DEPARTMENT OF THE ARMY

Procurement Programs

Committee Staff Procurement Backup Book
Fiscal Year 2010 Budget Estimates

AIRCRAFT PROCUREMENT, ARMY

APPROPRIATION

May 2009

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EXHIBIT P-1
DATE: Apr-10

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APPROPRIATION Aircraft Procurement, Army

Dollars in Thousands

				FY 2010		
		FY 2008	FY 2009	Base	OCO	Total
ACTIVITY						
01	Aircraft	1,940,993	2,468,154	3,269,098	555,180	3,824,278
02	Modification of aircraft	2,882,937	2,305,555	1,589,782	902,745	2,492,527
03	Spares and repair parts	9,241	6,855	7,083	18,200	25,283
04	Support equipment and facilities	1,122,012	952,423	450,028	160,104	610,132
APPROPRIATION TOTALS		**5,955,183**	**5,732,987**	**5,315,991**	**1,636,229**	**6,952,220**

APPROPRIATION Aircraft Procurement, Army **ACTIVITY** 01 Aircraft

FY 2009 Dollars in Thousands

LINE NO	ITEM NOMENCLATURE	ID	FY 2008 QTY	FY 2008 COST	FY 2009 QTY	FY 2009 COST	FY 2010 Base QTY	FY 2010 Base COST	FY 2010 OCO QTY	FY 2010 OCO COST	FY 2010 Total QTY	FY 2010 Total COST
	FIXED WING											
1	JOINT CARGO AIRCRAFT (JCA) (A11000)		4	155,982	7	263,381						
2	UTILITY F/W AIRCRAFT (A11300)			11,911								
3	MQ1 (SKY WARRIOR - ERMP) (A00005)						24	401,364	12	250,000	36	651,364
4	RQ-11 (RAVEN) (A00010)						618	35,008	258	44,640	876	79,648
5	RQ-7 (SHADOW) (A00015)											
	C-12 CARGO AIRPLANE (A02700)								6	45,000	6	45,000
	SUB-ACTIVITY TOTAL			167,893		263,381		436,372		339,640		776,012
	ROTARY											
6	ARMED RECON HELICOPTER (A04203)					(197,129)		(43,810)				(43,810)
	Less: Adv Proc							(-43,810)				(-43,810)
						197,129						0
7	ARMED RECON HELICOPTER (A04203)											
	Adv Proc					43,810						0
8	HELICOPTER, LIGHT UTILITY (LUH) (A05001)		42	228,933	44	256,360	54	326,040			54	326,040
9	AH-64 APACHE BLOCK III (A05111)						8	(161,280)			8	(161,280)
	Less: Adv Proc											0
								161,280				161,280
10	AH-64 APACHE BLOCK III (A05111)											
	Adv Proc							57,890				57,890

APPROPRIATION Aircraft Procurement, Army **ACTIVITY** 01 Aircraft

FY 2009 Dollars in Thousands

LINE NO	ITEM NOMENCLATURE	ID	FY 2008 QTY	FY 2008 COST	FY 2009 QTY	FY 2009 COST	FY 2010 Base QTY	FY 2010 Base COST	FY 2010 OCO QTY	FY 2010 OCO COST	FY 2010 Total QTY	FY 2010 Total COST
11	UH-60 BLACKHAWK (MYP) (AA0005)		77	(1,421,620)	68	(1,122,914)	79	(1,392,914)	4	(74,340)	83	(1,467,254)
	Less: Adv Proc			(-183,009)		(-116,795)		(-134,540)				(-134,540)
				1,238,611		1,006,119		1,258,374		74,340		1,332,714
12	UH-60 BLACKHAWK (MYP) (AA0005)											
	Adv Proc			115,956		136,770		98,740				98,740
13	CH-47 HELICOPTER (A05101) \1		6	(156,841)	27	(594,970)	35	(860,087)	4	(141,200)	39	(1,001,287)
	Less: Adv Proc					(-32,759)						
				156,841		562,211		860,087		141,200		1,001,287
14	CH-47 HELICOPTER (A05101)											
	Adv Proc			32,759				50,676				50,676
15	HELICOPTER NEW TRAINING (A06500)					2,374		19,639				19,639
	SUB-ACTIVITY TOTAL			1,773,100		2,204,773		2,832,726		215,540		3,048,266
	ACTIVITY TOTAL			1,940,993		2,468,154		3,269,098		555,180		3,824,278

\1 A program review conducted subsequent to the data base lock indicated funding supports 20 ea in FY 09. However, there is no quantity discrepancy in FY09. These P Forms do not reflect an approved reprogramming (09-07PA). Additionally the review indicated current funding supports 31 ea in FY 10. This revised program does not provide for a multiyear contract. Revised quantities are shown on these P-Forms. Once the FY 10 program has $22 million either realigned or reprogrammed from the CH-47 modification line into the CH-47 procurement line, the multiyear contract will be restored.

APPROPRIATION Aircraft Procurement, Army **ACTIVITY** 02 Modification of aircraft

FY 2009 Dollars in Thousands

LINE NO	ITEM NOMENCLATURE	ID	FY 2008 QTY	FY 2008 COST	FY 2009 QTY	FY 2009 COST	FY 2010 Base QTY	FY 2010 Base COST	FY 2010 OCO QTY	FY 2010 OCO COST	FY 2010 Total QTY	FY 2010 Total COST
	MODIFICATIONS OF AIRCRAFT											
16	PAYLOAD - UAS (A00020)							87,424				87,424
17	WEAPONIZATION - UAS (A00025)							14,832				14,832
18	GUARDRAIL MODS (MIP) (AZ2000)			178,464		147,737		61,517		50,210		111,727
19	MULTI SENSOR ABN RECON (MIP) (AZ2001)			236,315		23,228		21,457		54,000		75,457
20	AH-64 MODS (AA6605)		3	(855,915)	12	(1,013,910)		(455,701)	4	(315,300)		(771,001)
	Less: Adv Proc			(-38,923)		(-51,380)		(-29,286)				(-29,286)
				816,992		962,530		426,415		315,300		741,715
21	AH-64 MODS (AA6605) Adv Proc			51,380		29,286						
22	CH-47 CARGO HELIC MODS (AA0252)		41	(1,194,387)	23	(717,684)		(152,349)				(152,349)
	Less: Adv Proc			(-36,592)		(-38,917)		(-49,473)				(-49,473)
				1,157,795		678,767		102,876				102,876
23	CH-47 CARGO HELIC MODS (AA0252) Adv Proc			38,917		49,473						
24	UTILITY/CARGO AIRPLANE MODS (AA0270)			20,156		16,472		39,547				39,547
25	AIRCRAFT LONG RANGE MODS (AA0560)			638		575		823				823
26	UTILITY HELICOPTER MODS (AA0480)			65,893		26,986		66,682		2,500		69,182

APPROPRIATION Aircraft Procurement, Army **ACTIVITY** 02 Modification of aircraft

FY 2009 Dollars in Thousands

			FY 2008		FY 2009		FY 2010 Base		FY 2010 OCO		FY 2010 Total	
LINE NO	ITEM NOMENCLATURE	ID	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
27	KIOWA WARRIOR (AZ2200)			88,843		117,050		140,768	6	94,335	6	235,103
28	AIRBORNE AVIONICS (AA0700)			169,107		174,462		241,287				241,287
29	GATM Rollup (AA0711)			58,437		78,989		103,142				103,142
	RQ-7 UAS MODS (A00018)							283,012		326,400		609,412
	C-12 AIRCRAFT MODS (A01234)									60,000		60,000
	SUB-ACTIVITY TOTAL			2,882,937		2,305,555		1,589,782		902,745		2,492,527
	ACTIVITY TOTAL			2,882,937		2,305,555		1,589,782		902,745		2,492,527

APPROPRIATION Aircraft Procurement, Army **ACTIVITY** 03 Spares and repair parts

FY 2009 Dollars in Thousands

			FY 2008		FY 2009		FY 2010 Base		FY 2010 OCO		FY 2010 Total	
LINE NO	ITEM NOMENCLATURE	ID	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	SPARES AND REPAIR PARTS											
30	SPARE PARTS (AIR) (AA0950)			9,241		6,855		7,083		18,200		25,283
	SUB-ACTIVITY TOTAL			9,241		6,855		7,083		18,200		25,283
	ACTIVITY TOTAL			**9,241**		**6,855**		**7,083**		**18,200**		**25,283**

APPROPRIATION Aircraft Procurement, Army **ACTIVITY** 04 Support equipment and facilities

FY 2009 Dollars in Thousands

LINE NO	ITEM NOMENCLATURE	ID	FY 2008 QTY	FY 2008 COST	FY 2009 QTY	FY 2009 COST	FY 2010 Base QTY	FY 2010 Base COST	FY 2010 OCO QTY	FY 2010 OCO COST	FY 2010 Total QTY	FY 2010 Total COST
	GROUND SUPPORT AVIONICS											
31	AIRCRAFT SURVIVABILITY EQ (AZ3504)			47,795		56,738		25,975				25,975
32	ASE INFRARED CM (AZ3507)			814,327		585,461		186,356		111,600		297,956
	SUB-ACTIVITY TOTAL			862,122		642,199		212,331		111,600		323,931
	OTHER SUPPORT											
33	AVIONICS SUPPORT EQUIP (AZ3000)			5,031		5,013		4,933				4,933
34	COMMON GROUND EQUIP (AZ3100)			85,041		108,576		87,682		23,704		111,386
35	AIRCREW INTEGRATED SYS (AZ3110)			54,222		48,149		52,725		24,800		77,525
36	AIR TRAFFIC CONTROL (AA0050) \2			110,875		122,413		76,999				76,999
37	INDUSTRIAL FACILITIES (AZ3300)			2,361		2,529		1,533				1,533
38	LAUNCHER, 2.75 ROCKET (A50100)			2,360		2,435		2,716				2,716
39	AIRBORNE COMMUNICATIONS (AA0705) \2					21,109		11,109				11,109
	SUB-ACTIVITY TOTAL			259,890		310,224		237,697		48,504		286,201
	ACTIVITY TOTAL			**1,122,012**		**952,423**		**450,028**		**160,104**		**610,132**
APPOPRIATION TOTAL				**5,955,183**		**5,732,987**		**5,315,991**		**1,636,229**		**6,952,220**

\2 FY 09 Funding for these two programs above is correct, but differs from other versions of the P1 Exhibit.

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NOMENCLATURE INDEX

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Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	JOINT CARGO AIRCRAFT (JCA) (A11000)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		273744/D18

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	2	4	7			13
Gross Cost	76.7	156.0	263.4			496.1
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	76.7	156.0	263.4			496.1
Initial Spares						
Total Proc Cost	76.7	156.0	263.4			496.1
Flyaway U/C						
Weapon System Proc U/C	38.4	39.0	37.6			115.0

Description:
The Joint Cargo Aircraft (JCA) program was established to correct operational shortfalls to cargo mission requirements, provide commonality with other aviation platforms, and replace multiple retiring aircraft systems. This aircraft addresses these shortfalls, and replaces retiring C-23s, and selected C-12s. A cargo aircraft is ideally suited to move time-sensitive, mission-critical supply parts, equipment and personnel over extended distances. The JCA will have a payload interoperability with the C-130 aircraft and the CH-47F. This requires a payload capability of at least 6,000 pounds (lbs) of cargo allowing trans-loading to a CH-47F and fully supporting the Brigade Combat Team (BCT) missions. The aircraft must be capable of transporting, as a minimum, three 463L pallets. The JCA will bypass unsecured lines of communication and deliver routine sustainment items directly to forward supply bases. The JCA will have a robust takeoff and landing capability and be able to operate into and out of unimproved landing areas. The dimensions of the Future Force joint tactical area or the operational area of the ground force commander will severely limit the usefulness of rotary wing aircraft in re-supply missions. The distances are too great for effective use of helicopters. The JCA, with its extended range and speed, will meet time sensitive mission critical needs of the Future Force. The JCA will easily cover these distances and free the rotary-wing fleet for their primary tactical missions. The JCA will provide a multi-mission, multi-functional platform for the commanders use in accomplishing the mission.

Justification:
Army has already awarded FY 2009 Contract and will continue to manage this award. Begining in FY 2010, mission has been transferred to the Air Force; therefore, there is no FY 2010 Request.

$ M		FY2008	FY2009	FY2010
Active	QTY			
	Gross Cost		5	
National Guard	QTY	4	7	
	Gross Cost	156	259	

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature: JOINT CARGO AIRCRAFT (JCA) (A11000)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
Joint Cargo Aircraft										
Hardware		120191	4	30048	220230	7	31461			
Engineering Support					1162					
Support Equipment		6385			171					
Interim Contractor Support & Training		21649			33650					
Program Office Management		7757			8168					
Total:		**155982**			**263381**					

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 1/ Aircraft		JOINT CARGO AIRCRAFT (JCA) (A11000)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware										
FY 2008	L-3 Comm Integ Sys Greenville, Texas	C/FFP/REQ	Redstone Arsenal, AL	Apr 08	Jan 10	4	30048	YES		MAR 06
FY 2009	L-3 Comm Integ Sys Greenville, Texas	C/FFP/REQ	Redstone Arsenal, AL	Jan 09	Jan 11	7	31461	YES		MAR 06

REMARKS: Army has already awarded FY 2009 Contract and will continue to manage this award. Begining in FY 2010, mission has been transferred to the Air Force; therefore, there is no FY 2010 Request.

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
JOINT CARGO AIRCRAFT (JCA) (A11000)

Date: May 2009

COST ELEMENTS						Fiscal Year 09												Fiscal Year 10										
						Calendar Year 09												Calendar Year 10										
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Hardware																													
1	FY 08	A	4	0	4																1				1			1		1
1	FY 09	A	7	0	7				A																					7
Total					11																1				1			1		8
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	L-3 Comm Integ Sys, Greenville, Texas	1	11	11		1	Initial	0	9	15	24	
							Reorder	0	4	23	27	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
JOINT CARGO AIRCRAFT (JCA) (A11000)

Date: May 2009

COST ELEMENTS						Fiscal Year 11												Fiscal Year 12											
									Calendar Year 11													Calendar Year 12									
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Hardware																													
1	FY 08	A	4	3	1	1																							0
1	FY 09	A	7	0	7				1			1	1		1	1		1	1											0
Total					8	1			1			1	1		1	1		1	1										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
						1	Initial	0	9	15	24	
1	L-3 Comm Integ Sys, Greenville, Texas	1	11	11			Reorder	0	4	23	27	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	MQ1 (SKY WARRIOR - ERMP) (A00005)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		357204 RDT&E, B00305 - OPA

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty				36		36
Gross Cost				651.4		651.4
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1				651.4		651.4
Initial Spares						
Total Proc Cost				651.4		651.4
Flyaway U/C						
Weapon System Proc U/C				18.1		18.1

Description:

The Extended Range Multi-Purpose (ER/MP) Unmanned Aircraft System (UAS) will provide a real-time responsive capability to conduct long-dwell, wide area reconnaissance, surveillance, target acquisition, communications relay, and attack missions (up to 4 HELLFIRE Missiles aboard) to the Division Commander. The ER/MP addresses an ever-increasing demand for greater range, altitude, endurance and payload flexibility which enables dynamic mission changes while in flight. The ER/MP will be fielded as a system to a company level organization assigned to each of the 10 active Army Divisions Combat Aviation Brigades (CAB) providing a capability that is responsive to supported units based on the division Commander's priorities. The ER/MP system consists of 12 MQ-1C Sky Warrior aircraft with Electro-Optical/Infrared, Synthetic Aperture Radar with Ground Moving Target Indicator (EO/IR/SAR/GMTI), Communications Relay and precision weapons as payloads; Ground equipment includes 5 One System Ground Control Stations (OSGCS), 5 Ground Data Terminals (GDT), 2 Portable Ground Control Stations (PGCS), 2 Portable Ground Data Terminals (PGDT), a Satellite Communication (SATCOM) Ground Data Terminal (SGDT) and other associated ground support equipment. The acquisition strategy capitalizes upon competitive forces, bringing cutting-edge improvements at the best cost and value to support the major thrusts of the DoD UAS Roadmap, a host of other studies, and the imperatives of Army modernization and Army Aviation Transformation. This includes a heavy fuel engine, 30 mission hours of endurance (24 hours on station at 300 KM range), Tactical Common Data Link technology, network connectivity that reduces information cycle time and enhances overall battlespace awareness, teaming with manned platforms, and steps toward integration of UAS into national and international airspace. The ability to operate multiple Sky Warrior aircraft simultaneously from a single One System Ground Control Station (currently mission and Air Data Relay Aircraft), a 3,200 pound gross take off weight (with growth to 3,600 pounds), Fowler flaps which improve take-off and landing performance, Automatic Take-off and Landing and the flexibility to operate with or without SATCOM data links are characteristics which make this system a significant combat multiplier.

Justification:

FY2010 ERMP Base funding of 401 million procures two ER/MP UAS, which includes 24 Air Vehicles, new equipment training and Pre-planned Product Improvement (P3I).
FY2010 ERMP OCO funding of $250 million procures one ER/MP UAS, which includes 12 Air Vehicles, new equipment training and Pre-planned Product Improvement (P3I).

		FY2008	FY2009	FY2010
Active	QTY			24
	Gross Cost			401

		FY2010
Active	QTY	12

Exhibit P-40, Budget Item Justification Sheet			Date: May 2009
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft		P-1 Item Nomenclature MQ1 (SKY WARRIOR - ERMP) (A00005)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: 357204 RDT&E, B00305 - OPA	

Gross Cost 250

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature: MQ1 (SKY WARRIOR - ERMP) (A00005)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
AIRCRAFT Flyaway Costs										
MQ1 (SKY WARRIOR - ERMP)										
Aircraft								162656	24	6777
Ground Control Station (GCS)								28871		
Other Hardware								112139		
Contractor Support								10938		
P3I								15454		
Prime Contractor Cost								**330058**		
GOVERNMENT										
GFE								30904		
Program Management								6888		
OGA								33514		
Subtotal Government Cost								**71306**		
Total ERMP Cost								**401364**		
OCO (SKY WARRIOR - ERMP)										
Aircraft								81328	12	6777
Ground Control Station (GCS)								14566		
Other Hardware								69980		
Contractor Support								10376		
P3I								24309		
Prime Contractor Cost								**200559**		
GOVERNMENT										
GFE								16678		
Program Management								6888		
OGA								25875		
Subtotal Government Cost								**49441**		
Total ERMP Cost										
Total:								**651364**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 1/ Aircraft		MQ1 (SKY WARRIOR - ERMP) (A00005)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
MQ1 (SKY WARRIOR - ERMP)										
FY 2010	GENERAL ATOMICS / ASI SAN DIEGO, CA	SS/CPIF	AMCOM	Dec 10	Jun 12	24	6777	Y	N/A	N/A
OCO (SKY WARRIOR - ERMP)										
FY 2010	GENERAL ATOMICS / ASI SAN DIEGO, CA	SS/CPIF	AMCOM	Dec 10	Jun 12	12	6777	Y	N/A	N/A

REMARKS:

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
MQ1 (SKY WARRIOR - ERMP) (A00005)

Date: May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11 / Calendar Year 11 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 12 / Calendar Year 12 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
MQ1 - SKY WARRIOR - ERMP																														
1	FY 10	A	24	0	24			A																		1	1	1	1	20
SKY WARRIOR - ERMP OCO																														
1	FY 10	A	12	4	12			A																		1	1	1	1	4
Total					36																					2	2	2	2	24

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	GENERAL ATOMICS / ASI, SAN DIEGO, CA	1	1	3		1	Initial	8	3	28	31	
							Reorder	0	0	0	0	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

FY 13 / 14 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
MQ1 (SKY WARRIOR - ERMP) (A00005)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 13 / Calendar Year 13 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 14 / Calendar Year 14 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
MQ1 - SKY WARRIOR - ERMP																														
1	FY 10	A	24	4	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					0
SKY WARRIOR - ERMP OCO																														
1	FY 10	A	12	4	8	1	1	1	1	1	1	1	1																	0
Total					28	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1					

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	GENERAL ATOMICS / ASI, SAN DIEGO, CA	1	1	3		1	Initial	8	3	28	31	
							Reorder	0	0	0	0	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	RQ-11 (RAVEN) (A00010)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		375204 RDT&E, B00303 - OPA

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty				876		876
Gross Cost				79.6		79.6
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1				79.6		79.6
Initial Spares						
Total Proc Cost				79.6		79.6
Flyaway U/C				32.4		32.4
Weapon System Proc U/C				0.1		0.1

Description:
The Small Unmanned Aircraft System (SUAS) program provides the ground maneuver battalions and below with situational awareness and enhanced force protection. SUAS is a man portable unmanned aircraft system capable of handling a wide variety of Intelligence, Surveillance & Reconnaissance (ISR) tasks at Battalion and below. The SUAS aircraft has a wingspan of 4.5 feet and weighs 4.2 pounds. It is hand-launched, and provides aerial observation, day or night, at line-of-sight ranges up to 10 kilometers. The aircraft has an endurance rate of 90 minutes and can deliver color or infrared imagery in real time to the ground control and remote viewing stations. SUAS obtained Milestone C approval 6 Oct 05 and successfully completed IOT&E June 06. The program obtained Full Rate Production authority 5 Oct 06. Beginning in FY10, Raven Systems will include a Digital Data Link (DDL). Implementation of a Digital Data Link (DDL) will allow for the operation of a greater number of Raven systems in the same radio frequency spectrum, vice four that are possible with current analog link. By making a denser operating environment possible, DDL mitigates frequency restrictions in theater which limit both training and operational effectiveness.

Justification:
FY 10 Base funding in the amount of $35 million will procure 618 Air Vehicles.

FY 10 OCO funding in the amount of $45 million will procure 258 Small Unmanned Aircraft Systems, and 472 Digital Data Link retrofit kits.

$ M		FY2008	FY2009	FY2010
Active	QTY			618
	Gross Cost			35

OCO		FY2010
Active	QTY	258
	Gross Cost	45

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature: RQ-11 (RAVEN) (A00010)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
RAVEN - RQ-11										
PRIME CONTRACT SUPPORT										
Air Vehicles								10809	704	15
Other Hardware Cost								13031		
Contractor Support								2631		
Subtotal Prime Contractor Costs								**26471**		
GOVERNMENT SUPPORT										
Government Furnished Equipment (GFE)								1392		
Other Government Agencies (OGA)								4109		
Program Management								3036		
Subtotal Government Cost								**8537**		
RAVEN OCO										
PRIME CONTRACT SUPPORT										
Digital Data Link (Contractor Support)								44640	472	95
Subtotal Prime Contractor Costs								**44640**		
Total:								**79648**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 1/ Aircraft		RQ-11 (RAVEN) (A00010)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
RAVEN - RQ-11										
FY 2010	AERO VIRONMENT SIMI VALLEY, CA	C/FFP	AMCOM	Jan 10	May 10	704	15	Y	N/A	N/A
RAVEN OCO										

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	ARMED RECONNAISSANCE HELICOPTER (A04203)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	0.1		197.1	43.8		241.0
Less PY Adv Proc				43.8		43.8
Plus CY Adv Proc			43.8			43.8
Net Proc P1	0.1		240.9			241.0
Initial Spares						
Total Proc Cost	0.1		240.9			241.0
Flyaway U/C						
Weapon System Proc U/C						

Description:
Program Terminated

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	HELICOPTER, LIGHT UTILITY (LUH) (A05001)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	42	42	44	54		182
Gross Cost	239.1	228.9	256.4	326.0		1050.5
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	239.1	228.9	256.4	326.0		1050.5
Initial Spares						
Total Proc Cost	239.1	228.9	256.4	326.0		1050.5
Flyaway U/C						
Weapon System Proc U/C	5.7	5.5	5.8	6.0		23.0

Description:
The Light Utility Helicopter, UH-72A LAKOTA will provide general aviation support for CONUS based Table of Distribution and Allowance (TDA) and Table of Organization and Equipment (TOE) aviation units in the active and reserve components. 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 Continental United States (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.

Justification:
FY 2010 procures 54 aircraft. Funding also provides for fielding, engineering services, training, program office support, and approved modifications.

		FY2008	FY2009	FY2010
Active	QTY	14	28	21
	Gross Cost	79	164	139
National Guard	QTY	28	16	33
	Gross Cost	150	92	186

In accordance with congressional direction, Army has funded modifications for the aircraft added to the FY 2009 program. Revised funding is reflected on subsequent exhibits.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature: HELICOPTER, LIGHT UTILITY (LUH) (A05001)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
Procurement Hardware Costs										
Airframes/Includes non-recurring		205134	42	4884	219971	44	4999	272604	54	5048
B Kits (MEDEVAC & Hoist)		2306	12	192	1193	6	199	5969	29	206
Engineering Changes		11646			33408			22476		
Subtotal Hardware Cost		**219086**			**254572**			**301049**		
Flyaway Support Costs										
System Engineering & Program Management		4262			6800			7111		
System Test & Evaluation		98								
Engineering Services		1028			2156			2386		
Subtotal Flyaway Support Costs		**5388**			**8956**			**9497**		
Total Flyaway		**224474**			**263528**			**310546**		
Other Weapon System Cost										
Procedural Trainers										
Fielding		4459			12831			15494		
Other Weapon System Requirements										
Subtotal Other Weapon System Cost		**4459**			**12831**			**15494**		
Total Procurement Cost		**228933**			**276359**			**326040**		
Gross P-1 End Cost										
Less: Prior Year Adv Proc										
Net P-1 Full Funding Cost										
Plus: P-1 CY Adv Proc										
Other Non P-1 Costs										
Total:		**228933**			**276359**			**326040**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 1/ Aircraft		HELICOPTER, LIGHT UTILITY (LUH) (A05001)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Airframes/Includes non-recurring										
FY 2008	EADS-NA Columbus, MS	FFP	EADS-NA Columbus, MS	Dec 07	Sep 08	42	4884			
FY 2009	EADS-NA Columbus, MS	FFP	EADS-NA Columbus, MS	Nov 08	Sep 09	44	4999			
FY 2010	EADS-NA Columbus, MS	FFP	EADS-NA Columbus, MS	Dec 09	Sep 10	54	5048			

REMARKS: P-5 total of $276.4 reflects a reprogramming in accordance with congressional direction to fund modifications.

FY 10 / 11 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
HELICOPTER, LIGHT UTILITY (LUH) (A05001)

Date: May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 10 / Calendar Year 10 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 11 / Calendar Year 11 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Airframes/Includes non-recurring																														
1	FY 08	A	42	42																										0
1	FY 09	A	44	3	41	3	3	3	4	4	4	4	4	4	4	4														0
1	FY 10	A	54	0	54			A									4	4	4	4	5	4	5	5	4	5	5	5		0
Total					95	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	5	4	5	5	4	5	5	5		

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	EADS-NA, Columbus, MS	23	52	60		1	Initial	0	9	5	14	
							Reorder	0	2	9	11	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	AH-64 APACHE BLOCK III (A05111)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty				8		8
Gross Cost				161.3		161.3
Less PY Adv Proc						
Plus CY Adv Proc				57.9		57.9
Net Proc P1				219.2		219.2
Initial Spares						
Total Proc Cost				219.2		219.2
Flyaway U/C						
Weapon System Proc U/C				27.4		27.4

Description:
AB3 is a result of the continuing evolution process to keep the Apache fleet viable on the battlefield. Consequently, AB3 is the Army's only Attack Helicopter solution capable of interoperability with Joint and Future Modular Forces. The AB3 program is the remanufacture of the aging Apache fleet integrating proven technologies into a mature weapon system platform. AB3 will add significant combat capability while addressing obsolescence issues to ensure the aircraft remains a realistic combat multiplier beyond 2025. AB3 will address current system shortfalls by integrating: Unmanned Aircraft System (UAS) Level III - IV Control Capability, Improved Situational Awareness, an Upgraded Communications Suite, Improved Drive and Propulsion Systems, Improved Targeting Capability, Increased Computer Processing Capability and Speed, Improved Navigation Systems, and Improved Diagnostics and Maintainability. These system improvement requirements were generated by operational short falls identified during real world combat missions. AB3 enters the fleet in 2011.

Justification:
The AB3 Modernization is an incremental integration of block modifications providing the capabilities for the Longbow Apache to transition to the Future Force (FF), to increase survivability, and reduce the logistics footprint. AB3 satisfies the updated Longbow Apache Capability Development Document (CDD) mandates for modernization.

FY 10 Base funding in the amount of $219.2M will procure Advanced Procurement items, 8 Low Rate Initial Production (LRIP) Longbow Apache Block III aircraft, and associated support.

		FY2008	FY2009	FY2010
Active	QTY			8
	Gross Cost			219

The AH-64 APACHE BLOCK III program was initiated in FY2009 with $11 million for Long Lead Items. This effort was funded in the AH-64 MODS Line (BA 2). The new budget line for AH-64 APACHE BLOCK III (BA 1) was established to give this program more visibility.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature: AH-64 APACHE BLOCK III (A05111)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
APACHE BLOCK III (AB3) Flyaway Costs										
Airframes								48864	8	6108
Engines								9123	16	570
GFE								4757		
Engineering Change Orders (ECO)								1628		
Other Costs								4940		
Non-Recurring Costs										
Non-Recurring Costs								37632		
Support Cost										
Support Equipment								1302		
Publications/Tech Data								543		
PDSS (Software)										
Other Costs								52140		
Initial Spares										
Initial Spares								351		
Subtotal Costs								**161280**		
Advance Procurement								57890		
Total Flyaway								**219170**		
Total:								**219170**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 1/ Aircraft		AH-64 APACHE BLOCK III (A05111)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Airframes										
FY 2010	The Boeing Company Mesa, AZ	SS/FFP	AMCOM	May 10	Jun 11	8	6108	N		Jun 08

REMARKS: FY10 -- LRIP Lot 1 Production (8 aircraft)

FY 10 / 11 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AH-64 APACHE BLOCK III (A05111)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 10												Fiscal Year 11												Later
						Calendar Year 10												Calendar Year 11												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Airframes																														
1	FY 10	A	8	0	8								A													1	2	2	3	0
Total					8																					1	2	2	3	
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	The Boeing Company, Mesa, AZ	4	8	12		1	Initial	7	7	22	29	
							Reorder	0	0	0	0	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	AH-64 APACHE BLOCK III (A05111)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost						
Less PY Adv Proc						
Plus CY Adv Proc				57.9		57.9
Net Proc P1				57.9		57.9
Initial Spares						
Total Proc Cost				57.9		57.9
Flyaway U/C						
Weapon System Proc U/C						

Description:
AB3 is a result of the continuing evolution process to keep the Apache fleet viable on the battlefield. Consequently, AB3 is the Army's only Attack Helicopter solution capable of interoperability with Join and Future Combat Forces. The AB3 program is the remanufacture of the aging Apache fleet integrating proven technologies into a mature weapon system platform. AB3 will add significant combat capability while addressing obsolescence issues to ensure the aircraft remains a realistic combat multiplier beyond 2025. Advanced Procurement for AB3 contains funding for the Boeing airframe contract.

Justification:
Advanced Procurement funds long-lead items in support of the Apache Block III program. FY09 funds for AB3 advance procurement are located in the AH-64 Mods Procurement forms.

Advance Procurement Requirements Analysis-Funding (P-10A)	First System Award Date:	First System Completion Date:	Date: May 2009
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft		P-1 Line Item Nomenclature / Weapon System: AH-64 APACHE BLOCK III	

($ in Millions)

	PLT (mos)	When Rqd (mos)	Pr Yrs	FY 08	FY 09	FY 10	To Comp	Total
End Item Quantity								
Apache Block III	12	12				57.9		57.9
Total Advance Procurement			**0.0**	**0.0**	**0.0**	**57.9**	**0.0**	**57.9**

Advance Procurement Requirements Analysis-Funding (P-10B)

Date: May 2009

Appropriation / Budget Activity / Serial No:
Aircraft Procurement, Army / 1 / Aircraft

P-1 Line Item Nomenclature / Weapon System:
AH-64 APACHE BLOCK III

($ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2010 Qty	2010 Contract Forecast Date	2010 Total Cost Request
Apache Block III	**12**			**30.0**	**1QFY10**	**57.9**
Total Advance Procurement						**57.9**

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	UH-60 BLACKHAWK (MYP) (AA0005)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		0203744A/Project 504

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	1755	77	68	83		1983
Gross Cost	11662.9	1421.6	1122.9	1467.2		15674.7
Less PY Adv Proc	2613.9	183.0	116.8	134.5		3048.3
Plus CY Adv Proc	2799.0	116.0	136.8	98.7		3150.5
Net Proc P1	11848.0	1354.6	1142.9	1431.5		15776.9
Initial Spares	421.3					421.3
Total Proc Cost	12269.3	1354.6	1142.9	1431.5		16198.2
Flyaway U/C						
Weapon System Proc U/C	6.8	17.6	16.8	17.2		58.4

Description:
The UH-60 BLACK HAWK is a twin engine, single rotor helicopter that is designed to support the Army's air mobility doctrine for employment of land forces in the 21st century. The BLACK HAWK is used in the performance of the Air Assault, General Support, and Aeromedical Evacuation missions. It is designed to carry a crew of four and 11 combat-equipped troops, or an external load up to 9,000 pounds. It performs the missions of transporting troops and equipment into combat, resupplying the troops while in combat, and performing the associated functions of aeromedical evacuation, repositioning of reserves, and command and control.

