serve as effective air traffic control tools for aviation safety during night, inclement weather, and combat operations. The ACS facilitates training and continued operator proficiency by incorporating the functionality of ATNAVICs, MOTs, and TAIS into a single simulator system. The ACS provides the ability to simulate start to finish ATC scenarios or any specific phase of ATC operations. Simulated ATC scenarios can include tower, radar and air traffic services operations with precise simulation of take-off/landing under both Visual Flight Rules (VFR) and Instrument Flight Rules (IFR), radar simulation for surveillance and precision approach, flight-following, airspace control and airspace deconfliction. Fixed Base ATC requirements (DAAS, DASR, AAAS, DVOR, NAS Voice Switch) will be met through a vast array of new technology solutions and pre-planned product improvement (P3I) of these systems, resulting in highly reliable and safe ATC systems in accordance with the Joint DoD/Federal Aviation Administration (FAA) program to modernize the NAS and the FAA Next Gen program.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	98.314	72.277	38.341	-	38.341	65.080	58.325	34.933	33.690

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 30: Other Support

P-1 Line Item Number / Title:
 AA0050 / Air Traffic Control

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604633A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	27.836	22.268	12.064	-	12.064	46.810	32.794	18.336	21.232
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.082	-	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	127.232	94.545	50.405	-	50.405	111.890	91.119	53.269	54.922

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 30: Other Support

P-1 Line Item Number / Title:
 AA0050 / Air Traffic Control

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604633A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AA0050 / Air Traffic Control			- / 1,248.780	- / 127.232	- / 94.545	- / 50.405	- / -	- / 50.405
P-40	Total Gross/Weapon System Cost			- / 1,248.780	- / 127.232	- / 94.545	- / 50.405	- / -	- / 50.405

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2017 Base procurement dollars in the amount of \$50.405 million provides for the acquisition of MOTS engineering services and supports tactical and fixed base ATC systems including pre-planned product improvements (P3I). Funds for tactical ATC systems provide for upgrades and modifications to TAIS, ATNAVICS, TTCS, and MOTS. ATNAVICS upgrades will address interoperability and networking capabilities with the integration of the Tactical Operations Center Intercommunications System (TOCNET) and Mode S capability. ATNAVICS will also improve radio communications with the installation of PRC-117G radios, and will upgrade Advanced Signal Data Processors. TAIS funding provides for the implementation of interfaces to the Expanded Airtrack Sensor Integrator, ATC Network and conduct of systems engineering activities/analysis for software product modifications required to address workarounds identified by end users. TTCS funding provides for the production and retrofit of a Universal Rack that accommodates vehicle uparmor requirements, modernized communications suite, the integration of Blue Force Tracker capabilities, and the integration of TOCNET. These modifications to tactical ATC systems ensure Army ATC and Army airspace command and control systems are capable of supporting the path ahead to the Future Force. ACS funding provides for the acquisition and installation of simulator hardware and software, as well as non-recurring engineering services required to integrate the ACS, and initial training. Fixed Base funded efforts include P3I for DAAS and DASR, upgrade to the NAS voice switch, DVOR system, AAAS hardware and software upgrades to accommodate changes to the Digital Automatic Terminal Information Service and the USAF Weather System Joint Environmental Toolkit. Fixed Base equipment quantities and configurations are tailored to meet specific site requirements, resulting in varying unit costs. Funding ensures compliance and interoperability between the Army, Joint, and FAA systems operating in the National Airspace System (NAS).

The FY 2017 funding request was reduced by \$28.0 million to account for the availability of prior year execution balances.

In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: AA0050 / Air Traffic Control	Item Number / Title [DODIC]: AA0050 / Air Traffic Control

ID Code (A=Service Ready, B=Not Service Ready) :				MDAP/MAIS Code:					
Resource Summary				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)				-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)				1,248.780	127.232	94.545	50.405	-	50.405
Less PY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)				1,248.780	127.232	94.545	50.405	-	50.405
Plus CY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)				1,248.780	127.232	94.545	50.405	-	50.405
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>									
Initial Spares (\$ in Millions)				-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)				-	-	-	1,421.964	-	1,421.964

