DEPARTMENT OF THE ARMY

Procurement Programs



Committee Staff Procurement Backup Book Fiscal Year 2009 Budget Estimate

AIRCRAFT PROCUREMENT, ARMY

Table of Contents - Aircraft Procurement, Army

BLIN	SSN	Nomenclature	Page
001	A11000	JOINT CARGO AIRCRAFT (JCA)	1
002	A11300	UTILITY F/W AIRCRAFT	7
003	A04203	ARMED RECONNAISSANCE HELICOPTER	9
004	A04203	ARMED RECONNAISSANCE HELICOPTER (Adv. Proc.)	15
005	A05001	HELICOPTER, LIGHT UTILITY (LUH)	20
006	AA0005	UH-60 BLACKHAWK (MYP)	26
007	AA0005	UH-60 BLACKHAWK (MYP) (Adv. Proc.)	33
008	A05008	CH-47 HELICOPTER	38
009	A05008	CH-47 HELICOPTER (Adv. Proc.)	42
010	A06500	HELICOPTER NEW TRAINING	47
012	AZ2000	GUARDRAIL MODS (MIP)	49
013	AZ2001	MULTI SENSOR ABN RECON (MIP)	60
014	AA6605	AH-64 MODS	74
015	AA6605	AH-64 MODS (Adv. Proc.)	97
016	AA0252	CH-47 CARGO HELICOPTER MODS	
017	AA0252	CH-47 CARGO HELICOPTER MODS (Adv. Proc.)	117
018	AA0270	UTILITY/CARGO AIRPLANE MODS	122
019	AA0560	AIRCRAFT LONG RANGE MODS	126
020	AA0480	UTILITY HELICOPTER MODS	127
021	AZ2200	KIOWA WARRIOR	
022	AA0700	AIRBORNE AVIONICS	140
023	AA0711	GATM Rollup	
024	AA0950	SPARE PARTS (AIR)	
025	AZ3504	AIRCRAFT SURVIVABILITY EQUIPMENT	164
026	AZ3507	ASE INFRARED CM	177
027	AA0710	AIRBORNE COMMAND & CONTROL	183
028	AZ3000	AVIONICS SUPPORT EQUIPMENT	
029	AZ3100	COMMON GROUND EQUIPMENT	192
030	AZ3110	AIRCREW INTEGRATED SYSTEMS	
031	AA0050	AIR TRAFFIC CONTROL	210
032	AZ3300	INDUSTRIAL FACILITIES	213
033	A50100	LAUNCHER 2.75 ROCKET	214

Table of Contents - Aircraft Procurement, Army

BLIN	SSN	Nomenclature	Page
034	AA0705	AIRBORNE COMMUNICATIONS	

DEPARTMENT OF THE ARMY

FY 2009 PROCUREMENT PROGRAM (WORKSETS INCLUDED) President's Budget 2009

DATE: 17-Jan-2008 11:15

EXHIBIT P-1

TABLE OF CONTENTS

	PAGE
SUMMARY BY APPROPRIATION	2
SUMMARY BY ACTIVITY:	
Aircraft Procurement, Army	3
ACTIVITY: 01 Aircraft	4
ACTIVITY: 02 Modification of aircraft	5
ACTIVITY: 03 Spares and repair parts	6
ACTIVITY: 04 Support equipment and facilities	7
NOMENCLATURE INDEX	8
SSN INDEX	9

DEPARTMENT OF THE ARMY

FY 2009 PROCUREMENT PROGRAM (WORKSETS INCLUDED) President's Budget 2009

DATE: 17-Jan-2008 11:15

EXHIBIT P-1

APPROPRIATION SUMMARY DOLLARS IN THOUSANDS

APPROPRIATION	FY 2007	FY 2008	FY 2009	PAGE
Aircraft Procurement, Army	5,672,208	5,101,086	5,009,835	3
TOTAL PROCUREMENT PROGRAM	5,672,208	5,101,086	5,009,835	

DEPARTMENT OF THE ARMY

FY 2009 PROCUREMENT PROGRAM (WORKSETS INCLUDED) President's Budget 2009

EXHIBIT P-1 DATE: 17-Jan-2008 11:15

	APPROPRIATION Aircraft Procurement, Army	DOLLARS IN THOUSANDS				
	ACTIVITY	FY 2007	FY 2008	FY 2009	PAGE	
1 .	Aircraft	1,497,890	2,118,882	2,436,456	4	
2	Modification of aircraft	3,320,301	2,239,482	1,798,188	5	
3	Spares and repair parts	9,408	9,241	6,875	6	
4	Support equipment and facilities	844,609	733,481	768,316	7	
	APPROPRIATION TOTALS	5,672,208	5,101,086	5,009,835		

01 02 03

04

DEPARTMENT OF THE ARMY

FY 2009 PROCUREMENT PROGRAM (WORKSETS INCLUDED) President's Budget 2009

APPROPRIATION Aircraft Procurement, Army

ACTIVITY 01 Aircraft

DOI	ΙΔ	RS	IN	THO	us.	ANDS

	• •		FY	2007	FY	2008	FY	2009
LINE NO	ITEM NOMENCLATURE	ID	QTY	COST	QTY	COST	QTY	COST
	FIXED WING							
1	JOINT CARGO AIRCRAFT (JCA) (A11000)		2	71,864	4	155,982	7	264,160
2	UTILITY F/W AIRCRAFT (A11300)			4,044		5,000		
	SUB-ACTIVITY TOTAL		-	75,908	_	160,982	_	264,160
	ROTARY							
3 4	ARMED RECONNAISSANCE HELICOPTER (A04203) ARMED RECONNAISSANCE HELICOPTER (A04203) Advance Procurement (CY)			75	10	174,571	28	358,841 80,010
5	HELICOPTER, LIGHT UTILITY (LUH) (A05001)	А	26	148,426	43	228,933	36	224,518
6	UH-60 BLACKHAWK (MYP) (AA0005) Less: Advance Procurement (PY)		72 _	(1,164,824) (-77,991)	78 -	(1,431,849) (-183,009)	63 	(1,042,647) (-116,795)
7	UH-60 BLACKHAWK (MYP) (AA0005) Advance Procurement (CY)			1,086,833 185,098		1,248,840 115,956		925,852 137,175
8	CH-47 HELICOPTER (MYP) (A05008) Less: Advance Procurement (PY)	А			6	(156,841)	16	(476,278) (-32,759)
9	CH-47 HELICOPTER (MYP) (A05008) Advance Procurement (CY)					156,841 32,759		443,519
10	HELICOPTER NEW TRAINING (A06500)							2,381
11	DRUG INTERDICTION (AA0010)			1,550				
	SUB-ACTIVITY TOTAL		=	1,421,982	-	1,957,900	_	2,172,296
	ACTIVITY TOTAL		_	1,497,890	_	2,118,882	_	2,436,456

EXHIBIT P-1

DATE: 17-Jan-2008 11:15

DEPARTMENT OF THE ARMY

FY 2009 PROCUREMENT PROGRAM (WORKSETS INCLUDED)

President's Budget 2009

APPROPRIATION Aircraft Procurement, Army

ACTIVITY 02 Modification of aircraft

DOLLARS IN THOUSANDS

			FY 2007	FY 2008	FY 2009
LINE NO	ITEM NOMENCLATURE	ID	QTY COST	QTY COST	QTY COST
	MODIFICATIONS OF AIRCRAFT				
12	GUARDRAIL MODS (MIP) (AZ2000)		90,767	148,054	119,057
13	MULTI SENSOR ABN RECON (MIP) (AZ2001)		123,267	42,012	23,297
14	AH-64 MODS (AA6605) Less: Advance Procurement (PY)	A	(1,484,781) (-38,736)	(812,477) (-38,923)	(648,649) (-40,680)
15	AH-64 MODS (AA6605) Advance Procurement (CY)		1,446,045 38,923	773,554 40,680	607,969 29,373
16	CH-47 CARGO HELICOPTER MODS (MYP) (AA0252) Less: Advance Procurement (PY)		(1,296,835) (-24,658)	(907,696) (-36,592)	(713,503) (-38,917)
17	CH-47 CARGO HELICOPTER MODS (MYP) (AA0252) Advance Procurement (CY)		1,272,177 36,592	871,104 38,917	674,586 49,619
18	UTILITY/CARGO AIRPLANE MODS (AA0270)		17,347	17,556	14,921
19	AIRCRAFT LONG RANGE MODS (AA0560)		1,863	338	577
20	UTILITY HELICOPTER MODS (AA0480)		67,779	24,747	10,866
21	KIOWA WARRIOR (AZ2200)		51,079	51,457	13,722
22	AIRBORNE AVIONICS (AA0700)		142,924	178,351	174,978
23	GATM Rollup (AA0711)	Α	31,538	52,712	79,223
	SUB-ACTIVITY TOTAL		3,320,301	2,239,482	1,798,188
	ACTIVITY TOTAL		3,320,301	2,239,482	1,798,188

EXHIBIT P-1

DATE: 17-Jan-2008 11:15

DEPARTMENT OF THE ARMY

FY 2009 PROCUREMENT PROGRAM (WORKSETS INCLUDED) President's Budget 2009

DATE: 17-Jan-2008 11:15

APPROPR	IATION Aircraft Procurement, Army	ACTIVITY 03 Spares and repair parts		DOLLARS IN	THOUSAN	DS		
			FY	2007	F۱	2008	FY	2009
LINE NO	ITEM NOMENCLATURE	ID	QTY	COST	QTY	COST	QTY	COST
	SPARES AND REPAIR PARTS							
24	SPARE PARTS (AIR) (AA0950)			9,408		9,241		6,875
	SUB-ACTIVITY TOTAL		•	9,408		9,241	-	6,875
	ACTIVITY TOTAL			9,408		9,241	-	6,875