Justification:
FY 10 Base funding in the amount of $1,258 million will procure 79 aircraft.
FY 10 OCO funding in the amount of $74 million will procure 4 aircraft.

		FY2008	FY2009	FY2010
Active	QTY	47	66	69
	Gross Cost	820	1103	1175
National Guard	QTY	10	2	10
	Gross Cost	182	40	182
Reserve	QTY	20		
	Gross Cost	352		

OCO		FY2010
Active	QTY	4
	Gross Cost	74

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 1 / Aircraft	UH-60 BLACK HAWK (MYP) (A05002)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: 0203744A/Project 504

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	1752	77	68	83		1980
Gross Cost	11623.4	1421.6	1122.9	1467.2		15635.2
Less PY Adv Proc	2613.9	183.0	116.8	134.5		3048.3
Plus CY Adv Proc	2799.0	116.0	136.8	98.7		3150.5
Net Proc P1	11808.5	1354.6	1142.9	1431.5		15737.4
Initial Spares	421.3					421.3
Total Proc Cost	12229.8	1354.6	1142.9	1431.5		16158.7
Flyaway U/C						
Weapon System Proc U/C	17.7	17.4	16.8	17.5	21.8	91.2

Description:
The UH-60 BLACK HAWK is a twin engine, single rotor helicopter that is designed to support the Army's air mobility doctrine for employment of land forces in the 21st century. The BLACK HAWK is used in the performance of the Air Assault, General Support, and Aeromedical Evacuation missions. It is designed to carry a crew of four and 11 combat-equipped troops, or an external load up to 9,000 pounds. It performs the missions of transporting troops and equipment into combat, resupplying the troops while in combat, and performing the associated functions of aeromedical evacuation, repositioning of reserves, and command and control.

Justification:
FY 10 Base funding in the amount of $1,258 million will procure 79 aircraft.
FY 10 OCO funding in the amount of $74 million will procure 4 aircraft.

		FY2008	FY2009	FY2010
Active	QTY	47	66	69
	Gross Cost	820	1103	1175
National Guard	QTY	10	2	10
	Gross Cost	182	40	182
Reserve	QTY	20		
	Gross Cost	352		

OCO		FY2010
Active	QTY	4
	Gross Cost	74

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature: UH-60 BLACK HAWK (MYP) (A05002)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
Aircraft Flyaway Costs										
Airframes/CFE		869199	77	11288	827856	68	12174	1034453	83	12463
Engines/Accessories		99562	154	647	86699	136	637	116553	166	702
Avionics (GFE)		51978			35420			50324		
Other GFE		39333			25816			37218		
Armament										
ECO (All FLYAWAY Components)		29637			20557			26920		
Other Costs (Mission Equipment)		205642			42301			65307		
Tooling Equipment		27972			8954			3677		
Other Nonrecurring Cost		3651						4566		
Total FLYAWAY		**1326974**			**1047603**			**1339018**		
Support Cost										
Airframe PGSE										
Engine PGSE										
Peculiar Training Equipment		36395			31568			56972		
Publications/Tech Data		1961			2975			3132		
PM Administration		27346			31080			32151		
Fielding		28944			9688			35981		
Subtotal Support Cost		**94646**			**75311**			**128236**		
Gross P-1 End Item Cost		**1421620**			**1122914**			**1467254**		
Less: Prior Year Adv Proc		183009			116795			134540		
Net P-1 Full Funding Cost		**1238611**			**1006119**			**1332714**		
Plus: P-1 CY Adv Proc		115956			136770			98740		
Initial Spares										
Total:		**1354567**			**1142889**			**1431454**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 1/ Aircraft		UH-60 BLACK HAWK (MYP) (A05002)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Airframes/CFE										
FY 2008	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 07	Oct 08	47	11288	Yes		May-05
FY 2008	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Mar 08	Feb 10	26	11288	Yes		May-05
FY 2008	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	May 08	Mar 10	4	11288	Yes		May-05
FY 2009	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 08	Aug 09	63	12174	Yes		May-05
FY 2009	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	May 09	Nov 10	5	12174	Yes		May-05
FY 2010	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 09	Jul 10	49	12463	Yes		May-05
FY 2010	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 09	Feb 11	21	12463	Yes		May-05
FY 2010	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Jan 10	Jul 11	13	12463	Yes		May-05

REMARKS: The FY 2007 contract is the first year of a 5 year multi-year, multi-service contract for the procurement of H-60Ms.

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
UH-60 BLACK HAWK (MYP) (A05002)

Date:
May 2009

COST ELEMENTS						Fiscal Year 09												Fiscal Year 10										
						Calendar Year 09												Calendar Year 10										
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Airframes/CFE																													
1	FY 08	A	47	4	43	6	5	6	1	1	4	2	4	6	5	3													0
1	FY 08	A	26	0	26																	2	4	5	1	1	3	3	2	5
1	FY 08	A	4	0	4																									4
1	FY 09	A	63	0	63			A								5	4	7	9	6	7	4	5	3	5	5	3			0
1	FY 09	A	5	0	5								A																	5
1	FY 10	A	49	0	49															A							2	4	4	39
1	FY 10	A	21	0	21															A										21
1	FY 10	A	13	0	13																A									13
1	FY 08	NA	18	0	18					2	2	2	2	2	2	2	2	2												0
1	FY 08	NA	2	0	2																						1		1	0
1	FY 08	NA	28	0	28											2	2	2	2	2	2	2	3	3	3	3				2
1	FY 09	NA	20	0	20														2	2	2	3	2	3	2	2				2
1	FY 09	NA	31	0	31																						3	2	3	23
1	FY 10	NA	18	0	18																						1	2	1	14
1	FY 10	NA	24	0	24																									24
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
						1	Initial	8	3	6	9	
1	Sikorsky Aircraft, Stratford CT	18	96	150	22		Reorder	0	3	6	9	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
UH-60 BLACK HAWK (MYP) (A05002)

Date:
May 2009

COST ELEMENTS						Fiscal Year 09												Fiscal Year 10									
						Calendar Year 09												Calendar Year 10									
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Total					365	6	5	6	1	3	6	4	6	8	7	12	8	11	13	10	11	11	14	14	11	11	13	11	11	152
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
						1	Initial	8	3	6	9	
1	Sikorsky Aircraft, Stratford CT	18	96	150	22		Reorder	0	3	6	9	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
UH-60 BLACK HAWK (MYP) (A05002)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11 / Calendar Year 11 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 12 / Calendar Year 12 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Airframes/CFE																														
1	FY 08	A	47	47																										0
1	FY 08	A	26	21	5	2	1	2																						0
1	FY 08	A	4	0	4			2	2																					0
1	FY 09	A	63	63																										0
1	FY 09	A	5	0	5		3	2																						0
1	FY 10	A	49	10	39	5	4	4	4	3	5	5	5	4																0
1	FY 10	A	21	0	21					3	2	2	2	2	2	2	2	1	1	2										0
1	FY 10	A	13	0	13										3	2	3	2	2	1										0
1	FY 08	NA	18	18																										0
1	FY 08	NA	2	2																										0
1	FY 08	NA	28	26	2		1	1																						0
1	FY 09	NA	20	18	2			2																						0
1	FY 09	NA	31	8	23	3	3	2	3	3	3	3	3																	0
1	FY 10	NA	18	4	14	2	2	1	1	2	1	2	2	1																0
1	FY 10	NA	24	0	24									3	3	3	3	3	3	2	2	2								0
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Sikorsky Aircraft, Stratford CT	18	96	150	22

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	3	6	9
	Reorder	0	3	6	9
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
UH-60 BLACK HAWK (MYP) (A05002)

Date:
May 2009

COST ELEMENTS						Fiscal Year 11												Fiscal Year 12									
						Calendar Year 11												Calendar Year 12									
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Total					152	12	14	16	10	11	11	12	12	10	8	7	8	6	6	5	2	2								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Sikorsky Aircraft, Stratford CT	18	96	150	22

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	3	6	9
	Reorder	0	3	6	9
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	UH-60 BLACKHAWK (MYP) (AA0005)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		0203744A/ Project 504

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost						
Less PY Adv Proc						
Plus CY Adv Proc	2799.0	116.0	136.8	98.7		3150.5
Net Proc P1	2799.0	116.0	136.8	98.7		3150.5
Initial Spares						
Total Proc Cost	2799.0	116.0	136.8	98.7		3150.5
Flyaway U/C						
Weapon System Proc U/C						

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 the Improved Hover Infrared Suppressor Subsystem (IHIRSS) as well as numerous communication, navigation, and Aircraft Survivability Equipment items procured by the Communications and Electronics Command (CECOM).

Justification:
FY 2010 procures long lead and Economic Order Quantities (EOQ) items such as T700-GE-701D engines, IHIRSS and avionics components for the FY07-FY11 multiyear contract.

Advance Procurement Requirements Analysis-Funding (P-10A)

First System Award Date:	First System Completion Date:	Date: May 2009

Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft

P-1 Line Item Nomenclature / Weapon System: UH-60 BLACKHAWK (MYP)

($ in Millions)

	PLT (mos)	When Rqd (mos)	Pr Yrs	FY 08	FY 09	FY 10	To Comp	Total
End Item Quantity			1755.0	42.0	63.0	70.0	905.0	2835.0
CFE Airframe	18	6	1731.1	43.3	53.9	34.8	2476.9	4340.0
Engines	13	3	769.7	50.7	62.0	48.8	1166.9	2098.1
Avionics	0	3	140.8	10.7	11.8	8.5	188.7	360.5
Auxiliary Power Unit	6	3	49.8	4.5	3.3	2.4	52.8	112.8
Armored Crew Seat	6	3	23.4					23.4
Hover Infrared Suppressor	14	3	40.5	6.8	5.8	4.2	92.7	150.0
Elastomeric Bearings	10	3	1.5					1.5
Miscellaneous	0	3	42.2					42.2
Total Advance Procurement			**2799.0**	**116.0**	**136.8**	**98.7**	**3978.0**	**7128.5**

Advance Procurement Requirements Analysis-Funding (P-10B)

Date: May 2009

Appropriation / Budget Activity / Serial No:
Aircraft Procurement, Army / 1 / Aircraft

P-1 Line Item Nomenclature / Weapon System:
UH-60 BLACKHAWK (MYP)

($ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2010 Qty	2010 Contract Forecast Date	2010 Total Cost Request
CFE Airframe	**18**	**1**		**70.0**		**33.5**
Engines	**13**	**2**	**702.0**	**140.0**		**49.8**
Avionics						**8.7**
Auxiliary Power Unit	**6**	**1**	**69.0**	**70.0**		**2.4**
Hover Infrared Suppressor	**14**	**1**	**121.0**	**70.0**		**4.3**
Total Advance Procurement						**98.7**

Advance Procurement Requirements Analysis-Funding (P-10C)

Date: May 2009

Appropriation / Budget Activity / Serial No:
Aircraft Procurement, Army / 1 / Aircraft

P-1 Line Item Nomenclature / Weapon System:
UH-60 BLACKHAWK (MYP)

($ in Millions)

	Pr Yrs	FY 08	FY 09	FY 10	To Comp	Total
Proposal w/o AP						
Then Year Cost	326	780	921	1068		3095
Constant Year Cost	326	747	864	981		2918
Present Value	288	692	776	855		2611
AP Proposal						
Then Year Cost	318	741	876	1019		2954
Constant Year Cost	318	710	822	935		2785
Present Value	282	658	739	815		2494
AP Savings (Difference)						
Then Year Cost	-7	-39	-45	-49		-140
Constant Year Cost	-7	-37	-42	-46		-132
Present Value	-6	-34	-37	-40		-117

Advance Procurement Requirements Analysis-Execution (P-10D)

Date: May 2009

Appropriation / Budget Activity / Serial No:
Aircraft Procurement, Army / 1 / Aircraft

P-1 Line Item Nomenclature / Weapon System:
UH-60 BLACKHAWK (MYP)

($ in Millions)

		2008					2009					2010	
	PLT (mos)	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date
End Item Quantity					42.0		64			63.0		70	
CFE Airframe	18	42	Nov 2008		43.3		63			53.9		70	
Engines	13	84	Dec 2007		50.7		126			62.0		140	
Avionics					10.7					11.8			
Auxiliary Power Unit	6	42	Dec 2007		4.5		63			3.3		70	
Armored Crew Seat	6												
Hover Infrared Suppressor	14	42	Dec 2007		6.8		63			5.8		70	
Elastomeric Bearings	10												
Miscellaneous													
Total Advance Procurement					**116.0**					**136.8**			

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	CH-47 HELICOPTER (A05101)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		SSN A05008, SSN A05105

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty		6	20	31		57
Gross Cost		156.8	595.0	1001.3		1753.1
Less PY Adv Proc			32.8			32.8
Plus CY Adv Proc		32.8		50.7		83.4
Net Proc P1		189.6	562.2	1052.0		1803.8
Initial Spares						
Total Proc Cost		189.6	562.2	1052.0		1803.8
Flyaway U/C						
Weapon System Proc U/C		31.6	28.1	33.9		93.6

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 CH-47F Improved Cargo helicopter is an essential component of the Army Future Force. 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 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 2025 timeframe. The CH-47F Recapitalization 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 (AFCS) 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 recapitalization program rebuilds and upgrades all CH-47Ds and 61 Special Operations Aviation MH-47s to the CH-47F/MH-47G configuration.

Justification:
FY 10 Base funding in the amount of $860 million will procure 16 new build and 11 remanufactured aircraft.
FY 10 OCO funding in the amount of $141 million will procure 4 new build aircraft.

		FY2008	FY2009	FY2010
Active	QTY	6	16	27
	Gross Cost	190	442	911
National Guard	QTY		4	
	Gross Cost		120	

Exhibit P-40, Budget Item Justification Sheet			Date: May 2009
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft		P-1 Item Nomenclature CH-47 HELICOPTER (A05101)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: SSN A05008, SSN A05105	

OCO FY2010
Active QTY 4
Gross Cost 141

NOTE: A program review conducted subsequent to the data base lock indicated funding supports 20 ea in FY 09. However, there is no quantity discrepancy in FY09. These P Forms do not reflect an approved reprogramming (09-07PA).

Additionally the review indicated current funding supports 31 ea in FY 10. This revised program does not provide for a multiyear contract. Revised quantities are shown on these P-Forms. Once the FY 10 program has $22 million either realigned or reprogrammed from the CH-47 modification line into the CH-47 procurement line, the multiyear contract will be restored.

PROC	Qty	FY 2008	Qty	FY 2009	Qty	FY 2010
OSD						
Base	6	190	23	442	35	911
Mods	41	1197	23	728		
OCO			4	120	4	141
Total	47	1387	50	1290	39	1052
Army						
Base	6	190	16	442	27	911
Mods	41	1197	23	728		
OCO			4	120	4	141
Total	47	1387	43	1290	31	1052
Delta			-7		-8	

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 1 / Aircraft	CH-47 NEW BUILD (A05008)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: SSN A05105

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty		6	20	20		46
Gross Cost		156.8	595.0	706.0		1457.8
Less PY Adv Proc			32.8			32.8
Plus CY Adv Proc		32.8				32.8
Net Proc P1		189.6	562.2	706.0		1457.8
Initial Spares						
Total Proc Cost		189.6	562.2	706.0		1457.8
Flyaway U/C						
Weapon System Proc U/C		31.6	29.7	35.3	77.5	174.1

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 CH-47F Improved Cargo helicopter is an essential component of the Army Future Force. 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 (OCO) 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. 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 (AFCS) and an Extended Range Fuel System II for self-deployment missions. The CH-47F is expected to remain the Army's heavy lift helicopter until at least the 2025 timeframe. This program is funded to meet the Army Aviation Transformation Plans full requirement for Chinook aircraft. New Build allows the Army to retain aircraft vice turn in for induction to rebuild. (Prior to FY08, "New Build" aircraft were funded on the CH-47 Cargo Helicopter Mod SSN AA0252; 3 ea and 6 ea for FYs 06 and 07, respectively.)

Justification:
FY 10 Base funding in the amount of $860 million will procure 16 new build.

FY 10 OCO funding in the amount of $141 million will procure 4 new build aircraft.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature: CH-47 NEW BUILD (A05008)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
AIRCRAFT Flyaway Costs										
Airframes/CFE		119519	6	19920	474079	20	23704	513134	20	25657
Engine/Accessories		10882	12	907	43169	40	1079	37322	42	889
CFE Avionics		7232			24118			24266		
GFE		7027			27875			24100		
ECO (Flyaway)		2622			10318			10844		
Other Costs		4154			2881			31736		
Support Costs										
PSE		569			2470			1928		
Peculiar Training Equipment		596			2557			490		
Publications/Tech Data		111			483			565		
ECO (Support Items)		122			532			416		
Other Costs		3168			3159			58345		
Initial Spares										
Initial Spares		839			3329			2878		
Subtotal Support Costs		**156841**			**594970**			**706024**		
Advance Procurement		32759			-32759					
Total:		**189600**			**562211**			**706024**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 1/ Aircraft		CH-47 NEW BUILD (A05008)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Airframes/CFE										
FY 2008	The Boeing Company Ridley Park, PA	SS/FFP	AMCOM	Aug 08	Jan 11	6	19920	YES		Apr 07
FY 2009	The Boeing Company Ridley Park, PA	SS/FFP	AMCOM	Jan 09	Apr 11	20	23704	YES		Apr 07
FY 2010	The Boeing Company Ridley Park, PA	SS/FFP	AMCOM	Jan 10	Jun 12	20	25657	YES		Apr 07

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 1 / Aircraft	CH-47 SLEP (A05105)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: SSN A05008

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty				11		11
Gross Cost				295.3		295.3
Less PY Adv Proc						
Plus CY Adv Proc				50.7		50.7
Net Proc P1				345.9		345.9
Initial Spares						
Total Proc Cost				345.9		345.9
Flyaway U/C						
Weapon System Proc U/C				31.4		31.4

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 (OCO) 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 2025 timeframe. The CH-47F Recapitalization Program will provide a more reliable, less costly to operate aircraft compatible with Joint digital connectivity requirements in the Future Force. The Recapitalization 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. All dynamic components are recapitalized by the Original Equipment Manufacturer (OEM) and returned for incorporation during the assembly process. The Recapitalization Program rebuilds and upgrades all CH-47Ds and 61 Special Operations Aviation MH-47s to the CH-47F and MH-47G configuration. This program is funded to meet the Army Aviation Transformation Plans full requirement for Chinook aircraft. (Prior to FY10, this program was funded on the CH-47 Cargo Helicopters Mod SSN AA0252).

Justification:
FY 2010 base funding procures conversion of 11 CH-47Ds to CH-47Fs.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 1 / Aircraft	CH-47 SLEP (A05105)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: SSN A05008

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Ch-47 D to F Conversion						
0-00-00-0000	Operational	0.0	0.0	345.9	0.0	345.9
Totals		0.0	0.0	345.9	0.0	345.9

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Ch-47 D to F Conversion [MOD 1] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D/F

DESCRIPTION / JUSTIFICATION:

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

LRIP I Contract Award - Dec 02
MS III Production Decision - Nov 04
FRP Contract Award - Dec 04

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 5 months PRODUCTION LEADTIME: 25 months

Contract Dates: FY 2010 - Mar 10 FY 2011 - Jan 11 FY 2012 -

Delivery Dates: FY 2010 - Apr 12 FY 2011 - Feb 13 FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Ch-47 D to F Conversion [MOD 1] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Recurring Production (Suppl)										
Recurring Production (Mods)					11	267.1			11	267.1
Recurring Production (New Build)										
Recurring (New Build NG)										
Omnibus										
Other Flyaway						14.2				14.2
Other Support						33.6				33.6
Training						28.2				28.2
Support Equipment						2.8				2.8
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		345.9		0.0		345.9

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 1 / Aircraft	CH-47 HELICOPTER (A05101)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: SSN A05008, SSN A05105

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost						
Less PY Adv Proc						
Plus CY Adv Proc		32.8		50.7		83.4
Net Proc P1		32.8		50.7		83.4
Initial Spares						
Total Proc Cost		32.8		50.7		83.4
Flyaway U/C						
Weapon System Proc U/C						

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. 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 will provide future growth potential to meet 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.

Justification:
FY 2010 funding procures long lead time parts and materials required to preserve the production delivery schedule.

Advance Procurement Requirements Analysis-Funding (P-10A)	First System Award Date:	First System Completion Date:	Date: May 2009
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft		P-1 Line Item Nomenclature / Weapon System: CH-47 HELICOPTER	

($ in Millions)

	PLT (mos)	When Rqd (mos)	Pr Yrs	FY 08	FY 09	FY 10	To Comp	Total
End Item Quantity								
Avionics	13	14		13.1		20.3		33.4
Airframe	15	16		19.7		30.4		50.1
Total Advance Procurement			**0.0**	**32.8**	**0.0**	**50.7**	**0.0**	**83.5**

Advance Procurement Requirements Analysis-Funding (P-10B)

Date: May 2009

Appropriation / Budget Activity / Serial No:
Aircraft Procurement, Army / 1 / Aircraft

P-1 Line Item Nomenclature / Weapon System:
CH-47 HELICOPTER

($ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2010 Qty	2010 Contract Forecast Date	2010 Total Cost Request
Avionics	**13**	**1**	**1.0**			**20.3**
Airframe	**15**	**1**	**1.0**			**30.4**
Total Advance Procurement						**50.7**

Advance Procurement Requirements Analysis-Funding (P-10C)

Date: May 2009

Appropriation / Budget Activity / Serial No:
Aircraft Procurement, Army / 1 / Aircraft

P-1 Line Item Nomenclature / Weapon System:
CH-47 HELICOPTER

($ in Millions)

	Pr Yrs	FY 08	FY 09	FY 10	To Comp	Total
Proposal w/o AP						
Then Year Cost		149		539		688
Constant Year Cost		145		525		670
Present Value		144		499		643
AP Proposal						
Then Year Cost		143		484		627
Constant Year Cost		140		471		611
Present Value		138		448		586
AP Savings (Difference)						
Then Year Cost		-6		-55		-61
Constant Year Cost		-5		-54		-59
Present Value		-6		-51		-57

Constant Year Dollars are Fiscal Year 2005.

Advance Procurement Requirements Analysis-Execution (P-10D)

Date: May 2009

Appropriation / Budget Activity / Serial No:
Aircraft Procurement, Army / 1 / Aircraft

P-1 Line Item Nomenclature / Weapon System:
CH-47 HELICOPTER

($ in Millions)

		2008					2009					2010	
	PLT (mos)	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date
End Item Quantity													
Avionics	13	23	Mar 08	Aug 08	13.1								
Airframe	15	23	Mar 08	Aug 08	19.7								
Total Advance Procurement					**32.8**								

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	HELICOPTER NEW TRAINING (A06500)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	183		1			184
Gross Cost	189.7		2.4	19.6		211.7
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	189.7		2.4	19.6		211.7
Initial Spares						
Total Proc Cost	189.7		2.4	19.6		211.7
Flyaway U/C						
Weapon System Proc U/C						

Description:
The TH-67 Creek is a non-developmental commercial, three-seated, single engine, training helicopter with two main rotor blades. It is a variant of the Bell Helicopter Textron, Incorporated 206B-3 helicopter. It is used exclusively at the U.S. Army Aviation Center, Fort Rucker, AL, for Initial Entry Rotor Wing (IERW) training and is being considered for use by the Combined Training Centers. A mix of aircraft with Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) are used. The VFR version is ideal for early stages of flight school because it is lighter, simpler, and less sensitive to the harsher flight maneuvering generated during the students' primary training. The IFR is equipped for the more advanced instrument phase and is more complex and heavier, but does not undergo the harsher primary flight maneuvering generated in earlier training phases. An enhanced configuration of the VFR is a third design which offers a training environment for the acquisition of basic navigation/night/night vision goggles skills. All versions of the aircraft are designed to provide safe, effective and economical in-flight training when used to demonstrate and practice basic helicopter pilot skills. The enhancements in the latest production models permit training in combat skills.

Justification:
FY 10 supports a classified program.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	PAYLOAD - UAS (A00020)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost				87.4		87.4
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1				87.4		87.4
Initial Spares						
Total Proc Cost				87.4		87.4
Flyaway U/C						
Weapon System Proc U/C						

Description:
Advanced Tactical Unmanned Aerial Vehicles (UAVs) Payloads (A00020) budget line supports the procurement of the following payload systems: (1) Synthetic Aperture Radar/Ground Moving Target Indicator (SAR/GMTI), (2) Electro Optical Infrared w/Laser Designator (EO/IR/LD) Common Sensor Payload (CSP) AN/AAS-53, and (3) Tactical Signals Intelligence (SIGINT) Payload (TSP). The SAR/GMTI is a multi-mode radar that provides an all-weather, wide-area search capability with a built-in imaging mode for increased situational awareness. The SAR/GMTI payload is a complementary system to the Army's Future Combat System (FCS) and is a vital component necessary to support the Extended Range/Multi-Purpose (ER/MP) Unmanned Aerial Vehicle (UAV). The EO/IR/LD payload provides a day/night capability to collect and display continuous imagery with the ability to designate targets of interest for attack by laser guided precision weapons. The Enhanced Tactical Signals Intelligence (SIGINT) Payload (ETSP) is the second increment of an Unmanned Aerial System (UAS) mounted SIGINT sensor that detects radio frequency (RF) emitters. ETSP, through handoff from the Combat Aviation Brigade (CAB), is capable of providing the Brigade Combat Team (BCT) Land Commander with an overwatch and penetrating SIGINT system capable of detecting, identifying, locating, and providing geolocation information on RF emitters throughout the Area of Operations (AO).

Justification:
The FY10 base funding in the amount of $87 million requested to procure 22 SAR/GMTI and 22 EO/IR/LD CSP payloads in support of the fielding schedule for the ERMP UAV to 2nd & 3rd unit equipped (UE). In addition, the procurement of 5 ETSP payloads to support the fielding schedule of the ERMP UAS (TSP is $14 million).

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft	P-1 Line Item Nomenclature: PAYLOAD - UAS (A00020)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
Common Sensor Payload (EO/IR/LD)										
Hardware Contract (EO/IR/LD)								16948	22	770
PMO Support								3125		
Program Management/ Engineering Support								1500		
Engineering Changes								3379		
System Test & Eval								2091		
Initial Spares								3749		
Interim Contractor Support								5286		
Other								219		
SAR/GMTI Production										
Hardware Contract (SAR/GMTI)								17332	22	788
PMO Support								3125		
Program Management/ Engineering Support								1500		
Engineering Changes								3500		
System Test & Eval								1800		
Initial Spares								3473		
Interim Contractor Support								5550		
Other								15		
Enhanced Tactical SIGINT Payload (ETSP)										
Hardware Contract (SIGINT ETSP)								7830	5	1566
Program Management/ Engineering Support								1470		
Engineering Changes								150		
System Test & Eval								1820		
Initial Spares								2472		
Training								210		
Data								490		
Other								390		
Total:								**87424**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 2/ Modification of aircraft		PAYLOAD - UAS (A00020)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware Contract (EO/IR/LD)										
FY 2010	Raytheon McKinney, TX	FFP	CECOM	Dec 09	Dec 10	22	770	Y		
Hardware Contract (SAR/GMTI)										
FY 2010	Northrop Grumman Linthicum, MD	FFP	CECOM	Dec 09	Dec 10	22	788	Y		
Hardware Contract (SIGINT ETSP)										
FY 2010	TBS TBS	FFP	TBS	Sep 10	Mar 11	5	1566	N		

REMARKS:

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PAYLOAD - UAS (A00020)

Date: May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11												Fiscal Year 12												Later
						Calendar Year 11												Calendar Year 12												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Hardware Contract (EO/IR/LD)																														
1	FY 10	A	22	0	22			2	2	2	2	2	2	2	2	2	2	2												0
Hardware Contract (SAR/GMTI)																														
2	FY 10	A	22	0	22			2	2	2	2	2	2	2	2	2	2	2												0
Hardware Contract (SIGINT ETSP)																														
3	FY 10	A	5	0	5						1	1	1	1	1															0
Total					49			4	4	4	5	5	5	5	5	4	4	4												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Raytheon, McKinney, TX	12	22	125	
2	Northrop Grumman, Linthicum, MD	12	22	35	
3	TBS, TBS	12	36	72	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	0	9	3	12
	Reorder	0	0	0	0
2	Initial	0	9	3	12
	Reorder	0	0	0	0
3	Initial	0	2	4	6
	Reorder	0	6	6	12
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	WEAPONIZATION - UAS (A00025)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost				14.8		14.8
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1				14.8		14.8
Initial Spares						
Total Proc Cost				14.8		14.8
Flyaway U/C						
Weapon System Proc U/C						

Description:
FY2010 fund weaponization capabilities of Unmanned Aircraft Systems (UAS) such as the Extended Range Multi-Purpose (ERMP) UAS. Effort includes procurement of launchers, cables and rails from PM JAMS and all other government support required for full scale integration.

Justification:
FY2010 procures hardware for UAS weaponization such as launchers, installation and support kits, and includes all aspects of government and contractor support required to support unique UAS mission profiles.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft	P-1 Line Item Nomenclature: WEAPONIZATION - UAS (A00025)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
WEAPONIZATION - UAS										
Weaponization Effort - OGA								14832		
Total Government								**14832**		
Total:								**14832**		

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	GUARDRAIL MODS (MIP) (AZ2000)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost		178.5	147.7	111.7		437.9
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1		178.5	147.7	111.7		437.9
Initial Spares						
Total Proc Cost		178.5	147.7	111.7		437.9
Flyaway U/C						
Weapon System Proc U/C						

Description:

- Guardrail Common Sensor (GRCS) is an Airborne Signal Intercept Location System designed to provide tactical commanders with critical information via Common Data Link (CDL) connectivity with the Guardrail Ground Base (GGB) Station, which then provides information in Near Real Time (NRT) via NSA Net connectivity to Intel users such as Distributed Common Ground Station-Army (DCGS-A) and Common Ground Station (CGS). The Army's GR/CS System provides a flexible architecture to allow rapid deployment to support contingency operations, and is designed to support field commanders until Aerial Common Sensor (ACS) is fielded.

- The GRCS integrates Communications Intelligence (COMINT), the Communications High Accuracy Airborne Location System (CHAALS/CHALS-X) for COMINT precision emitter locations, the Advanced QUICKLOOK (AQL) for Electronics Intelligence (ELINT) precision emitter location, and the Guardian Eagle technical insertion payload into a single signal intelligence (SIGINT) system. The airborne elements are integrated into the RC-12H/K/N/P Aircraft. Ground processing is conducted in the Surveillance Information Processing Center, commonly referred to as the Guardrail Ground Base (GGB). Key performance requirements include a real-time COMINT and ELINT collection and high accuracy target location capability in communications and radar frequencies. The Tactical Common Data Link (TCDL) connects the airborne elements and the ground processing element. A satellite remote relay supports rapid deployment, minimum footprint forward, and remote signal processing capability. GR/CS Guardian Eagle (GE) payloads were provided to enhance GR/CS ability to process non-traditional signals, providing intercept of military communication emitters, and modern communication devices. The Guardian Eagle is software upgradeable and has an open architecture that leverages National and Services Military Intelligence Program (MIP) investments for future GR/CS upgrades. This capability supports ongoing Deployments in Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Overseas Contingency Operations (OCO). GR/CS contributes directly to the success of Army Modernization by serving as an operational platform for verification of new or improved technologies.

Justification:

FY 10 Base Funding in the amount of $61 million will provide the following capabilities for GR/CS: An Enhanced precision geo-location subsystem "Communication High Accuracy Location System-Compact (CHALS-C)", a greatly improved COMINT Infrastructure and Core COMINT Subsystem "Enhanced Situational Awareness (ESA)"; continuation of increased capability for modern signals "High Band COMINT (HBC)" subsystem; initial production of X-Midas V3 for "Special Signals (SS)" to enhance interception; and continuation of "Electronic Intelligence (ELINT)".