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Fixed Base Precision Approach Radar	-	-	91.260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DoD Advanced Automation System (DAAS)	-	-	97.709	-	-	6.883	-	-	7.302	-	-	0.359	-	-	-	-	-	0.359
Digital Airport Surveillance Radar(DASR)	-	-	84.163	-	-	0.050	-	-	0.661	-	-	0.835	-	-	-	-	-	0.835
Tactical Airspace Integration Sys (TAIS)	-	-	360.672	-	-	39.629	-	-	17.433	-	-	14.292	-	-	-	-	-	14.292
Air Traffic Navigation and Integration	-	-	390.087	-	-	16.810	2,079.500	8	16.636	583.762	21	12.259	-	-	-	583.762	21	12.259
Navigational Control (AAAS, DVOR, Radio)	-	-	39.161	-	-	5.620	-	-	6.613	-	-	12.616	-	-	-	-	-	12.616
Tactical Terminal Control System (TTCS)	-	-	50.329	-	-	22.608	3,899.000	2	7.798	314.083	12	3.769	-	-	-	314.083	12	3.769
Mobile Tower System (MOTS)	-	-	108.564	3,563.200	10	35.632	3,463.818	11	38.102	784.375	8	6.275	-	-	-	784.375	8	6.275
ATC Common Simulator (ACS)	-	-	26.835	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	<i>1,248.780</i>	-	-	<i>127.232</i>	-	-	<i>94.545</i>	-	-	<i>50.405</i>	-	-	-	-	-	<i>50.405</i>
<i>Subtotal: Flyaway Cost</i>	-	-	<i>1,248.780</i>	-	-	<i>127.232</i>	-	-	<i>94.545</i>	-	-	<i>50.405</i>	-	-	-	-	-	<i>50.405</i>

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Exhibit P-5, Cost Analysis: PB 2017 Army												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30						P-1 Line Item Number / Title: AA0050 / Air Traffic Control						Item Number / Title [DODIC]: AA0050 / Air Traffic Control					
ID Code (A=Service Ready, B=Not Service Ready) :												MDAP/MAIS Code:					

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	1,248.780	-	-	127.232	-	-	94.545	1,421.964	-	50.405	-	-	-	1,421.964	-	50.405

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	98.314	72.277	38.341	-	38.341
ANG	Quantity	-	-	-	-	-
	Total Obligation Authority	27.836	22.268	12.064	-	12.064
AR	Quantity	-	-	-	-	-
	Total Obligation Authority	1.082	-	-	-	-
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	127.232	94.545	50.405	-	50.405

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 30: Other Support

P-1 Line Item Number / Title:
 AZ3300 / Industrial Facilities

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	185.224	1.203	1.207	1.217	-	1.217	1.397	1.430	1.456	1.498	-	194.632
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	185.224	1.203	1.207	1.217	-	1.217	1.397	1.430	1.456	1.498	-	194.632
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	185.224	1.203	1.207	1.217	-	1.217	1.397	1.430	1.456	1.498	-	194.632

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This program provides funding to the Army Test and Evaluation Command (ATEC) to establish, modernize, expand or replace test facilities used in production testing of Aircraft and Aircraft components. It sustains Army production test capabilities through upgrade and replacement of instrumentation and equipment that is technologically and/or economically obsolete. Modernization of test instrumentation and equipment provides increased automation and efficiencies, improved data quality and quantity and cost avoidances to Army Program Managers. Programmed funding will be used to upgrade or replace production test instrumentation and equipment at the Redstone Test Center (RTC), Huntsville, AL and Yuma Test Center (YTC), Yuma Proving Ground, AZ.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.203	1.207	1.217	-	1.217	1.397	1.430	1.456	1.498
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.203	1.207	1.217	-	1.217	1.397	1.430	1.456	1.498

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 30: Other Support

P-1 Line Item Number / Title:
 AZ3300 / Industrial Facilities

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	AA7700 / PROVISION OF INDUSTRIAL FACILITIES			- / 185.224	- / 1.203	- / 1.207	- / 1.217	- / -	- / 1.217
P-40	Total Gross/Weapon System Cost			- / 185.224	- / 1.203	- / 1.207	- / 1.217	- / -	- / 1.217

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY 2017 Base procurement dollars in the amount of \$1.217 million support the following: At RTC, procures new data acquisition equipment used to collect aircraft structural integrity data during extreme flight maneuvers to help predict catastrophic structure failures and provide life cycle fatigue estimates of aircraft components. At YTC, procures replacement aircraft instrumentation for the time-stamping, on-board recording and telemetering of data from standard data buses and sensors; and on-board recorders and telemetry equipment that can meet the environment and data speeds needed for production base aviation programs. Funding also provide upgrades for Kineto Tracking Mounts (optical tracking equipment) used for trajectory estimates for aircraft fired munitions in the evaluation, integration and fault isolation of aircraft weapons systems; allows remote control of mounts for safety during tests with live munitions.

The majority of the instrumentation being upgraded or replaced is obsolete and has met or exceeded its economic life. This instrumentation is required to ensure complete and accurate test data is collected and safety and environmental hazards are minimized. Benefits of this project include increased test efficiencies and decreased costs and risks to Army Program Managers.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30 **P-1 Line Item Number / Title:** AZ3300 / Industrial Facilities **Aggregated Items Title:** Various

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
PROVISION OF INDUSTRIAL FACILITIES																				
AA7700 / PROVISION OF INDUSTRIAL FACILITIES			-	-	185.224	-	-	1.203	-	-	1.207	-	-	1.217	-	-	-	-	-	1.217
<i>Secondary Distribution</i>																				
Army				-	-		-	1.203		-	1.207		-	1.217		-	-		-	1.217
Subtotal: PROVISION OF INDUSTRIAL FACILITIES			-	-	185.224	-	-	1.203	-	-	1.207	-	-	1.217	-	-	-	-	-	1.217
Total			-	-	185.224	-	-	1.203	-	-	1.207	-	-	1.217	-	-	-	-	-	1.217