EXHIBIT P-1

DEPARTMENT OF THE ARMY

FY 2009 PROCUREMENT PROGRAM (WORKSETS INCLUDED)

President's Budget 2009

APPROPRIATION Aircraft Procurement, Army

ACTIVITY 04 Support equipment and facilities

DOLLARS IN THOUSANDS

	Terror / morale recomment, / mmy			DOLLANO III				
LINE NO	ITEM NOMENCLATURE	ID	FY QTY	2007 COST	FY QTY	2008 COST	FY QTY	2009 COST
	GROUND SUPPORT AVIONICS							
25	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)			23,680		47,795		56,906
26	ASE INFRARED CM (AZ3507)			540,028		442,461		433,941
	SUB-ACTIVITY TOTAL		-	563,708	-	490,256	-	490,847
	OTHER SUPPORT							
27	AIRBORNE COMMAND & CONTROL (AA0710)			44,958				
28	AVIONICS SUPPORT EQUIPMENT (AZ3000)			5,043		5,031		5,028
29	COMMON GROUND EQUIPMENT (AZ3100)			61,363		84,713		103,882
30	AIRCREW INTEGRATED SYSTEMS (AZ3110)			61,332		44,822		40,697
31	AIR TRAFFIC CONTROL (AA0050)			103,769		103,938		122,775
32	INDUSTRIAL FACILITIES (AZ3300)			2,092		2,361		2,536
33	LAUNCHER, 2.75 ROCKET (A50100)			2,344		2,360		2,442
34	AIRBORNE COMMUNICATIONS (AA0705)							109
	SUB-ACTIVITY TOTAL		-	280,901	-	243,225	-	277,469
	ACTIVITY TOTAL		-	844,609	-	733,481	-	768,316
	APPROPRIATION TOTAL		-	5,672,208	-	5,101,086	=	5,009,835

EXHIBIT P-1

DATE: 17-Jan-2008 11:15

NOMENCLATURE INDEX

SSN	LINE	PAGE	NOMENCLATURE
AA6605	14	5	AH-64 MODS (AA6605)
AA6605	15	5	AH-64 MODS (AA6605)
AA0050	31	7	AIR TRAFFIC CONTROL (AA0050)
AA0700	22	5	AIRBORNE AVIONICS (AA0700)
AA0710	27	7	AIRBORNE COMMAND & CONTROL (AA0710)
AA0705	34	7	AIRBORNE COMMUNICATIONS (AA0705)
AA0560	19	5	AIRCRAFT LONG RANGE MODS (AA0560)
AZ3504	25	7	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)
AZ3110	30	7	AIRCREW INTEGRATED SYSTEMS (AZ3110)
A04203	3	4	ARMED RECONNAISSANCE HELICOPTER (A04203)
A04203	4	4	ARMED RECONNAISSANCE HELICOPTER (A04203)
AZ3507	26	7	ASE INFRARED CM (AZ3507)
AZ3000	28	7	AVIONICS SUPPORT EQUIPMENT (AZ3000)
AA0252	16	5	CH-47 CARGO HELICOPTER MODS (MYP) (AA0252)
AA0252	17	5	CH-47 CARGO HELICOPTER MODS (MYP) (AA0252)
A05008	8	4	CH-47 HELICOPTER (MYP) (A05008)
A05008	9	4	CH-47 HELICOPTER (MYP) (A05008)
AZ3100	29	7	COMMON GROUND EQUIPMENT (AZ3100)
AA0010	11	4	DRUG INTERDICTION (AA0010)
AA0711	23	5	GATM Rollup (AA0711)
AZ2000	12	5	GUARDRAIL MODS (MIP) (AZ2000)
A06500	10	4	HELICOPTER NEW TRAINING (A06500)
A05001	5	4	HELICOPTER, LIGHT UTILITY (LUH) (A05001)
AZ3300	32	7	INDUSTRIAL FACILITIES (AZ3300)
A11000	1	4	JOINT CARGO AIRCRAFT (JCA) (A11000)
AZ2200	21	5	KIOWA WARRIOR (AZ2200)
A50100	33	7	LAUNCHER, 2.75 ROCKET (A50100)
AA0005	6	4	Less: Advance Procurement (PY)
A05008	8	4	Less: Advance Procurement (PY)
AA6605	14	5	Less: Advance Procurement (PY)
AA0252	16	5	Less: Advance Procurement (PY)
AZ2001	13	5	MULTI SENSOR ABN RECON (MIP) (AZ2001)
AA0950	24	6	SPARE PARTS (AIR) (AA0950)
AA0005	6	4	UH-60 BLACKHAWK (MYP) (AA0005)
AA0005	7	4	UH-60 BLACKHAWK (MYP) (AA0005)
A11300	2	4	UTILITY F/W AIRCRAFT (A11300)
AA0480	20	5	UTILITY HELICOPTER MODS (AA0480)
AA0270	18	5	UTILITY/CARGO AIRPLANE MODS (AA0270)

SSN INDEX

SSN	LINE	PAGE	NOMENCLATURE
A04203	3	4	ARMED RECONNAISSANCE HELICOPTER (A04203)
A04203	4	4	ARMED RECONNAISSANCE HELICOPTER (A04203)
A05001	5	4	HELICOPTER, LIGHT UTILITY (LUH) (A05001)
A05008	8	4	CH-47 HELICOPTER (MYP) (A05008)
A05008	8	4	Less: Advance Procurement (PY)
A05008	9	4	CH-47 HELICOPTER (MYP) (A05008)
A06500	10	4	HELICOPTER NEW TRAINING (A06500)
A11000	1	4	JOINT CARGO AIRCRAFT (JCA) (A11000)
A11300	2	4	UTILITY F/W AIRCRAFT (A11300)
A50100	33	7	LAUNCHER, 2.75 ROCKET (A50100)
AA0005	6	4	UH-60 BLACKHAWK (MYP) (AA0005)
AA0005	6	4	Less: Advance Procurement (PY)
AA0005	7	4	UH-60 BLACKHAWK (MYP) (AA0005)
AA0010	11	4	DRUG INTERDICTION (AA0010)
AA0050	31	7	AIR TRAFFIC CONTROL (AA0050)
AA0252	16	5	CH-47 CARGO HELICOPTER MODS (MYP) (AA0252)
AA0252	16	5	Less: Advance Procurement (PY)
AA0252	17	5	CH-47 CARGO HELICOPTER MODS (MYP) (AA0252)
AA0270	18	5	UTILITY/CARGO AIRPLANE MODS (AA0270)
AA0480	20	5	UTILITY HELICOPTER MODS (AA0480)
AA0560	19	5	AIRCRAFT LONG RANGE MODS (AA0560)
AA0700	22	5	AIRBORNE AVIONICS (AA0700)
AA0705	34	7	AIRBORNE COMMUNICATIONS (AA0705)
AA0710	27	7	AIRBORNE COMMAND & CONTROL (AA0710)
AA0711	23	5	GATM Rollup (AA0711)
AA0950	24	6	SPARE PARTS (AIR) (AA0950)
AA6605	14	5	AH-64 MODS (AA6605)
AA6605	14	5	Less: Advance Procurement (PY)
AA6605	15	5	AH-64 MODS (AA6605)
AZ2000	12	5	GUARDRAIL MODS (MIP) (AZ2000)
AZ2001	13	5	MULTI SENSOR ABN RECON (MIP) (AZ2001)
AZ2200	21	5	KIOWA WARRIOR (AZ2200)
AZ3000	28	7	AVIONICS SUPPORT EQUIPMENT (AZ3000)
AZ3100	29	7	COMMON GROUND EQUIPMENT (AZ3100)
AZ3110	30	7	AIRCREW INTEGRATED SYSTEMS (AZ3110)
AZ3300	32	7	INDUSTRIAL FACILITIES (AZ3300)
AZ3504	25	7	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)
AZ3507	26	7	ASE INFRARED CM (AZ3507)