FY 10 OCO Funding in the amount of $50 million will procure from NSA the Advanced Precision Geolocation (APG) subsystem to collect modern OCO threat signals; and additional ESA, HBC and SS B-Kits. These modifications provide critical upgrade capability to collect insurgent threats in support of current OIF/OEF operations.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	GUARDRAIL MODS (MIP) (AZ2000)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Comm High Accuracy Location Sys-Compact (CHALS-C						
1-06-111-2006		22.7	3.2	1.7	0.0	27.6
Special Signals (SS) Subsystem						
1-07-333-2007		0.6	8.0	8.5	0.0	17.1
Enhanced Situational Awareness (ESA) Subsystem						
1-06-333-2006		216.4	115.8	67.6	0.0	399.8
Guardrail Ground Base Sub-System						
1-07-111-2007		6.8	0.0	0.0	0.0	6.8
High Band Comint (HBC) Subsystem						
1-07-222-2007		20.4	18.6	19.9	0.0	58.9
Electronic Intelligence (ELINT)						
1-07-444-2007		10.1	2.1	3.8	0.0	16.0
Advanced Precision Geolocation (APG)						
1-10-111-2010		0.0	0.0	10.2	0.0	10.2
Totals		277.0	147.7	111.7	0.0	536.4

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Special Signals (SS) Subsystem [MOD 2] 1-07-333-2007

MODELS OF SYSTEM AFFECTED: Systems 1, 2, 3 & 4

DESCRIPTION / JUSTIFICATION:

The Special Signals Modernization effort provides capability to intercept special signals through evolution of the current X-Midas capability. Special Signal efforts will include production, integration and testing of X-Midas V3 hardware required to provide capability against unique signals. This also includes modification to ground software to enable sensor control and signal exploitation tools. Design, architecture, and antennas to support Special Signal capability will be included within ESA architecture efforts, as well as fielding in conjunction with ESA. It is anticipated that each aircraft will be equipped with two B-Kits. Funding for SS Provides fifteen B-Kits for two systems; and two B-Kits for a third system. SS will not be provided for the four Trainers at Ft Huachuca.

Justification: FY2010 provides Recurring Engr to support hardware purchase for the 2nd system within the ESA Mod. Special signals provides continued relevance against current and emerging threats. PM Support, Fielding and installation costs are captured as part of ESA integration.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

3QFY08 Contract Award
2QFY11 SS Flight Test
3QFY11 Begin Fielding 1st SS Capabilities
1-2QFY12 Begin Fielding 2nd SS Capabilities
2-4QFY12 Begin Fielding 3rd SS Capabilities
2-3QFY2013 Begin Fielding 4th SS Capabilities
NOTE: Systems installation will occur as units become available between deployments.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs								6	6	5	5	5	6	8	2		2	2			
Outputs												8	8	8	6	4	4	3	4	2	

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		47
Outputs																		47

METHOD OF IMPLEMENTATION: Contractor ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 12 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Special Signals (SS) Subsystem [MOD 2] 1-07-333-2007

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
NRE/Study		0.6		2.0		1.1				3.7
Installation Kits										
SS V3 B-Kits			20	6.0	23	7.4			43	13.4
Spare SS V3 B-Kits										
Data										
Training Equipment										
Support Equipment										
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.6		8.0		8.5		0.0		17.1

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Enhanced Situational Awareness (ESA) Subsystem [MOD 3] 1-06-333-2006

MODELS OF SYSTEM AFFECTED: System 1, 2, 3 & 4

DESCRIPTION / JUSTIFICATION:

-The ESA Upgrade provides a Modern Airborne Communication Intelligence (COMINT) Subsystem on 28 GRCS aircraft and infrastructure on 33 GRCS aircraft; provides a capability against modern commercial targets; & allows GRCS to remain relevant until Aerial Common Sensor (ACS) is fielded. The ESA upgrade replaces the current 1980's vintage Direction Finding (DF) and signal classification subsystems with a Net-Centric Sustainable Architecture capable of mapping the modern signal environment and provides the software on the ground to enable sensor control & signal exploitation tools. Upgrades are needed to keep the system relevant against evolving threat signals. ESA also includes the integration, test and fielding for CHALS-C, High Band COMINT (HBC), Special Signals (SS); integration of X-Midas, & Data Link equipment, & for related aircraft mods to continue to support these capabilities. ESA will provide data link & cockpit upgrades for the first two systems. ESA provides A-Kits to 4 Trainer Aircraft at Ft Huachuca. ESA provides COMINT infrastructure and Core COMINT capability allowing more open architecture & continued relevance against emerging OEF/OIF threats. Justification: FY2010 provides ESA A&B Kits for the 2nd system & partial 3rd system, Program Management Support, System Assessment & Test, and Training to include ESA, CHALS-C & HBC. Installation of ESA includes contract costs to integrate/test/fielding ESA, CHALS-C, HBC and SS. Systems installation will occur "As Units Become Available" between deployments.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

1QFY09 Factory Acceptance Test
3QFY10 System Assessment Test
3QFY10-1QFY2011 Field 1st ESA Upgrade; 3QFY11-1QFY2012 Field 2nd; 2QFY12-1QFY2013 Field 3rd; and 2QFY13-2QFY2016 Field 4th.
1-4QFY2014 Fields 4 Trainer Aircraft Systems to Ft Huachuca.

Installation Schedule

	Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs		4			1	1	2	2	2	2	3	3	1	2	2	2	1	2	1	1	2
Outputs								4	2	2		4	4	2	2	2	2	2	2	2	1

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		34
Outputs	1	2																34

METHOD OF IMPLEMENTATION: Contractor ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Enhanced Situational Awareness (ESA) Subsystem [MOD 3] 1-06-333-2006

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
PROCUREMENT										
Non-Recur		97.5		22.2						119.7
Recur ESA B-Kit	7	21.0	7	22.0	9	28.8			23	71.8
Recur A-Kit (Racks/Cable)	9	13.5	5	7.9	5	8.0			19	29.4
Recur A-Kit (Airframe)	10	11.5	4	4.8	5	6.2			19	22.5
Recur Nav/Timing	9	5.2	5	3.0	5	3.1			19	11.3
Recur Data Link Air	18	8.6		3.0					18	11.6
Recur Data Link Ground	4	1.8	9	18.0					13	19.8
Spare ESA B-Kit	1	3.0	1	3.1	1	3.2			3	9.3
Eng Lab Asset ESA B-Kit	2	4.9							2	4.9
Aircraft Upgrade Cockpit	13	27.2	3	5.8					16	33.0
System Integration		1.6		5.5						7.1
Sys Assessment/Test Spt		2.0		5.6		3.8				11.4
Training Supt				0.4		0.5				0.9
Fielding (CHALS/ESA/HBC)				3.1		3.4				6.5
PM Support		18.6		11.1		10.3				40.0
A-Kit Installations:										
FY 2009 Installation			5	0.3					5	0.3
FY 2010 Installation					5	0.3			5	0.3
FY 2011 Installation										
FY 2012 Installation										
FY 2013 Installation										
Total Installment	0	0.0	5	0.3	5	0.3	0	0.0	10	0.6
Total Procurement Cost		216.4		115.8		67.6		0.0		399.8

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: High Band Comint (HBC) Subsystem [MOD 5] 1-07-222-2007

MODELS OF SYSTEM AFFECTED: System 1, 2, 3 & 4

DESCRIPTION / JUSTIFICATION:

The COMINT Upgrade provides for continued capability to intercept, locate, and exploit high frequency Communication Intelligence (COMINT) signals, including critical modern signals. High Band COMINT (HBC) efforts will include production, integration, and testing of hardware. This also includes modifications to ground software to enable sensor control and incorporate signal exploitation tools. Design, architecture, and antenna to support HBC capability will be included within ESA architecture efforts, as well as fielding in conjunction with ESA. Funding for HBC provides 4 B-Kits for the first three system fieldings, and one B-Kit for the fourth system fielding. HBC will not be provided for the four Trainers at Ft Huachuca.

Justification: FY2010 funding provides Recurring Engr to support hardware purchases (B-Kits). HBC provides greatly enhanced capabilities against Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) modern threat signals. PM Support, Fielding and installation costs are captured as part of ESA integration.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

1QFY2008 Contract Award
3QFY2010 System Assessment
3QFY2010 Begin Fielding 1st System
3QFY2011 Begin Fielding 2nd System
2-4QFY2012 Begin Fielding 3rd System
2-3QFY2013 Begin Fielding 4th System
2QFY2015-2QFY2016 Complete System 1-3 Roundout
NOTE: Systems installation will occur as units become available between deployments.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	4						4	4	4	4	4	2	2	2	2	1					
Outputs								4			4	4	4	4	4	4	4		1		

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		33
Outputs																		33

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): High Band Comint (HBC) Subsystem [MOD 5] 1-07-222-2007

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity										
Installation Kits										
Nonrecurring Engr		6.1		4.0						10.1
Recurring HBC B-Kits	7	8.9	1	1.8	3	4.3			11	15.0
QRC-P Support		5.4								5.4
Initial Spares										
Data										
Support Equipment										
Full B-Kit			9	12.8	11	15.6			20	28.4
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		20.4		18.6		19.9		0.0		58.9

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Advanced Precision Geolocation (APG) [MOD 7] 1-10-111-2010

MODELS OF SYSTEM AFFECTED: System 1

DESCRIPTION / JUSTIFICATION:

This effort incorporates the Advanced Precision Geolocation (APG) subsystem developed by NSA to eleven GRCS P/K/N aircraft to support the collection of OCO threat signals. Justification: The FY 2010 procurement funding provides for the B-Kits, integration, testing and fielding of the Advanced Precision Geo-Location (APG) capability developed by NSA to GRCS. This capability provides a unique capability to collect against modern OCO threat signals.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Contract Award 4thQ FY10
First Unit Equip (FUE) 1stQ FY12

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs													6	5							
Outputs														6	5						

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		11
Outputs																		11

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Advanced Precision Geolocation (APG) [MOD 7] 1-10-111-2010

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Non-Recurring						1.2				1.2
Recurring						0.5				0.5
A-Kit					11	1.9			11	1.9
APG B-Kit					11	3.9			11	3.9
APG B-Kit Spare					3	1.1			3	1.1
Interim Contract Supt						1.0				1.0
PM Fielding Supt						0.6				0.6
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		10.2		0.0		10.2

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	MULTI SENSOR ABN RECON (MIP) (AZ2001)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost		236.3	23.2	75.5		335.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1		236.3	23.2	75.5		335.0
Initial Spares						
Total Proc Cost		236.3	23.2	75.5		335.0
Flyaway U/C						
Weapon System Proc U/C						

Description:
Multi Sensor Airborne Reconnaissance (AZ2001) is a summary budget line including the following programs:
(1) Airborne Reconnaissance Low (ARL) Mods (MIP). ARL is a multi-intelligence (MultiINT) airborne sensor providing the Combatant Commander with real-time Communications Intelligence (COMINT), Imagery Intelligence (IMINT) and Radar products. These systems are currently supporting forces in CENTCOM (Operation Iraqi Freedom (OIF)), SOUTHCOM, and Republic of Korea (ROK).
(2) ARMS/MARSS Mods (MIP). Aerial Reconnaissance Multi Sensor (ARMS) and Medium Altitude Reconnaissance and Surveillance System (MARSS) are two quick reaction capability (QRC) systems which support real-time surveillance and target acquisition missions in Iraq and Afghanistan. These systems can be configured with imagery, COMINT or other sensors, depending on the emerging requirements. MARSS is a Government Owned/Contractor Operated (GOCO) system; ARMS is an Army system.
(3) Constant Hawk (MIP). Constant Hawk is a persistent surveillance wide field of view airborne intelligence, surveillance and reconnaissance (AISR) system conducting Counter Improvised Explosive Device (IED) surveillance force protection missions in Iraq.
(4) Airborne Intelligence, Surveillance and Reconnaissance (ISR) Mods (MIP). AISR Mods support the Global War on Terrorism (GWOT) mission by providing real-time data links and a wide range of product exploitation/dissemination capability. This allows receivers of real-time video with METAdata and enables secondary exploitation tools to produce products for dissemination to maneuver elements. Video is also routed to multiple users in theater. The configuration also supports capture and dissemination of other sensors/capabilities (radars, et al).

Justification:
FY 10 Base Funding in the amount of $21 million procures the continued baselining and modernization of the ARL fleet; ARL Multifunction (ARL-M) in CENTCOM and Operation Iraqi Freedom (OIF), ARL-C and ARL-M in SOUTHCOM, and ARL-M in Korea. Communications Intelligence (COMINT), Radar, Imagery, Interoperability with other systems, and Workstation Architecture will be upgraded. This standardization will reduce the maintenance burden and operational support costs. Sensors will also be modernized to prosecute emerging threats and requirements.
FY 10 OCO Funding in the amount of $54 million procures High Definition Elctro-Optical Infra-Red (EO/IR) sensors on two ARL aircraft in support of OIF; Datalinks for 10 ARMS aircraft in OIF; Ku Band Beyond Line Of Sight (BLOS) communications links for two MARSS aircraft in OEF; and day/night sensors for Constant Hawk aircraft systems in OIF and OEF.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	ARL MODS (MIP) (AZ2050)		
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost		236.3	23.2	34.0		293.5
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1		236.3	23.2	34.0		293.5
Initial Spares						
Total Proc Cost		236.3	23.2	34.0		293.5
Flyaway U/C						
Weapon System Proc U/C						

Description:
Airborne Reconnaissance Low Multifunctional (ARL-M) evolved from two complementary tactical airborne systems ARL-I Imagery Intelligence (IMINT), an elecro-optic reconnaissance and surveillance system, and ARL-C (communications intelligence (COMINT)) which provides real-time highly accurate radio intercept and location. The ARL-M program integrates the capabilities of ARL-I and ARL-C into a single system to satisfy requirements identified by validated Combatant Commanders' Statements of Need (SON). The primary sensors are COMINT with precision Direction Finding (DF) capability, IMINT electro-optics for target identification, and classification and multimode capability including wide area search Moving Target Indicator (MTI) and Synthetic Aperture Radar (SAR). ARL provides near real-time tactical airborne COMINT and IMINT collection support to Joint Task Force (JTF) Commanders. ARL is a multi-INT (combined COMINT and IMINT) system, designed for forward deployment/force projection in Operations Other Than War (OOTW) and Overseas Contingency Operations (OCO). Additionally, ARL currently supports CENTCOM OIF missions and also conducts daily Joint Chiefs of Staff (JCS) Sensitive Reconnaissance Operations. ARL is rapidly self-deployable to support contingency operations, and is the airborne Reconnaissance Surveillance Target Acquisition (RSTA) platform of choice for various non-DOD government agencies such as Drug Enforcement Administration (DEA) and Federal Emergency Management Agency (FEMA). ARL is configured to allow interoperability with other Army and DOD Intel nodes such as Common Ground Station (CGS) and Tactical Exploitation System (TES). ARL uses UHF and wideband Tactical Common Data Links (TCDL), L-Band, and S-Band for Line of Sight (LOS) datalink communication, and uses UHF SATCOM and Direct Air-to-Satellite (DASR) for beyond LOS reporting. ARL contributes directly to the success of Army Transformation by serving as an operational platform for verification of new or improved technologies. ARL will continue to support current operations until a future system is fielded.

Justification:
FY 10 Base Funding in the amount of $21.457 million procures the continued standardization and modernization of the ARL fleet resulting in Radar, COMINT, and IMINT upgrades. Specifically, conversion of the final ARL-C to ARL-M configuration and upgrades to the COMINT and Imagery payloads. These upgrades also result in greater standardization across the fleet which not only maintains relevancy but reduces operational and sustainment costs.
FY 10 OCO Funding in the amount of $12.500 million provides the procurement, integration, and testing of High Definition (HD) Electro-Optical Infra-Red (EO/IR) sensors on 2 ARL aircraft which currently support OIF. Due to high Operation Tempo (OPTEMPO), current IMINT sensors are burned out and this allows for immediate procurement of replacement. This enhancement provides the Soldiers with the capability to identify and classify high value targets for direct support to the warfighter on the ground. This modification provides direct support for operation in Operation Iraqi Freedom (OIF) and OCO.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	ARL MODS (MIP) (AZ2050)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Comint Upgrades						
6-66-66-0000	Operational	36.8	5.5	4.9	0.0	47.2
System Interoperability						
0-00-08-8888	Operational	16.6	0.3	4.5	0.0	21.4
Radar						
0-00-05-2222	Operational	30.5	2.0	1.0	0.0	33.5
Workstation Architecture						
1-08-11-0000	Operational	9.2	2.9	0.5	0.0	12.6
Imagery						
0-00-05-3333	Operational	23.0	2.4	0.0	0.0	25.4
ARL-C to ARL-M Conversion						
0-00-07-7777	Operational	7.1	10.1	10.6	0.0	27.8
High Definition (HD) Sensors						
0-00-09-9999	Operational	0.0	0.0	12.5	0.0	12.5
Totals		123.2	23.2	34.0	0.0	180.4

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Comint Upgrades [MOD 1] 6-66-66-0000

MODELS OF SYSTEM AFFECTED: ARL-M4, M5, C1 and C2

DESCRIPTION / JUSTIFICATION:

The Communications Intelligence (COMINT) upgrade modification adds a COMINT subsystem to M4, M5, C1, C2 and provides two spare COMINT subsystems. The COMINT system includes a complete Acquisition and Direction Finding antenna manifold, Tactical Signals Intelligence (SIGINT) Payload system, navigation interfaces, and Man Machine Interface (MMI). This will allow the ARLs to have a standard COMINT capability which can support operations in support of Operation Iraqi Freedom (OIF) and the Overseas Contingency Operations (OCO). The system will include a frequency extension and architectural modifications for federated acquisition boxes (to allow rapid threat response). The system will also be configured for remote operations and multi-level security operation. FY10-FY15 provides software module drops to support the exploitation of additional high priority target waveforms. The COMINT installation for Airborne Reconnaissance Low (ARL-C1) and ARL-C2 will be part of the ARL communications intelligence (C) to multifunctional (M) conversion, hence installation fielding is protracted as part of the larger aircraft modification cycle. Fielding schedule is dependent on aircraft availability due to the unit supporting current Operation Iraqi Freedom (OIF) and Overseas Contingency Operations (OCO). FY2010 funding provides COMINT installation on C1 fielding and frequency extension antennas and software upgrades. The installation of the fourth COMINT is funded under the final ARL-C to ARL-M conversion modification.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

1QFY09 First System Fielded
2QFY10 Second System Fielded
3QFY12 Third System Fielded (concurrently with final ARL-C to ARL-M conversion)
1QFY10 Fourth System Fielded, (dependent on aircraft availability)

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	2				1			1													
Outputs		1				1	1									1					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		4
Outputs																		4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Comint Upgrades [MOD 1] 6-66-66-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Diamondback NRE		4.5								4.5
Diamondback B Kits	3	9.5	1	1.6					4	11.1
Calibration & Test		4.5				0.1				4.6
Contractor & Govt Mgt		1.8		0.2		0.1				2.1
Signal Processing SW						2.6				2.6
Spares		1.6		1.6						3.2
Sunk Costs		13.2								13.2
Frequency Extension Antenna				0.4		0.4				0.8
ECO										
Installation of Hardware										
FY 2007 & Prior Equip -- Kits	1	1.7	1	1.7	1	1.7			3	5.1
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	1	1.7	1	1.7	1	1.7	0	0.0	3	5.1
Total Procurement Cost		36.8		5.5		4.9		0.0		47.2

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: ARL-C to ARL-M Conversion [MOD 6] 0-00-07-7777

MODELS OF SYSTEM AFFECTED: ARL C1, C2 to ARL M7, M8

DESCRIPTION / JUSTIFICATION:

The Airborne Reconnaissance Low Communications Intelligence (ARL C) to Multifunctional (M) conversion consists of a Triport (three sensor positions) modification to allow for the installation of Electro Optical/Infrared (EO/IR), Digital Camera, or radar payloads (the radar payload will be purchased under the Radar modification); aircraft navigation modification; Air Survivability Equipment (ASE) modification; aircraft power modification; and Communications Intelligence (COMINT) antenna modification. The current COMINT infrastructure will be replaced (COMINT payload will be purchased under COMINT upgrade modification). This modification will also provide an imagery capability (EO/IR and digital pan camera); upgrade the communications suite; and modify the Mission Analysts Workstations. This upgrade is to support capability requirement in Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Overseas Contingency Operations (OCO).

FY2010 funding procures the final ARL-C to ARL-M conversion.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

3QFY07 Award Contract and begin Non-Recurring Engineering (NRE)
2QFY10 Field C1 to M7 Conversion
3QFY12 Field C2 to M8 Conversion

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	1							1													
Outputs							1									1					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		2
Outputs																		2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): ARL-C to ARL-M Conversion [MOD 6] 0-00-07-7777

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Airframe Modification and Integration		6.5		8.7		9.2				24.4
Fielding						0.3				0.3
Test				0.5		0.5				1.0
PMO		0.6		0.5		0.4				1.5
Air Worthiness Release				0.4		0.2				0.6
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		7.1		10.1		10.6		0.0		27.8

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: High Definition (HD) Sensors [MOD 7] 0-00-09-9999

MODELS OF SYSTEM AFFECTED: ARL M4, M5

DESCRIPTION / JUSTIFICATION:

This modification provides the procurement, integration, and testing of High Definition (HD) Electro-Optical Infra-Red (EO/IR) sensors on 2 Airborne reconnaissance Low (ARL) aircraft which currently support Operation Iraqi Freedom (OIF). Due to high Operation Tempo (OPTEMPO), current imagery intelligence (IMINT) sensors are burned out and this allows for immediate procurement of replacement. This enhancement provides the Soldiers with the capability to identify and classify high value targets for direct support to the warfighter on the ground. This modification provides direct support for operation in OIF and Overseas Contingency Operations (OCO).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

3QFY10 Contract Award/1st Aircraft Inducted
2QFY11 Testing and Integration
3QFY11 Fielding of 1st Aircraft
4QFY11 2nd Aircraft Inducted
1QFY12 Testing and Integration
2QFY12 Fielding of 2nd Aircraft
Fielding schedule is based upon aircraft availability

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs								1				1									
Outputs													1		1						

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		2
Outputs																		2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): High Definition (HD) Sensors [MOD 7] 0-00-09-9999

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Non-Recurring Engineering (NRE)						0.4				0.4
MX-20 HD (2 per aircraft) / Cables					4	5.9			4	5.9
MX-15 HD / Cables					2	2.5			2	2.5
Third Hole Hardware					2	0.5			2	0.5
Work Station Digital Interface Hardware					2	0.9			2	0.9
Test Flight/Acceptance Test Procedure						0.7				0.7
PMO Mgmt						0.7				0.7
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Labor						0.9				0.9
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.9	0	0.0	0	0.9
Total Procurement Cost		0.0		0.0		12.5		0.0		12.5

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	ARMS MARSS MODS (MIP) (AZ2052)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost				23.2		23.2
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1				23.2		23.2
Initial Spares						
Total Proc Cost				23.2		23.2
Flyaway U/C						
Weapon System Proc U/C						

Description:
ARMS/MARSS Mods (MIP). Aerial Reconnaissance Multi Sensor (ARMS) and Medium Altitude Reconnaissance and Surveillance System (MARSS) are two quick reaction capability (QRC) systems which support real-time surveillance and target acquisition missions in Iraq and Afghanistan. They provide manned airborne reconnaissance platforms to provide commanders with real time intelligence and support to their battlefield operations. These systems can be configured with various sensors and communications equipment to include imagery, COMINT or other specialized sensors, depending on the emerging requirements.

ARMS: There are ten ARMS aircraft fielded to Iraq in support of Task Force Observe, Detect, Identify and Neutralize (TF ODIN). The ARMS system in composed of B-200 (C-12) aircraft equipped with imagery sensors, specialized COMINT sensors, and an array of line of sight and beyond line of sight communications equipment. The aircraft were fielded to Operation Iraqi Freedom (OIF) in FY06 and have been providing daily support to the TF ODIN commander. They are manned with Army reserve personnel and maintained and supported by contractors. A major enabler for this equipment is real-time data links and a wide range of product exploitation/dissemination capability. This allows users to receive real-time video with Metadata and enables secondary exploitation tools to produce products for dissemination to maneuver elements. Imagery is also routed to multiple users in theater. The configuration also supports capture and dissemination of other sensors/capabilities. Prior to establishment of this line, $7.5M of FY07 Supplement funds and $23.0M of FY08 Supplement funds were placed in the Airborne Reconnaissance Low (ARL) Mods line (AZ2050) for ARMS.
MARSS: The MARSS aircraft are primarily King Air 300's (C-12 variant) equipped with numerous sensors to include imagery and communications intelligence (COMINT) payloads. They also include several line-of-sight and beyond line of sight communications systems and on board (manned) processing of the imagery and COMINT. There is one MARSS system in Iraq and currently one in Overseas Enduring Freedom (OEF) with a planned and funded growth to eight total aircraft in OEF. Three of these aircraft will be manned by contractors while the others will be manned by National Guard pilots and backseat operators. These systems are and will be under the command of the TF ODIN-Iraq and Afghanistan commanders. The Extended MARSS (EMARSS) program provides six additional MARSS systems based on a King Air 350 Extended Range (ER) aircraft. Prior to establishment of this line, $114.8M of FY08 Supplement and Intelligence, Surveillance, and Reconnaissance (ISR) Surge funds were placed in the ARL Mods line (AZ2050) for MARSS.

Justification:
FY 10 OCO Funding in the amount of $23 million procures upgrades to both sets of aircraft. The ARMS aircraft will receive new data links as well as upgrades to the processing systems associated with the aircraft. The MARSS aircraft will be rounded out to have Ku beyond line of sight communication for all the aircraft in OEF.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	ARMS MARSS MODS (MIP) (AZ2052)		
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
ARMS Data links and Data Dissemination						
1-07-01-OCO	U	0.0	0.0	18.7	0.0	18.7
MARSS Beyond Line of Sight in OEF						
01-08-003-OCO	U	0.0	0.0	4.5	0.0	4.5
Totals		0.0	0.0	23.2	0.0	23.2

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: ARMS Data links and Data Dissemination [MOD 1] 1-07-01-OCO

MODELS OF SYSTEM AFFECTED: ARMS 1 through 10

DESCRIPTION / JUSTIFICATION:

The ARMS aircraft require upgrades to allow for real time/encrypted data links to support real time dissemination of imagery from the aircraft to warfighters on the ground. The aircraft will be equipped with a total of ten Tactical Common Data Links (TCDLs) as well as additional communications equipment to provide improved data dissemination. The associated ground equipment will be upgraded to allow for improved processing of data from the aircraft as well as improved data dissemination. It is not expected that any aircraft will come out of service to support the integration of the equipment.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):
1QFY10: procurement of 12 TCDL systems for the aircraft (10 plus 2 spares)
3QFY10: Receipt of TCDL equipment
4QFY10: Testing of TCDL on surrogate aircraft
1-2QFY11; Fielding/integration of TCDLs to theater

1QFY10: Contract for upgrades to OIF aircraft/ground processing
3-4QFY10: Integration of upgraded air/ground processing

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): ARMS Data links and Data Dissemination [MOD 1] 1-07-01-OCO

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Data Link HW					10	3.5			10	3.5
Nonrecurring Engineering						11.6				11.6
Spares/Support Equipment					2	2.1			2	2.1
Interim Contractor Support						1.5				1.5
ARMS Integration										
ARMS Sensor Upgrades										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		18.7		0.0		18.7

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	CONSTANT HAWK (MIP) (AZ2054)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost				18.3		18.3
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1				18.3		18.3
Initial Spares						
Total Proc Cost				18.3		18.3
Flyaway U/C						
Weapon System Proc U/C						

Description:

Constant Hawk (MIP). Constant Hawk (CH) is a persistent surveillance wide field of view airborne intelligence, surveillance and reconnaissance (AISR) system conducting Counter Improvised Explosive Device (IED) surveillance and forensic force protection missions in Iraq and Afghanistan. CH uses high resolution Electro Optic (EO) cameras mounted on manned aircraft to provide persistent surveillance of a designated Named Area of Interest (NAI). The aircraft loiters over a NAI for five to six hours collecting and storing imagery data. At the completion of the mission this data will be processed on the ground and personnel will perform forensic analysis of the data. The resulting intelligence related to IED attacks and other critical information is pushed out to commanders within hours of completion of the mission. The system currently only operates in daytime conditions. Several near term upgrades are planned for the system to include the addition of a real time data link, improved processing tools, improved EO sensors, and an Infra-Red (IR) sensor to allow for day and night operations.

Constant Hawk Iraq (CH-I): There are four CH aircraft in Iraq as well as one test-bed aircraft CONUS for training and evaluation of upgrades to the system. The CH-Iraq system is under the operational control of the Task Force Observe, Detect, Identify, and Neutralize (TF ODIN). CH-I is a unique capability from other assets within TF ODIN, and is the only asset performing forensic analysis. The four CH-I aircraft perform on average twenty five (25) sorties per week. The CH-I system uses a Shorts 360 non-pressurized aircraft. The CH-I system is contractor owned and operated. The government funds the contractor for full operations and support of the system in theater to include pilots, analysts, backseat operators, and maintenance personnel. The development of CH-I was primarily funded through Joint IED Defeat Organization (JIEDDO).

Constant Hawk-Afghanistan (CH-A): In FY08 the ISR Task Force funded the production and fielding of three CH aircraft to support TF ODIN Afghanistan operations. In January 2009 the Army awarded a contract to produce and field these aircraft which will be fielded in FY10. This system will be identical to the CH-I equipment except it will be integrated on a pressurized, King Air 350 (C-12) aircraft. The system will also include a single CONUS based aircraft to support training and upgrades. The TFO-A system will also be contractor owned and operated and fall under the command and control of TF-ODIN Afghanistan.

Justification:

FY 10 OCO Funding in the amount of $18.300 million procures sensors which will allow for full day and night time operations across the CH fleet. A total of seven day/night sensors will be procured, tested and integrated on the CH aircraft in Iraq and Afghanistan. This fills a major void in CH operations and rounds out the entire fleet of CH aircraft with this capability. The CH IR sensors development is on contract with BAE in Greenlawn, NY. A minimum number of these sensors called (AWAPSS-Airborne Wide Area Persistent Surveillance System) are being built and tested in FY09 and early FY 10 in preparation for fielding of this capability in FY 10 to Iraq. No sensors have been procured for Afghanistan. MIT Lincoln Labs provides the ground processing capability for CH and will need to upgrade their equipment to accept this new CH sensor.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	CONSTANT HAWK (MIP) (AZ2054)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Constant Hawk - Iraq IR Sensors Upgrade						
1-07-00-OCO	U	0.0	0.0	8.0	0.0	8.0
Constant Hawk - Afghanistan IR Sensors Upgrade						
1-08-00-OCO	U	0.0	0.0	10.3	0.0	10.3
Totals		0.0	0.0	18.3	0.0	18.3

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Constant Hawk - Iraq IR Sensors Upgrade [MOD 1] 1-07-00-OCO

MODELS OF SYSTEM AFFECTED: Constant Hawk-I Sys 1-4

DESCRIPTION / JUSTIFICATION:

This funding will provide the integration of 3 additional day/night CH sensors (AWAPSS) and the testing and integration of those sensors on CH aircraft in theater. Two will be integrated on aircraft in theater and the third will be integrated on the test-bed aircraft CONUS for training support. This effort will also support upgrades to the CH ground processing facilities to allow for processing, analysis and dissemination of data to commanders.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

2QFY08: Contract award of the AWAPSS (CH IR sensor)
4QFY08: CDR for AWAPSS
3-4QFY09: Flight testing of AWAPSS on surrogate aircraft
1QFY10: Flight testing on CH-I test-bed aircraft
2-3QFY10: Field two AWAPSS to CH-I
1QFY10: procure three additional AWAPSS sensors
4QFY10: Receive 3 AWAPSS sensors
1-2QFY11: Integrate two AWAPSS sensors on CH-I in theater with one spare

Installation Schedule

	Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs										1	1										
Outputs										1	1										

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		2
Outputs																		2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Constant Hawk - Iraq IR Sensors Upgrade [MOD 1] 1-07-00-OCO

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
AWAPSS HW					2	3.0			2	3.0
Nonrecurring Engineering						3.0				3.0
Training/Spare Equipment					1	1.5			1	1.5
Support Equipment						0.5				0.5
CH-I Integration										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		8.0		0.0		8.0

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Constant Hawk - Afghanistan IR Sensors Upgrade [MOD 2] 1-08-00-OCO

MODELS OF SYSTEM AFFECTED: Constant Hawk-A Systems 1-3

DESCRIPTION / JUSTIFICATION:

This funding will provide the integration of 3 additional day/night CH sensors (AWAPSS) and the testing and integration of those sensors on CH aircraft in theater. Two will be integrated on aircraft in theater and the third will be integrated on the test-bed aircraft CONUS for training support. This effort will also support upgrades to the CH ground processing facilities to allow for processing, analysis and dissemination of data to commanders.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

2QFY08: Contract award of the AWAPSS (CH IR sensor)
4QFY08: CDR for AWAPSS
3-4QFY09: Flight testing of AWAPSS on surrogate aircraft
1QFY10: Flight testing on CH-I test-bed aircraft
2-3QFY10: Field two AWAPSS to CH-I
1QFY10: procure three additional AWAPSS sensors
4QFY10: Receive 3 AWAPSS sensors
1-2QFY11: Integrate two AWAPSS sensors on CH-I in theater with one spare

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs											1	2									
Outputs											1	2									

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		3
Outputs																		3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Constant Hawk - Afghanistan IR Sensors Upgrade [MOD 2] 1-08-00-OCO

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
AWAPSS HW					3	4.5			3	4.5
Nonrecurring Engineering						3.5				3.5
Training Equipment						1.5				1.5
Support Equipment						0.8				0.8
CH-A System Integration										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		10.3		0.0		10.3

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 2 / Modification of aircraft	AH-64 APACHE MODS (AA6605)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: AA6670, AA0951, PE23744 D12 & D17

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	3346.4	855.9	1013.9	771.0		5987.2
Less PY Adv Proc	38.7	38.9	51.4	29.3		158.3
Plus CY Adv Proc	77.7	51.4	29.3			158.3
Net Proc P1	3385.3	868.4	991.8	741.7		5987.2
Initial Spares	896.1	3.9				900.0
Total Proc Cost	4281.4	872.2	991.8	741.7		6887.2
Flyaway U/C						
Weapon System Proc U/C						

Description:
Program provides for an Apache Attack Helicopter fleet to meet the AAO of 634 AH-64D model Apache attack helicopters in the Block III configuration, all equipped with a single main rotor, twin engines, and a tandem cockpit. In addition, 13 Longbow War Replacement Aircraft (WRA)(replenishments for combat attrition) were added to the Longbow budget line in the FY 05 supplemental appropriation, 14 aircraft were added to this budget line in FY 06, 20 aircraft in FY07, and 5 in FY08. Principal aircraft components are: the Target Acquisition Designation Sight (TADS) is housed in a turret on the nose of the AH-64 and consists of a TV, Forward Looking Infrared (FLIR), Direct View Optics, Laser Designator/ Rangefinder and Spot Tracker. The Pilot Night Vision Sensor (PNVS) is a FLIR which allows Nap-of-Earth operations at night by the pilot independent of the co-pilot/gunner's FLIR. The Apache aircraft is armed with the Hellfire Antitank Missile, 2.75 inch rockets, and a 30mm gun capable of defeating armor by day or night and in adverse weather. The more advanced Longbow Apache aircraft (AH-64D) incorporates the Longbow weapon system and provides the U.S. Army with a significant improvement in target acquisition and firepower effectiveness, increasing the survivability, lethality, and adverse weather fighting capabilities of the Apache. The AH-64D model is equipped with a modified AH-64 airframe, a Fire Control Radar (FCR)/ Radar Frequency Interferometer (RFI) mission kit, and "Fire and Forget" Longbow HELLFIRE missiles. Modernization provides near term improvements to the Apache fleet, focusing on reliability and safety (R&S) upgrades and operational deficiencies. The Modernized TADS/PNVS (M-TADS/PNVS) program provides a second generation FLIR (SGF) sensor suite to the Apache. The Internal Auxiliary Fuel System (IAFS)/Combo-Pak provides additional 100 gallon fuel tank for extended range plus a 30 MM 246 round ammo pack. This is a Task Force Hawk initiative increasing performance in the Global War on Terrorism. Modifications specifically for the AH-64D include Selected Component Recapitalization, FCR Obsolescence, Trainer Upgrades, Light Weight Missile Launcher (LWML) and the Apache Block III (AB3). Modifications also include the remanufacture of an additional 140 AH-64A to the AH-64D Extended Block II Upgrade configuration via a single year contract, with options.