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA 30: Other Support

P-1 Line Item Number / Title:
A50100 / Launcher, 2.75 Rocket

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	379	225	219	205	-	205	253	245	354	352	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	82.930	2.931	3.012	3.055	-	3.055	3.911	3.918	5.221	5.369	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	82.930	2.931	3.012	3.055	-	3.055	3.911	3.918	5.221	5.369	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	82.930	2.931	3.012	3.055	-	3.055	3.911	3.918	5.221	5.369	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	218.813	13.027	13.753	14.902	-	14.902	15.458	15.992	14.749	15.253	Continuing	Continuing

Description:

The M261 19-tube analog launcher and the M260 7-tube analog launcher are used to fire 2.75 Inch Hydra 70 Rockets from the following platforms: AH-64 Apache, H-60 Blackhawk, and Special Operations aircraft. The analog launchers are non-repairable, yet durable enough to withstand at least 16 rocket firings per tube before being discarded. The empty weight of the M260 analog launcher is approximately 35 pounds and the empty weight of the M261 analog launcher is approximately 82 pounds. The analog launcher permits fuze-timing selections from the cockpit and will launch rockets using either the MK40 or the MK66 motors.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Army	Quantity	225	219	205	-	205	253	245	354	352
	Total Obligation Authority	2.931	3.012	3.055	-	3.055	3.911	3.918	5.221	5.369
Total: Secondary Distribution	Quantity	225	219	205	-	205	253	245	354	352
	Total Obligation Authority	2.931	3.012	3.055	-	3.055	3.911	3.918	5.221	5.369

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Exhibit P-40, Budget Line Item Justification: PB 2017 Army **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 2031A: Aircraft Procurement, Army / BA 04: Support Equipment and Facilities / BSA
 30: Other Support

P-1 Line Item Number / Title:
 A50100 / Launcher, 2.75 Rocket

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost <i>(Each) / (\$ M)</i>	Quantity / Total Cost <i>(Each) / (\$ M)</i>	Quantity / Total Cost <i>(Each) / (\$ M)</i>	Quantity / Total Cost <i>(Each) / (\$ M)</i>	Quantity / Total Cost <i>(Each) / (\$ M)</i>	Quantity / Total Cost <i>(Each) / (\$ M)</i>
P-5	A50100 / Launcher, 2.75 Rocket			379 / 82.930	225 / 2.931	219 / 3.012	205 / 3.055	- / -	205 / 3.055
P-40	Total Gross/Weapon System Cost			379 / 82.930	225 / 2.931	219 / 3.012	205 / 3.055	- / -	205 / 3.055

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY2017 procurement dollars in the amount of \$3.055 million supports the procurement of 205 M261 19-tube analog launcher for the AH-64 Apache, H-60 Blackhawk, and Special Operation aircraft. Procurement replaces disposable launchers as a result of annual rocket firings for training and replenishes the limited issuable stockage that has been depleted below levels acceptable to support training and war reserve requirements of Active Army, Special Operations Forces and Reserve Components usage.

M260 analog launchers are no longer being procured due to the Aviation Restructure Initiative.

"In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities."

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Exhibit P-5, Cost Analysis: PB 2017 Army		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 2031A / 04 / 30	P-1 Line Item Number / Title: A50100 / Launcher, 2.75 Rocket	Item Number / Title [DODIC]: A50100 / Launcher, 2.75 Rocket

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (<i>Units in Each</i>)	379	225	219	205	-	205
Gross/Weapon System Cost (<i>\$ in Millions</i>)	82.930	2.931	3.012	3.055	-	3.055
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	82.930	2.931	3.012	3.055	-	3.055
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	82.930	2.931	3.012	3.055	-	3.055

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	218.813	13.027	13.753	14.902	-	14.902

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Hardware	199.008	379	75.424	11.893	225	2.676	12.589	219	2.757	13.659	205	2.800	-	-	-	13.659	205	2.800
Production Support	-	-	7.215	-	-	0.255	-	-	0.255	-	-	0.255	-	-	-	-	-	0.255
First Article Test	-	-	0.291	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	82.930	-	-	2.931	-	-	3.012	-	-	3.055	-	-	-	-	-	3.055
<i>Subtotal: Flyaway Cost</i>	-	-	82.930	-	-	2.931	-	-	3.012	-	-	3.055	-	-	-	-	-	3.055
Gross/Weapon System Cost	218.813	379	82.930	13.027	225	2.931	13.753	219	3.012	14.902	205	3.055	-	-	-	14.902	205	3.055

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Army	Quantity	225	219	205	-	205
	Total Obligation Authority	2.931	3.012	3.055	-	3.055
Total: Secondary Distribution	Quantity	225	219	205	-	205
	Total Obligation Authority	2.931	3.012	3.055	-	3.055