Exhibit P-2	1M, Proc	uremen	t Progr	ams - N	Iodifica	tion Su	mmary			
	Prior Yrs.	2007	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	2013	<u>To</u>	Total
System/Modification									<u>Complete</u>	<u>Program</u>
GUARDRAIL MODS (MIP) (AZ2000)										
Comm High Accuracy Location Sys-Compact (CHALS-C	7.8	6.6	8.3	8.5	1.7					32.9
Special Signals (SS) Subsystem		0.6	4.2	3.9	0.9	0.4	0.5	0.5		11.0
Enhance Situational Awareness (ESA) Subsystem		74.0	118.4	90.7	22.7	26.9	40.1	40.6		413.4
Guardrail Ground Base Sub-System		4.1	2.7							6.8
High Band Comint (HBC) Subsystem		0.5	7.4	7.2	3.3	3.4	0.9	0.9	1.8	25.4
Electronic Intelligence (ELINT)		5.0	7.1	8.8	1.1		4.6	4.7		31.3
Total	7.8	90.8	148.1	119.1	29.7	30.7	46.1	46.7	1.8	520.8
ARL MODS (MIP) (AZ2050)										
Comint Upgrades	25.2	6.6	5.0	5.6	4.9	4.0				51.3
System Interoperability		6.0	10.3	7.2	6.5	3.0				33.0
Radar	11.0	6.0	9.1	2.0	1.0	1.5				30.6
Workstation Architecture		4.0	4.2	3.0	0.5	2.0				13.7
Imagery	6.5	2.9	10.9	5.0	3.7	7.0	2.6	2.7		41.3
ARL-C to ARL-M Conversion		8.4	1.1	0.5						10.0
Safety Upgrades	11.4	4.0	1.4							16.8
Constant Hawk InfraRed (IR) Sensor		20.0								20.0
Constant Hawk A/C Survivability Equipment (ASE)		7.0								7.0
Constant Hawk Gimbal Upgrade		6.0								6.0
Constant Hawk Systems 3 and 4		24.0								24.0
ABN ISR Mods, Ft Hood Trainer		15.0								15.0
MARSS IV Aircraft Repairs		7.5								7.5
ARMS MARSS TFO QRC	6.0	5.9								11.9
Total	60.1	123.3	42.0	23.3	16.6	17.5	2.6	2.7		288.1
AH-64 MODS (AA6605)										
Apache Sensors Life Extension & Upgrade	121.9	7.6	7.7	10.6	8.6	8.8	9.0	9.2		183.4
AH-64A MISC Mods \$5M or less (no P3a set)	713.6	7.9	6.5	8.2	8.0	6.4	9.6	6.3		766.5
Apache Transformation	34.6	5.9	5.7	4.9			4.0			55.1
Modernized TADS/PNVS (M-TADS)	309.7	253.9	145.4	101.4						810.4
Aircraft Survivability Product Improvement (ASPI)		64.2	61.6							125.8
AH-64 R&S & Recap	135.8	41.5	20.6	22.9	20.3	6.0	21.2	8.3		276.6

Exhibit P	P-1M, Prod	curemen	t Progr	rams - N	Aodifica	tion Su	mmary			
System/Modification	Prior Yrs.	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>To</u> Complete	<u>Tota</u> <u>Program</u>
Apache Block III				11.1	160.7	430.6	538.4	589.1	5732.7	7462.6
AH-64 Extended Block II Upgrade	49.0	446.5	451.5	427.0	216.7					1590.7
Internal Auxiliary Fuel System (IAFS)	26.4	34.7	8.1	39.0	10.0					118.2
Fire Control Radar (FCR)Obsolescence & Integration	4.9	0.5								5.4
AH-64 Post Production Organic Support	1.1	1.3	2.1	12.2	28.6					45.3
AH-64D Longbow War Replacement Aircraft (WRA)	419.1	621.0	105.0							1145.1
Total	1816.1	1485.0	814.2	637.3	452.9	451.8	582.2	612.9	5732.7	12585.1
CH-47 CARGO HELICOPTER MODS (AA0252)										
Engine Filtration System	34.3	8.5	0.2	0.3	0.2	0.3				43.8
Engine Upgrade to T55-GA-714A Configuration	2493.6	46.6	14.4	30.3	22.3	14.5	13.3	29.4	36.1	2700.5
CH-47 "D" to "F" Conversion	1477.2	1215.3	841.5	621.1	616.6	850.7	1154.5	628.5	4067.6	11473.0
Maintenance Training Devices (MTD)	4.3	3.6	5.3	8.3	9.9	7.0	6.4	7.1	0.7	52.6
Engine Fire Extinguisher (Halon Replacement)	9.8	8.2								18.0
AVCATT		5.0	4.7	1.2						10.9
Cargo Handling Floor System				17.9	9.3	9.2	14.0	18.0	23.5	91.9
M240 Window/Door Gun Mount		9.3	4.5	5.8	5.1	5.7	5.9	6.3	1.5	44.1
Transformation Sets, Kits and Outfits	30.6	4.9	7.7	10.3	12.1	12.3	12.7	8.6	3.2	102.4
CH-47 MISC Mods \$5M or Less	1.5	6.1	18.4	18.9	15.0	7.1	2.5	2.5	1.0	73.0
Aircraft Component Parts-Marking		1.3	8.8	7.4	3.5					21.0
Ballistic Protection System (BPS)			4.5	2.7	2.8	2.8	2.8	2.2		17.8
Total	4051.3	1308.8	910.0	724.2	696.8	909.6	1212.1	702.6	4133.6	14649.0
UTILITY/CARGO AIRPLANE MODS (AA0270)										
Avionics System Cockpit Upgrade	107.8	17.3	17.6	14.9	18.5	10.4	10.2	10.4		207.1
Total	107.8	17.3	17.6	14.9	18.5	10.4	10.2	10.4		207.1
UTILITY HELICOPTER MODS (AA0492)										
Crashworthy External Fuel System (CEFS)	102.2	19.1	9.7	7.8	10.9	10.9	11.9	12.4		184.9
Internal Extended Range Fuel System (Internal 200)		2.7	3.6							6.3
Engine Digital Electronic Control		1.0								1.0
UH-60A to UH-60L Conversion		8.3	1.6							9.9
Health Usage Monitoring System (HUMS)	19.6	17.7	2.9							40.2

	Prior Yrs.	2007	2008	2009	<u>2010</u>	2011	<u>2012</u>	2013	<u>To</u>	Tota
System/Modification									<u>Complete</u>	Program
UH-60 Mission Equipment Package		9.8								9.8
UH-60A Rewiring Program			2.0							2.0
FLIR/Ext. Mount (AN/AAQ-22)	4.8	2.6	1.8							9.2
Brigade Sets	22.7	6.6	3.1	3.1						35.5
Total	149.3	67.8	24.7	10.9	10.9	10.9	11.9	12.4		298.8
KIOWA WARRIOR (AZ2200)										
Safety Enhancement Program (SEP)	309.2	10.5	45.3	1.9	0.1					367.0
Safety Enhancement Program - Weight Reduction	19.5	39.5	6.2	7.1						72.3
Program Support and Other	2.0	1.1		4.7	3.3	2.4	1.3	1.9	13.2	29.9
Total	330.7	51.1	51.5	13.7	3.4	2.4	1.3	1.9	13.2	469.2
AIRBORNE AVIONICS (AA0700)										
DGNS (AN/ASN-128B) P3I	47.5	12.6	20.1	24.4	30.5	19.9	26.5	5.0		186.5
Aviation Mission Planning System (AMPS)	160.6	19.2	19.0	16.4	18.6	17.0	22.2	23.2		296.2
Embedded GPS Inertial Navigation System (EGI) P3I	21.6	3.7	1.0	1.2	1.3	1.5	1.1	18.2		49.6
Improved Data Modem (IDM)	321.0	50.9	61.4	53.7	65.0	72.9	106.6	90.7		822.2
Aviation Tactical Communication Systems	51.4	54.4	62.1	64.4	97.9	84.7	89.0	102.1		606.0
Joint Precision Approach and Landing Sys (JPALS)					28.9	74.0	110.6	76.2		289.7
Mil Flight Operation Quality Assurance (MFOQA)		2.1	14.8	14.9	14.9	14.9				61.6
Total	602.1	142.9	178.4	175.0	257.1	284.9	356.0	315.4		2311.8
GATM - Fixed Wing Aircraft (AA0703)										
Global Air Traffic Management - FW	110.4	8.1	9.5	8.6	13.4	13.4	13.9	13.9		191.2
Global Air Traffic Management - RW	106.9	23.5	43.2	70.7	91.6	89.2	94.2	74.3		593.6
Total	217.3	31.5	52.7	79.2	105.0	102.7	108.0	88.2		784.7
Grand Total	7342.5	3318.6	2239.2	1797.7	1590.9	1820.8	2330.5	1793.2	9881.3	32114.7

Exhibit P-40, Budget Iter	m Justificatio	on Sheet						I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 1 / Airc					P-1	Item Nomencla	iture RGO AIRCRAFT (JO	CA) (A11000)		-	
Program Elements for Code B Items:		Code:	Oth	er Related l 27374		Elements:					
	Prior Years	FY 2007	FY 2008	FY	2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty		2		4	7	8	11	11	. 11		54
Gross Cost	4.9	71.9	15	6.0	264.2	301.3	424.1	462.7	461.5	2913.8	5060.3
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc P1	4.9	71.9	15	6.0	264.2	301.3	424.1	462.7	461.5	2913.8	5060.3
Initial Spares											
Total Proc Cost	4.9	71.9	15	6.0	264.2	301.3	424.1	462.7	461.5	2913.8	5060.3
Flyaway U/C											
Weapon System Proc U/C		35.9	3	9.0	37.7	37.7	38.6	42.1	42.0		272.9

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 provide a multi-mission, multi-functional platform for the commanders use in accomplishing the mission.

Justification

FY 2009 procures seven critically needed Joint Cargo Aircraft. The Joint Cargo Aircraft will meet time sensitive mission critical needs of the warfighter.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No:		P-1 L	ine Item No	menclature:			Weapon Syster	n Type:	Date:	
Exhibit 1-3, Weapon ACF 1 Cost Analysis	Aircraft Procurement, Army / 1 / Aircraft		JOIN	T CARGO	AIRCRAFT (JCA)	(A11000)			51		February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	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											
Source Selection Evaluation Board (SSEB)			155	5							
Hardware			6615	1 2	33076	121590	4	30398	22038	5 7	31484
Engineering Support						1116			116	2	
Support Equipment						3313			1502	2	
Interim Contractor Support & Training						21995			32970	0	
Program Office Management			415	3		7968			814	1	
Total:			7186	1		155982			26416	0	

Exhibit P-5a, Budget Procur	ement History and Planni	ng						Oate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 1/ Aircraft	Weapon System Type:		Nomenclature: GO AIRCRAFT (JCA) (A1100	0)			·			
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 2007	L-3 Comm Integ Sys Greenville, Texas	C/FFP/REQ	Redstone Arsenal, AL	Jun 07	Sep 08	2	33076	YES		MAR (
FY 2008	L-3 Comm Integ Sys Greenville, Texas	C/FFP/REQ	Redstone Arsenal, AL	Mar 08	Feb 10	4	30398	YES		MAR (
FY 2009	L-3 Comm Integ Sys Greenville, Texas	C/FFP/REQ	Redstone Arsenal, AL	Jan 09	Dec 10	7	31484	YES		MAR (

REMARKS: The initial JCA contract is a five year, Firm Fixed Price (FFP), Requirements type contract to include three one-year ordering periods and two options. The contract is for aircraft procurement, commercial pilot/loadmaster training, and performance based interim contractor logistics support. The contract was awarded competitively, using Federal Acquisition Regulation Part 15, Contracting by Negotiations.