Justification:
FY 10 Base funding in the amount of $426.4M will procure: Apache Sensors Life Extension and Upgrades, Internal Auxiliary Fuel System (IAFS), Apache Product Improvements, Modernized TADS/PNVS, Fire Control Radars, Advanced Procurement items, Apache Upgrades and Remanufacture, and Apache Post Production Organic Support.

FY 10 OCO funding in the amount of $315.3M will 4 Longbow War Replacement Aircraft (WRA).

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	AH-64 APACHE MODS (AA6605)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: AA6670, AA0951, PE23744 D12 & D17

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Apache Sensors Life Extension & Upgrade						
1-94-01-2005		137.2	10.6	8.6	0.0	156.4
AH-64A MISC Mods $5M or less (no P3a set)						
OSIP		728.0	8.2	0.0	0.0	736.2
Apache Transformation						
OSIP		46.2	4.9	0.0	0.0	51.1
Modernized TADS/PNVS (M-TADS)						
1-01-01-0022		709.0	101.4	24.6	0.0	835.0
Apache Upgrades and Remanufacture						
OSIP		947.0	441.7	333.4	0.0	1722.1
Fire Control Radar						
0-00-00-0000		0.0	0.0	27.7	0.0	27.7
Video from UAS Interoperability Teaming (VUIT-2)						
0-00-00-0000		0.0	0.0	176.9	0.0	176.9
AH-64D Longbow War Replacement Aircraft (WRA)						
0-00-00-0000		0.0	343.5	138.4	0.0	481.9
Apache Product Improvements						
OSIP		197.9	25.2	13.0	0.0	236.1
Apache Block III						
OSIP		0.0	11.1	0.0	0.0	11.1
Internal Auxiliary Fuel System (IAFS)						
OSIP		69.2	39.0	10.0	0.0	118.2
Apache Post Production Organic Support						
OSIP		4.5	6.2	9.1	0.0	19.8
Totals		2839.0	991.8	741.7	0.0	4572.5

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Apache Sensors Life Extension & Upgrade [MOD 1] 1-94-01-2005

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION / JUSTIFICATION:

Operational and logistical improvement. This is a critical stage in the Longbow remanufacturing effort as it produces a single configuration MTADS for AH64 Extended Block II Upgrade (117 aircraft) and Longbow Apache Block III (AB3). This mod facilitates maintainers' access to TADS/PNVS/MTADS systems thereby allowing for accelerated application of outstanding ECPs. Additionally, satisfies program growth and life extension requirements and provides for offsite contractor support for upgrade/integration of hardware in the TADS/PNVS/MTADS. Funding is required throughout the AB3 program to overhaul sensors/TEDACs, etc., through the Arizona Support facility to the proper configuration for the AB3 aircraft. Funding will satisfy emerging requirements for zero timing all Apache Sensors to include TADS/PNVS, MTADS, FCR, RFI, and TEDAC.

Installation costs are included in contract and are not broken out separately.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Initial contract award was Dec 95. Date of first delivery was Jun 96.

Installation Schedule

	Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	579	6	6	6	9	9	9	9	9												
Outputs	561	9	9	9	9	9	9	9	9												

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		642
Outputs																		633

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 1 months

Contract Dates:	FY 2010 - Nov 09	FY 2011 - Nov 10	FY 2012 - Nov 11
Delivery Dates:	FY 2010 - Dec 09	FY 2011 - Dec 10	FY 2012 - Dec 11

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Apache Sensors Life Extension & Upgrade [MOD 1] 1-94-01-2005

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity	561		36		36				633	
T/P FFP/T&M/CFE/O&A		93.0		6.2		6.8				106.0
Equipment (GFE)		40.3		3.6		1.0				44.9
Other		3.9		0.8		0.8				5.5
Installation of Hardware										
FY 2007 & Prior Equip -- Kits	537								537	
FY 2008 -- Kits	24		12						36	
FY 2009 Equip -- 36 Kits			24		12				36	
FY 2010 Equip -- 36 Kits					24				24	
FY 2011 Equip -- 36 Kits										
FY 2012 Equip -- 45 Kits										
FY 2013 Equip -- 45 Kits										
FY 2014 Equip -- 48 Kits										
FY 2015 Equip -- 48 Kits										
Total Installment	561	0.0	36	0.0	36	0.0	0	0.0	633	0.0
Total Procurement Cost		137.2		10.6		8.6		0.0		156.4

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Modernized TADS/PNVS (M-TADS) [MOD 4] 1-01-01-0022

MODELS OF SYSTEM AFFECTED: AH-64D Apache Helicopter

DESCRIPTION / JUSTIFICATION:

The Modernized Target Acquisition & Designation Sight/Pilot Night Vision Sensor (M-TADS/PNVS) modification program is the Army initiative to provide 2nd Generation Forward Looking Infrared (SGF)(FLIR) sensors for the Apache fleet. Suite modifications encompass: M-TADS/PNVS Line Replaceable Units (LRUs), TADS Electronic Display and Control (TEDAC) assemblies, and the Integrated Helmet Display Sight System (IHDSS) assemblies. The SGF system improves overall pilotage and enhances the pilot's ability to engage targets during night and bad weather. Specifically: increased detection range, enhanced recognition and target identification; higher resolution and sensitivity for safety and pilotage performance (especially in adverse weather); better identifying of friend/foe during hostilities; and increased reliability and reduction in O&S costs. The complementary TEDAC and IHDSS upgrade reduces operating costs, increases cockpit space, and exploits the expanded capability of the M-TADS/PNVS. This exhibit identifies funding for 542 of a total of 706 M-TADS production units and associated displays.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Jan 01 -- Preliminary Design Review (PDR); Aug 01 -- Critical Design Review (CDR)
May 02 -- Qualification testing; Dec 03 -- M-TADS/PNVS Production Contract Award; June 05 -- M-TADS/PNVS FUE
Feb 08 -- MTADS/PNVS Lot 5 Production Contract Award (Price Agreement reached Dec 07)
Feb 09 -- Projected MTADS/PNVS Lot 6 Production Contract Award
Sep 09 -- Projected MTADS/PNVS Lot 7 Production Contract Award
Nov 09 -- Contract Option
Nov 10 -- Contract Option

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	158	36	36	36	36	36	36	36	36												
Outputs	158	36	36	36	36	36	36	36	36												

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		446
Outputs																		446

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 19 months

Contract Dates:	FY 2010 - Nov 09	FY 2011 - Nov 10	FY 2012 - Nov 11
Delivery Dates:	FY 2010 - Jun 11	FY 2011 - Jun 12	FY 2012 - Jun 13

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Modernized TADS/PNVS (M-TADS) [MOD 4] 1-01-01-0022

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity										
Installation Kits										
SDU				1.4						1.4
Equipment	415	588.3	55	90.0	12	24.6			482	702.9
Equipment, Nonrecurring		21.3								21.3
TEDAC/IHDSS		62.2		5.0						67.2
Other Support		37.2		5.0						42.2
Installation of Hardware										
FY 2007 & Prior Equip -- Kits	158		144		19				321	
FY 2008 -- 94 Kits					94				94	
FY 2009 Equip -- 55 Kits					31				31	
FY 2010 Equip -- 12 Kits										
FY 2011 Equip -- 12 Kits										
FY 2012 Equip -- 30 Kits										
FY 2013 Equip -- 18 Kits										
FY 2014 Equip -- Kits										
TC Equip- 0 Kits										
Total Installment	158	0.0	144	0.0	144	0.0	0	0.0	446	0.0
Total Procurement Cost		709.0		101.4		24.6		0.0		835.0

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Apache Upgrades and Remanufacture [MOD 5] OSIP

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION / JUSTIFICATION:

Funding for the AH-64 Extended Block II Upgrade supports the remanufacture of additional AH-64A aircraft to the AH-64D configuration. The schedule generates greater attack helicopter combat power for the War-fight sooner and accelerates Reserve Component modernization by cascading Longbow Block I aircraft directly to USAR and ARNG Apache battalions. By modernizing additional AH-64As, the Army is acknowledging concerns of OSD and Congress by mapping out a strategy for the entire Apache fleet. Funding the obsolescence requirement promotes increased readiness and decreased total ownership cost of the existing Apache fleet. Critical software enhancements supporting GWOT will now be available to Apache commanders and aircrew. These improvements are vital to conducting the attack helicopter mission, provide critical safety improvements to protect the aircrew from harm, and reduce loss of aircraft. Funding TADSS concurrency will support projected student through-put for MOS producing classes.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Contract Award Dec 2006 (FY 07)
Contract Options (FY 08-10) -- Extended Block 2 (EBII)
Contract Awards, Dec 09, Dec 10

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	72	9	9	8	6	5	5	2													
Outputs	36	9	9	9	9	9	9	8	6												

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		116
Outputs																		104

METHOD OF IMPLEMENTATION: Firm Fixed Price ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 12 months
Contract

Contract Dates:	FY 2010 - Dec 09	FY 2011 - Dec 10	FY 2012 -
Delivery Dates:	FY 2010 - Dec 10	FY 2011 - Jan 13	FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Apache Upgrades and Remanufacture [MOD 5] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
Procurement										
Kit Quantity/Equipment	72	754.1	32	372.0	12	150.2			116	1276.3
NG Aircraft					12	161.9			12	161.9
Long Lead		118.3		18.2						136.5
Other Support		74.6		51.5		21.3				147.4
Training										
Software Upgrades										
Obsolescence										
Installation of Hardware										
FY 2007 & Prior Equip -- Kits	36								36	
FY 2008 -- Kits			36						36	
FY 2009 Equip -- 32 Kits					32				32	
FY 2010 Equip -- 12 Kits							12		12	
FY 2010 NG Equip -- 12 Kits							12		12	
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	36	0.0	36	0.0	32	0.0	24	0.0	128	0.0
Total Procurement Cost		947.0		441.7		333.4		0.0		1722.1

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Fire Control Radar [MOD 6] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION / JUSTIFICATION:

The FCR is a monopulse, coherent Doppler radar system. It is a multimode system capable of acquiring moving and stationary targets in ground and air environments. It also provides navigational and piloting information on the surrounding terrain. The FCR, in combination with the Radio Frequency (RF) missile, provides the Longbow Apache with fire-and-forget capability. The FCR includes a MMA, LPRF, PSP, and RFI LRU. This provides the aircrew with the capability to detect and locate moving and stationary ground targets, helicopters, and fixed wing aircraft, even when operating in limited adverse weather or minimum visibility conditions. The mast-mounted Radar Frequency Interferometer (RFI) provides threat emitter warning and azimuth direction finding/cueing. Target information is sent to the Weapons Processor (WP). Target coordinates are sorted and sent to the Display Processor (DP) for target symbology presentation on the FCR page or Tactical Situation Display (TSD) page. Target and threat information can also be selected for FCR symbology overlay on TADS/PNVS video.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Jan 10 - Projected FCR/RFI Production Contract Award Base with 3 Options

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 4 months PRODUCTION LEADTIME: 24 months

Contract Dates: FY 2010 - Jan 10 FY 2011 - Jan 11 FY 2012 - Jan 12

Delivery Dates: FY 2010 - Dec 11 FY 2011 - Dec 12 FY 2012 - Dec 13

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Fire Control Radar [MOD 6] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity										
Installation Kits					6	27.7			6	27.7
Equipment										
Other										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- 6 Kits										
FY 2011 Equip -- 3 Kits										
FY 2012 Equip -- 9 Kits										
FY 2013 Equip -- 9 Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		27.7		0.0		27.7

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Video from UAS Interoperability Teaming (VUIT-2) [MOD 7] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION / JUSTIFICATION:

FY10 funding totals include $176.9M in supplemental funding to procure 6 BN sets of 24 each plus spares of Apache Video Unmanned Aircraft System (UAS) Interoperability Teaming - Level II (Apache VUIT-2) capability to support Overseas Contingency Operations (OCO). VUIT-2 gives Apache pilots the capability to view UAS video in the cockpit and transmit sensor data to the ground, thus improving situational awareness and enabling real-time intelligence sharing. The complete modification includes UAS Level II interoperability and Apache sensor video transmission to the ground capabilities.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Proposed contract award -- July 2010

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs													24	24	24	24	24	24			
Outputs													24	24	24	24	24	24			

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		144
Outputs																		144

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 8 months PRODUCTION LEADTIME: 12 months

Contract Dates: FY 2010 - Jul 10 FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - Jul 11 FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Video from UAS Interoperability Teaming (VUIT-2) [MOD 7] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity -- FY10 OCO					144	176.9			144	176.9
Installation Kits										
Equipment										
Data										
Training Equipment										
Support Equipment										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits							144		144	
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	144	0.0	144	0.0
Total Procurement Cost		0.0		0.0		176.9		0.0		176.9

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: AH-64D Longbow War Replacement Aircraft (WRA) [MOD 8] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: Longbow Apache

DESCRIPTION / JUSTIFICATION:

FY09 funding totals include $343.6M in supplemental OCO funding which procures twelve (12) Longbow WRA (with Modernized TADS/PNVS and Aircraft Survivability Equipment) to replace those helicopters attrited during OIF/OEF. FY10 funding totals include $138.4M requested to procure four (4) Longbow WRA. These replacement aircraft will be the same configuration as those produced under the remanufacturing contract, but will be fitted with a new fuselage and materials rather than being remanufactured.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

FY09 OCO 12 WRA Proposed Contract Award, Dec 09
FY10 OCO 4 WRA Proposed Contract Award, Jun 10

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs					3	3	3	3	2	2											
Outputs																	3	3	3	3	2

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		16
Outputs	2																	16

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 6 months PRODUCTION LEADTIME: 36 months

Contract Dates:	FY 2010 - Dec 09	FY 2011 -	FY 2012 -
Delivery Dates:	FY 2010 - Dec 12	FY 2011 -	FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): AH-64D Longbow War Replacement Aircraft (WRA) [MOD 8] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
FY09 OCO WRA			12	343.5					12	343.5
FY10 OCO WRA					4	138.4			4	138.4
Kit Quantity										
Data										
Training Equipment										
Support Equipment										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits							12		12	
FY 2010 Equip -- Kits							4		4	
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	16	0.0	16	0.0
Total Procurement Cost		0.0		343.5		138.4		0.0		481.9

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Apache Product Improvements [MOD 9] OSIP

MODELS OF SYSTEM AFFECTED: AH-64 Apache Helicopter

DESCRIPTION / JUSTIFICATION:

Apache Mods and Recap provides near term improvements to the Apache fleet, focusing on reliability & safety (R&S) upgrades and operational deficiencies. The R&S mods and selected component recapitalization are being accomplished by the reman line, field retrofits, and through spares. Improvements focus on: main transmission, rotor blades, gear boxes, and hydraulic systems. Funding also provides for selected component recap and insertion of R&S mods for the Apache fleet. The program also includes select Task Force Hawk initiatives (i.e., HF Radio and New Digital Video Recorder). The selected component recap fixes were identified through a Sandia National Lab analysis of components coupled with the results of a nonrecurring engineering analysis of components. These assessments ensure that the recap resources are focused on the highest payoff components. In summary, the goal of this program is to improve safety, maximize marginal return on recapped components, enhance aircraft performance by increasing unscheduled mean time between removal (MTBR) for selected components, and reduce the average fleet age. Funding in FY10 &11 for NG Support will procure the delta component overhauls to convert AH-64A model Recap kits to AH-64D model Recap kits. Extended year funding provides for continued reliability and safety improvements, gains synergy from future programs and bridges the gap to Block III future requirements. Condition Based Maintenance (CBM) and expansion of the Modernized Signal Processing Unit (MSPU) capabilities will continue to evolve reducing ownership costs and improving the maintenance posture and burden on the warfighter.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Jan 07 - FFP Contract Option,
Jul 07 - FFP Contract restructure to support the 96 additional aircraft
Dec 07 - CBM contract
Jul 09 - CBM contract option (OCO)

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	611	36	36	37	37	8	8	8	8												
Outputs	611	36	36	37	37	8	8	8	8												

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		789
Outputs																		789

METHOD OF IMPLEMENTATION: Contract - CBM ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 12 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 - Nov 11

Delivery Dates: FY 2010 - FY 2011 - FY 2012 - Dec 12

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Apache Product Improvements [MOD 9] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
CBM Hardware	296	11.1	32	2.0					328	13.1
Other Recap		12.9		4.8						17.7
NG Recap Support						10.2				10.2
R&S Equipment (Kits)	655	108.2							655	108.2
CBM Services		35.6		3.9		2.1				41.6
Non-recurring engineering		11.0								11.0
CBM Kits -- FY09 OCO			132	10.8					132	10.8
Installation of Hardware										
FY 2007 & Prior Equip -- Kits	411	14.8	50	2.0					461	16.8
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits	100	1.8							100	1.8
FY 2012 Equip -- Kits	100	2.5							100	2.5
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2008 Equip -- 96 CBM Kits			96	1.7					96	1.7
FY 2010 Equip -- 0 CBM Kits										
FY 2009 Equip -- 32 CBM Kits					32	0.7			32	0.7
FY 2009 OCO Equip -- 132 CBM Kits					132				132	
FY 2011 Equip -- 0 CBM										
FY 2012 Equip -- 60 CBM										
TC Equip -- Kits										
Total Installment	611	19.1	146	3.7	164	0.7	0	0.0	921	23.5
Total Procurement Cost		197.9		25.2		13.0		0.0		236.1

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Apache Block III [MOD 10] OSIP

MODELS OF SYSTEM AFFECTED: AH-64D Longbow Apache

DESCRIPTION / JUSTIFICATION:

AH-64A to Block III (NRE): The evolutionary system improvement process that has kept the Apache AH-64 attack helicopter a viable combat multiplier for over 20 years has moved from the original AH-64A through two block improvement programs of the AH-64D Longbow (Block I and Block II). The most significant modification and technological change was from the AH-64A to the AH-64D Block I configuration. The original Apache Block III (AB3) program plan called for the remanufacture of AH-64D Block I and Block II aircraft into the AB3 configuration. The revised plan to remanufacture AH-64A aircraft directly into the AB3 configuration will require the appropriate AH-64D Block I or Block II modifications in addition to the mandatory AB3 modifications. Consequently, design work and the associated drawing changes not originally planned or budgeted in the AB3 program must take place.

AH-64A to Block III remanufacture: The AB3 remanufacture program will be required to make 100% of the airframe hardware modifications and technological system upgrades generated by the original AH-64A to AH-64D Longbow Block I or Block II remanufacture programs. This creates a greater requirement for subsystem hardware procurements, installations, and the associated man-hours needed to modify the original AH-64A airframe.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Advance Procurement (LRIP) Lot 1 Contract Award Production - Third Quarter FY09

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Apache Block III [MOD 10] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Long Lead Items				11.1						11.1
A to Block III (NRE)										
A to Block III										
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip -- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		11.1		0.0		0.0		11.1

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Internal Auxiliary Fuel System (IAFS) [MOD 11] OSIP

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION / JUSTIFICATION:

This program meets the requirements established by Task Force Hawk, as approved for incorporation by the VCSA. The IAFS is ballistically tolerant, crashworthy, self sealing and increases aircraft mission endurance by increasing fuel capacity by 100 gallons. During ongoing OIF/OEF missions the AH-64, in the Quick Reaction Force (QRF) and in support of Close Combat operations, is required to remain on station longer to protect ground troops with immediate suppression by the 30mm weapon. The additional capacity provided by IAFS increases mission time by 30-45 minutes and enables the Apache aircraft to remain in fight longer and reduce Forward Area Refuel Point (FARP) iterations. The Combo-pak also has a 246 round 30mm capacity which meets critical operational needs associated with current operations in OIF/OEF as well as future contingencies. IAFS is designated as a threshold Mission Equipment Package (MEP) requirement in support of OEF/OIF. FY09-10 procured B-kits will be installed by operating units.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

FFP Contract will be used for all IAFS procurements, FY 08 - FY 10

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	303																				
Outputs	303																				

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		303
Outputs																		303

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 1 months PRODUCTION LEADTIME: 9 months

Contract Dates: FY 2010 - Nov 09 FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - Jul 10 FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Internal Auxiliary Fuel System (IAFS) [MOD 11] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity										
A Kits	93	2.0							93	2.0
B Kits	253	59.4	148	37.0	32	8.0			433	104.4
Other Support & Equipment		5.8		2.0		2.0				9.8
Installation of Hardware										
FY 2007 & Prior Equip -- Kits	303	2.0							303	2.0
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	303	2.0	0	0.0	0	0.0	0	0.0	303	2.0
Total Procurement Cost		69.2		39.0		10.0		0.0		118.2

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Apache Post Production Organic Support [MOD 12] OSIP

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION / JUSTIFICATION:

Funds will be used to establish a pilot program (initially at Corpus Christi Army Depot (CAD)) to support transitioning repair/overhaul of selected AH-64D Longbow unique airframe components, currently supported by the contractor/Original Equipment Manufacturer (OEM), to organic depot facilities (Corpus Christi Army Depot and Tobyhanna Army Depot). The transitioning is occuring in phases from the least to the most complex Transition Package.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

FY08 funds -- Contract with Boeing, July 08
FY09 funds -- Contract with Boeing, Jan 09
FY10 funds -- Contract with Boeing, Jan 10

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Organic ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Apache Post Production Organic Support [MOD 12] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
Procurement										
Other - Transition Packages		4.5		6.2		9.1				19.8
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
Other Support										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		4.5		6.2		9.1		0.0		19.8

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 2 / Modification of aircraft	CH-47 CARGO HELICOPTER MODS (MYP) (AA0252)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: RDTE PE 0203744A

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	8375.8	1194.4	717.7	152.3		10440.2
Less PY Adv Proc	1043.9	36.6	38.9	49.5		1168.9
Plus CY Adv Proc	1080.5	38.9	49.5			1168.9
Net Proc P1	8412.4	1196.7	728.2	102.9		10440.2
Initial Spares	263.9	2.0	2.0			267.9
Total Proc Cost	8676.2	1198.7	730.3	102.9		10708.1
Flyaway U/C						
Weapon System Proc U/C						

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 (OCO) 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 are Engine Filtration System, Engine Improvement, Maintenance Training Devices (MTD), Transformation Sets, Kits and Outfits, M240 Window/Door Gun Mount, Adjustable Pitch Change Link, Crashworthy Seats, Combined Transmission Fan Drive Shaft, Electric Pump Utility System Hydraulic Accumulator (EPUSHA), Aft Pylon Work Platform, Swashplate Bearing, Cargo Hook and 1553 Parts, Cargo On/Off Loading System (COOLS), High-Definition Upgrade to Airborne Full Motion Video (FMV), Aircraft Component Parts-marking, and Ballistic Protection Systems (BPS) to equip new Chinook units forming under the Army's Aviation Transformation Plan.

Justification:
FY 2010 funding procures safety and operation modifications to the CH-47D fleet and trainers to maintain the latest configuration. These changes contribute to the effectiveness of heavy lift capability, maintainability, reliability, and aircraft/crew safety. The major modifications are Engine Filtration System, Engine Improvement, Maintenance Training Devices (MTD), Transformation Sets, Kits and Outfits, M240 Window/Door Gun Mount, Adjustable Pitch Change Link, Crashworthy Seats, Combined Transmission Fan Drive Shaft, Electric Pump Utility System Hydraulic Accumulator (EPUSHA), Aft Pylon Work Platform, Swashplate Bearing, Cargo Hook and 1553 Parts, Cargo On/Off Loading System (COOLS), Aircraft Component Parts-marking, High-Definition Upgrade to Airborne FMV, and Ballistic Protection Systems (BPS) to equip new Chinook units forming under the Army's Aviation Transformation Plan.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 2 / Modification of aircraft	CH-47 CARGO HELICOPTER MODS (MYP) (AA0252)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: RDTE PE 0203744A

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Engine Filtration System						
1-93-01-0807	Operational	43.0	0.3	0.2	0.0	43.5
Engine Improvement						
1-96-01-0828	Operational	2554.6	30.3	18.4	10.3	2613.6
CH-47 D to F Conversion						
0-00-00-0000	Operational	3534.0	621.1	0.0	0.0	4155.1
Maintenance Training Devices (MTD)						
0-00-00-0000		13.2	8.3	9.7	0.0	31.2
Transformation Sets, Kits and Outfits						
0-00-00-0000	Safety	43.2	10.3	11.8	0.0	65.3
M240 Window/Door Gun Mount						
0-00-00-0000	Operational	3.4	5.8	5.1	0.0	14.3
Adjustable Pitch Change Link						
0-00-00-0000		0.0	0.0	3.3	15.8	19.1
Crashworthy Seats						
0-00-00-0000		0.0	0.0	3.2	39.3	42.5
AVCATT						
0-00-00-0000		9.7	0.2	0.0	0.0	9.9
CH-47 MISC Mods $5M or Less						
0-00-00-0000	Operational	26.0	18.9	11.7	33.6	90.2
Cargo On/Off Loading System						
0-00-00-0000		0.0	24.0	9.3	138.4	171.7
Aircraft Component Parts-Marking						
0-00-00-0000		10.1	7.4	3.5	0.0	21.0
Ballistic Protection System (BPS)						
0-00-00-0000		4.3	1.7	4.7	16.5	27.2
High-Definition Upgrade to Airborne FMV						
0-00-00-0000		0.0	0.0	22.0	0.0	22.0

Exhibit P-40M, Budget Item Justification Sheet						Date: May 2009
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft			P-1 Item Nomenclature CH-47 CARGO HELICOPTER MODS (MYP) (AA0252)			
Program Elements for Code B Items:				Code:	Other Related Program Elements: RDTE PE 0203744A	
Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Totals		6241.5	728.3	102.9	253.9	7326.6

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Engine Improvement [MOD 2] 1-96-01-0828

MODELS OF SYSTEM AFFECTED: CH-47D, CH-47F and MH-47 E/G

DESCRIPTION / JUSTIFICATION:

Type of Improvement: Improved Operational Capability, Improved reliability and lower Operational/Support Costs. T55-GA-714A engine improvements will increase reliability, increase engine time on wing and lower operational and support costs. Upgrades include a new Electronic Control Unit (ECU). The ECU will replace the Digital Electronic Control Unit (DECU) currently used which will improve reliability and add enhanced features. The Improved Torque Meter will address torque errors associated with the current system. Torque accuracy of the current system is +/-5.9%, the new system is designed to meet +/-2.0%. This will lower operational and support costs and increase torque kit reliability. DECU/ECU remote readout. This program will allow engine performance check data to be viewed when access to the DECU/ECU display window is not possible. In addition, this program also upgrades the tools and Ground Support Equipment needed for the T55-GA-714A Engine Upgrade Program. P3 Check Valve improvement: The current P3 check valve can crack causing P3 leaks which can lead to uncommanded fuel flow reduction. The new P3 valve resolves this issue and adds a self draining feature. Installation schedules and methods of implementation are not listed because of numerous mods of varied schedules and delivery dates.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

ECU: ECP Delivery September 2007; First Kit Delivery May 2009.
Improved Torque Meter: ECP Delivery 2Q 2009, ECP Approval 3Q 2009, Contract Award for Kits: 1Q 2010, First Kit Delivery 3Q 2010.
T55 DECU Remote Readout: ECP Delivery 3Q 2009, ECP Approval 4Q 2009, Contract Award for Kits: 1Q 2010, First Kit Delivery 3Q 2010.
T55 P3 Check Valve: ECP and Kits Production Contract Award 4Q 2008

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Engine Improvement [MOD 2] 1-96-01-0828

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
New Engines	1250	2495.0							1250	2495.0
T55 Engine Control Unit Prog (ECU)	56	6.1	131	7.9	240	15.5			427	29.5
P3 Check Value	139	2.4	234	2.5					373	4.9
Digital ECU Remote Readout			68	9.4	33	2.0			101	11.4
Improved Torque Meter			260	9.1			426	10.3	686	19.4
Logistics		50.6								50.6
PM Admin Support		0.5		1.4		0.9				2.8
--										
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		2554.6		30.3		18.4		10.3		2613.6

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: CH-47 D to F Conversion [MOD 3] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D/F

DESCRIPTION / JUSTIFICATION:

The CH-47 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 Helicopters mission is to transport troops (including air assault), supplies, weapons, and other cargo in general support operations and is an essential component of the Army Future Force and is vital to the Overseas Contingency Operations and the Homeland Security needs of our nation. This budget line for the CH-47F program procures 465 aircraft out of the Armys Aviation Transformation Chinook total requirement of 513 aircraft. Three MH-47G aircraft were procured previously with unique Special Operations/Congressional funding outside of this budget line item. The total aircraft requirement consists of 61 special operations MH-47Gs (which includes the three unique Special Operations/Congressionally funded helicopters mentioned above) and 262 remanufactured CH-47Fs. The CH-47F program installs a new digital cockpit, incorporates all new airframe components, and modifies the aircraft to reduce vibration. The CH-47F Common Avionics Architecture System (CAAS) digital cockpit will provide future growth potential to meet the Net-Ready Key Performance requirements and include a digital data bus that permits installation of enhanced communications and navigation equipment for improved situational awareness, mission performance, and survivability. 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. All CH-47F funding starting in FY10 was moved to CH-47 SLEP (A05105) and CH-47 New Build (A05008).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

MS III Production Decision - Nov 04

FRP Contract Award - Dec 04

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): CH-47 D to F Conversion [MOD 3] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Recurring Production (Suppl)	28	845.6							28	845.6
Recurring Production (Mods)	125	1674.3	23	545.6					148	2219.9
Recurring Production (New Build)	6	177.5							6	177.5
Recurring (New Build NG)	4	120.0							4	120.0
Omnibus	1	30.0							1	30.0
Other Flyaway		351.0		41.5						392.5
Other Support		189.0		10.2						199.2
Training		128.1		21.0						149.1
Support Equipment		18.5		2.8						21.3
--										
--										
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		3534.0		621.1		0.0		0.0		4155.1

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Maintenance Training Devices (MTD) [MOD 4] 0-00-00-0000

MODELS OF SYSTEM AFFECTED:

DESCRIPTION / JUSTIFICATION:

The Maintenance Training Devices (MTD) to be upgraded include the Electrical Trainer, Hardware Maintenance Trainer, Automatic Flight Control System Classroom Trainer, Single Point Pressure Refueling Systems Trainer, Composite Maintenance Trainer, Landing Gear, Cargo Hook, Hydraulics Maintenance Trainers, and Flight Controls Trainers. Since almost all dynamic components will remain the same between the D and F models, many of these trainers will be required for CH-47F as it transitions.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 12 months