Pair	
F	
No bare No b	
No bare No b	=
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
1 FYO A 2 0 2 N N D J F M A N D A N	Later
FYOS A	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1
	4
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	7
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	
C O E A E A P A U U U E C O E A E A P A U U U E	12
C O E A E A P A U U U E C O E A E A P A U U E T V C N B R R Y N L G P T V C N B R R Y N L G P	
M PRODUCTION RATES ADMIN LEAD TIME MFR TOTAL REMARKS Production rate is annual, not monthly. The	The
Reactied MFK Phot Foct After Foct After Foct After Foct contract will require the accelerated manuf	nufacture
R Name - Location MIN 1-8-5 MAX D+ 1 Initial 0 9 15 24 (12 months) of first aircraft. A 100 day sto	stop work st
requiring a three month delay in the delive	ivery of
Initial Initial the first aircraft. The second aircraft to support government test requirements will be delivered by the first aircraft. The second aircraft to support government test requirements will be delivered by the first aircraft.	support elivered in
Reorder 17 months. Production lead time for remain	nainder of
Initial aircraft to be procured is 23 months. The a of 4 aircraft in FY08 has slipped from Jan	
Mar 08 due to Section 131 of House Repor	port 110-
Initial 477 - National Defense Authorization Act Provides: Fiscal Year 2008 language halting all obliges and the second	
Reorder until submission of multiple reports.	_
Initial Reorder	

A11000 JOINT CARGO AIRCRAFT (JCA) Item No. 1 Page 4 of 6

Exhibit P-21 Production Schedule

		F	FY 09 /	10 BU	DGE	ΓPRO	ODUC	CTIO	N SCI	HEDU	LE			P-1 ITE JOINT (A) (A11	000)				Da	te:	Februa	ry 2008				
	C	OST	ELEN	IENTS	3						Fiscal `	Year 09)										Fiscal Y	Year 10	1					
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	ır Year (9								Cale	ndar Ye	ar 10				
F R		R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Ha	rdware	1		l	1		1	<u> </u>	1				<u> </u>	-	1								I	I	l	<u> </u>				ı
	FY 07	A	2	1	1		1																							0
1	FY 08	A	4	0	4																	1				1			1	1
1	FY 09	A	7	0	7				A																					7
То	tal		13	1	12		1															1				1			1	8
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M							1	PRODU	ICTION :	RATES						Α	DMIN I	EAD T	TIME		MFR		TOT	AL	REMA					
F											Reac	hed M	FR			Pri	or 1 Oct	Afte	r 1 Oct	Aft	er 1 Oct		After 1	Oct		tion rate				The nufacture
R			Nan	ne - Locati	ion		N	MIN	1-8-5	MAX	D	+	1 In	itial			0		9		15		24		(12 mo	nths) of	first airc	eraft. A 1	00 day	stop work
1	L-3 C	omm Int	teg Sys, C	reenville,	Texas			1	11	11			Re	order			0		4		23		27			vas neces ng a thre				
													In	itial											the firs	t aircraft	. The se	econd air	craft to	support
													Re	order																elivered in nainder of
													In	itial											aircraft	to be pr	ocured i	is 23 mo	nths. Th	he award
													Re	order																an 08 to
													In	itial																reports.
													Re	order																
													In	itial																
													D.	order								i								

		F	FY 11 /	12 BU	DGET	ΓPR	ODUC	CTIO	N SCI	HEDU	ILE			P-1 ITE JOINT (A) (A11	1000)				Da	te:	Februa	ry 2008				
	C	OST	ELEN	IENTS	\$						Fiscal	Year 11											Fiscal Y	Year 12	2					
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year 1	1								Cale	ndar Ye	ar 12				=
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Ha	rdware	1		l	I.		1	I.				l	l .									l	I		1	<u> </u>			l	1
1	FY 07	Α	2	2																										0
1	FY 08	A	4	3	1		1																							0
1	FY 09	A	7	0	7			1	l	1		1		1	1	1	1													0
To	al		13	5	8		1	1		1		1		1	1	1	1													
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M								PRODU	JCTION	RATES						A	DMIN I	LEAD T	ПМЕ		MFR		TOT	AL	REMA					
F											Read	hed M	FR			Pri	or 1 Oct	Afte	er 1 Oct	Aft	er 1 Oct		After 1	Oct		tion rate				The nufacture
R			Nan	ne - Locati	on		1	MIN	1-8-5	MAX	D	+	1 In	itial			0		9		15		24		(12 mo	nths) of	first airc	eraft. A	00 day	stop work
1	L-3 C	omm Int	teg Sys, C	reenville,	Texas			1	11	11			Re	eorder			0		4		23		27			vas neces ng a thre				
													In	itial											the firs	t aircraft	. The se	econd air	rcraft to	support
													Re	eorder																elivered in nainder of
													In	itial											aircraft	to be pr	ocured i	is 23 mo	nths. Tl	he award
													Re	eorder																an 08 to
													In	itial																reports.
													Re	eorder																
													In	itial																
													D	order																

A11000 JOINT CARGO AIRCRAFT (JCA) Item No. 1 Page 6 of 6

Exhibit P-21 Production Schedule

Exhibit P-40, Budget Item	Justification	Sheet						Γ	Date:	February 2008	
Appropriation / Budget Activity / Seri Aircraft Procurement, Army / 1 / Air					P-1	Item Nomencla UTILITY F	ature //W AIRCRAFT (A1	1300)			
Program Elements for Code B Items:		Code:	Other	Related Pro	gram I	Elements:					
	Prior Years	FY 2007	FY 2008	FY 20	09	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty	27										27
Gross Cost	234.2	4.0	5	.0				34.2	34.2		311.7
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc P1	234.2	4.0	5	.0				34.2	34.2		311.7
Initial Spares											
Total Proc Cost	234.2	4.0	5	.0				34.2	34.2		311.7
Flyaway U/C											
Weapon System Proc U/C											

The budget line covers the acquisition of Army fixed wing aircraft to include the procurement of utility fixed wing aircraft to support Operational Support Airlift (OSA) requirements, Special Electronic Mission Aircraft (SEMA), Special Mission Aircraft (Utility), and training. This budget line also provides new commercial-off-the shelf, non-developmental, fixed wing aircraft systems for the Golden Knights Parachute Teams, as well as service life extension of existing aircraft.

Justification:

FY 2009 - No Budget Request.

- 1. FY2008 funding total includes \$5.0 million received in the Consolidated Appropriations Act, 2008 (P.L. 110-161).
- 2. FY2008 funding totals do not include \$7.5 million previously requested for current FY2008 GWOT requirements.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft				menclature: IRCRAFT (A1130	00)		Weapon System	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Golden Knights Aircraft											
Hardware and Associated Support			4044	1	4044						
Golden Knights Aircraft Total			4044	ı							
FY08 Supplemental											
Safety/Navigation Communication Support						5000	2	2500			
FY08 Supplemental Total						5000					
Total:			4044	ı		5000					

Exhibit P-40, Budget Item	Justification	Sheet					Γ	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 1 / Airc				P-1	Item Nomencla ARMED RE	iture ECONNAISSANCE	HELICOPTER (A0	4203)		
Program Elements for Code B Items:		Code:	Other R	Related Program	Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty			10	28	42	60	60	60	252	512
Gross Cost		0.1	136.5	396.9	504.6	591.8	580.7	584.6	2331.4	5126.6
Less PY Adv Proc				38.0	80.0	82.4	84.1	85.8	377.2	747.6
Plus CY Adv Proc			38.0	80.0	82.4	84.1	85.8	90.4	286.8	747.6
Net Proc P1		0.1	174.6	438.9	507.1	593.5	582.4	589.2	2240.9	5126.6
Initial Spares										
Total Proc Cost		0.1	174.6	438.9	507.1	593.5	582.4	589.2	2240.9	5126.6
Flyaway U/C										
Weapon System Proc U/C			17.5	15.7	12.1	9.9	9.7	9.8	8.9	83.5

The mission of the Armed Reconnaissance Helicopter (ARH) is to provide a robust reconnaissance and security capability for the Joint Combined arms air-ground maneuver team. The ARH is a combination of a modified off-the-shelf (OTS) airframe integrated with a non-developmental item (NDI) mission equipment package (MEP). The ARH will be fielded to support current forces in the Global War on Terror (GWOT) and will possess the growth potential to bridge the capability gaps to the Future Combat Force. The ARH is a direct replacement for the aging OH-58D Kiowa Warrior fleet.

The rapidly reconfigurable ARH provides the space, weight, and power to incorporate the MEP, as Mission, Enemy, Terrain, Troops available, Time and Civilian considerations(METT-TC) dictates, for use in High/hot (4K/95°F with growth potential to 6K/95°F) conditions, complex terrain, and urban environments. The MEP provides a robust communications and navigation suite, advanced state-of-the-art sensor assembly, and self-defense armament capability to fight for, collect, and distribute critical information to all members of the Joint air-ground maneuver team. Specifically, the ARH's robust communication suite when combined with the sensors assembly provides real time delivery of actionable combat information to the joint force while enabling precision employment of Joint sensors and fires.

The ARH will provide a highly deployable, reconnaissance and security capability that will employ immediately upon arrival into theater. The platform will address the capability gaps of interoperability, survivability, versatility, agility, lethality, and sustainability to ensure interoperability over extended ranges, enhance mission effectiveness throughout the operational environment, and focus on system survivability against threats operating in the contemporary operational environment, while reducing the logistical burden on the tactical unit. The fundamental purpose of ARH is to perform reconnaissance and to provide security in combat operations. In doing so, it improves the commander's ability to maneuver and concentrate superior combat power against the enemy at the decisive time and place.

Justification:

FY09 procures aircraft, training devices/services, support equipment, interim contractor logistic support, and tooling to support production.

FY 08 Advance Procurement funding pending approval of reprogramming.

Item No. 3 Page 1 of 6

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft				menclature: NNAISSANCE H	ELICOPTER (A04	1203)	Weapon System	n Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08		•	FY 09	
Cost Elemen	ts	CD	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 Cost											
Contract Flyaway						113207	10	11321	283062	28	10109
Government Flyaway						5462			8312	2	
Total Flyaway						118669			291374	ı	
Armament / Mission Kits			75			2676			7657	7	
Training Devices / Services									59771		
Support Equipment						1674			4789)	
Other Support						13516			33286	5	
Gross P-1 End Item Cost			75			136535			396877	,	
Less: Prior Year Adv Proc									38036	5	
Net P-1 Full Funding Cost			75			136535			358841	l l	
Plus: P-1 CY Adv Proc						38036			80010		
Total:			75			174571			438851		

Exhibit P-5a, Budget Procur	ement Histor	y and Planning							oate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 1/ Aircraft		Weapon System Type:		Nomenclature: CONNAISSANCE HELICOPT	ER (A04203)						
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
Contract Flyaway											
FY 2008 LT 1	Bell Helic Fort Wortl	opter Textron 1, TX	FFP	Fort Worth, TX	Jun 08	Nov 09	10	11321	No		Feb 0
FY 2009 LT 2	Bell Helic Fort Wortl	opter Textron 1, TX	FFP	Fort Worth, TX	May 09	Jul 10	28	10109	No		Feb 0

REMARKS:

		F	FY 07 /	08 BU	DGE	ΓPRO	ODU	CTIO	N SCI	HEDUI	LE				M NOME RECON			ELICO	PTER (A	A04203)			Dat	te:	Februa	ary 2008				
	C	OST	ELEM	IENTS						I	iscal Ye	ar 07											Fiscal Y	Year 08	3					
		S	PROC	ACCEP	BAL									Calenda	r Year 0	7								Cale	ndar Ye	ar 08				-
M F R	FY	E R V	QTY Each	PRIOR TO 1 OCT	AS OF 1 OCT	O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	T -4
				1001	1001	Ť	v	Č	N	В	R	R	Y	N	Ĺ	Ğ	P	T	v	Č	N	В	R	R	Y	N	Ĺ	Ğ	P	Later
	craft Pro		1			1	1	ı		1													1	1	ı			ı		
	FY 08 LT 1	A	10	0	10																					A				10
2	FY 09 LT 2	A	28	0	28																									28
	LIZ																									\vdash	\vdash		<u> </u>	
																											<u> </u>		<u> </u>	
																											<u> </u>			
																											<u> </u>			
																											<u> </u>		<u> </u>	
																											<u> </u>		<u> </u>	
Tot	tal		38		38	_			_								_			_		_					<u> </u>		<u> </u>	38
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
-																				ı					Ī					
M								PRODU	ICTION 1	RATES							DMIN L	1			MFR		TOTA		REMA	RKS				
F R			Non	ne - Locati	on		١,	MIN	1-8-5	MAX	Reache D+		_	:-1		Pri	or 1 Oct	1	r 1 Oct	AIt	er 1 Oct 15		After 1		-					
1		aliconte		, Fort Wo				8	16	26	D+	1		order			0	+	1		15		16							
				, Fort Wo				24	28	36		2					4	+	8		12		20							
_	_							30	42	48							0	1	1		12		13							
	3 Bell Helicopter Textron, Fort Worth, TX 30 42 48 Reor 4 Bell Helicopter Textron, Fort Worth, TX 48 60 72 3 Initia												4		2		18		20		1									
	5 Bell Helicopter Textron, Fort Worth, TX 48 60 72 Reord												0	1	1		18		19		1									
-	1				•							4	-				4		2		18		20		1					
	1													order			0	-	1		18		19		1					
												5	Init	ial			4		2		18		20		1					
												1		order			0	1	1		18		19		1					

Item No. 3 Page 4 of 6 12 Exhibit P-21 Production Schedule

		F	Y 09 /	10 BU	DGE	ΓPRO	ODU	CTIO	N SCI	HEDUI	LE				M NOME RECON			IELICO	PTER (A	A04203)			Dat	ite:	Februa	ıry 2008				
	C	OST	ELEN	IENTS	}					I	Fiscal Y	ear 09											Fiscal Y	Year 10)					
		~	Tonoa																	I										
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year 0	9								Cale	endar Ye	ar 10				
F R	FY	R V	Each	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Air	craft Pro	cureme	nt																											
	FY 08 LT 1	A	10	0	10														1	1	1	1	1	. 1	2	2	ž.			0
		A	28	0	28								A														2	2	2	22
	LT 2							┼		 														 		 	 	 		
			 					+-	+					 										+			+	 	 	
			<u> </u>							$\sqcup \!\!\! \perp$				<u> </u>		<u> </u>														
								—		\vdash				 											-	<u> </u>		 		
										 														 	<u> </u>	 	 			
								+-	+					\vdash										+	_		+	+	 	
Tot	al		38		38			+	+		-								1	1	1	1	1	1	2	2	2	2	2	22
			.1	ı	1	O C	N O	D E	J	F E	M	A P	M	J U	J U	A U	S E	O C	N O	D E	J	F E	M	A P	M	J U	J U	A U	S E	
						T	v	C	A N	В	A R	R	A Y	N	L	G	P	T	V	C	A N	B	A R	R	A Y	N	L	G	P	
	1							DDODI	JCTION I	DATEC							DMIN I	EADT	TME		MFR		TOTA	· A T	REMA	DIC				1
M F								INODU	CIIONI	NA LEO	Reach	ned MI	FR			-	or 1 Oct	_	r 1 Oct		virk er 1 Oct		After 1		KEMA	CILL				
R			Nan	ne - Locati	on]	MIN	1-8-5	MAX	D+		_	ial	-	+	4		9		15		24		1					
1	Bell He	elicopte	r Textror	, Fort Wo	rth, TX			8	16	26			Red	order			0		1		15		16	5	1					
2	Bell He	elicopte	r Textror	, Fort Wo	rth, TX			24	28	36		2	2 Init	ial			4		8		12		20)	1					
3	Bell He	elicopte	r Textron	, Fort Wo	rth, TX			30	42	48			Red	order			0		1		12		13	3	Ī					
4 Bell Helicopter Textron, Fort Worth, TX 48 60 72 3								3 Init	ial			4		2		18		20)											
5	Bell He	elicopte	r Textron	, Fort Wo	rth, TX			48	60	72	<u> </u>	\perp		order		\perp	0		1		18		19		_					
										<u> </u>	₩					$+\!-$	4	+	2		18		20		4					
								\longrightarrow			 			order		+-	4		2		18		19		4					
-								-+		 	+	\dashv		order		+	0	_	1		18		19		1					

		F	Y 11 /	/ 12 BU	DGE	ΓPRO	ODUC	TIO	N SCI	HEDU	LE				M NOME RECON		TURE ANCE H	IELICO	PTER (A	A04203)			Dat	te:	Februa	ry 2008				
	C	OST I	ELEM	1ENTS	}					I	Fiscal Ye	ear 11											Fiscal Y	Year 12						
М		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	ır Year 1	1								Cale	ndar Ye	ar 12				-
F R	FY	R V	Each	TO 1 OCT	AS OF	O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	Later
			<u></u>	1001	1 001	T	V	E C	N	В	R	R	Y	N	L	G	E P	T	V	C	N	В	R	R	Y	N	L	G	P	Later
_	craft Pro		1	1 10	ı																	l	l	1					т—	1 0
	LT 1	A	10																											0
	FY 09 LT 2	A	28	6	22	2	3	2	3	2	3	2	3	3 2																0
		<u> </u>					↓	<u> </u>		\longmapsto	\rightarrow	\longrightarrow		↓	<u> </u>	<u> </u>										<u> </u>				
		 	<u> </u>	 			₩			\vdash				—	<u> </u>	<u> </u>	-									<u> </u>	₩		 	
		\vdash	<u> </u>	 			┼		\vdash	\vdash	-+			 	 	 	-									 	+		+	
-		\vdash		1			\vdash			\vdash	-+	\rightarrow		\vdash	\vdash												+		+	
-							+							+													+		1	
							<u> </u>					-		+													1		1	
										1																				
Tot	al		38	16	22	2	3	2	3	2	3	2	3	2																
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
																											1			
M								PRODU	ICTION I	RATES	_						ADMIN I			4	MFR		TOTA		REMA	.RKS				
F			.,							3.6.55		ed MF	-			Prio	or 1 Oct	+	r 1 Oct	Aft	er 1 Oct		After 1		4					
R		.1:		ne - Locati n, Fort Wo				MIN 8	1-8-5	MAX 26	D+	1				+	4	_	9		15		24		-					
2				n, Fort Wo n, Fort Wo				24	28	36	 		-	order		+	0		1		15		16							
3				n, Fort Wo				30	42	48	+	2				+	0		8		12		20		-					
4				n, Fort Wo				48	60	72	+	3	_	order		+	4		2	-	18		20		1					
	+			n, Fort Wo				48	60	72	+	⊣ '		order		+-	0		1	 	18		19		1					
Ě	201111	пеори	- 10.111011	., 1 011 110	, 1/1		+	-		· -	+	4	_			+	4		2	 	18		20		1					
							-	-			+	┥゛		order		+	0		1		18		19		1					
		-					-+	-	-		1	5	-			+	4		2		18		20		1					
-	1										†	- [ordor		+	0	_	1	1	10		10		†					