Contract Dates:	FY 2010 - Jan 10	FY 2011 - Dec 11	FY 2012 - Jan 12
Delivery Dates:	FY 2010 - Jan 11	FY 2011 - Jan 12	FY 2012 - Jan 13

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Maintenance Training Devices (MTD) [MOD 4] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
MTD Upgrades	2	5.4	4	7.2	5	8.2			11	20.8
Engineering Support		7.4		0.9		1.2				9.5
Logistics		0.4		0.2		0.3				0.9
Other										
Interim Contractor Support										
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		13.2		8.3		9.7		0.0		31.2

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Transformation Sets, Kits and Outfits [MOD 5] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D/F CHINOOK

DESCRIPTION / JUSTIFICATION:

Type of Improvements - Improved Operational and Safety Capability. Sets, Kits and Outfits. This funding procures initial start-up tooling and equipment to facilitate unit reorganizations as part of the Army Aviation Transformation. Procurement of these kits are through requisition in the supply system.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Transformation Sets, Kits and Outfits [MOD 5] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
SKOs	17	42.8	4	10.0	4	11.8			25	64.6
PM Support		0.4		0.3						0.7
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		43.2		10.3		11.8		0.0		65.3

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: M240 Window/Door Gun Mount [MOD 6] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D and F

DESCRIPTION / JUSTIFICATION:

Type of Improvement. The M240 Window/Door Mount will replace the legacy gun mount to improve operational capability. The current M240H machine gun is adapted to the legacy M24 mount by means of a mount and pintle assembly with a 200 round capacity ammunition can and a collection system. The M240H machine gun Operational Requirement Document (ORD) requires the system to be stowable and increase the number of rounds available for firing without the need to change ammunition cans. The current M24 gun mount will not support a 400 ammunition can nor provide the needed egressibility/stowability requirement without modification. These are user installed.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Contract Award - Sep 09

First Production Hardware Delivery - Mar 10

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 11 months PRODUCTION LEADTIME: 18 months

Contract Dates: FY 2010 - Oct 09 FY 2011 - Oct 10 FY 2012 -

Delivery Dates: FY 2010 - Mar 11 FY 2011 - Mar 12 FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): M240 Window/Door Gun Mount [MOD 6] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Door Gunner Mount B Kits	70	3.4	80	5.8	390	4.9			540	14.1
PM Support						0.2				0.2
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		3.4		5.8		5.1		0.0		14.3

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Cargo On/Off Loading System [MOD 11] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D, F & G

DESCRIPTION / JUSTIFICATION:

The Cargo On/Off Loading System will replace the current system which is cumbersome and not flexible enough to meet mission diversity currently faced in OEF and OIF. The system would be integrated into the aircraft. This would allow for units to perform cargo missions and pax missions without stopping to reconfigure the helicopter. The current system is a bolt on system that is maintenance intensive to install and remove. The cargo handling floor would allow a cargo handling system to be installed on the aircraft all the time allowing for in-flight mission changes as needed and reducing mission prep time while eliminating man-hours needed to install.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

NRE Contract Award Sep 08

Production Contract Award Jun 09

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs							15	15	15	5	5	5	5	2	3	3	3	7	7	8	8
Outputs								15	15	15	5	5	5	5	2	3	3	3	7	7	8

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	7	7	7	8	10	10	10	11	15	15	15	15	15	15	15	15	200	496
Outputs	8	7	7	7	8	10	10	10	11	15	15	15	15	15	15	15	215	496

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 5 months PRODUCTION LEADTIME: 6 months

Contract Dates: FY 2010 - Mar 10 FY 2011 - Mar 11 FY 2012 -

Delivery Dates: FY 2010 - Sep 10 FY 2011 - Sep 11 FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Cargo On/Off Loading System [MOD 11] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Cargo Handling Floor System			106	24.0	20	5.7	260	117.3	386	147.0
PM Support						0.4				0.4
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits					45	3.2			45	3.2
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits							320	21.1	320	21.1
Total Installment	0	0.0	0	0.0	45	3.2	320	21.1	365	24.3
Total Procurement Cost		0.0		24.0		9.3		138.4		171.7

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Aircraft Component Parts-Marking [MOD 12] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D Chinook, MH-47E, CH-47F

DESCRIPTION / JUSTIFICATION:

The CH-47 Cargo program will adopt an automatic information system (AIS). This will include automatic identification technology (AIT) which will provide error free documentation of aircraft and components across the fleet. This project will locate mobile partsmarking facilities to allow the Cargo Helicopter PMO to effectively manage the CH-47 fleet.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Aircraft Component Parts-Marking [MOD 12] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Component Markings		10.1		7.4		3.5				21.0
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		10.1		7.4		3.5		0.0		21.0

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: High-Definition Upgrade to Airborne FMV [MOD 14] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D & CH-47F

DESCRIPTION / JUSTIFICATION:

Full-Motion Video (FMV) contributes to the development of situational awareness either locally or at some distant node. FMV provides the situational awareness that enables the human perception of the elements of the operational environment in the context of forces, space and time, the comprehension of their meaning, and the projection of their status in the near future. Motion Imagery is a likeness or representation of any natural or man-made feature or related object or activity utilizing sequential or continuous streams of images that enable observation of the dynamic behavior of objects within the scene. Delivery schedule varies.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): High-Definition Upgrade to Airborne FMV [MOD 14] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Airborne FMV					44	20.4			44	20.4
Logistics						0.7				0.7
PM Admin Support						0.9				0.9
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		22.0		0.0		22.0

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	UTILITY/CARGO AIRPLANE MODS (AA0270)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	125.2	20.2	16.5	39.5		201.3
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	125.2	20.2	16.5	39.5		201.3
Initial Spares						
Total Proc Cost	125.2	20.2	16.5	39.5		201.3
Flyaway U/C						
Weapon System Proc U/C						

Description:
The budget line updates and modernizes Army fixed wing aircraft such as C-31A, UV-18, C-12, RC-12, UC-35, C-23, C-26, and EO-5 aircraft communication, navigation, surveillance, engines and Department of Defense (DoD) mandated safety equipment to current and evolving international standards. In addition, it provides for the procurement of commercial, military, and test equipment and other support equipment. These modifications ensure continued worldwide deployment capability and safe operations.

Justification:
FY 10 Base Funding in the amount of $39.547 million will procure communications, navigation, and surveillance equipment that supports current and future air traffic management requirements. In addition, equipment included in the modifications will enhance the safety of passengers and crew. The upgrade will also permit the Army fixed wing aircraft to operate in compliance with other existing and emerging regulations. As requirements for new avionics equipment continue, aircraft delays and airspace exclusion 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.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	UTILITY/CARGO AIRPLANE MODS (AA0270)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Avionics System Cockpit Upgrade						
1-96-01-0612	UNCLASSIFIED	145.3	16.5	39.5	0.0	201.3
Totals		145.3	16.5	39.5	0.0	201.3

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Avionics System Cockpit Upgrade [MOD 1] 1-96-01-0612

MODELS OF SYSTEM AFFECTED: All series Army fixed wing aircraft:C-31, 12, 23, 26, 37, 20, 208, UV-18, RC-12, UC-35, EO-5,CE-182

DESCRIPTION / JUSTIFICATION:

This effort will modernize Fixed Wing aircraft communications, navigation, surveillance (CNS), safety equipment, and engines to current and future international requirements, enhance fleet standardization, allow worldwide deployments and continued safe operations in the 21st Century. As currently equipped, the aircraft will not be suitable for worldwide deployment nor capable of using modern navigation and air traffic control facilities. The following equipment is included in this upgrade: Flight Management System, Displays, Terrain Awareness Warning System, 8.33kHz radios, APX 119, Mode S/5 upgrade, Satellite Communications (SATCOM), Traffic Alert Collision Avoidance System II, Flight Data Recorder, Cockpit Voice Recorder, Aux Fuel System, High Frequency Radios, Weather Radars, Data Link Capability, Communications Management Unit, and other commercial and military CNS equipment. The preceding components reflect critically needed items. However, air traffic management and DOD navigation warfare requirements are evolving and will require additional systems in the near future. The kit quantities reflected on the next page represent a wide variety of avionics kits with different mixes each fiscal year. Additionally, kit configurations vary based on the aircraft that they will be installed on. Consequently, kit and installation unit cost will vary significantly from year to year.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Development is not required for Avionics System Cockpit Upgrade.

Installation Schedule

	Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	133		2	2		2	4	5	5												
Outputs	129	4		2	2		2	3	5	6											

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		153
Outputs																		153

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 6 months

Contract Dates: FY 2010 - Dec 09 FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - May 10 FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Avionics System Cockpit Upgrade [MOD 1] 1-96-01-0612

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity										
Installation Kits	133	102.0	4	11.5	16	27.6			153	141.1
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data		0.8		0.1		0.1				1.0
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits	133	42.5							133	42.5
FY 2009 -- Kits			4	4.9					4	4.9
FY 2010 Equip -- Kits					16	11.8			16	11.8
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip-Kits										
Total Installment	133	42.5	4	4.9	16	11.8	0	0.0	153	59.2
Total Procurement Cost		145.3		16.5		39.5		0.0		201.3

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	AIRCRAFT LONG RANGE MODS (AA0560)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	18.0	0.6	0.6	0.8		20.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	18.0	0.6	0.6	0.8		20.0
Initial Spares						
Total Proc Cost	18.0	0.6	0.6	0.8		20.0
Flyaway U/C						
Weapon System Proc U/C						

Description:
The budget line updates and modernizes the C-20F, C-20E, C-37A and C-37B fixed wing aircraft, including communications and navigation equipment, enhancing the aircraft's capability for worldwide deployments. These aircraft support the Army's executive flight detachment at the three star and above level with required communications equipment.

Justification:
FY 10 Base Funding in the amount of $.823 million will procure new C-20/C-37 Communication, Navigation, and Surveillance equipment as well as interior/exterior aircraft upgrades needed to support the crew in meeting the demands of the future air navigation system and the customer. Funds will be used to meet evolving avionics requirements resulting from a worldwide transition to a new air traffic management/control structure.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	UTILITY HELICOPTER MODS (AA0480)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	877.6	65.9	27.0	69.2	336.7	1376.3
Less PY Adv Proc	13.5					13.5
Plus CY Adv Proc	13.5					13.5
Net Proc P1	877.6	65.9	27.0	69.2	336.7	1376.3
Initial Spares						
Total Proc Cost	877.6	65.9	27.0	69.2	336.7	1376.3
Flyaway U/C						
Weapon System Proc U/C						

Description:
Utility Helicopter Mods include modifications to the UH-60 BLACKHAWK helicopter and the Light Utility Helicopter (UH-72A LAKOTA). The UH-60 BLACKHAWK helicopter is the Army's utility helicopter in the future force. The UH-72A LAKOTA will provide general aviation support for CONUS based Table of Distribution and Allowance (TDA) and Table of Organization and Equipment (TOE) aviation units in the active and reserve components.

Justification:
FY 10 Base funding in the amount of $67 million will procure Crashworthy External Fuel Systems (CEFS)/ Conformal Auxilliary Fuel Systems (CAFS) and UH-60 A to L Conversions. CEFS/CAFS is a safety modification that reduces the risk of a post-crash fire. 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/upgrade program.

FY 10 OCO funding in the amount of $3 million will procure 72 ea Berthing & Positioning Systems (BAPS) kits.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	UTILITY HELICOPTER MODS (AA0492)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	877.6	65.9	27.0	69.2	336.7	1376.3
Less PY Adv Proc	13.5					13.5
Plus CY Adv Proc	13.5					13.5
Net Proc P1	877.6	65.9	27.0	69.2	336.7	1376.3
Initial Spares						
Total Proc Cost	877.6	65.9	27.0	69.2	336.7	1376.3
Flyaway U/C						
Weapon System Proc U/C						

Description:
Utility Helicopter Mods include modifications to the UH-60 BLACKHAWK helicopter and the Light Utility Helicopter (UH-72A LAKOTA). 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, air cavalry, troop and equipment transport, command & control, and medical evacuations (MEDEVAC) in active and reserve component theater, corps, division and Table of Distribution and Allowances (TDA) units. The UH-60 is joint force capable, provides 24 hour/day support including operations at night 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 fleet consists of the UH-60A, first fielded in FY 1978, the newer UH-60L which was fielded in FY 1989 and the UH-60M which began low rate initial production in FY 2005 and full rate production FY 2007. The oldest UH-60As are now over 30 years old, and the average age of the UH-60A fleet is 23 years. The UH-72A LAKOTA will provide general aviation support for CONUS based TDA and Table of Organization and Equipment (TOE) aviation units in the active and reserve components. The UH-72A platform provides the flexibility to respond to Homeland Security (HLS) requirements, conducts civil search and rescue operations, supports damage assessment, supports test and training centers, performs generating force missions, augments the HH-60 MEDEVAC aircraft and provides support to the Continental United States (CONUS) counterdrug operations. 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, advance warning/detection of external threats to include threats to our borders, augmentation of air ambulance capabilities and limited command & control operations in the conduct of HLS.

Justification:
FY 10 Base funding in the amount of $67 million will procure Crashworthy External Fuel Systems (CEFS)/ Conformal Auxilliary Fuel Systems (CAFS) and UH-60 A to L Conversions. CEFS/CAFS is a safety modification that reduces the risk of a post-crash fire. 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/upgrade program.

FY 10 OCO funding in the amount of $3 million will procure 72 ea Berthing & Positioning Systems (BAPS) kits.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	UTILITY HELICOPTER MODS (AA0492)		
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Crashworthy External Fuel System (CEFS)						
OSIP	Safety	131.0	7.7	9.7	51.7	200.1
UH-60A to UH-60L Conversion						
OSIP	Operational	9.9	0.0	57.0	285.0	351.9
Brigade Sets						
OSIP	Operational	32.4	3.1	0.0	0.0	35.5
UH-60A Rewiring						
OSIP	Operational	0.0	5.0	0.0	0.0	5.0
UH-60 Improved Communications (ARC 220)						
OSIP	Operational	0.0	1.6	0.0	0.0	1.6
HH-60A to HH-60L Upgrade						
OSIP	Operational	0.0	8.0	0.0	0.0	8.0
UH-60 MEDEVAC Thermal Imaging Upgrades						
OSIP	Operational	0.0	1.6	0.0	0.0	1.6
Berthing & Positioning System (BATS)						
OSIP	Operational	0.0	0.0	2.5	0.0	2.5
Totals		173.3	26.9	69.2	336.7	606.1

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Crashworthy External Fuel System (CEFS) [MOD 1] OSIP

MODELS OF SYSTEM AFFECTED: UH-60A/L/Q/M

DESCRIPTION / JUSTIFICATION:

The Crashworthy External Fuel System (CEFS)/Conformal Auxilliary Fuel System (CAFS) is a safety modification that reduces the risk of a post-crash fire. The existing external fuel tanks were designed for self-deployment missions and do not meet current battlefield doctrine that requires these helicopters to fly long-range missions into hostile environments. CEFS/CAFS is critical to the safety and survivability of UH-60 helicopters. The Army Aviation Safety Center assessed the risk associated with continued routine flight operations using the current non-crashworthy tanks as high.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Development is complete.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	693	10	10	10	10	9	9	9	8	16	16	16	16	16	16	16	17	16	16	16	17
Outputs	672	21	10	10	10	10	9	9	9	8	16	16	16	16	16	16	16	17	16	16	16

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	16	16	16	17	32	32	32	34										1157
Outputs	17	16	16	16	17	32	32	32	34									1157

METHOD OF IMPLEMENTATION: Contract Teams ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 9 months

Contract Dates: FY 2010 - Nov 09 FY 2011 - Nov 10 FY 2012 -

Delivery Dates: FY 2010 - Aug 10 FY 2011 - Aug 11 FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Crashworthy External Fuel System (CEFS) [MOD 1] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
A-Kits (A/L)	733	40.6	35	2.4	64	4.4	325	23.1	1157	70.5
A-Kits (GFE to Production)	32	2.7							32	2.7
A-Kits (GFE to SAR Acft)	10	0.6							10	0.6
B-kits	398	53.8	20	3.0	19	2.9	95	14.9	532	74.6
Support Equipment/Other		27.9		1.9		2.0		9.2		41.0
Installation of A-Kits										
FY2006 & Prior Equip -- 349 Kits	609	4.5							609	4.5
FY2007 Equip -- 84 Kits	84	0.9							84	0.9
FY2008 Equip --40 Kits			40	0.4					40	0.4
FY2009 Equip-- 35 Kits					35	0.4			35	0.4
FY2010 Equip -- 72 Kits										
FY2011 Equip -- 70 Kits										
FY2012 Equip-- 70 Kits										
FY2013 Equip-- 70 Kits										
FY2014 Equip-- 70 Kits										
FY2015 Equip-- 70 Kits										
TC Equip							389	4.5	389	4.5
Total Installment	693	5.4	40	0.4	35	0.4	389	4.5	1157	10.7
Total Procurement Cost		131.0		7.7		9.7		51.7		200.1

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: UH-60A to UH-60L Conversion [MOD 2] OSIP

MODELS OF SYSTEM AFFECTED: UH-60A

DESCRIPTION / JUSTIFICATION:

Expands the current UH-60 A to A recapitalization/rebuild program to a UH-60 A to L recapitalization/upgrade program. Leverages ongoing UH-60 A to A recapitalization to further bridge the gap to UH-60M fielding and further reduces the overall O&S cost and logistics footprint of the fleet. Also provides an enhanced warfighting capability through aircraft performance improvements, to include installation of the T700-701D engine, improved durability gearbox, upgraded flight controls, and 9,000 lb cargo hook. Effort will also be leveraged to define future UH-60 L to L sustainment.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs						9	9	10	10	9	9	10	10	9	9	10	10	9	9	10	10
Outputs								9	9	10	10	9	9	10	10	9	9	10	10	9	9

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	9	9	10	10	9	9	10	10										228
Outputs	10	10	9	9	10	10	9	9	10	10								228

METHOD OF IMPLEMENTATION: Conversion at Depot ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): UH-60A to UH-60L Conversion [MOD 2] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement		9.9			38	57.0	190	285.0	228	351.9
Kit Quantity										
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		9.9		0.0		57.0		285.0		351.9

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: UH-60A Rewiring [MOD 4] OSIP

MODELS OF SYSTEM AFFECTED: UH-60A

DESCRIPTION / JUSTIFICATION:
Congressional add for NGB. Funds passed to NGB for execution.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): UH-60A Rewiring [MOD 4] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement				5.0						5.0
Kit Quantity										
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		5.0		0.0		0.0		5.0

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: HH-60A to HH-60L Upgrade [MOD 6] OSIP

MODELS OF SYSTEM AFFECTED: HH-60A

DESCRIPTION / JUSTIFICATION:

Provides funding for Non-Recurring Engineering analysis to define airframe/component configuration changes required to Recap/upgrade HH-60A to HH-60L aircraft. Document changes via Engineering Change Proposal(ECP), define draft work instruction/installation procedures through identification of existing Modification Work Orders (MWOs) and development of new Special Service Instructions (SSIs) as required.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): HH-60A to HH-60L Upgrade [MOD 6] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement				8.0						8.0
Kit Quantity										
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		8.0		0.0		0.0		8.0

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	KIOWA WARRIOR (AZ2200)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	3513.2	88.8	117.1	235.1		3954.2
Less PY Adv Proc	223.3					223.3
Plus CY Adv Proc	223.3					223.3
Net Proc P1	3513.2	88.8	117.1	235.1		3954.2
Initial Spares						
Total Proc Cost	3513.2	88.8	117.1	235.1		3954.2
Flyaway U/C						
Weapon System Proc U/C						

Description:
The OH-58D Kiowa Warrior is a two-seat, single-engine, observation, scout/attack helicopter with four main rotor blades. It utilizes a thermal-imaging system and a laser rangefinder/designator in a mast-mounted sight situated above the main rotor system. The aircraft is equipped with a variety of weapon systems including: HELLFIRE, 2.75-inch rockets, and a .50-caliber machine gun. The aircraft operates autonomously at standoff ranges providing armed reconnaissance, command and control, and target acquisition/designation for Apache helicopters and other airborne weapons platforms in day, night, and adverse-weather conditions. The Active Army and the National Guard fly Kiowa Warriors.

To be both safe and operationally compatible with the digitized battlefield, an ongoing Safety Enhancement Program (SEP) incorporates upgraded engines and engine barrier filters, crashworthy crew seats, cockpit airbags, enhanced digitization capabilities, and improved weapons interface. The SEP reduces pilot workload during emergency maneuvers and significantly improves the crashworthiness of the aircraft thus enhancing crew survivability. Partial SEP improvements had previously been incorporated into the later lots of Bell Helicopter's Kiowa Warrior remanufacture/retrofit lines; those aircraft will receive missing portions of the SEP modifications through field retrofit activities. Other fielded Kiowa Warrior aircraft are being SEP modified via a combination of efforts on the contractor's SEP modification line and through field retrofit.

The SEP Weight Reduction initiatives will increase safety by reducing the aircraft weight thus improving operational and autorotational characteristics. The Program will also increase system reliability and lower support costs. Efforts include removing obsolete and extraneous hardware, repainting after removing excess layers of paint, replacing the current bomb rack, replacing armor panels with lighter-weight, better protective ones, updating the multifunction displays (MFDs) with lightweight MFDs, providing a lighter weight and better positioned common transponder and video data transfer system.

The Life Support 2020 program will address additional safety and obsolescence issues to allow the aircraft to safely serve as the Army's night, armed-reconnaissance, aviation platform until replaced/retired. Efforts include upgrading to CDS 5, adding AN/ARC231 SATCOM radios, color MFDs, third MFD, Dual Channel FADEC, improved .50 cal gun, replace mast mounted site with a nose-mounted common sensor, and other safety upgrades.

To replace aircraft lost during Overseas Contingency Operations and to return the fleet size to the quantity required for full readiness levels, Kiowa Scout (OH-58A) model airframes must be modified into new Kiowa Warriors (OH-58D). These new Kiowa Warriors will be delivered in the planned configuration; including meeting all SEP, Weight Reduction and Life Support 2020

requirements. ISR Task Force added funds for Video from Unmanned Aircraft Systems Interoperability Teaming - Level 2 (VUIT -2)

Justification:
FY 2010 Base Funding in the amount of $141 Million will procure the continuation of SEP, Weight Reduction, and Life Support 2020 efforts. It procures modifications which allow the Kiowa Warrior to safely serve as the Army's, armed-reconnaissance, aviation platform until replaced/retired.

FY 2010 OCO Funding in the amount of $94 Million will procure VUIT-2 and the modification of OH-58A models to OH-58D models in the planned configuration including all SEP, Weight Reduction and Life Support 2020 modifications

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	KIOWA WARRIOR (AZ2200)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Safety Enhancement Program (SEP)						
2-97-01-0115	Safety	380.6	60.5	42.4	0.0	483.5
Safety Enhancement Program - Weight Reduction						
2-02-01-0116	Safety	59.8	9.8	1.8	0.0	71.4
Life Support 2020						
2-08-01-0117	Life Extension	15.4	46.8	96.6	0.0	158.8
OH-58A to OH-58D Conversion						
2-10-01-0118	AC Modification	0.0	0.0	94.3	0.0	94.3
Totals		455.8	117.1	235.1	0.0	808.0

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Safety Enhancement Program (SEP) [MOD 1] 2-97-01-0115

MODELS OF SYSTEM AFFECTED: OH-58D Kiowa Warrior

DESCRIPTION / JUSTIFICATION:

The Safety Enhancement Program (SEP) addresses safety issues and enables Kiowa Warrior performance as a digitized platform capable of integrated combat engagement via the Tactical Internet. R3 Engines with Full Authority Digital Electronic Control increase reliability, control responsiveness, and overcome a rotor droop anomaly by providing faster response time to power demands. Engine barrier filters improve engine reliability by reducing damage from sand/dust ingestion and by increasing engine meantime between overhaul. The Improved Master Controller Processor Unit (IMCPU) increases memory and throughput and reduces both aircraft empty weight and Operating and Support (O&S) costs. The IMCPU accommodates upgraded software required for digital communications and provides the Variable Message Format (VMF). Energy attenuating seats provide crew safety in case of vertical and horizontal impacts. Cockpit airbags increase crew protection. Of the current fleet of 341 Kiowa Warriors, all (including nine Category B trainers) will receive SEP modifications; 264 are being accomplished on the contractor's modification line and 77 additional aircraft had been partially equipped in prior remanufacture/retrofit lines. Thirty-one of the SEP-modified aircraft have been lost to attrition. Equipment not installed at the contractor's facility will be applied via field retrofit. In order to complete the SEP, aircraft will be modified at the contractor's facility plus some will have seats, airbags, and engine barrier filters installed in the field. The full fleet of 341 aircraft will be equipped with engine barrier filters, seats, and airbags.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Multiple installations will be done on individual aircraft. The majority of aircraft will be block-modified on the Bell Helicopter Textron, Inc. line via annual contractual orders and will be delivered over a 12-month period. Some aircraft will receive the complete complement of modifications at that facility. Others will receive portions of the modification efforts via field retrofit. Hardware installation dollars fund a variety of field retrofit modifications. The block-modification installations on the contractor's modification line are not separately priced and therefore the dollars are embedded in the Recurring line for each year.

Installation Schedule

	Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Kr line & fld retrofit ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Safety Enhancement Program (SEP) [MOD 1] 2-97-01-0115

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Aircraft Modified - Bell Helicopter	312								312	
Nonrecurring		40.7		5.5		8.8				55.0
Recurring - Bell Helicopter		147.2		25.7		31.0				203.9
Government-Furnished Equipment		128.8		25.8		0.4				155.0
Engineering Change Orders		0.2		1.2		0.4				1.8
Aircraft Preparation		16.3								16.3
Fielding		5.3		1.0		0.7				7.0
Training/Training Devices		9.0								9.0
Other		22.5		0.1		0.5				23.1
Technical Support		5.5		0.5		0.6				6.6
Installation of Hardware - Field										
FY 2002 & Prior Equip -- Kits		0.8								0.8
FY 2003 -- Kits		0.6								0.6
FY 2004 Equip -- Kits		0.7								0.7
FY 2005 Equip -- Kits		0.6								0.6
FY 2006 Equip -- Kits		0.5								0.5
FY 2007 Equip -- Kits		0.9								0.9
FY 2008 Equip -- Kits		1.0								1.0
FY 2009 Equip -- Kits				0.7						0.7
FY 2010 Equip -- Kits										
Total Installment	0	5.1	0	0.7	0	0.0	0	0.0	0	5.8
Total Procurement Cost		380.6		60.5		42.4		0.0		483.5

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Safety Enhancement Program - Weight Reduction [MOD 2] 2-02-01-0116

MODELS OF SYSTEM AFFECTED: OH-58D Kiowa Warrior

DESCRIPTION / JUSTIFICATION:

The Safety Enhancement Weight Reduction Program addresses the safety of the Kiowa Warrior and its crew. The safety of the crew depends to a large extent on the maneuverability and performance of the aircraft. Due to its overweight condition, the Kiowa Warrior has an existing operational safety deficiency for autorotational capability. The Weight Reduction modifications will reduce the aircraft weight thus improving the margin of safety, correcting aft center of gravity and providing increased power margin. Efforts include the following initiatives: bomb racks, lightweight multi-function displays, a video data transfer system, a lighter weight and better positioned common transponder and a better protective set of armor panels. Additionally, extraneous hardware and paint layers will be removed. Of the current fleet of 341 aircraft, various lesser quantities are planned for weight reduction modifications due to the projected retirement schedule of the fleet. These modifications will be applied primarily to Kiowa Warriors in the Control Display Symbology, version 4 (CDS4) configuration.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Aircraft will be equipped/modified via field retrofits.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Field Retrofit ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Safety Enhancement Program - Weight Reduction [MOD 2] 2-02-01-0116

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity										
Nonrecurring		1.2								1.2
Recurring Labor		2.9								2.9
Hardware		45.6		7.5						53.1
Data/Pubs/Manuals		1.0								1.0
Support Equipment										
Other		7.4		1.5		1.0				9.9
Fielding										
Training/Training Devices										
Installation of Hardware (Retrofit)										
FY 2003 & Prior Equip -- Kits										
FY 2004 Equip -- Kits										
FY 2005 Equip -- Kits										
FY 2006 Equip -- Kits		0.1								0.1
FY 2007 Equip -- Kits		0.6								0.6
FY 2008 Equip -- Kits		1.0								1.0
FY 2009 Equip -- Kits				0.8						0.8
FY 2010 Equip -- Kits						0.8				0.8
FY2011 Equip -- Kits										
TC Eqiup -- Kits										
Total Installment	0	1.7	0	0.8	0	0.8	0	0.0	0	3.3
Total Procurement Cost		59.8		9.8		1.8		0.0		71.4

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Life Support 2020 [MOD 3] 2-08-01-0117

MODELS OF SYSTEM AFFECTED: OH-58D Kiowa Warrior

DESCRIPTION / JUSTIFICATION:

The Life Support 2020 program addresses issues relating to extending the useful life of the Kiowa Warrior as the Army's armed reconnaissance, aviation platform until replaced/retired. Efforts include upgrading to Control Display System version 5 (CDS5), installing AN/ARC231 SATCOM radios, Color multi-function displays, 3rd multi-function display, Dual Channel FADEC, Common Missile Warning System (CMWS), improved .50 cal gun, replacing the Mast Mounted Site (MMS) system with a nose-mounted common sensor, and retrofitting the fleet with light weight digital launchers and universal weapons pylon. The current fleet of 341 aircraft is planned to be modified. Trainers will be upgraded to maintain concurrency.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Aircraft will be block modified at RESET locations.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs												9	9	24	24	24	24	24	24	24	24
Outputs												3	9	14	24	24	24	24	24	24	24

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	24	24	24	24	12	12	11											341
Outputs	24	24	24	24	20	12	12	7										341

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Life Support 2020 [MOD 3] 2-08-01-0117

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity										
Hardware		14.3		38.7		90.4				143.4
Training/Devices		0.3		6.2		5.1				11.6
Tech Pubs				1.0		1.0				2.0
Support Equipment										
Other						0.1				0.1
Fielding		0.8		0.9						1.7
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		15.4		46.8		96.6		0.0		158.8

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: OH-58A to OH-58D Conversion [MOD 4] 2-10-01-0118

MODELS OF SYSTEM AFFECTED: OH-58D Kiowa Warrior

DESCRIPTION / JUSTIFICATION:

Fy 2010 OCO funding will procure modifications of OH-58A airframes into OH-58D aircraft to replace aircraft lost during Overseas Contingency Operations. OH-58A model airframes will be modified at Bell Helicopter Textron Industries into OH-58D airframes and Corpus Christi Army Depot (CCAD) will incorporate all equipment and modifications to the current planned configuration including all SEP, Weight Reduction and Life Support 2020 modifications. ISR Task force added funds for Video from Unmanned Aircraft Systems Interoperability Teaming - Level 2 (VUIT-2).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Airframes will be modified at Bell and the rest of the modifications will be at CCAD.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs							2	2	2												
Outputs													2	2	2						

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		6
Outputs																		6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 4 months PRODUCTION LEADTIME: 18 months

Contract Dates: FY 2010 - Feb 2010 FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - Aug 2011 FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): OH-58A to OH-58D Conversion [MOD 4] 2-10-01-0118

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
AC Modification Quantity					6				6	
BHTI Airframe Mod						41.9				41.9
Government Furnished Equipment						18.5				18.5
CCAD Labor						6.1				6.1
Program Support - Govt						3.7				3.7
VUIT-2						24.1				24.1
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		94.3		0.0		94.3

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 2 / Modification of aircraft	AIRBORNE AVIONICS (AA0700)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: PE 0604201A, SSN AA0704

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	943.1	169.1	174.5	241.3		1528.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	943.1	169.1	174.5	241.3		1528.0
Initial Spares	74.0	3.3	4.8	7.1		89.3
Total Proc Cost	1017.1	172.4	179.3	248.4		1617.2
Flyaway U/C						
Weapon System Proc U/C						

Description:
The Airborne Avionics budget line includes the Global Positioning System (GPS), the Aviation Mission Planning System (AMPS), the Improved Data Modem (IDM), Aviation Tactical Communications Systems (ATCS), and Military Flight Operations Quality Assurance (MFOQA). The GPS, IDM, AMPS, and ATCS are four of the aviation systems required to support the digitization of the battlefield.

The GPS provides Army Aviation with extremely accurate and secure navigation and timing, assists in situational awareness, and aids in prevention of fratricide. GPS is installed in two configurations based upon mission profile, operational requirements, and avionics architecture of the aircraft. The Doppler GPS Navigation System (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. A Pre-Planned Product Improvement (P3I) to the DGNS and EGI began in FY01 to integrate a Selective Availability Anti-Spoofing Module (SAASM) and Instrument Flight Rule (IFR) navigation capability. The P3I DGNS (AN/ASN-128D) 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, Longbow Apache (AH-64D), and Special Operations Aircraft (SOA). M-code is a new GPS security architecture and signal in space, mandated to support navigation warfare (NAVWAR) requirements in accordance with the Assistant Secretary of Defense (ASD) Memorandum Subject: Global Positioning System User Equipment Development and Procurement Policy, dated 7 August 2006. In order to minimize aircraft integration and testing requirements, introduction of M-Code capable GPS receivers is planned to coincide with the JPALS program.