Exhibit P-40, Budget Item	Justification	Sheet					Γ	Date:	F.1. 2000	
									February 2008	
Appropriation / Budget Activity / Seri Aircraft Procurement, Army / 1 / Airc				P	1 Item Nomencla ARMED RI	iture ECONNAISSANCE	HELICOPTER (A0-	4203)		
Program Elements for Code B Items:		Code:	Other	Related Prograi	n Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost			38.0)						38.0
Less PY Adv Proc										
Plus CY Adv Proc				80.	82.4	84.1	85.8	90.4	286.8	709.6
Net Proc P1			38.0	80.	82.4	84.1	85.8	90.4	286.8	747.6
Initial Spares										
Total Proc Cost			38.0	80.	82.4	84.1	85.8	90.4	286.8	747.6
Flyaway U/C										
Weapon System Proc U/C										

The mission of the Armed Reconnaissance Helicopter (ARH) is to provide a robust reconnaissance and security capability for the Joint Combined arms air-ground maneuver team. The ARH is a combination of a modified off-the-shelf (OTS) airframe integrated with a non-developmental item (NDI) mission equipment package (MEP). The ARH will be fielded to support current forces in the Global War on Terror (GWOT) and will possess the growth potential to bridge the capability gaps to the Future Combat Force. The ARH is a direct replacement for the aging OH-58D Kiowa Warrior fleet.

The rapidly reconfigurable ARH provides the space, weight, and power to incorporate the MEP, as Mission, Enemy, Terrain, Troops available, Time and Civilian considerations(METT-TC) dictates, for use in High/hot (4K/95°F with growth potential to 6K/95°F) conditions, complex terrain, and urban environments. The MEP provides a robust communications and navigation suite, advanced state-of-the-art sensor assembly, and self-defense armament capability to fight for, collect, and distribute critical information to all members of the Joint air-ground maneuver team. Specifically, the ARH's robust communication suite when combined with the sensors assembly provides real time delivery of actionable combat information to the joint force while enabling precision employment of Joint sensors and fires.

The ARH will provide a highly deployable, reconnaissance and security capability that will employ immediately upon arrival into theater. The platform will address the capability gaps of interoperability, survivability, versatility, agility, lethality, and sustainability to ensure interoperability over extended ranges, enhance mission effectiveness throughout the operational environment, and focus on system survivability against threats operating in the contemporary operational environment, while reducing the logistical burden on the tactical unit. The fundamental purpose of ARH is to perform reconnaissance and to provide security in combat operations. In doing so, it improves the commander's ability to maneuver and concentrate superior combat power against the enemy at the decisive time and place.

Justification:

FY09 procures long lead hardware to support production of aircraft in FY10.

FY 08 Advance Procurement funding pending approval of reprogramming.

Item No. 4 Page 1 of 5

Advance Procurement Requirements Analysis-Funding (P-10A)	First System Award Date: June 2008	First System Completion Date: September 2009	Date: February 2008
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft		P-1 Line Item Nomenclature / Weapon System: ARMED RECONNAISSANCE HEI	LICOPTER
	(\$	in Millions)	

							(\$ in Million	is)				
	PLT (mos)	When Rqd (mos)	Pr Yrs	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	To Comp	Total
End Item Quantity												
CFE Engine	24	6			11.2	17.2	25.1	25.6	26.1	27.5	97.6	230.3
CFE Sensor	18	6			18.4	23.5						41.9
CFE Airframe	18	12			8.4	12.9	18.7	19.1	19.5	20.6	54.2	153.4
GFE Mission Equipment	16	8				26.4	38.6	39.4	40.2	42.3	135.1	322.0
Total Advance Procurement			0.0	0.0	38.0	80.0	82.4	84.1	85.8	90.4	286.9	747.6

FY 08 Advance Procurement funding pending approval of reprogramming.

Advance Procurement Requirements Analysis-Funding (P-10B)					Date: February 20	08
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft		P-1 Line Item Nomencla ARMED RE	ture / Weapon System: ECONNAISSANCE HELL	COPTER		
			(\$ in Millions)		
					2009	
	PLT (mos)	Quantity Per Assembly	Unit Cost	Qty	Contract Forecast Date	Total Cost Request
CFE Engine	24	1	0.4	42.0	1Q FY09	17.2
CFE Sensor	18	1	1.3	21.0	1Q FY09	23.5
CFE Airframe	18	1	0.3	42.0	1Q FY09	12.9
GFE Mission Equipment	16	1	0.6	21.0	1Q FY09	26.4
Total Advance Procurement						80.0

Phasing of induction onto production line requires advance procurement of 50% of sensors and mission equipment.

Advance Procurement Requirements Analysis-Funding (P-10C)		Date: February 2008
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature / Weapon System: ARMED RECONNAISSANCE HELICOPTER	

					(\$ in M	illions)				
	Pr Yrs	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	To Comp	Total
Proposal w/o AP										
Then Year Cost			119	296	416	493	485	486	2067	4362
Constant Year Cost			107	260	358	416	402	394	1595	3532
Present Value			104	246	329	372	348	332	1270	3001
AP Proposal										
Then Year Cost			119	295	388	453	444	444	1883	4026
Constant Year Cost			107	260	335	384	369	361	1458	3274
Present Value			104	246	308	343	320	305	1162	2788
AP Savings (Difference)										
Then Year Cost				-1	-28	-40	-41	-42	-184	-336
Constant Year Cost					-23	-32	-33	-33	-137	-258
Present Value					-21	-29	-28	-27	-108	-213

Advance Procurement Requir	ements .	Analysis-Exe	cution (P-10I	D)				Date:	February 2008	
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Airc	eraft					enclature / Weapon Sy D RECONNAISSAN		·		
						(\$ in Millions)				
				2007			20	08	20	09
	PLT (mos)	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Qty	Contract Forecast Date
End Item Quantity										
CFE Engine	24						28	Jun 08	42	1Q FY09
CFE Sensor	18						14	Jun 08	21	1Q FY09
CFE Airframe	18						28	Jun 08	42	1Q FY09
GFE Mission Equipment	16								21	1Q FY09
Total Advance Procurement										

Phasing of induction onto production line requires advance procurement of 50% of sensors and mission equipment.

Exhibit P-40, Budget Item Justification Sheet								Date:					
									February 2008				
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft					P-1 Item Nomenclature HELICOPTER, LIGHT UTILITY (LUH) (A05001)								
Program Elements for Code B Items:	Code:	Code: Other Related Program Elements:											
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog			
Proc Qty	16	26	43	36	25	18	41	43	97	345			
Gross Cost	90.7	148.4	228.9	224.5	159.8	134.0	252.2	250.8	597.8	2087.3			
Less PY Adv Proc													
Plus CY Adv Proc													
Net Proc P1	90.7	148.4	228.9	224.5	159.8	134.0	252.2	250.8	597.8	2087.3			
Initial Spares													
Total Proc Cost	90.7	148.4	228.9	224.5	159.8	134.0	252.2	250.8	597.8	2087.3			
Flyaway U/C													
Weapon System Proc U/C	5.7	5.7	5.3	6.2	6.4	7.4	6.2	5.8	6.2	54.9			

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:

FY2009 procures 36 aircraft. Funding also provides for fielding, engineering services, and program office support.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft					LUH) (A05001) Weapon System			n Type:	Date: February 2008		
ACFT		ID	FY 07			FY 08			FY 09			
Cost Elements		CD	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			125543	26	4829	210018	43	4884	187338	36	5204	
B Kits (MEDEVAC & Hoist)			1116	6	186	2242	12	187				
Engineering Changes			2176			7116			17917	'		
Subtotal Hardware Cost			128835			219376			205255	;		
Flyaway Support Costs												
System Engineering & Program Management			6936			5136			6585			
System Test & Evaluation			2003			181						
Engineering Services			2243			538			3656	5		
Subtotal Flyaway Support Costs			11182			5855			10241			
Total Flyaway			140017			225231			215496	5		
Other Weapon System Cost												
Procedural Trainers			5978	2	2989				136	5		
Fielding			2431			3702			8886	5		
Other Weapon System Requirements												
Subtotal Other Weapon System Cost			8409			3702			9022	:		
Total Procurement Cost			148426			228933			224518	s		
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:			148426			228933			224518			

Exhibit P-5a, Budget Procur	ement History and Planning	Ş						Oate: February	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 1/ Aircraft	Weapon System Type:		Nomenclature: R, LIGHT UTILITY (LUH) (A	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	RFF Issue Date
Airframes/Includes non-recurring										
FY 2007	EADS-NA Columbus, MS	FFP	AMCOM	Oct 06	Dec 07	26	4829	No		
FY 2008	EADS-NA Columbus, MS	FFP	AMCOM	Dec 07	Sep 08	43	4884	No		
FY 2009	EADS-NA Columbus, MS	FFP	AMCOM	Nov 08	Sep 09	36	5204	No		

REMARKS:

		F	FY 06 /	07 BU	DGE	Γ PR(ODUC	CTIO	N SCI	HEDU	LE			P-1 ITE HELICO				(LUH)	(A0500	1)			Dat	te:	Februa	ry 2008				
	C	OST	ELEM	IENTS)						Fiscal '	Year 06	5										Fiscal Y	Year 07	,					
		ı		I					1																					
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year ()6								Cale	ndar Ye	ar 07				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Air	frames/l	ncludes	non-recu	rring					1																					
1	FY 07	A	26	0	26													A												26
1	FY 08	A	43	0	43																									43
1	FY 09	A	36	0	36																									36
																													<u> </u>	
Tot	tal		105		105																									105
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M]	PRODU	ICTION	RATES						A	DMIN I	LEAD T	IME		MFR		TOTA	AL	REMA	RKS				
F											Reac	hed M	FR			Prio	or 1 Oct	After	r 1 Oct	Aft	er 1 Oct		After 1	Oct						
R			Nam	ne - Locati	on		N	MIN	1-8-5	MAX	D	+	1 In	itial			0		9		5		14							
1	EADS	-NA, C	olumbus,	MS				16	50	55			Re	eorder			0		2		9		11							
													In	itial																
													Re	eorder																
													In	itial																
													Re	eorder																
													In	itial																
													Re	eorder																
													In	itial																
					-								Re	eorder											1					

		F	Y 08 /	09 BU	DGET	r PRC	DUC	CTIO	N SCI	HEDU	LE			P-1 ITEN HELICO				(LUH)	(A0500	1)			Dat	te:	Februa	ry 2008				
	C	OST	ELEM	IENTS	;						Fiscal Y	Zear 08	3										Fiscal Y	Year 09						
	ı	1		ı	1				1												ı									
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year 0	8								Cale	ndar Ye	ar 09				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Aiı	frames/l	Includes	non-recu	rring	Į.	1		ı		l.	l			· L			l										ı	L		
1	FY 07	A	26	0	26			2	2	3	3	3		3	4	3														0
	FY 08	A	43	0	43			A									3	3	3	3	3	4	4	4	4	4	4	4		0
1	FY 09	A	36	0	36														A										4	32
-																														
То	tal	1	105		105			2	2	3	3	3	3	3	4	3	3	3	3	3	3	4	4	4	4	4	4	4	4	32
			1		•	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M							I	PRODU	CTION	RATES						A	DMIN I	LEAD T	IME		MFR		TOTA	AL	REMA	RKS				•
F												hed M	FR			Prio	or 1 Oct	+	r 1 Oct	Aft	ter 1 Oct		After 1	Oct						
R				ne - Locati	on			MIN	1-8-5	MAX	D-	-	_	tial			0	_	9		5		14		_					
1	EADS	-NA, C	olumbus,	MS				16	50	55		_		order			0		2		9		11		_					
													-	tial				-				_			_					
														order				-				_			_					
	-												_	tial											1					
-	1										+	\dashv	_	order				-				-			1					
	1										+	_	_	tial				1				\perp			1					
											+	_		order				1		1					1					
	+										+		-	order				+							1					
	1						1			i	1		INC	oraci		1		1		1		1			1					

		F	Y 10 /	11 BU	DGE'	T PR	ODUC	CTIO	N SCI	HEDU	LE			P-1 ITEM HELICO				(LUH)	(A0500	1)			Dat	te:	Februa	ry 2008				
	C	OST	ELEM	IENTS	;						Fiscal `	Year 10)										Fiscal Y	Year 11	-					
		1							1																					
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year 1	.0								Cale	ndar Ye	ar 11				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Air	frames/I	ncludes	non-recu	rring			•	•	•			•	•	•	•	•				•				•		•			•	•
1	FY 07	A	26	26																										0
1	FY 08	A	43	43																										0
1	FY 09	A	36	4	32	2 3	3	3	3	3	3	3	:	3 3	3	2														0
													-																	
													-																	
			405																											
Tot	al		105	73	32	-	3	3	3	3	3	3	3		3	2	_			_		_				_	_		_	
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M								PRODU	ICTION	RATES						A	DMIN I	EAD T	IME		MFR		TOTA	AL	REMA	RKS				1
F											Reac	hed M	IFR			Pri	or 1 Oct	Afte	r 1 Oct	Aft	er 1 Oct		After 1	Oct						
R			Nam	e - Locati	on		1	MIN	1-8-5	MAX	D	+	1 I	nitial			0		9		5		14							
1	EADS	-NA, Co	olumbus,	MS				16	50	55			R	leorder			0		2		9		11							
													Iı	nitial																
													R	eorder																
													Iı	nitial																
													R	eorder											1					
	İ												Iı	nitial											1					
													R	eorder											1					
													I	nitial											1					
													R	eorder																

Exhibit P-40, Budget Item	Justification	Sheet					Γ	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 1 / Airc				P-1	Item Nomencla UH-60 BLA	ture CKHAWK (MYP) (AA0005)			
Program Elements for Code B Items:		Code:	Other I	Related Program 0203744A/Projec						
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty	1680	72	78	63	72	46	52	60	781	2904
Gross Cost	10498.1	1164.8	1431.8	1042.6	1272.4	915.3	1017.4	1136.4	14415.1	32894.0
Less PY Adv Proc	2535.9	78.0	183.0	116.8	135.9	96.6	132.8	147.5	1886.1	5312.7
Plus CY Adv Proc	2613.9	185.1	116.0	137.2	94.1	132.8	173.6	165.5	1694.5	5312.7
Net Proc P1	10576.1	1271.9	1364.8	1063.0	1230.6	951.5	1058.3	1154.4	14223.5	32894.0
Initial Spares	421.3									421.3
Total Proc Cost	10997.4	1271.9	1364.8	1063.0	1230.6	951.5	1058.3	1154.4	14223.5	33315.3
Flyaway U/C										
Weapon System Proc U/C	25.5	18.0	17.1	16.2	16.5	20.0	18.9	19.5	19.2	170.9

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:

- 1. FY2007 funding total includes \$456.4 million received in GWOT supplemental.
- 2. FY2008 funding total includes \$483.3 million received in the Consolidated Appropriations Act, 2008 (P.L. 110-161).
- 3. FY2008 funding totals do not include \$44.1 million previously requested for current FY2008 GWOT requirements.

Exhibit P-40, Budget Item .	Justification	Sheet					Γ	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 1 / Airc				P-1	Item Nomencla UH-60 BLA	ture CK HAWK (MYP)	(A05002)		·	
Program Elements for Code B Items:		Code:	Other	Related Program 0203744A/Proje						
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty	1680	72	78	63	72	46	52	60	781	2904
Gross Cost	10458.6	1164.8	1431.8	1042.6	1272.4	915.3	1017.4	1136.4	14415.1	32854.5
Less PY Adv Proc	2535.9	78.0	183.0	116.8	135.9	96.6	132.8	147.5	1886.1	5312.7
Plus CY Adv Proc	2613.9	185.1	116.0	137.2	94.1	132.8	173.6	165.5	1694.5	5312.7
Net Proc P1	10536.6	1271.9	1364.8	1063.0	1230.6	951.5	1058.3	1154.4	14223.5	32854.5
Initial Spares	421.3									421.3
Total Proc Cost	10957.9	1271.9	1364.8	1063.0	1230.6	951.5	1058.3	1154.4	14223.5	33275.8
Flyaway U/C										
Weapon System Proc U/C	25.5	18.0	17.1	16.2	16.5	20.0	18.9	19.5	19.2	170.9

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.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft				menclature: HAWK (MYP) (A	05002)		Weapon System	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Element	S	CD	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			826173	72	11475	911196	78	11682	704503	63	1118
Engines/Accessories			91235	144	634	102024	156	654	84493	126	67
Avionics (GFE)			58134			49892			36364	1	
Other GFE			42032			38877			28624	1	
Armament											
ECO (All FLYAWAY Components)			17575			25736			22549)	
Other Costs (Mission Equipment)			25771			169286			54503	3	
Tooling Equipment			14838			28633			11645	5	
Other Nonrecurring Cost			1045			4272			197	l	
Total FLYAWAY			1076803			1329916			944652	2	
Support Cost											
Airframe PGSE											
Engine PGSE											
Peculiar Training Equipment			38742			35958			3964	1	
Publications/Tech Data											
PM Administration			20804			28037			28998	3	
Fielding			28475			37938			29356	5	
Subtotal Support Cost			88021			101933			9799	5	
Gross P-1 End Item Cost			1164824			1431849			104264	7	
Less: Prior Year Adv Proc			77991			183009			11679	5	
Net P-1 Full Funding Cost			-77991			-183009			-11679	5	
Plus: P-1 CY Adv Proc			185098			115956			137175	5	
Initial Spares											
Total:			1271931								

Exhibit P-5a, Budget Procur	rement History and Plannin	ıg						ate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 1/ Aircraft	Weapon System Type:		Nomenclature: K HAWK (MYP) (A05002)							
WBS Cost Elements:	Contractor and Location	n 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 2007	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Nov 07	Dec 07	34	11475	Yes		May-05
FY 2007	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Nov 07	Jun 08	8	11475	Yes		May-05
FY 2007	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Nov 06	Jun 08	5	11475	Yes		Oct-04
FY 2007	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Nov 06	May 08	13	11475	Yes		OCT-04
FY 2007	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Nov 07	Jan 09	12	11475	Yes		May-05
FY 2008	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Jan 08	Aug 08	52	11682	Yes		May-05
FY 2008	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Jan 08	Jul 09	26	11682	Yes		May-05
FY 2009	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Jan 09	Jul 09	63	11183	Yes		May-05

REMARKS: The FY07 contract is the first year of a 5 year multi-year, multi-service contract for the procurement of UH-60Ms.