The AMPS is a mission planning/battle synchronization tool that automates aviation mission planning tasks, including tactical command and control, mission planning, and flight planning. It interfaces with Army Battle Command Systems (ABCS) and associated networks which furnish the aviation commander with continuous situational awareness, allowing the commander to rapidly adjust mission plans. AMPS generates mission data in either hard copy or electronic formats. The electronic formats are loaded onto the aircraft platforms, initializing the communication, navigation, situational awareness, and weapons systems on modernized fleet aircraft including the AH-64A, AH-64D, CH-47D/F, Kiowa Warrior (OH-58D), UH-60A/L/M/Q, HH-60L/M, and Unmanned Aerial Systems (UAS). The AMPS program includes management of the Commander's Aviation Risk Tool (CART) and the Centralized Automated Flight Record 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 6 channel transmit/receive terminal, the IDM provides radio connectivity to the ARC-201D/210/220/231, ARC-186, ARC-164, and the Blue Force Tracker's (BFT) MT-2011

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, OH-58D, CH-47F, and UH/HH-60M.

The ATCS is an Army Aviation Program to procure Alternative Communications (Alt Comms) A&B Kits to meet minimum acceptable near term communication requirements due to delays in the Joint Tactical Radio System (JTRS) program. Alt Comms 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.

Military Flight Operations Quality Assurance (MFOQA) is the systematic collection and automated analysis of operational data from aircraft for use in continuous improvement of combat readiness in the areas of operation, training, maintenance and safety. MFOQA builds on a commercial aviation initiative which uses operational trend analyses of flight data to better identify hazards, increase operational efficiency and provide more effective risk management.

Justification:
FY10 base funding in the amount of $28.8 million will procure DGNS AN/ASN-128D B-Kits, A-Kits, and installations for the UH-60A/L and CH-47D. The ASN-128D is required to meet directed SAASM security requirements and to provide a box-level IFR navigation capability. DGNS, Global Air Traffic Management (GATM) and JPALS programs are closely linked and have joint perspective/participation.

FY10 base funding in the amount of $18.6 million will procure AMPS upgrades to system software to support aviation fleet modernization programs and implementation of CAFRS Phase II. AMPS hardware (B-Kits) is being replaced on a 5-year cycle to maintain pace with technology. The start of the next cycle is in FY11.

FY10 base funding in the amount of $1.9 million will procure EGI programmatic, engineering and logistics support for aircraft integration efforts. GPS P3I, GATM, and JPALS programs are closely linked and have joint perspective/participation.

FY10 base funding in the amount of $73.2 million will procure IDM Redesign 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, CH-47F, HH/UH-60M helicopters and OH-58D Safety Enhancement Program. FY10 funds are also required to complete IDM Software Block 3 and begin Software Block 4 modifications and integrate those modifications into AH-64D, CH-47F, OH-58D, and UH-60M. 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.

FY10 base funding in the amount of $104.6 million will procure Alt Comms A-Kits and B-Kits for AH-64D, CH-47F, UH/HH-60M, LUH, Army Airborne Command and Control (A2C2S), UAS, and SOA. An Alt Comms suite of aviation radios comprises a standard configuration of non-developmental and commercially available off-the-shelf equipment. The standard configuration consists of 2 ARC-201D radios, an Improved Frequency Modulation (IFM) Power Amplifier (two IFM's for CH-47F), and a suite of ARC-231 sets. Additionally, FY10 funds modifications to crypto and satellite communications through ECPs.

FY10 base funding in the amount of $14.2 million will procure and install MFOQA Digital Source Collectors for Army rotary wing aircraft. This program is intended to provide users at all levels of the Army with the required information to conduct analyses and make decisions in the areas of operations, training, maintenance, and safety to ensure efficient fleet management, to reduce operations and support (O&S) costs and to improve operational readiness.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	AIRBORNE AVIONICS (AA0700)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: PE 0604201A, SSN AA0704

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
DGNS (AN/ASN-128B) P3I						
OSIP	Oper/Log	79.9	23.8	28.8	1.5	134.0
Aviation Mission Planning System (AMPS)						
1-95-01-2185	Oper/Log	198.7	21.1	18.6	0.0	238.4
Embedded GPS Inertial Navigation System (EGI) P3I						
OSIP	Legislative	26.5	1.7	1.9	0.0	30.1
Improved Data Modem (IDM)						
OSIP	Oper/Log	433.1	48.8	73.2	0.0	555.1
Aviation Tactical Communication Systems						
OSIP	Operational	159.0	64.3	104.6	0.0	327.9
Mil Flight Operation Quality Assurance (MFOQA)						
OSIP		16.9	14.8	14.2	0.0	45.9
Totals		914.1	174.5	241.3	1.5	1331.4

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: DGNS (AN/ASN-128B) P3I [MOD 1] OSIP

MODELS OF SYSTEM AFFECTED: UH-60A/L, CH-47D, HH-60A/L

DESCRIPTION / JUSTIFICATION:

The Doppler GPS Navigation System (DGNS) is one of the aviation systems required for Digitization of the Battlefield. The ASN-128D is required to meet directed SAASM security requirements and to provide a box-level IFR navigation capability. A P3I for the current ASN-128B/DGNS for the UH-60A/L, HH-60A/L, and CH-47D aircraft is updating to an ASN-128D. The AN/ASN-128D/DGNS will meet the regulatory requirements of civil airspace for the UH-60A/L, HH-60A/L, and CH-47D aircraft. A-Kit unit procurement and installation costs vary by platform.

FY10 base funding in the amount of $28.8 million will procure DGNS AN/ASN-128D B-Kits, A-Kits, and installations for the UH-60A/L and CH-47D. DGNS, Global Air Traffic Management (GATM) and JPALS programs are closely linked and have joint perspective/participation.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Full Rate Production (FRP) contract awarded August 2005 for B-Kits. The B-Kit production leadtime is 12 months. The A-Kits have been developed and tested for the UH-60A/L and CH-47D. DGNS will be integrated onto the HH-60A/L in FY10.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	692	75	75	75	75	34	32	32	30	30	28	27	25								
Outputs	617	75	75	75	75	75	32	32	32	32	30	28	27	25							

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		1230
Outputs																		1230

METHOD OF IMPLEMENTATION: On Site Log/Repair Team ADMINISTRATIVE LEADTIME: 6 months PRODUCTION LEADTIME: 6 months

Contract Dates: FY 2010 - Apr 10 FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - Oct 10 FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): DGNS (AN/ASN-128B) P3I [MOD 1] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity - B-Kit	524	26.6	235	12.6	252	16.8			1011	56.0
B-Kit Nonrecurring		14.3								14.3
Kit Quantity A-Kit	992	12.9	128	2.4	110	2.1			1230	17.4
Aircraft Integration - Nonrecurring		4.3				1.3				5.6
ECPs		1.3		1.0		1.0				3.3
Data		1.3		0.9		0.7				2.9
Training Equipment		0.7		0.5		0.7				1.9
Systems Engineering		8.5		2.4		2.3				13.2
Other - PM Admin		3.7		2.0		2.1				7.8
Other										
Installation of Hardware										
FY 2007 & Prior Equip -- Kits	692	6.3							692	6.3
FY 2008 -- Kits			300	2.0					300	2.0
FY 2009 Equip -- Kits					128	1.8			128	1.8
FY 2010 Equip -- Kits							110	1.5	110	1.5
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
Total Installment	692	6.3	300	2.0	128	1.8	110	1.5	1230	11.6
Total Procurement Cost		79.9		23.8		28.8		1.5		134.0

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Aviation Mission Planning System (AMPS) [MOD 2] 1-95-01-2185

MODELS OF SYSTEM AFFECTED: AH-64A/D, CH-47D/F, OH-58D, UH-60A/L/M/Q, HH-60L/M, and UASs

DESCRIPTION / JUSTIFICATION:

The AMPS is used to automate Aviation mission planning tasks. The AMPS supports tactical command and control, mission planning, and mission management. It interfaces with the ABCS components, which furnish the aviation commander with continuous situational awareness, allowing the commander to rapidly adjust mission plans. This system generates mission data in either hard copy or electronic formats. The electronic formats are loaded onto the aircraft platforms, initializing the communication, navigation, and situational awareness systems on the modernized fleet aircraft. Since the airframes have the data receptacles/busses required to interface with AMPS, there is no installation cost/schedule. The system functionality is upgraded through the application of Engineering Change Proposals (ECPs) (primarily software) in a spiral acquisition program. AMPS is fielded from Army through Aviation Company, centered in the Combat Aviation Brigade.

FY10 base funding in the amount of $18.6M will procure AMPS upgrades to system software to support aviation fleet modernization programs and implementation of CAFRS Phase II. AMPS hardware (B-Kits) is being replaced on a 5-year cycle to maintain pace with technology. The start of the next cycle is in FY11.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Operational Requirements Document Change 1 was approved in April 1998. The AMPS was approved to enter into production through a Milestone III decision in July 2000. The AMPS initial hardware has been fielded and will begin the next hardware technology refresh in FY11. Software is being modified concurrently with Aviation fleet modernization programs. The AMPS software will be upgraded to include Joint Mission Planning Software (JMPS) improved components. This upgrade is funded with RTDE and will complete in FY12.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: N/A ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Aviation Mission Planning System (AMPS) [MOD 2] 1-95-01-2185

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity-B Kit (Computer)	2411	31.3	128	1.1					2539	32.4
Kit Quantity- B Kit (Upgrades)	1392	6.1							1392	6.1
Kit Quantity -B Kit (Peripherals)		17.2								17.2
B Kit (Nonrecurring)		10.3				0.4				10.7
ECPs		92.6		11.5		9.1				113.2
Systems Engineering		4.6		1.7		1.3				7.6
System Test & Eval		4.1		0.7		1.0				5.8
Fielding/Training		22.5		5.1		5.6				33.2
Other - PM Admin		10.0		1.0		1.2				12.2
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		198.7		21.1		18.6		0.0		238.4

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Embedded GPS Inertial Navigation System (EGI) P3I [MOD 3] OSIP

MODELS OF SYSTEM AFFECTED: SOA, UH/HH-60M, CH-47F, AH-64D Block III

DESCRIPTION / JUSTIFICATION:

Embedded GPS/INS (Global Positioning System/Inertial Navigation Systems) (EGI) is one of the aviation systems required for Digitization of the Battlefield. Fielding of the GPS EGI P3I continues. This P3I modification provides enhanced security with the directed SAASM and GPS IFR navigation capability, in accordance with civil airspace regulatory requirements. Since the EGI P3I configuration will be applied to UH/HH-60M, CH-47F and AH-64D Block III during RECAP, the platforms funded integration non-recurring and recurring costs and this budget line funded Special Operations Aviation (SOA). The next modification to the EGI will be to include M-Code security requirements into the currently fielded equipment. The additional B-kits beginning in FY14 are to incorporate the M-code changes.

FY10 base funding in the amount of $1.9 million will procure the system engineering, program management, and other non-recurring costs required to support platform requirements funded in those aircraft procurement lines. GPS P3I, GATM, and JPALS programs are closely linked and have joint perspective/participation.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

The EGI B-kits being procured in FY14 and out are to incorporate M-code into the EGI.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Embedded GPS Inertial Navigation System (EGI) P3I [MOD 3] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity - B-Kit	142	11.1							142	11.1
M Code Upgrade B-Kit										
B-Kit Nonrecurring		4.8								4.8
Aircraft Integration (NonRecurring)		2.8								2.8
ECPs		1.1		0.4		0.3				1.8
Data		0.9		0.2		0.1				1.2
Training Equipment		1.7		0.2		0.3				2.2
Systems Engineering		2.5		0.6		0.7				3.8
Other - PM Admin		1.6		0.3		0.5				2.4
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		26.5		1.7		1.9		0.0		30.1

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Improved Data Modem (IDM) [MOD 4] OSIP

MODELS OF SYSTEM AFFECTED: AH-64D, OH-58D, CH-47F, UH/HH-60M

DESCRIPTION / JUSTIFICATION:

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. 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, OH-58D, CH-47F, and UH/HH-60M.

FY10 base funding in the amount of $73.2 million will procure IDM Redesign B Kits to mitigate parts obsolescence concerns and to provide a technology refresh to the IDM hardware. These B Kits support production line incorporation for the AH-64D, CH-47F, HH/UH-60M helicopters and the OH-58D Safety Enhancement Program. FY10 funds are also required to complete IDM Software Block 3 and begin Software Block 4 modifications and integrate those modifications into AH-64D, CH-47F, OH-58D, and UH-60M. 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.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

A hardware upgrade of the IDM to mitigate parts obsolescence issues and to refresh technology will be completed in FY10 to support B-kit procurements in FY10 and out. IDM OSA development and test will be completed in the 1st Quarter FY12.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Improved Data Modem (IDM) [MOD 4] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity - B -Kits(IDM)	1416	42.5			163	6.1			1579	48.6
Kit Quantity - B -Kits (IDM Mods)	206	4.5			195	7.3			401	11.8
Kit Quantity - B -Kits(IDM OSA)										
B-Kit NonRecurring		99.6		10.1		8.2				117.9
Kit Quantity- A-Kits	240	11.9							240	11.9
Aircraft Integration		212.3		28.2		30.3				270.8
ECP (B-Kit HW)		2.4		0.4		3.1				5.9
ECP (B-Kit SW)		13.7		3.5		7.0				24.2
Data		4.4		0.2		4.0				8.6
Systems Engineering		10.4		3.3		3.6				17.3
Systems Test and Evaluation		4.0		0.3		0.8				5.1
Fielding/Training		8.3		1.3		1.3				10.9
Other-PM Admin		19.1		1.5		1.5				22.1
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		433.1		48.8		73.2		0.0		555.1

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Aviation Tactical Communication Systems [MOD 5] OSIP

MODELS OF SYSTEM AFFECTED: AH-64D, CH-47F, UH/HH-60M, Special Operations Aircraft (SOA), LUH-72A, UAS

DESCRIPTION / JUSTIFICATION:

Aviation Tactical Communication Systems (ATCS) is comprised of Alternate Communications (Alt Comms) and installation of Joint Tactical Radio System (JTRS). Alt Comms procures A-Kits and B-Kits to meet minimum acceptable near-term communication requirements as defined by the U.S. Army Aviation Center of Excellence (USAACE) due to delays in the JTRS program. Alt Comms B-Kits include the ARC-201D and the ARC-231 radio sets along with associated power amplifiers and mounts. B-Kit hardware is procured through existing Communications Electronics Command (CECOM) contracts. A-Kit hardware and software is planned to be procured through the prime contractor for each platform using funds in this budget line and installed on the production line. B-kits are procured prior to A-kits due to platform and radio lead times. A-Kit configuration and radio suite varies by platform. B-Kit unit costs vary based on platform configuration. No installation schedule due to A and B-Kits being installed on the production line.

FY10 base funding in the amount of $104.6 million will procure Alt Comms A-Kits and B-Kits for AH-64D, CH-47F, UH/HH-60M, LUH, and SOA. An Alt Comms suite of aviation radios comprises a standard configuration of non-developmental and commercially available off-the-shelf equipment. The standard configuration consists of 2 ARC-201D radios, an Improved Frequency Modulation (IFM) Power Amplifier (two IFM's for CH-47F), and a suite of ARC-231 sets. Additionally, FY10 base funding provides for ARC-231 modifications to crypto and satellite communications through ECPs. Beginning in FY10, ARC-231 radios for LUH-72A, and UAS will be procured in this budget line.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Alt Comms is a non-developmental program in the production and deployment phase. JTRS A-Kit development, integration, and test on Apache Block III will be completed in FY12. JTRS A-Kit procurement begins in FY13 for production incorporation in Apache Block III Lot 4 aircraft.

Installation Schedule

	Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Aviation Tactical Communication Systems [MOD 5] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity - B-Kit (ARC-231)	515	47.5	149	15.8	241	20.9			905	84.2
Kit Quantity - B-Kit (ARC-201D)	751	24.5	198	1.7	168	6.2			1117	32.4
Kit Quantity - B-Kit (IFM)	470	8.9	101	2.3	122	2.9			693	14.1
Kit Quantity - A-Kit	137	18.7	338	11.2	115	13.1			590	43.0
ECP/Non-Recurring		33.8		22.4		47.4				103.6
System Engineering		12.4		3.3		3.3				19.0
System Test & Evaluation		3.5		1.8		2.0				7.3
Fielding/Training		1.0		2.4		3.4				6.8
Other - PM Admin		8.7		3.4		5.4				17.5
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		159.0		64.3		104.6		0.0		327.9

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Mil Flight Operation Quality Assurance (MFOQA) [MOD 6] OSIP

MODELS OF SYSTEM AFFECTED: AH-64D, CH-47F, UH-60A/L, LUH, HH-60A

DESCRIPTION / JUSTIFICATION:

Military Flight Operations Quality Assurance (MFOQA) is the systematic collection and automated analysis of operational data from aircraft for use in continuous improvement of combat readiness in the areas of operation, training, maintenance and safety. MFOQA builds on a commercial aviation initiative which uses operational trend analyses of flight data to better identify hazards, increase operational efficiency and provide more effective risk management. Unit costs vary by aircraft platform.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

MFOQA is a non-developmental program and is OSD directed to equip rotary wing aircraft with diagnostic and prognostic systems.

Installation Schedule

	Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: OLR Team ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Mil Flight Operation Quality Assurance (MFOQA) [MOD 6] OSIP

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity B-Kits	80	6.5	12	0.5	12	0.5			104	7.5
Kit Quantity A-Kits	80	4.3	12	0.5	12	0.5			104	5.3
Other-PM Admin		3.7		3.6		3.0				10.3
System Engineering				9.2		9.2				18.4
Installation of Hardware										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits	80	2.4							80	2.4
FY 2009 Equip -- Kits			12	1.0					12	1.0
FY 2010 Equip -- Kits					12	1.0			12	1.0
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	80	2.4	12	1.0	12	1.0	0	0.0	104	4.4
Total Procurement Cost		16.9		14.8		14.2		0.0		45.9

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	GATM Rollup (AA0711)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	248.8	58.4	79.0	103.1		489.4
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	248.8	58.4	79.0	103.1		489.4
Initial Spares						
Total Proc Cost	248.8	58.4	79.0	103.1		489.4
Flyaway U/C						
Weapon System Proc U/C						

Description:
This budget line supports procurement of Global Air Traffic Management equipment for both Fixed Wing (FW) and Rotary Wing (RW) aircraft.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft	P-1 Line Item Nomenclature: GATM Rollup (AA0711)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
Fixed Wing Aircraft (AA0703)		9494			8567			13196		
Rotary Wing Aircraft (AA0704)		48943			70422			89946		
Total:		**58437**			**78989**			**103142**		

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	GATM - Fixed Wing Aircraft (AA0703)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	118.5	9.5	8.6	13.2		149.7
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	118.5	9.5	8.6	13.2		149.7
Initial Spares						
Total Proc Cost	118.5	9.5	8.6	13.2		149.7
Flyaway U/C						
Weapon System Proc U/C						

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 (CNS/ATM) 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 the upgrading of some existing avionics and the procurement of new systems for the fixed wing fleet.

Justification:
FY 10 Base Funding in the amount of $13.196 million will procure GATM equipment for Fixed Wing aircraft. Fixed Wing aircraft were purchased with avionics available at the time of production. However, for the Army's Fixed Wing aircraft to remain current and have unrestricted access to the rapidly changing Air Traffic Management airspace, new communication, navigation and surveillance equipment will be needed to meet GATM requirements. Unless equipped, the Army's senior leadership will be limited in conducting their worldwide command and control missions because of potential airspace exclusion or routing delays. In addition, new communication and navigation systems will enhance reliability and maintainability by employing commercial systems thereby improving aircraft availability for mission requirements.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	GATM - Fixed Wing Aircraft (AA0703)		
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Global Air Traffic Management - FW						
GATM-FW	Operational	128.0	8.6	13.2	0.0	149.8
Totals		128.0	8.6	13.2	0.0	149.8

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Global Air Traffic Management - FW [MOD 1] GATM-FW

MODELS OF SYSTEM AFFECTED: All series Army fixed wing aircraft:C-31, 12, 23, 26, 37, 20, 208, UV-18, RC-12, UC-35, EO-5,CE-182

DESCRIPTION / JUSTIFICATION:

This effort will update and modernize communication, navigation, and surveillance equipment to current international requirements, allow worldwide deployments and continued safe operations. Failure to modify the Fixed Wing fleet will prevent worldwide deployability.

As currently equipped, the aircraft are not suitable for worldwide deployment nor capable of using modern navigation and air traffic control capabilities. A variety of equipment is required by GATM including: datalink technology, satellite communication (SATCOM), communication management units, Electronic Flight Information System, surveillance equipment, radios, navigation equipment and multi-mode receivers. GATM requirements are evolving and require additional systems in the near future. The kit quantities reflected on the next page represent a wide variety of avionics kits with different mixes each fiscal year. Kit configuration varies by aircraft. Consequently, kit unit and installation costs vary significantly from year to year.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Development is not required for avionics system cockpit upgrades.

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	166				2	1	1														
Outputs	147	19				2	1		1												

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		170
Outputs																		170

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 6 months

Contract Dates: FY 2010 - Dec 09 FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - May 10 FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Global Air Traffic Management - FW [MOD 1] GATM-FW

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Installation Kits	166	83.6	2	6.0	2	9.1			170	98.7
Kit Quantity										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data		0.6		0.1		0.1				0.8
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
Installation of Hardware										
FY 2008 & Prior Equip -- Kits	166	43.8							166	43.8
FY 2009 -- Kits			2	2.5					2	2.5
FY 2010 Equip -- Kits					2	4.0			2	4.0
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	166	43.8	2	2.5	2	4.0	0	0.0	170	50.3
Total Procurement Cost		128.0		8.6		13.2		0.0		149.8

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	GATM - Rotary Wing Aircraft (AA0704)		
Program Elements for Code B Items:	Code:	Other Related Program Elements: SSN AA0703, SSN AA0711	

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	130.3	48.9	70.4	89.9		339.6
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	130.3	48.9	70.4	89.9		339.6
Initial Spares						
Total Proc Cost	130.3	48.9	70.4	89.9		339.6
Flyaway U/C						
Weapon System Proc U/C						

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 (CNS/ATM) programs. GATM is a 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. Current 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 fleets. Included in the GATM Program is an upgrade to the Mode S Identification Friend or Foe (IFF) transponder (APX-118), an upgrade to Mode 5 capability (APX-123), and upgrades to meet requirements for 8.33KHz channel spacing.

Justification:
FY10 base funding in the amount of $89.9 million will procure and install APX-123 B-Kits and A-Kits for the AH-64D, CH-47D/F, UH-60A/L/M, Unmanned Aerial Systems (UAS), and Special Operations Aircraft (SOA) which will allow Rotary Wing aircraft to have Mode 5 capability. Procures and installs APX-118 (Mode S) B-Kits and A-Kits for platforms not migrating to Mode 5 and retrofit kits to upgrade previously fielded APX-118 transponders to APX-123 transponders. Procurement of ARC-231 B-Kits, A-Kits, and installs to meet 8.33 khz channel spacing requirements for UH-60A/L and CH-47D is also funded in FY10.

GATM provides Army aircraft improved deployment capabilities and allows them to operate in civil airspace without the threat of exclusion. IFF Mode 5 provides enhanced security and greatly improved performance over Mode 4. It also maintains compatibility with civil ATC with less interference. Europe mandates a Mode S transponder for all flights after March 2009 and plans expansion of 8.33KHz VHF-AM controlled airspace to the ground in high volume traffic areas. 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 over 300 European based aircraft as well as those deploying to Europe. 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 unrestricted operations in worldwide civil controlled airspace and improves safety and operational efficiency while meeting the new worldwide frequency spectrum requirements. GATM provides Army aircraft improved deployment capabilities and allows them to operate in civil airspace without the threat of exclusion.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	GATM - Rotary Wing Aircraft (AA0704)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: SSN AA0703, SSN AA0711

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Global Air Traffic Management - RW						
GATM-RW	Unclassified	179.2	70.4	89.9	14.9	354.4
Totals		179.2	70.4	89.9	14.9	354.4

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Global Air Traffic Management - RW [MOD 1] GATM-RW

MODELS OF SYSTEM AFFECTED: CH-47D/F, UH-60A/L/M, MH-47D/E/G, MH-60L/K/M, A/MH-6, AH-64A/D, HH60L/M,Unmanned Aerial Systems(UAS)

DESCRIPTION / JUSTIFICATION:

Global Air Traffic Management (GATM) is the military equivalent of the International Civil Aviation architecture known as Communications, Navigation, Surveillance and Air Traffic Management (CNS/ATM) programs. GATM provides the equipment, training, and procedures mandated by Civilian Air Traffic Control (ATC) authorities. Current 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 fleets. Included in the GATM Program are upgrades to the Mode S Identification Friend or Foe (IFF) (APX-118) and Mode 5 (APX-123). FY10 base funding in the amount of $89.9 million will procure and install APX-123 B- and A-Kits for the AH-64D, CH-47D/F, UH-60A/L/M, UAS, and Special Operations Aircraft (SOA) which will allow them to meet have Mode 5 capability. Procures and installs APX-118 B- and A-Kits for platforms not migrating to Mode 5 and retrofit kits to upgrade previously fielded APX-118 transponders to APX-123 transponders. Procurement of ARC-231 B-Kits, A-Kits, and installs to meet 8.33 khz channel spacing requirements for UH-60A/L and CH-47D is also funded in FY10. GATM provides Army aircraft improved deployment capabilities and allows operation in civil airspace without exclusion.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

The APX-123 reached Milestone C in July 06. Integration of 8.33KHz channel spacing for UH-60A/L and CH-47D will be completed in early FY10. B-Kit quantities exceed A-Kit and install quantities because: some aircraft B-Kits are being installed on the production line and the A-Kits and installs are not funded from this budget line; some B-Kits are for trainers and simulators; and kits vary by platform. A-Kit and installation costs vary by platform. B-Kit unit costs vary due to multiple kits included. Leadtimes reflected below are for transponders (APX-118/123).

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	1090	100	105	105	116	215	225	224	215	147	147	150	150	111	111						
Outputs	1041	49	100	105	105	116	215	225	224	215	147	147	150	150	111	111					

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		3211
Outputs																		3211

METHOD OF IMPLEMENTATION: OLR Team ADMINISTRATIVE LEADTIME: 6 months PRODUCTION LEADTIME: 11 months

Contract Dates: FY 2010 - Mar 10 FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - Feb 11 FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Global Air Traffic Management - RW [MOD 1] GATM-RW

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Kit Quantity - B Kits	2600	92.2	973	32.7	1222	52.4			4795	177.3
B-Kits, Nonrecurring		5.7		4.8		5.0				15.5
Kit Quantity - A Kits	1628	7.3	989	13.9	594	13.0			3211	34.2
Aircraft Integration - Nonrecurring		21.3		6.3		4.6				32.2
ECP		2.5		1.4		1.5				5.4
Data		3.8		0.9		0.6				5.3
Training Equipment		1.5		0.8		0.8				3.1
Fielding		2.6		1.5		1.5				5.6
Systems Engineering		9.5		2.1		2.1				13.7
System Test & Evaluation		1.2		1.1		1.1				3.4
Other PM Admin		6.1		2.5		2.5				11.1
Other		18.9								18.9
Installation of Hardware										
FY 2007 & Prior Equip -- Kits	1090	6.6	88	0.5					1178	7.1
FY 2008 -- Kits			338	1.9	112	0.6			450	2.5
FY 2009 Equip -- Kits					767	4.2	222	1.9	989	6.1
FY 2010 Equip -- Kits							594	13.0	594	13.0
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
Total Installment	1090	6.6	426	2.4	879	4.8	816	14.9	3211	28.7
Total Procurement Cost		179.2		70.4		89.9		14.9		354.4

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 3 / Spares and repair parts	SPARE PARTS (AIR) (AA0950)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	1262.2	9.2	6.9	25.3		1303.6
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	1262.2	9.2	6.9	25.3		1303.6
Initial Spares						
Total Proc Cost	1262.2	9.2	6.9	25.3		1303.6
Flyaway U/C						
Weapon System Proc U/C						

Description:
Provides for the procurement of spares to support initial fielding of end items.

Justification:
FY 10 Budget Request funds depot level reparables (DLR) secondary items from the Supply Management, Army activity of the Army Working Capital Fund.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 4 / Support equipment and facilities	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		SSN AA0720; PE/Project 0604270A/665

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	1006.8	47.8	56.7	26.0		1137.3
Less PY Adv Proc	11.6					11.6
Plus CY Adv Proc	11.6					11.6
Net Proc P1	1006.8	47.8	56.7	26.0		1137.3
Initial Spares	53.9					53.9
Total Proc Cost	1060.7	47.8	56.7	26.0		1191.2
Flyaway U/C						
Weapon System Proc U/C						

Description:
The Aircraft Survivability Equipment (ASE) budget line includes ASE Laser Countermeasures, ASE Trainers, and ASE Radio Frequency Countermeasures (RFCM).

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
ASE Trainers		1720			1977			2050		
ASE Laser CM		9836			18014			21400		
Radio Frequency CM		36239			36747			2525		
Total:		**47795**			**56738**			**25975**		

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 4 / Support equipment and facilities	ASE Trainers (AZ3506)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	360.2	1.7	2.0	2.1	30.6	396.6
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	360.2	1.7	2.0	2.1	30.6	396.6
Initial Spares						
Total Proc Cost	360.2	1.7	2.0	2.1	30.6	396.6
Flyaway U/C						
Weapon System Proc U/C						

Description:
The Aircraft Survivability Equipment Trainer will be a man-portable training device (MAST) that simulates shoulder fired weapons. The MAST will provide force-on-force training by stimulating the onboard Common Missile Warning System (CMWS)at the maneuver Combat Training Centers (MCTC) and home stations. The CMWS provides protection against man-portable and other missile systems. The aircraft training against the MAST include the Apache, Chinook, Kiowa Warrior, Blackhawk, and Fixed Wing platforms.

Justification:
FY 2010 procures man portable CMWS stimulators for aviation Maneuver Combat Training Centers (MCTC) and home stations.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 4 / Support equipment and facilities	ASE Laser CM (AZ3508)		
Program Elements for Code B Items:	Code:	Other Related Program Elements: SSN AA0720; PE/Project 0604270A/665	

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	193.5	9.8	18.0	21.4	577.1	819.8
Less PY Adv Proc	11.6					11.6
Plus CY Adv Proc	11.6					11.6
Net Proc P1	193.5	9.8	18.0	21.4	577.1	819.8
Initial Spares						
Total Proc Cost	193.5	9.8	18.0	21.4	577.1	819.8
Flyaway U/C						
Weapon System Proc U/C						

Description:
The AN/AVR-2B is a passive threat laser warning system that alerts the aircrew that they are being targeted by threat forces allowing the aircrew to engage the target or maneuver to break the targeting. The system detects aircraft illumination by laser rangefinders, designators, and beam rider surface to air missiles. The system additionally provides the following: aircrew visual and audio warnings according to threat lethality, 360 degree azimuth and 90 degree elevation field of view coverage, and detects aircraft illumination by Multiple Integrated Laser Engagement/Air Ground Engagement System (MILES/AGES) II lasers.

Justification:
FY 2010 procures AN/AVR-2B A-Kits and installs for selected aircraft platforms in support of required operational capabilities.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: ASE Laser CM (AZ3508)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
AN/AVR-2B Laser Warning										
AN/AVR-2B System Acquisition B-kits		6535	62	105	7800	62	126			
AN/AVR-2B System Acquisition A-kits								6241	119	52
AN/AVR-2B System Install								10655		
Engineering Change Proposals										
Non-Recurring Production					3440			1823		
Program Management		500			921			1113		
System Engineering/Logistics		1817			4878			1568		
Spares B-kits		984			975					
Total:		**9836**			**18014**			**21400**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 4/ Support equipment and facilities		ASE Laser CM (AZ3508)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
AN/AVR-2B System Acquisition B-kits										
FY 2008	Goodrich Danbury, CT	C/FFP	CECOM, Ft. Monmouth, NJ	Jan 08	Oct 08	62	105	Yes		
FY 2009	Goodrich Danbury, CT	C/FFP	CECOM, Ft. Monmouth, NJ	Jan 09	Oct 09	62	126	Yes		
FY 2010	Goodrich Danbury, CT	C/FFP	CECOM, Ft. Monmouth, NJ	Jan 10	Oct 10			Yes		

REMARKS:

FY 08 / 09 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ASE Laser CM (AZ3508)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY	ACCEP PRIOR	BAL DUE	Fiscal Year 08												Fiscal Year 09												Later
						Calendar Year 08												Calendar Year 09												
			Units	TO 1 OCT	AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AN/AVR-2B System Acquisition B-kits																														
1	FY 08	A	62	0	62				A									5	5	5	5	5	5	5	5	5	5	5	7	0
1	FY 09	A	62	0	62																A									62
1	FY 09	NA	6	0	6																		3	3						0
1	FY 10	FMS	26	0	26																									26
Total					156													5	5	5	5	5	8	8	5	5	5	5	7	88

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Goodrich, Danbury, CT	60	120	240	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	0	1	9	10
	Reorder	0	1	9	10

REMARKS
Navy funding for testing on CH 53K aircraft.

FY 10 / 11 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ASE Laser CM (AZ3508)

Date:
May 2009

COST ELEMENTS						Fiscal Year 10												Fiscal Year 11												
						Calendar Year 10												Calendar Year 11												
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
AN/AVR-2B System Acquisition B-kits																														
1	FY 08	A	62	62																										0
1	FY 09	A	62	0	62	3	5	5	5	5	5	5	5	5	5	5	9													0
1	FY 09	NA	6	6																										0
1	FY 10	FMS	26	0	26	5	5	5	5	5	1																			0
Total					88	8	10	10	10	10	6	5	5	5	5	5	9													
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
						1	Initial	0	1	9	10
1	Goodrich, Danbury, CT	60	120	240			Reorder	0	1	9	10
							Initial				
							Reorder				
							Initial				
							Reorder				
							Initial				
							Reorder				
							Initial				
							Reorder				

REMARKS
FMS funding for UAE UH60 Blackhawk.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 4 / Support equipment and facilities	Radio Frequency CM (AZ3511)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		0604270A.665 A/C Surv Equip Dev

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	20.7	36.2	36.7	2.5	7.9	104.1
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	20.7	36.2	36.7	2.5	7.9	104.1
Initial Spares						
Total Proc Cost	20.7	36.2	36.7	2.5	7.9	104.1
Flyaway U/C						
Weapon System Proc U/C						

Description:
The objective of the Aircraft Survivability Equipment (ASE) project is to improve radio frequency (RF) ASE for Army aviation. Phase 1 upgrades the Processor Line Replaceable Unit (LRU) of the AN/APR-39A(V)1 Radar Signal Detecting Set through modernization and reduced parts count. Along with improved maintainability and reliability, performance will be enhanced via increased processing speed and expanded memory. These improvements will result in faster response time, better dense environment capability and improved parameter measurement. Phase 1 serves to make the currently fielded system viable until affordable improved RF ASE capability can be pursued in Phases 2 and 3. Phase 2 initiates an improved digital Radar Warning Receiver (RWR) and Phase 3 adds active Electronic Countermeasures (ECM) for selected aircraft.

Justification:
FY 2010 APA procures continued Phase 1 upgrades of the Processor Line Replaceable Unit (LRU) of the AN/APR-39A(V)1 Radar Signal Detecting Set.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: Radio Frequency CM (AZ3511)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
Systems Eng/Mgt		734			820			1343		
Recurring Production		28184	700	40	33938	650	52			
Training		113			137					
Data		96			116					
Fielding		5908			1736					
Test and Evaluation		983								
Support Equipment		144								
Other Procurement		77						1182		
Total:		**36239**			**36747**			**2525**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 4/ Support equipment and facilities		Radio Frequency CM (AZ3511)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Recurring Production										
FY 2008	Northrup Grumman Rolling Meadows, IL	TBD	CECOM, Ft. Monmouth, NJ	Jun 08	Oct 09	700	40			
FY 2009	Northrup Grumman Rolling Meadows, IL	TBD	CECOM, Ft. Monmouth, NJ	Jun 09	Jun 11	650	52			

REMARKS:

FY 10 / 11 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Radio Frequency CM (AZ3511)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 10 / Calendar Year 10 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Recurring Production																	
1	FY 08	A	700	0	700	10	30	60	100	100	100	100	100	100			
1	FY 09	A	650	0	650												
Total					1350	10	30	60	100	100	100	100	100	100			

MFR	FY	Fiscal Year 11 / Calendar Year 11 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Recurring Production														
1	FY 08													0
1	FY 09									75	75	75	75	350
Total										75	75	75	75	350

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Northrup Grumman, Rolling Meadows, IL	120	600	1200	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	0	1	23	24
	Reorder	0	0	0	0

REMARKS

FY 12 / 13 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Radio Frequency CM (AZ3511)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 12 / Calendar Year 12 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 13 / Calendar Year 13 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Recurring Production																														
1	FY 08	A	700	700																										0
1	FY 09	A	650	300	350	50	50	50	50	50	50	50																		0
Total					350	50	50	50	50	50	50	50																		

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
						1	Initial	0	1	23	24	
1	Northrup Grumman, Rolling Meadows, IL	120	600	1200			Reorder	0	0	0	0	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 4 / Support equipment and facilities	ASE INFRARED CM (AZ3507)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	1519.5	814.3	585.5	298.0		3217.2
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	1519.5	814.3	585.5	298.0		3217.2
Initial Spares						
Total Proc Cost	1519.5	814.3	585.5	298.0		3217.2
Flyaway U/C						
Weapon System Proc U/C						

Description:
The Advanced Threat Infrared Countermeasure (ATIRCM) is a US Army program to develop, test, and integrate defensive infrared (IR) countermeasures capabilities into existing, current generation host platforms for more effective protection against a greater number of IR- guided missile threats than afforded by currently fielded IR countermeasures. The US Army operational requirements concept for IR countermeasure systems is known as the Suite of Integrated Infrared Countermeasures (SIIRCM). It is an integrated warning and countermeasure system to enhance aircraft survivability against IR guided threat missile systems. The core element of the SIIRCM concept is the ATIRCM, Common Missile Warning System (CMWS) Program. The ATIRCM/CMWS, a subsystem to a host aircraft, is an integrated ultraviolet (UV) missile warning system and an IR Laser Jamming and Improved Countermeasure Dispenser (ICMD).

The CMWS also functions as a stand-alone system with the capability to detect missiles and provide audible and visual warnings to the pilot(s); and, when installed with the ICMD, activates expendables to provide a degree of protection. ATIRCM/CMWS is the key IR survivability system for current and future Army aircraft.

The A-Kit is the modification hardware, wiring harness, cable, etc., necessary to install and interface the ATIRCM/CMWS Mission Kit to each platform. The A-Kit ensures the Mission Kit is functionally and physically operational with the host platform.

The Mission Kit consists of the ATIRCM/CMWS which performs the missile detection, false alarm rejection, and missile declaration functions of the system. The Electronic Control Unit (ECU) of the CMWS sends a missile alert signal to on-board avionics and other Aircraft Survivability Equipment (ASE) such as expendable flare dispensers. Threat missiles detected by the CMWS are handed over to the ATIRCM.

Justification:
FY 2010 Base funding in the amount of $186 million procures recurring production of the CMWS A-kits and associated installation and integration, and the Generation 3 (GEN 3) Electronic Control Unit (ECU) effort.

FY 2010 OCO funding in the amount of $112 million procures spares and support for the ATIRCM Quick Reaction Capability (QRC).

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: ASE INFRARED CM (AZ3507)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
A Kit CMWS Recurring	B	55869	170	329	62169	219	284	34240	87	394
A Kit CMWS Installation		42323			34504			28058		
A Kit ATIRCM Retrofits		22900	70	327	45126	138	327			
CMWS Recurring Hardware	B	126985	339	375	21600					
ATIRCM B Kit Recurring Hardware	B	244697	70	3496						
ATIRCM B-Kit Nonrecurring		63174			1500					
CIRCM Nonrecurring										
A-Kit Integration		31627			59400			19077		
ICS/Spt Eq/Trans/Training		36537			50076			145611		
In House/Matrix Spt		34653			23378			28554		
Program Management		2392			983			1002		
Spares		34488			11064			2313		
CTR SEPM/ECO/SW Spt		41682			99293			23191		
Modification Effort (Gen 3 ECU)					30168	55	549	15910	110	145
RESET										
Other Platform Procurement										
CH-47 Suppression		50800								
UH-60 Suppression		26200								
AVR2B					15000					
IR Suppressor Kits										
AH-64					19200					
CH-47					56000					
UH-60					36000					
Misc Support					20000					
Total:		**814327**			**585461**			**297956**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 4/ Support equipment and facilities		ASE INFRARED CM (AZ3507)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A Kit CMWS Recurring										
FY 2008	Various Various	CPFF	Various	Dec 07	May 08	170	329	Yes		
FY 2009	Various Various	CPFF	Various	Dec 08	May 09	219	284	Yes		
FY 2010	Various Various	CPFF	Various	Dec 09	May 10	87	394	Yes		
A Kit ATIRCM Retrofits										
FY 2008	BAE Systems Nashua, NH	SS/FFP	CECOM,Ft. Monmouth, NJ	Dec 07	May 08	70	327	N/A		
FY 2009	BAE Systems Nashua, NH	SS/FFP	CECOM,Ft. Monmouth, NJ	Aug 09	Jan 10	138	327	Yes		
CMWS Recurring Hardware										
FY 2008	BAE Systems Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Dec 07	Aug 08	339	375	Yes		
ATIRCM B Kit Recurring Hardware										
FY 2008	BAE Systems Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Dec 07	May 08	70	3496	N/A		
Modification Effort (Gen 3 ECU)										
FY 2009	BAE Systems Nashua, NH	SS/FFP	CECOM, Ft Monmouth, NJ	Dec 07	Oct 08	55	549	Yes		
FY 2010	BAE Systems Nashua, NH	SS/FFP	CECOM, Ft Monmouth, NJ	Dec 08	Oct 09	110	145	Yes		

REMARKS:

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ASE INFRARED CM (AZ3507)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY	ACCEP PRIOR	BAL DUE	Fiscal Year 09												Fiscal Year 10												Later
						Calendar Year 09												Calendar Year 10												
			Units	TO 1 OCT	AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
A Kit CMWS Recurring																														
1	FY 08	A	170	70	100	14	14	14	14	14	15	15																		0
1	FY 09	A	219	0	219			A					18	18	18	18	18	18	18	18	18	19	19	19						0
1	FY 10	A	87	0	87															A					7	7	7	7	7	52
A Kit ATIRCM Retrofits																														
2	FY 08	A	0	-42	42	6	6	6	6	6	6	6																		0
2	FY 09	A	89	-49	138			A					11	11	11	11	11	11	12	12	12	12	12	12						0
CMWS Recurring Hardware																														
3	FY 08	A	339	58	281	29	28	28	28	28	28	28	28	28	28															0
ATIRCM B Kit Recurring Hardware																														
4	FY 08	A	70	-42	42	6	6	6	6	6	6	6																		0
Modification Effort (Gen 3 ECU)																														
5	FY 09	A	55	-55	55	4	4	4	4	4	5	5	5	5	5	5	5													0
5	FY 10	A	110	-110	110			A										8	8	8	8	8	10	10	10	10	10	10	10	0
Total					1074	59	58	58	58	58	60	60	62	62	62	34	34	37	38	38	38	39	41	41	17	17	17	17	17	52
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Various, Various	18	200	800	
2	BAE Systems, Nashua, NH	24	120	300	
3	BAE Systems, Nashua, NH	12	480	1200	
4	BAE Systems, Nashua, NH	12	48	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	ADMIN LEAD TIME After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	0	3	3	6
	Reorder	0	3	3	6
2	Initial	0	3	5	8
	Reorder	0	3	5	8
3	Initial	0	4	10	14
	Reorder	0	1	12	13
4	Initial	6	6	12	18
	Reorder	3	3	12	15
	Initial				
	Reorder				

REMARKS

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ASE INFRARED CM (AZ3507)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11												Fiscal Year 12												Later
						Calendar Year 11												Calendar Year 12												
			Units			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
A Kit CMWS Recurring																														
1	FY 08	A	170	170																										0
1	FY 09	A	219	219																										0
1	FY 10	A	87	35	52	7	7	7	7	8	8	8																		0
A Kit ATIRCM Retrofits																														
2	FY 08	A	0	0																										0
2	FY 09	A	89	89																										0
CMWS Recurring Hardware																														
3	FY 08	A	339	0	2373																									2373
ATIRCM B Kit Recurring Hardware																														
4	FY 08	A	70	0																										0
Modification Effort (Gen 3 ECU)																														
5	FY 09	A	55	0																										0
5	FY 10	A	110	0																										0
Total					2425	7	7	7	7	8	8	8																		2373
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Various, Various	18	200	800	
2	BAE Systems, Nashua, NH	24	120	300	
3	BAE Systems, Nashua, NH	12	480	1200	
4	BAE Systems, Nashua, NH	12	48	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	0	3	3	6
	Reorder	0	3	3	6
2	Initial	0	3	5	8
	Reorder	0	3	5	8
3	Initial	0	4	10	14
	Reorder	0	1	12	13
4	Initial	6	6	12	18
	Reorder	3	3	12	15
	Initial				
	Reorder				

REMARKS
Production rates are yearly rates.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 4 / Support equipment and facilities	AVIONICS SUPPORT EQUIPMENT (AZ3000)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	2925					2925
Gross Cost	475.8	5.0	5.0	4.9		490.8
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	475.8	5.0	5.0	4.9		490.8
Initial Spares						
Total Proc Cost	475.8	5.0	5.0	4.9		490.8
Flyaway U/C						
Weapon System Proc U/C						

Description:
Consists of a family of avionics support equipment. Current program consists of the Aviators' Night Vision Imaging System (ANVIS).

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 4 / Support equipment and facilities	ANVIS (K35601)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
	A	

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	2925					2925
Gross Cost	475.8	5.0	5.0	4.9		490.8
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	475.8	5.0	5.0	4.9		490.8
Initial Spares						
Total Proc Cost	475.8	5.0	5.0	4.9		490.8
Flyaway U/C						
Weapon System Proc U/C						

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.

Justification:
FY 2010 procures 410 AN/AVS-6(V)3 systems for fielding to Active Units. 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.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: ANVIS (K35601)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
K35601 ANVIS/HUD										
ANVIS		4081	453	9.005	3938	428	9.202	3852	410	9.395
Engineering Support		310			365			368		
Project Management Admin		390			417			419		
Engineering Change Orders					61			62		
Fielding		250			232			232		
Total:		**5031**			**5013**			**4933**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 4/ Support equipment and facilities		ANVIS (K35601)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
K35601 ANVIS/HUD										
FY 2008	TBS TBD	C/ID/IQ	RDECOM	May 09	Jul 10	453	9.005	Yes		
FY 2009	TBS TBD	C/ID/IQ	RDECOM	May 09	Jul 10	428	9.202	Yes		
FY 2010	TBS TBD	C/ID/IQ	RDECOM	Jan 10	Dec 10	410	9.395	Yes		

REMARKS:

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ANVIS (K35601)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 09 / Calendar Year 09 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 10 / Calendar Year 10 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
K35601 ANVIS/HUD																														
1	FY 08	A	453	0	453								A														38	38	38	339
1	FY 09	A	428	0	428								A														36	36	36	320
1	FY 10	A	417	0	417																A									417
Total					1298																						74	74	74	1076

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	TBS, TBD	25	210	355	120

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	14	21
	Reorder	1	3	11	14
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ANVIS (K35601)

Date:
May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11												Fiscal Year 12										Later
						Calendar Year 11												Calendar Year 12										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
K35601 ANVIS/HUD																														
1	FY 08	A	453	114	339	38	38	37	37	37	38	38	38	38															0
1	FY 09	A	428	108	320	36	36	36	36	36	35	35	35	35															0
1	FY 10	A	417	0	417			10	10	10	10	10	10	10	70	70	69	69	69											0
Total					1076	74	74	83	83	83	83	83	83	83	70	70	69	69	69										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	TBS, TBD	25	210	355	120

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	14	21
	Reorder	1	3	11	14
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 4 / Support equipment and facilities	COMMON GROUND EQUIPMENT (AZ3100)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: 63801/B32

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	617.8	85.0	108.6	111.4		922.8
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	617.8	85.0	108.6	111.4		922.8
Initial Spares						
Total Proc Cost	617.8	85.0	108.6	111.4		922.8
Flyaway U/C						
Weapon System Proc U/C						

Description:
Provides various types of ground support equipment.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 4 / Support equipment and facilities	AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: 63801/B32, SSN AZ3510

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	438.4	85.0	108.6	111.4		743.4
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	438.4	85.0	108.6	111.4		743.4
Initial Spares						
Total Proc Cost	438.4	85.0	108.6	111.4		743.4
Flyaway U/C						
Weapon System Proc U/C						

Description:
Aviation Ground Support Equipment (AGSE) develops, acquires, fields, and sustains aviation equipment within cost, schedule, and performance parameters, allowing the Joint Warfighter to carry out peacetime and wartime missions. Systems managed by AGSE through its Life Cycle include Aviation Vibration Analyzer, Aviation Intermediate Maintenance Shop Set, Battle Damage Assessment and Repair Block II, Aviation Ground Power Unit, Generic Aircraft Nitrogen Generator, Standard Aircraft Towing System, Aviation Shop Equipment Contact Maintenance, Non-Destructive Test Equipment, Digital Aircraft Weighing Scales, Unit Maintenance Aerial Recovery Kit, Aviation - Sets, Kits, Outfits and Tools, (Aviation Unit Maintenance Shop Set, Aviation Foot Locker and Tool Kits), support items of equipment, (Fuel Quantity Tester, Pitot Static Test Sets, Jacks, Rail Trailer, Swaging Tool Kits) and Flexible Engine Diagnostic System. AGSE is critical to the operational readiness of Aviation. AGSE products provide the finest materiel and support solutions to Army Aviation.

Justification:
FY 10 Base Funding in the amount of $88 million will procure ground support equipment which supports and sustains the operational readiness of all Army aviation field units which are operating AH-64, UH-60, CH-47, OH-58D and other Army aircraft. AGSE also provides a means to correct safety-of-flight discrepancies which endanger both life and property. Various pieces of AGSE equipment are being procured in FY 2010. The Modification Work Orders (MWOs) for the Unit Maintenance Aerial Recovery Kit provides Aviation Support Company (ASC) and Aviation Maintenance Company (AMC) units the ability to quickly rig battle/crash-damaged non-flyable modernized aircraft or aircraft undergoing maintenance for evacuation. The Aviation Ground Power Units Service Life Extension Program (SLEP) provides the capability of meeting Army helicopter servicing requirements into the next decade. The Standard Aircraft Towing System fills the need for a standard aircraft towing system that has the capability to reposition all U.S. Army rotary wing aircraft. Aviation - Sets, Kits, Outfits and Tools provides standardized tools, kits and outfits which meet transformation modularity, flexibility and mobility requirements for repair of rotary wing aircraft during combat, contingency and training operations. The Aviation Shop Equipment Contact Maintenance provides the combat maintainer a contact maintenance vehicle for transporting a crew and mission essential equipment, expendable supplies, spares and repair parts to repair or recover downed helicopters. The Aviation Vibration Analyzer Enhancement Modification Kits provide a rugged, portable and safe means of performing helicopter vibration reduction for both main and tail rotors and also upgrades the hardware and firmware which provides significant improvements to the Aviation Vibration Analyzer Control and Display Unit (CADU). The Flexible Engine Diagnostic System is a Turboshaft Engine Test Stand to verify flight readiness/safety of engines removed from aircraft maintenance. The FEDS supports the CH-47, OH-58, AH-64, and UH-60.

FY 10 OCO Funding in the amount of $24 million will procure Aviation - Sets, Kits, Outfits and Tools (Alpha 92, AVUM #2) providing standardized tools, kits and outfits which meet

Exhibit P-40, Budget Item Justification Sheet		Date: May 2009
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Item Nomenclature AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: 63801/B32, SSN AZ3510

transformation modularity, flexibility and mobility requirements for repair of rotary wing aircraft during combat and contingency operations. Aviation Intermediate Maintenance (AVIM) Shop Set provides modernization of current tools, replacing obsolete tools with Aerospace Standard tools and the Reset of existing systems deployed in OIF/OEF contingency operations.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
Non-Destructive Test Equipment (NDTE)		17912			6255					
Unit Maint Aerial Recovery Kit (UMARK)		1751			759			782		
Aviation Vibration Analyzer (AVA) Kits		244			359			461		
Aviation Ground Power Unit (AGPU) SLEP		21230			41257			42187		
Standard Aircraft Towing System (SATS)					10858			15678		
Shop Equipment Contact Maint (SECM)					1835			1863		
Avn-Sets, Kits, Outfits, Tools (A-SKOT)		11707			32323			20652		
Avn Intermediate Maint (AVIM) Shop Sets		11176			7976			12534		
Flexible Engine Diagnostics Sys (FEDS)		892			2327			12331		
Generic Aircraft Nitro Generator (GANG)		11197			947					
Digital Aircraft Weight Scales (DAWS)		3914								
Program Management Support		5018			3680			4898		
Subtotal		**85041**			**108576**			**111386**		
Total:		**85041**			**108576**			**111386**		

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 4 / Support equipment and facilities	AIRCREW INTEGRATED SYSTEMS (AZ3110)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: RDTE 0603801(DB45), 0604801(DC45), 0603827(S51), 0604601(S61)

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	533.1	54.2	48.1	77.5		713.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	533.1	54.2	48.1	77.5		713.0
Initial Spares						
Total Proc Cost	533.1	54.2	48.1	77.5		713.0
Flyaway U/C						
Weapon System Proc U/C						

Description:
The Air Warrior (AW) system is a modular systems solution to aviation crewmember life support equipment, integrating survival and mission equipment into an aircrew ensemble that improves the combat effectiveness of the Army aircrew member. AW leverages joint-service technologies to increase situational awareness, enhances mobility to safely operate aircraft systems, reduces physiological stress and injuries, and provides survival gear in the event of a downed aircraft over land or water. Block 1 components include integrated Aviation Clothing and Individual Equipment, a Microclimate Cooling System (MCS) that significantly reduces heat stress and injuries, the Aircrew Integrated Helmet System with laser eye protection, chemical-biological (CB) protection, tailored body armor, overwater survival gear, and survival, escape, and evasion tools. Block 2, plus new capabilities required in the Air Warrior Capability Production Document (CPD) dated Aug 07, include the Electronic Data Manager (EDM), a lightweight touch screen computer that provides mission planning, digital moving map w/tactical overlays, and interface to Blue Force Tracking capabilities in the form of a digital kneeboard. The Aircraft Wireless Intercom System (AWIS) eliminates the mobility problems and snag hazards inherent to the current tethered cord systems. The Portable Helicopter Oxygen Delivery System (PHODS) is a lightweight system worn by the crewmember that automatically delivers oxygen to the crew member to safely conduct high altitude missions. The Integrated Survival Kit is an individual crewmember supplemental survival equipment Go Bag with integrated on-the-go Hydration capability. The Helmet Hear Through system provides an external audio capability without the need to remove the flight helmet. Cockpit Air Bags (CABS) is a crash-activated, inflatable protection system designed to supplement the current restraint systems on UH-60 and OH-58D helicopters. The Personnel Recovery Support Equipment (PRSE) program includes the modification, integration, procurement, and fielding of both unclassified and classified systems to provide a significantly enhanced ability to respond to occurrences of isolated, missing, detained or captured Soldiers. The Flat Panel Display is an enhanced helmet-mounted Heads Up Display system that projects critical flight data symbology through night vision goggles for UH-60 Blackhawk and CH-47 Chinook pilots flying low level night missions to significantly increase their situational awareness and safety.

Justification:
FY2010 Base procurement dollars in the amount of $53 million supports production and fielding the Air Warrior Block 1 System, including A Kit and B Kit production and installations, the Increment III Electronic Data Manager (EDM) for deploying units and procurement of encrypted Aircraft Wireless Intercom System (AWIS). These funds also procure PRSE platforms interoperability hardware and software improvements.

FY2010 OCO procurement dollars in the amount of $25 million supports the Flat Panel Display which is an enhanced helmet-mounted Heads Up Display system that provides critical flight data through night vision goggles for pilots flying low level night missions.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIRCREW INTEGRATED SYSTEMS (AZ3110)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
Hardware										
-										
Air Warrior Block 1										
Air Warrior Block 1 Ensembles		14868	7998	1.9	5217	2745	1.9	3084	1623	1.9
Air Warrior A Kits		818	62	13.2	4831	366	13.2			
A Kit Installs		1421			1984					
Air Warrior Microclimate Cooling Garment		1489	5002	0.3	750	2501	0.3	276	920	0.3
Air Warrior Microclimate Cooling Units		9594	1246	7.7	9840	1278	7.7	15199	1974	7.7
-										
Air Warrior Block 2										
Electronic Data Mgr (EDM)		6557	745	8.8	4400	500	8.8	4409	500	8.8
EDM A Kits		1914	500	3.8	1900	500	3.8			
Acft Wireless Intercom Sys (AWIS)		149	78	1.9	480	12	40.0	2723	136	20.0
AWIS A Kits		189	24	7.9	118	15	7.9			
EDM/AWIS Installs		1114			1150					
Airframe Kits								6606	904	7.3
Airframe Kit Installs								6593		
-										
Cockpit Air Bags (CABS) System & Install										
CABS A Kits		240	40	6.0	90	15	6.0			
CABS B Kits		1000	40	25.0	375	15	25.0			
CABS Installs		200			135					
CABS B-Kit Retrofit		160	50	3.2	1000	312	3.2			
-										
Personel Recovery Support Equipment										
PRSE Platform Modifications					1585	2	792.5			
-										
Total Hardware Costs		**39713**			**33855**			**38890**		
Other Costs										
Manuals		115			117			119		
New Equipment Training		212			215			218		

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIRCREW INTEGRATED SYSTEMS (AZ3110)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
Initial Spares and Repair Parts		535			537			601		
Support Equipment		213			216			219		
Systems Test and Evaluation		803			807			811		
Total Other Costs		**1878**			**1892**			**1968**		
Nonrecurring Costs										
Nonrecurring Engineering		899			909			918		
PRSE Interoperability Engineering		3859						3990		
Total Nonrecurring Costs		**4758**			**909**			**4908**		
Air Warrior ECP		594			608			611		
Systems Integration Engineering		2307			2314			717		
Project Management Admin		3124			3130			4067		
Total ECP, Sys Int, & Admin Costs		**6025**			**6052**			**5395**		
Support Costs										
Fielding		829			833			837		
Contract Logistics Support		1019			1024			727		
Total Support Costs		**1848**			**1857**			**1564**		
FY 2009 OCO Request										
Portable Helicopter Oxygen Delivey Syst					1556	116	13.4			
Hydration System					322	2740	0.1			
Integrated Survival Kit					537	2742	0.2			
Helmet Hear Through System					1169	7700	0.2			
Total FY 2009 OCO Request					**3584**					
FY 2010 OCO Request										
Flat Panel Display								24800	1240	20.0
Total FY 2010 OCO Request								**24800**		
Total:		**54222**			**48149**			**77525**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 4/ Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature: AIRCREW INTEGRATED SYSTEMS (AZ3110)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Air Warrior Block 1 Ensembles										
FY 2008	BAE Phoenix, AZ	C/FFP	Redstone Arsenal, AL	Dec 07	Feb 08	7998	1.9	Yes		Feb 03
FY 2009	CONAX St. Petersburg, FL	C/FFP	Aberdeen Proving Ground	Dec 08	Feb 09	2745	1.9	Yes		Dec 07
FY 2010	CONAX St. Petersburg, FL	C/FFP	Aberdeen Proving Ground	Dec 09	Feb 10	1623	1.9	Yes		
Air Warrior A Kits										
FY 2008	Westwind Corporation Huntsville, AL	C/FFP	Redstone Arsenal, AL	Jul 08	Oct 08	62	13.2	Yes		Nov 07
FY 2009	Westwind Corporation Huntsville, AL	C/FFP	Redstone Arsenal, AL	Dec 08	Mar 09	366	13.2	Yes		
Air Warrior Microclimate Cooling Units										
FY 2008	Carleton Technologies, Inc. Orchard Park, NY	C/FFP	Redstone Arsenal, AL	Dec 07	Mar 08	1246	7.7	Yes		Aug 02
FY 2009	TBS TBS	C/FFP	Redstone Arsenal, AL	May 09	Sep 09	1278	7.7	Yes		Dec 08
FY 2010	TBS TBS	C/FFP	Redstone Arsenal, AL	Dec 09	Mar 10	1974	7.7	Yes		
Electronic Data Mgr (EDM)										
FY 2008	JVYS Huntsville, AL	C/FFP	Redstone Arsenal, AL	Dec 07	Apr 08	745	8.8	Yes		Jan 05
FY 2009	Raytheon Indianapolis, IN	C/FFP	Redstone Arsenal, AL	Dec 08	Apr 09	500	8.8	Yes		Jan 08
FY 2010	Raytheon Indianapolis, IN	C/FFP	Redstone Arsenal, AL	Dec 09	Apr 10	500	8.8	Yes		
EDM A Kits										
FY 2008	Westwind Corporation Huntsville, AL	C/FFP	Redstone Arsenal, AL	Jul 08	Oct 08	500	3.8	Yes		Nov 07
FY 2009	Westwind Corporation Huntsville, AL	C/FFP	Redstone Arsenal, AL	Dec 08	Mar 09	500	3.8	Yes		
Acft Wireless Intercom Sys (AWIS)										
FY 2008	Telephonics Farmingdale, NY	S/FFP	Redstone Arsenal, AL	Jul 08	Oct 08	78	1.9	Yes		Sep 07

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 4/ Support equipment and facilities		AIRCREW INTEGRATED SYSTEMS (AZ3110)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2009	Telephonics Farmingdale, NY	S/FFP	Redstone Arsenal, AL	Jul 09	Oct 09	12	40.0	Yes		
FY 2010	Telephonics Farmingdale, NY	S/FFP	Redstone Arsenal, AL	Jul 10	Oct 10	136	20.0	Yes		
AWIS A Kits										
FY 2008	Westwind Corporation Huntsville, AL	C/FFP	Redstone Arsenal, AL	Jul 08	Oct 08	24	7.9	Yes		Nov 07
FY 2009	Westwind Corporation Huntsville, AL	C/FFP	Redstone Arsenal, AL	Dec 08	Mar 09	15	7.9	Yes		
Airframe Kits										
FY 2010	Westwind Corporation Huntsville, AL	C/FFP	Redstone Arsenal, AL	Dec 09	Mar 10	904	7.3	Yes		Nov 07
CABS A Kits										
FY 2008	Westwind Corporation Huntsville, AL	C/FFP	Redstone Arsenal, AL	Jun 08	Oct 08	40	6.0	Yes		Mar 08
FY 2009	Westwind Corporation Huntsville, AL	C/FFP	Redstone Arsenal, AL	Jun 09	Oct 09	15	6.0	Yes		
CABS B Kits										
FY 2008	BAE Phoenix, AZ	C/FFP	Redstone Arsenal, AL	Aug 08	Dec 08	40	25.0	Yes		Jun 08
FY 2009	BAE Phoenix, AZ	C/FFP	Redstone Arsenal, AL	Aug 09	Dec 09	15	25.0	Yes		
CABS B-Kit Retrofit										
FY 2008	BAE Phoenix, AZ	C/FFP	Redstone Arsenal, AL	May 08	Jun 08	50	3.2	Yes		Feb 08
FY 2009	BAE Phoenix, AZ	C/FFP	Redstone Arsenal, AL	May 09	Jun 09	312	3.2	Yes		
PRSE Platform Modifications										
FY 2009	TBS TBS	C/FFP	Redstone Arsenal, AL	Mar 10	Mar 11	2	792.5	Yes		
Portable Helicopter Oxygen Delivey Syst										
FY 2009	U.S. Divers Co Inc Vista, CA	C/FFP	Aberdeen Proving Grd	Sep 09	Jun 10	116	13.4	Yes		Jun 08
Hydration System										
FY 2009	TBS TBS	C/FFP	TBS	Sep 09	Jun 10	2740	0.1	Yes		Aug 09

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 4/ Support equipment and facilities		AIRCREW INTEGRATED SYSTEMS (AZ3110)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Integrated Survival Kit										
FY 2009	TBS TBS	C/FFP	TBS	Sep 09	Jun 10	2742	0.2	Yes		Aug 09
Helmet Hear Through System										
FY 2009	TBS TBS	C/FFP	TBS	Sep 09	Mar 10	7700	0.2	Yes		Aug 09
Flat Panel Display										
FY 2010	EFW Inc. Ft. Worth, TX	S/FFP	Redstone Arsenal, AL	Jan 10	Oct 10	1240	20.0	Yes		Jun 05

REMARKS: 1

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY	ACCEP PRIOR	BAL DUE	Fiscal Year 09												Fiscal Year 10										Later
						Calendar Year 09												Calendar Year 10										
			Units	TO 1 OCT	AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Air Warrior Block 1 Ensembles																													
11	FY 08	A	7998	5330	2668	667	667	667	667																				0
5	FY 09	A	2745	0	2745			A		228	228	228	229	229	229	229	229	229	229	229	229									0
5	FY 10	A	1623	0	1623															A		135	135	135	135	135	135	135	135	543
Air Warrior A Kits																													
1	FY 08	A	62	0	62	31	31																							0
1	FY 09	A	366	0	366			A			30	30	30	30	30	30	31	31	31	31	31	31								0
Air Warrior Microclimate Cooling Units																													
2	FY 08	A	1246	726	520	104	104	104	104	104																				0
10	FY 09	A	1278	0	1278								A				106	106	106	106	106	106	107	107	107	107	107	107		0
10	FY 10	A	1974	0	1974															A				164	164	164	164	164	164	990
Electronic Data Mgr (EDM)																													
3	FY 08	A	745	372	373	62	62	62	62	62	63																			0
6	FY 09	A	500	0	500			A				41	41	41	41	42	42	42	42	42	42	42	42							0
6	FY 10	A	500	0	500															A				41	41	41	41	42	42	252
EDM A Kits																													
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Westwind Corporation, Huntsville, AL	50	400	1500	
2	Carleton Technologies, Inc., Orchard Park, NY	84	2000	4000	
3	JVYS, Huntsville, AL	41	600	1000	
4	Telephonics, Farmingdale, NY	6	250	500	
5	CONAX, St. Petersburg, FL	83	300	1000	
6	Raytheon, Indianapolis, IN	41	600	1000	
7	BAE, Phoenix, AZ	10	60	250	
8	U.S. Divers Co Inc, Vista, CA	30	100	150	
9	EFW Inc., Ft. Worth, TX	50	104	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	5	9	3	12
	Reorder	0	2	3	5
2	Initial	4	2	3	5
	Reorder	0	2	3	5
3	Initial	5	4	4	8
	Reorder	0	2	4	6
4	Initial	5	9	3	12
	Reorder	0	9	3	12
5	Initial	6	4	4	8
	Reorder	0	2	2	4

REMARKS

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 09												Fiscal Year 10												Later
						Calendar Year 09												Calendar Year 10												
			Units			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	FY 08	A	500	0	500	41	41	41	41	42	42	42	42	42	42	42	42													0
1	FY 09	A	500	0	500			A			41	41	41	41	42	42	42	42	42	42	42	42								0
Acft Wireless Intercom Sys (AWIS)																														
4	FY 08	A	78	0	78	6	6	6	6	6	6	7	7	7	7	7	7													0
4	FY 09	A	12	0	12										A			12												0
4	FY 10	A	136	0	136																						A			136
AWIS A Kits																														
1	FY 08	A	24	0	24	12	12																							0
1	FY 09	A	15	0	15			A			15																			0
Airframe Kits																														
1	FY 10	A	904	0	904															A			75	75	75	75	75	75	75	379
CABS A Kits																														
1	FY 08	A	40	0	40	10	10	10	10																					0
1	FY 09	A	15	0	15										A			15												0
CABS B Kits																														
7	FY 08	A	40	0	40			10	10	10	10																			0
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Westwind Corporation, Huntsville, AL	50	400	1500	
2	Carleton Technologies, Inc., Orchard Park, NY	84	2000	4000	
3	JVYS, Huntsville, AL	41	600	1000	
4	Telephonics, Farmingdale, NY	6	250	500	
5	CONAX, St. Petersburg, FL	83	300	1000	
6	Raytheon, Indianapolis, IN	41	600	1000	
7	BAE, Phoenix, AZ	10	60	250	
8	U.S. Divers Co Inc, Vista, CA	30	100	150	
9	EFW Inc., Ft. Worth, TX	50	104	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	5	9	3	12
	Reorder	0	2	3	5
2	Initial	4	2	3	5
	Reorder	0	2	3	5
3	Initial	5	4	4	8
	Reorder	0	2	4	6
4	Initial	5	9	3	12
	Reorder	0	9	3	12
5	Initial	6	4	4	8
	Reorder	0	2	2	4

REMARKS

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY	ACCEP PRIOR	BAL DUE	Fiscal Year 09												Fiscal Year 10												Later
						Calendar Year 09												Calendar Year 10												
			Units	TO 1 OCT	AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
7	FY 09	A	15	0	15			A			15																			0
CABS B-Kit Retrofit																														
7	FY 08	A	50	40	10	10																								0
7	FY 09	A	312	0	312								A	26	26	26	26	26	26	26	26	26	26	26	26					0
PRSE Platform Modifications																														
10	FY 09	A	2	0	2																		A							2
Portable Helicopter Oxygen Delivey Syst																														
8	FY 09	A	116	0	116												A									38	38	40		0
Hydration System																														
10	FY 09	A	2740	0	2740												A									228	228	228	228	1828
Integrated Survival Kit																														
10	FY 09	A	2742	0	2742												A									228	228	228	228	1830
Helmet Hear Through System																														
10	FY 09	A	7700	0	7700												A						641	641	641	641	641	641	641	3213
Flat Panel Display																														
9	FY 10	A	1240	0	1240																A									1240
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Westwind Corporation, Huntsville, AL	50	400	1500	
2	Carleton Technologies, Inc., Orchard Park, NY	84	2000	4000	
3	JVYS, Huntsville, AL	41	600	1000	
4	Telephonics, Farmingdale, NY	6	250	500	
5	CONAX, St. Petersburg, FL	83	300	1000	
6	Raytheon, Indianapolis, IN	41	600	1000	
7	BAE, Phoenix, AZ	10	60	250	
8	U.S. Divers Co Inc, Vista, CA	30	100	150	
9	EFW Inc., Ft. Worth, TX	50	104	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	5	9	3	12
	Reorder	0	2	3	5
2	Initial	4	2	3	5
	Reorder	0	2	3	5
3	Initial	5	4	4	8
	Reorder	0	2	4	6
4	Initial	5	9	3	12
	Reorder	0	9	3	12
5	Initial	6	4	4	8
	Reorder	0	2	2	4

REMARKS

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: May 2009

COST ELEMENTS						Fiscal Year 09												Fiscal Year 10									
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 09												Calendar Year 10									Later
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Total					29750	943	933	900	900	452	450	389	390	416	417	418	525	503	476	476	476	382	1026	1189	1189	1657	1657	1660	1513	10413
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Westwind Corporation, Huntsville, AL	50	400	1500	
2	Carleton Technologies, Inc., Orchard Park, NY	84	2000	4000	
3	JVYS, Huntsville, AL	41	600	1000	
4	Telephonics, Farmingdale, NY	6	250	500	
5	CONAX, St. Petersburg, FL	83	300	1000	
6	Raytheon, Indianapolis, IN	41	600	1000	
7	BAE, Phoenix, AZ	10	60	250	
8	U.S. Divers Co Inc, Vista, CA	30	100	150	
9	EFW Inc., Ft. Worth, TX	50	104	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	5	9	3	12
	Reorder	0	2	3	5
2	Initial	4	2	3	5
	Reorder	0	2	3	5
3	Initial	5	4	4	8
	Reorder	0	2	4	6
4	Initial	5	9	3	12
	Reorder	0	9	3	12
5	Initial	6	4	4	8
	Reorder	0	2	2	4

REMARKS

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY	ACCEP PRIOR	BAL DUE	Fiscal Year 11												Fiscal Year 12												Later
						Calendar Year 11												Calendar Year 12												
			Units	TO 1 OCT	AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Air Warrior Block 1 Ensembles																														
11	FY 08	A	7998	7998																										0
5	FY 09	A	2745	2745																										0
5	FY 10	A	1623	1080	543	135	136	136	136																					0
Air Warrior A Kits																														
1	FY 08	A	62	62																										0
1	FY 09	A	366	366																										0
Air Warrior Microclimate Cooling Units																														
2	FY 08	A	1246	1246																										0
10	FY 09	A	1278	1278																										0
10	FY 10	A	1974	984	990	165	165	165	165	165	165																			0
Electronic Data Mgr (EDM)																														
3	FY 08	A	745	745																										0
6	FY 09	A	500	500																										0
6	FY 10	A	500	248	252	42	42	42	42	42	42																			0
EDM A Kits																														
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Westwind Corporation, Huntsville, AL	50	400	1500	
2	Carleton Technologies, Inc., Orchard Park, NY	84	2000	4000	
3	JVYS, Huntsville, AL	41	600	1000	
4	Telephonics, Farmingdale, NY	6	250	500	
5	CONAX, St. Petersburg, FL	83	300	1000	
6	Raytheon, Indianapolis, IN	41	600	1000	
7	BAE, Phoenix, AZ	10	60	250	
8	U.S. Divers Co Inc, Vista, CA	30	100	150	
9	EFW Inc., Ft. Worth, TX	50	104	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	5	9	3	12
	Reorder	0	2	3	5
2	Initial	4	2	3	5
	Reorder	0	2	3	5
3	Initial	5	4	4	8
	Reorder	0	2	4	6
4	Initial	5	9	3	12
	Reorder	0	9	3	12
5	Initial	6	4	4	8
	Reorder	0	2	2	4

REMARKS

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11 / Calendar Year 11 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 12 / Calendar Year 12 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
1	FY 08	A	500	500																										0
1	FY 09	A	500	500																										0
Acft Wireless Intercom Sys (AWIS)																														
4	FY 08	A	78	78																										0
4	FY 09	A	12	12																										0
4	FY 10	A	136	0	136	11	11	11	11	11	11	11	11	12	12	12	12													0
AWIS A Kits																														
1	FY 08	A	24	24																										0
1	FY 09	A	15	15																										0
Airframe Kits																														
1	FY 10	A	904	525	379	75	76	76	76	76																				0
CABS A Kits																														
1	FY 08	A	40	40																										0
1	FY 09	A	15	15																										0
CABS B Kits																														
7	FY 08	A	40	40																										0
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Westwind Corporation, Huntsville, AL	50	400	1500	
2	Carleton Technologies, Inc., Orchard Park, NY	84	2000	4000	
3	JVYS, Huntsville, AL	41	600	1000	
4	Telephonics, Farmingdale, NY	6	250	500	
5	CONAX, St. Petersburg, FL	83	300	1000	
6	Raytheon, Indianapolis, IN	41	600	1000	
7	BAE, Phoenix, AZ	10	60	250	
8	U.S. Divers Co Inc, Vista, CA	30	100	150	
9	EFW Inc., Ft. Worth, TX	50	104	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	5	9	3	12
	Reorder	0	2	3	5
2	Initial	4	2	3	5
	Reorder	0	2	3	5
3	Initial	5	4	4	8
	Reorder	0	2	4	6
4	Initial	5	9	3	12
	Reorder	0	9	3	12
5	Initial	6	4	4	8
	Reorder	0	2	2	4

REMARKS

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: May 2009

COST ELEMENTS

MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11 / Calendar Year 11 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 12 / Calendar Year 12 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
7	FY 09	A	15	15																										0
CABS B-Kit Retrofit																														
7	FY 08	A	50	50																										0
7	FY 09	A	312	312																										0
PRSE Platform Modifications																														
10	FY 09	A	2	0	2						2																			0
Portable Helicopter Oxygen Delivey Syst																														
8	FY 09	A	116	116																										0
Hydration System																														
10	FY 09	A	2740	912	1828	228	228	228	228	229	229	229	229																	0
Integrated Survival Kit																														
10	FY 09	A	2742	912	1830	228	228	229	229	229	229	229	229																	0
Helmet Hear Through System																														
10	FY 09	A	7700	4487	3213	642	642	643	643	643																				0
Flat Panel Display																														
9	FY 10	A	1240	0	1240	103	103	103	103	103	103	103	103	104	104	104	104													0
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Westwind Corporation, Huntsville, AL	50	400	1500	
2	Carleton Technologies, Inc., Orchard Park, NY	84	2000	4000	
3	JVYS, Huntsville, AL	41	600	1000	
4	Telephonics, Farmingdale, NY	6	250	500	
5	CONAX, St. Petersburg, FL	83	300	1000	
6	Raytheon, Indianapolis, IN	41	600	1000	
7	BAE, Phoenix, AZ	10	60	250	
8	U.S. Divers Co Inc, Vista, CA	30	100	150	
9	EFW Inc., Ft. Worth, TX	50	104	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	5	9	3	12
	Reorder	0	2	3	5
2	Initial	4	2	3	5
	Reorder	0	2	3	5
3	Initial	5	4	4	8
	Reorder	0	2	4	6
4	Initial	5	9	3	12
	Reorder	0	9	3	12
5	Initial	6	4	4	8
	Reorder	0	2	2	4

REMARKS

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: May 2009

COST ELEMENTS						Fiscal Year 11												Fiscal Year 12									
						Calendar Year 11												Calendar Year 12									
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Total					10413	1629	1631	1633	1633	1498	781	572	572	116	116	116	116												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	Westwind Corporation, Huntsville, AL	50	400	1500	
2	Carleton Technologies, Inc., Orchard Park, NY	84	2000	4000	
3	JVYS, Huntsville, AL	41	600	1000	
4	Telephonics, Farmingdale, NY	6	250	500	
5	CONAX, St. Petersburg, FL	83	300	1000	
6	Raytheon, Indianapolis, IN	41	600	1000	
7	BAE, Phoenix, AZ	10	60	250	
8	U.S. Divers Co Inc, Vista, CA	30	100	150	
9	EFW Inc., Ft. Worth, TX	50	104	120	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	5	9	3	12
	Reorder	0	2	3	5
2	Initial	4	2	3	5
	Reorder	0	2	3	5
3	Initial	5	4	4	8
	Reorder	0	2	4	6
4	Initial	5	9	3	12
	Reorder	0	9	3	12
5	Initial	6	4	4	8
	Reorder	0	2	2	4

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 4 / Support equipment and facilities	AIR TRAFFIC CONTROL (AA0050)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: 0604633A/586 Air Traffic Control

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	591.2	110.9	122.4	77.0		901.5
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	591.2	110.9	122.4	77.0		901.5
Initial Spares						
Total Proc Cost	591.2	110.9	122.4	77.0		901.5
Flyaway U/C						
Weapon System Proc U/C						

Description:
Tactical Air Traffic Control (ATC) equipment includes Air Traffic Navigation Integration and Coordination System (ATNAVICS), ATNAVICS Environmental Dome, Tactical Airspace Integration System (TAIS), ATNAVICS/TAIS Air Picture Integration, TAIS Airspace Workstation (AWS), Advanced Fusion Tracking System (AFTS), Multifunctional Information Distribution System (MIDS), and Tactical Terminal Control System (TTCS). ATNAVICS provides all weather instrument flight capabilities to include enroute, terminal, radar precision approach and landing services to all Army, Joint, and allied aircraft. ATNAVICS Environmental Dome provides semi-permanent protective shelter for radar under extreme heat and sand environment. ATNAVICS/TAIS Air Picture Integration provides data port out of ATNAVICS to feed the radar picture to TAIS. TAIS is a highly mobile, airspace synchronization and deconfliction system providing Airspace Command and Control (AC2) and Air Traffic Services (ATS) capabilities at the Combat Aviation Brigade, Division and Corps. TAIS AWS provides for AC2 planning and execution at the Brigade Combat Team (BCT) and above. It is the Army's link to the Theater Battle Management Core System (TBMCS) for Joint Airspace Management. TAIS and TAIS AWS provide an automated AC2 and ATS capability for current requirements and Battle Command interfaces. ATNAVICS and TAIS serve as effective risk management tools for aviation safety during night, inclement weather, and combat operations. AFTS for TAIS provides a fused air picture below the coordinating altitude. TAIS MIDS provides Link 16 UHF Comms capability with the convergence of networked sensors and weapons. TAIS will evolve Airspace Integration Improvements Initiatives (AI3) capabilities including the Dynamic Airspace Collaboration Tool (DACT). TTCS provides enhanced ATS communications support to aviation assets conducting reconnaissance, maneuver, medical evacuation, logistics, and intelligence operations across the battlefield. Fixed Base ATC requirements will be met through a vast array of high technology solutions resulting in highly reliable and safe ATC systems in accordance with the Joint DoD/Federal Aviation Administration (FAA) program to modernize the National Airspace System (NAS), Next Gen. This includes upgrading and automating the complete infrastructure, systematically replacing antiquated analog systems (radars and communications switching system) with installation of state of the art digital technology. These systems include Department of Defense (DoD) Advanced Automation System (DAAS), Digital Airport Surveillance Radar (DASR), and navigational control aids which consist of Instrument Landing System (ILS), Voice Recorder Replacement Program (VRRP), Army Airfield Automation System (AAAS), and Radio and Antenna replacement program. Fixed Base Precision Approach Radar (FBPAR) is the Army's primary ground controlled precision approach capability to provide recovery operations for aircraft to fixed base airfields during adverse weather conditions.

Justification:
FY 10 Base Funding in the amount of $77 million will procure tactical and fixed base ATC systems and modifications to systems. Funds for tactical ATC systems provide for upgrades and modifications to TAIS, ATNAVICS, and TTCS. ATNAVICS upgrades will address joint interoperability and networking capabilities, as well as Information Assurance requirements, increased operating ranges, and integrating the Air Defense Interrogator to interrogate both Mode S and Mode 5 equipped aircraft. These enhancements will allow the ATNAVICS to transmit critical air

Exhibit P-40, Budget Item Justification Sheet			Date: May 2009
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities		P-1 Item Nomenclature AIR TRAFFIC CONTROL (AA0050)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: 0604633A/586 Air Traffic Control	

picture information to TAIS and DOD Command and Control network/systems. TAIS airspace management functions will be modified as web services that will be available throughout the tactical network via a common server to properly credentialed users. TAIS airspace management web services will also support Army Battle Command, ATS, and Airspace Integration Improvements Initiatives (AI3). Current chat messaging capability will be modified to a real time, cross-echelon collaboration capability. TTCS modifications will integrate the TTCS onto an uparmored vehicle in accordance with DA direction for force protection. 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. Fixed base ATC systems (DAAS, DASR, Navigational Control Aids, FBPAR) provide the Army a joint service capability required for the DoD/FAA modernization and upgrade of the NAS via the Next Gen program. These systems will save significant Operational and Support costs by replacing old, obsolete, and antiquated analog radars, switches, and automation systems with new, state of the art, highly reliable ATC systems in towers and approach control facilities. Equipment quantity and configuration is tailored to meet specific site requirements, resulting in varying unit costs. Funding ensures compliance and interoperability between the Army and FAA systems.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIR TRAFFIC CONTROL (AA0050)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
Fixed Base Precision Approach Radar					7796			2078		
DoD Advanced Automation System (DAAS)		10177			10876			5682		
Digital Airport Surveillance Radar(DASR)		10043			18847			18372		
Tactical Airspace Integration Sys (TAIS)		34512			34543			24230		
Air Traffic Navigation and Integration		37983			35674			16910		
TAIS Airspace Workstation (AWS)		1567			238					
Navigational Control Aids		6898			13586			6789		
TTCS Upgrades		9695			853			2938		
Total:		**110875**			**122413**			**76999**		

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 4 / Support equipment and facilities	INDUSTRIAL FACILITIES (AZ3300)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	181.5	2.4	2.5	1.6		187.9
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	181.5	2.4	2.5	1.6		187.9
Initial Spares						
Total Proc Cost	181.5	2.4	2.5	1.6		187.9
Flyaway U/C						
Weapon System Proc U/C						

Description:
This program provides funding to the Army Test and Evaluation Command (ATEC), Developmental Test Command (DTC) 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 Aviation Technical Test Center (ATTC), Fort Rucker, AL and Yuma Proving Ground (YPG), Yuma, AZ. Note: Base Realignment and Closure (BRAC) decisions move the ATTC to the Redstone Technical Test Center in Huntsville, AL. All of the instrumentation and equipment to be procured for ATTC will be moved with the Test Center to Huntsville and will be used for Aircraft Testing in the relocation of this mission.

Justification:
ATEC: At ATTC, FY 2010 procures various types of airborne instrumentation including analog and inertial sensors, Global Positioning System (GPS) receivers, signal conditioning units, data acquisition equipment and cockpit display components used to obtain aircraft performance data. It also funds upgrades to engineering PC based workstations for engineers to use in test data analysis, presentation, and reporting and procurement of calibration and support equipment used to maintain flight test instrumentation. Lastly, it procures instrumentation to stimulate and collect message traffic and message data for aircraft communications testing within actual flight environments. At YPG, FY 2010 procures replacement instrumentation for the time-stamping, on-board recording and telemetering of standard aircraft bus data, analog video from sensors, intercom (voice), and on-board recorders. Funds procure telemetry equipment that can meet the environment performance and data speed requirements needed for production base aviation programs. It will also procure an acoustic or seismic sensor system that will allow the YPG test team to accurately determine impact locations for high rate aerial fired weapon systems, at short and long ranges, during aircraft weapons performance tests. 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.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 4 / Support equipment and facilities	LAUNCHER, 2.75 ROCKET (A50100)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	80.4	2.4	2.4	2.7		87.9
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	80.4	2.4	2.4	2.7		87.9
Initial Spares						
Total Proc Cost	80.4	2.4	2.4	2.7		87.9
Flyaway U/C						
Weapon System Proc U/C						

Description:
The M261 19-tube and M260 7-tube rocket launchers are used to fire 2.75 Inch HYDRA 70 rockets from the following platforms: AH-64 Apache, OH-58D Kiowa Warrior, MH-60L Blackhawk, and AH-6J helicopters. The 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 launcher is approximately 35 pounds, and the empty weight of the M261 launcher is approximately 82 pounds. The launcher permits fuze-timing selection from the cockpit and will launch rockets using either the MK 40 or the MK 66 motors.

Justification:
FY2010 procures both the M260 7-tube rocket launcher for OH-58D Kiowa Warrior and AH-6J helicopters and the M261 19-tube launcher for the AH-64 Apache, MH-60L Blackhawk, and AH-6J helicopters. Procurement replaces launchers expended 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 Component usage.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 4 / Support equipment and facilities	AIRBORNE COMMUNICATIONS (AA0705)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		AA0700

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	325.2		21.1	11.1		357.5
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	325.2		21.1	11.1		357.5
Initial Spares						
Total Proc Cost	325.2		21.1	11.1		357.5
Flyaway U/C						
Weapon System Proc U/C						

Description:
The AN/ARC-220/VRC-100 High Frequency (HF) Radio Program answers Army Aviation's critical long-standing requirement for a Non-Line of Sight (NLOS) communications capability. The HF radio system allows continuous and reliable secure/non-secure communication between Army aircraft flying Nap-of-the-Earth (NOE) maneuvers and at NLOS distances with Aviation Tactical Operations Centers (TOC) and other Army aircraft. The radio incorporates Automatic Link Establishment (ALE) to eliminate manual searches for workable frequencies reducing pilot workload and enhancing communication connectivity. The AN/ARC-220/VRC-100 also provides a frequency hopping capability and is night vision compatible. The AN/ARC-220 provides a position reporting and data capability enhancing situational awareness and command and control.

In FY09, this budget line also includes $21.0 million of Overseas Contingency Operations (OCO) funds for NLOS systems to support OEF operations.

Justification:
FY10 base funding in the amount of $11.1 million will procure 66 VRC-100 Ground Radios in support of the Grow the Army Initiative and 44 AN/ARC-220 radios for the Army Reserve.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIRBORNE COMMUNICATIONS (AA0705)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
RECURRING COSTS										
A. AN/ARC-220 NOE HF Airborne Radio								3601	44	82
B. AN/VRC-100 Ground Radio					138	2	69	4645	66	70
C. Misc Non-LOS Equipment (OCO)					20971	147	143			
D. A-Kits								615	44	14
E. A-Kit Installation								1414	44	32
SUBTOTAL					**21109**			**10275**		
SUPPORT COST										
A. Fielding Support								600		
B. Program Management								234		
SUBTOTAL								**834**		
Total:					**21109**			**11109**		

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 1 / Aircraft	C-12 CARGO AIRPLANE (A02700)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty				6		6
Gross Cost				45.0		45.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1				45.0		45.0
Initial Spares						
Total Proc Cost				45.0		45.0
Flyaway U/C						
Weapon System Proc U/C				7.5		7.5

Description:
The budget line covers the acquisition of Army C-12 fixed wing aircraft to support operational requirements. The budget line provides acquisition of new commercial-off-the-shelf, non-developmental aircraft, hardware and associated support, military unique avionics, and aircraft survivability equipment.

Justification:
FY10 OCO Funding in the amount of $45 million will procure six C-12W fixed wing aircraft with military unique avionics and aircraft survivability equipment.

$ M		FY2010
Active	QTY	6
	Gross Cost	45

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature: C-12 CARGO AIRPLANE (A02700)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000
C-12W Aircraft										
Hardware and Associated Support								38300	6	6383
Avionics								2700		
Other GFE								4000		
Total:								**45000**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 1/ Aircraft		C-12 CARGO AIRPLANE (A02700)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware and Associated Support										
FY 2010	Hawker Beech Wichita, KS	SS/FFP	Redstone Arsenal, AL	Apr 10	Oct 11	6	6383	Yes		Dec 09

REMARKS:

FY 12 / 13 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
C-12 CARGO AIRPLANE (A02700)

Date: May 2009

COST ELEMENTS						Fiscal Year 12												Fiscal Year 13										
						Calendar Year 12												Calendar Year 13										
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Hardware and Associated Support																													
1	FY 10	A	6	0	6	1	1	1		1	1	1																	0
Total					6	1	1	1		1	1	1																	
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	Hawker Beech, Wichita, KS	1	4	18		1	Initial	0	6	18	24	
							Reorder	0	0	0	0	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army / 2 / Modification of aircraft	RQ-7 UAS MODS (A00018)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: 0305204A-RDT&E, BA0330 (OPA)

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost				609.4		609.4
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1				609.4		609.4
Initial Spares						
Total Proc Cost				609.4		609.4
Flyaway U/C						
Weapon System Proc U/C						

Description:
The Tactical Unmanned Aerial Systems (TUAS) Shadow 200 provides the Army Brigade Commander with dedicated Reconnaissance, Surveillance and Target Acquisition (RSTA), Intelligence, Battle Damage Assessment (BDA) and Force Protection. The Shadow provides the Brigade Commander with critical battlefield intelligence and targeting information in the rapid cycle time required for success at the tactical level. The TUAS Shadow system air vehicle meets the required operating range of 50 kilometers and remains on station for up to five hours. The baseline fielded payload is electro-optic infrared (EO/IR) with a Laser Designator payload (EO/IR/LD) scheduled for retrofit beginning in FY 2008. Congressionally mandated Tactical Common Data Links is also scheduled for retrofit beginning in FY 2010. Intelligence, Surveillance, and Reconnaissance surge funding purchased both re-wing kits that allow the launch of heavier Shadow Aircraft. The TUAS Shadow system consists of four air vehicles, (each configured with an EO/IR sensor payload), launcher and ground control and support equipment including: power generation, communications equipment, automated recovery equipment, one system remote video terminals (OSRVT), vehicle mounted shelters, and High Mobility Multipurpose Wheeled Vehicles with trailer(s). Each system is equipped with one Maintenance Section Multifunctional (MSM) Vehicle and is supported at the division level by a Mobile Maintenance Facility (MMF). The TUAS Shadow has logged over 360,000 flight hours since June FY 2001 most of which were flown in support of Operation Iraqi Freedom and Operation Enduring Freedom.

Justification:
FY2010 Base funding in the amount of $283 million will procure Laser Designators (LD) and retrofits of congressionally-mandated Tactical Common Data Link (TCDL); which includes Universal Ground Control Station (GCS), Universal Ground Data Terminal (UGT) and associated Production Quality Testing.

FY2010 OCO funding in the amount of $326 million will procure Pre-planned Product Improvements (P3I), Contractor Support, Encryption of full motion video enhancements and OGA support.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft	P-1 Line Item Nomenclature: RQ-7 UAS MODS (A00018)	Weapon System Type:	Date: May 2009

ACFT Cost Elements	ID CD	FY 08			FY 09			FY 10		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Units	$000	$000	Units	$000	$000	Units	$000
TACTICAL UNMANNED AERIAL VEHICLE SHADOW										
Pre-Planned Product Improvement (P3I)								196614		
Contractor Support								39472		
Subtotal Prime Contractor System								**236086**		
GFE								11425		
Program Management								11790		
Other Government Agencies Support								23711		
Subtotal Government Cost								**46926**		
SHADOW OCO										
Pre-Planned Product Improvement (P3I)								158184		
Contractor Support								37720		
Encryption								115500		
Subtotal Prime Contractor System								**311404**		
GFE								14996		
Subtotal Government Cost								**14996**		
Total:								**609412**		

Exhibit P-5a, Budget Procurement History and Planning

Date: May 2009

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army/ 2/ Modification of aircraft		RQ-7 UAS MODS (A00018)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
TACTICAL UNMANNED AERIAL VEHICLE SHADOW										
FY 2010	AAI Hunt Valley, MD	SS/FPIF	AMCOM					Y	NA	NA

REMARKS: FY 2010 funding for retrofits.

Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army / 2 / Modification of aircraft	C-12 AIRCRAFT MODS (A01234)

Program Elements for Code B Items:	Code:	Other Related Program Elements:

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost				60.0		60.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1				60.0		60.0
Initial Spares						
Total Proc Cost				60.0		60.0
Flyaway U/C						
Weapon System Proc U/C						

Description:
The C-12 fixed wing aircraft platform hosts a number of Army Intelligence, Surveillance and Reconnaissance/Reconnaissance Surveillance and Target Acqusition (ISR/RSTA) sensor systems that support irregular warfare in Overseas Contingency Operations (OCO). Included in those systems are the Aerial Reconnaissance Multi Sensor (ARMS) (Iraq), the Medium Altitude Reconnaissance and Surveillance Systems (MARSS)(Iraq and Afghanistan), and Constant Hawk (Afghanistan). The ARMS system is composed of B-200 (C-12) aircraft equipped with imagery sensors, specialized COMINT sensors, and an array of line of sight and beyond line of sight communications equipment. The aircraft were fielded to Operation Iraqi Freedom (OIF) in FY06 and have been providing daily support to the (Task Force Observe, Detect Identify, Neutralize (TF ODIN) commander. The MARSS aircraft are primarily King Air 300's (C-12 variant) equipped with numerous sensors to include imagery and communications intelligence (COMINT) payloads. They also include several line-of-sight and beyond line of sight communications systems and on board (manned) processing of the imagery and COMINT. The Enhanced MARSS (EMARSS) program provides six additional MARSS systems based on a King Air 350 Extended Range (ER) aircraft. Constant Hawk (CH) in Afghanistan is hosted on King Air 350(C-12) aircraft. CH is a persistent surveillance wide field of view airborne intelligence, surveillance and reconnaissance (AISR) system conducting Counter Improvised Explosive Device (IED) surveillance and forensic force protection missions. CH uses high resolution Electro Optic (EO) cameras mounted on manned aircraft to provide persistent surveillance of a designated Named Area of Interest (NAI).

Justification:
FY 10 OCO funding in the amount of $60.000 million will provide the aircraft modifications and integration efforts necessary to field six (6) EMARSS to provide Line of Sight (LOS) and Beyond Line of Sight (BLOS) communications, and Imagery and Communications Intelligence (IMINT and COMINT) capabilities with real-time data dissemination in Operation Enduring Freedom (OEF) ISR operations.

Exhibit P-40M, Budget Item Justification Sheet

Date: May 2009

Appropriation / Budget Activity / Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army / 2 / Modification of aircraft	C-12 AIRCRAFT MODS (A01234)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Enhanced MARSS (EMARSS)						
1-10-00-OCO	U	0.0	0.0	60.0	0.0	60.0
Totals		0.0	0.0	60.0	0.0	60.0

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE: Enhanced MARSS (EMARSS) [MOD 1] 1-10-00-OCO

MODELS OF SYSTEM AFFECTED: EMARSS 1-6

DESCRIPTION / JUSTIFICATION:

The Enhanced MARSS (EMARSS) aircraft will provide six additional planes to perform ISR operations. These systems will be integrated on a King Air 350 Extended Range (ER) aircraft and include Imagery and Communications Intelligence (COMINT) sensors as well as line of sight and beyond line of sight communications equipment. It will allow for two backseat operators performing COMINT and imagery analysis and real time dissemination of the data from the aircraft. PM ACS will procure and perform NRE on two preliminary platforms; PM Fixed Wing will be procuring the balance of the platforms aircraft via Funding line A02700. PM ACS will fund the integration efforts for all six systems.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

. 1QFY10: Contract award for Systems Integrator
. 4QFY10: Receipt of Initial platforms
. 1QFY12: Completion of Integration, Testing, and Deployment of first Aircraft

Installation Schedule

	Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs													1	1	2	2	2				

	FY 2014				FY 2015				FY 2016				FY 2017				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

INDIVIDUAL MODIFICATION Date: May 2009

MODIFICATION TITLE (cont): Enhanced MARSS (EMARSS) [MOD 1] 1-10-00-OCO

FINANCIAL PLAN: ($ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E										
Procurement										
Initial NRE Platforms & Mods					2	21.0			2	21.0
NonRecur Engineering						4.6				4.6
Recurring Sensor HW (6 & 1)					7	15.6			7	15.6
Spt Equipment						1.0				1.0
Integration					6	14.6			6	14.6
Program Mgt Costs						1.5				1.5
Fldg & Initial Spt						1.7				1.7
Installation of Hardware										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		60.0		0.0		60.0