		FY 07	/ 08 BU	JDGE	Γ PR(ODUC	CTIO	N SCI	HEDU	LE				M NOME BLACK F			A05002))				Date	e:	Februa	ry 2008				
	COS	T ELE	MENTS	5						Fiscal Y	Year 0'	7										Fiscal Y	ear 08						
	-		_	1				1												ı									4
M		S PROC E QTY											Calenda	ır Year 0	7								Caler	ıdar Ye	ar 08				
F F		R Unit	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	N A	A U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Airfram	es/CFE		•										•																
1 FY		3	4 (34														A	5	5	6	6	8	3	1				0
1 FY)7 A		8 (8														A							3	3	2		0
1 FY)7 A		5 (5		A																			1	2	1	1	0
1 FY)7 A	1	3 (13		A																		1		1	1	1	9
1 FY)7 A	1		12														A											12
1 FY)8 A	5	2 (52																A							1	5	46
1 FY	08 A	2	6 (26																A									26
1 FY)9 A	6	3 (63																									63
1 FY)7 NA	. 1	8 (18																			2	2	2	2	2	2	6
1 FY)7 NA	. 2	5 (25																							2	2	21
1 FY	08 NA	. 1	8 (18																									18
1 FY	08 NA	. 2	5 (25																									25
1 FY)9 NA	. 1	8 (18																									18
1 FY)9 NA	. 2	4 (24																									24
Total		34	1	341															5	5	6	6	10	6	7	8	9	11	268
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	N A	A U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M						I	PRODU	JCTION I	RATES						Α	DMIN L	EAD T	IME		MFR		TOTA	AL	REMA					
F										Reac	hed M	1FR			Pric	or 1 Oct	After	r 1 Oct	Af	ter 1 Oct		After 1	Oct	Max pr quantit	oductionies.	1 rates d	o not inc	lude Na	ıvy
R		Na	me - Locat	ion		N	MIN	1-8-5	MAX	D-	F	1	Initial			8		3		6		9							
1 Sik	orsky A	ircraft, Str	atford CT				18	96	120	22	:		Reorder			0		3		6		9							
													Initial																
													Reorder																
													Initial																
													Reorder																
													Initial																
													Reorder																
		-											Initial																
											Ī	Ī	Reorder																

		F	Y 09 /	10 BU	DGET	r PRC	DDUC	CTIO	N SCI	IEDU	ILE			P-1 ITEI UH-60 E	M NOME BLACK F			A05002))				Dat	e:	Februa	ry 2008				
	C	OST I	ELEM	ENTS	}						Fiscal '	Year 0	9	•									Fiscal Y	ear 10	1					
			l .																											
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	ır Year 0	9								Caler	ndar Ye	ar 10				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	l d	M J A U Y N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Airfra	mes/C	FE												•																
1 F	Y 07	A	34	34																										0
1 F	Y 07	A	8	8																										0
1 F	Y 07	A	5	5																										0
1 F	Y 07	A	13	4	9	1			2	2	2	12	2																	0
1 F	Y 07	A	12	0	12				1	1	1	1	1	1 1	1	1	1	1	1	1										0
1 F	Y 08	A	52	6	46	6	5	5	4	4	4	4	4	6 6	2															0
1 F	Y 08	A	26	0	26										2	2	2	2	2	2	3	3	3	3	2					0
1 F	Y 09	A	63	0	63				A						5	6	6	6	5	5	5	5	5	5	5	5				0
1 F	Y 07	NA	18	12	6	2	2	2																						0
1 F	Y 07	NA	25	4	21	2	2	2	2	2	2	2	2	2 3	2															0
1 F	Y 08	NA	18	0	18				2	2	2	2	2	2 2	2	2	2													0
1 F	Y 08	NA	25	0	25											2	2	2	2	2	2	2	3	3	3	2				0
1 F	Y 09	NA	18	0	18													1	1	2	2	3	2	3	2	2				0
1 F	Y 09	NA	24	0	24																						2	2	2	18
Total			341	73	268	11	9	9	11	11	11	11	1	1 12	14	13	13	12	11	12	12	13	13	14	12	9	2	2	2	18
						O C T	N O V	D E C	J A N	F E B	M A R	A P R		M J A U Y N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M							I	PRODU	CTION I	RATES						Α	DMIN I	LEAD T	IME		MFR		TOTA	AL.	REMA	RKS				1
F											Reac	hed N	1FR			Pric	or 1 Oct	Afte	r 1 Oct	Aft	er 1 Oct		After 1	Oct						
R			Nam	e - Locati	on		N	ΛIN	1-8-5	MAX	D-	+	1	Initial			8		3		6		9							
1 5	Sikorsl	cy Aircr	aft, Stratt	ford CT				18	96	120	22	2		Reorder			0		3		6		9							
														Initial																
														Reorder																
														Initial																
														Reorder																
														Initial											1					
														Reorder																
														Initial																
1														Reorder											1					

		F	Y 11 /	12 BU	DGET	r PR(DUC	CTIO	N SCI	HEDU	LE			P-1 ITEN UH-60 B				A05002))				Dat	e:	Februa	ry 2008				
	CO	OST I	ELEM	ENTS	5						Fiscal `	Year 11		•									Fiscal Y	ear 12						
	1		ppog	+ CCEP	D.17									~		_					Ι			~ .						
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year 1	1								Calei	ndar Ye	ar 12				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Airfrai	mes/C	FE																												
1 FY	7 07	A	34	34																										0
1 FY	7 07	A	5	5																										0
1 FY	7 07	A	8	8																										0
1 FY	7 07	A	13	13																										0
1 FY	7 07	A	12	12																										0
1 FY	7 08	A	52	52																										0
1 FY	08	A	26	26																										0
1 FY	09	A	63	63																										0
1 FY	7 07	NA	18	18																										0
1 FY	7 07	NA	25	25																										0
1 FY	7 08	NA	18	18																										0
1 FY	7 08	NA	25	25																										0
1 FY	7 09	NA	18	18																										0
1 FY	7 09	NA	24	6	18	2	2	2	2	2	2	2		2 2																0
Total			341	323	18	2	2	2	2	2	2	2	2	2																
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M]	PRODU	ICTION I	RATES						Α	DMIN L	EAD T	IME		MFR		TOTA	AL	REMA	RKS				1
F											Reac	hed M	FR			Pric	or 1 Oct	After	r 1 Oct	Aft	ter 1 Oct		After 1	Oct						
R			Nam	e - Locati	on		N	MIN	1-8-5	MAX	D-	+	1 I1	nitial			8		3		6		9							
1 S	ikorsk	y Aircr	aft, Stratt	ford CT				18	96	120	22	2	R	leorder			0		3		6		9							
													Iı	nitial																
													R	leorder																
													Iı	nitial																
													R	leorder											1					
													Iı	nitial						İ					1					
													R	leorder											1					
1													Iı	nitial											1					
													R	eorder											1					

Exhibit P-40, Budget Item	Justification	Sheet					Г	Date:	February 2008	
Appropriation / Budget Activity / Serie Aircraft Procurement, Army / 1 / Airc				P-:	Item Nomencla	iture ACKHAWK (MYP) (AA0005)	·	Cordary 2000	
Program Elements for Code B Items:		Code:	Other	Related Program 0203744A/ Proj						
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost										
Less PY Adv Proc										
Plus CY Adv Proc	2613.9	185.1	116.0	137.2	94.1	132.8	173.6	165.5	1694.5	5312.7
Net Proc P1	2613.9	185.1	116.0	137.2	94.1	132.8	173.6	165.5	1694.5	5312.7
Initial Spares										
Total Proc Cost	2613.9	185.1	116.0	137.2	94.1	132.8	173.6	165.5	1694.5	5312.7
Flyaway U/C										
Weapon System Proc U/C										

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:

FY2009 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 Requir	ement	s Anal	ysis-Fundi	ng (P-10A)	First System	Award Date:	First S	ystem Completion D	rate:	Date:	February 2008	
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Airc	raft						P-1 Lin	ne Item Nomenclatur UH-60 BLAC	re / Weapon System KHAWK (MYP)	:		
					(\$ in Mill	ions)						
	PLT	When Rqd									То	

								*				
	PLT (mos)	When Rqd (mos)	Pr Yrs	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	To Comp	Total
End Item Quantity			1683.0	38.0	42.0	64.0	73.0	47.0	53.0	61.0	762.0	2823.0
Ī												
CFE Airframe	18	6	1593.0	138.1	47.1	46.4	30.1	45.8	75.3	48.0	473.1	2496.9
Engines	13	3	736.6	33.1	49.9	63.6	46.7	65.7	74.6	88.7	922.1	2081.0
Avionics	0	3	134.4	6.4	9.5	12.7	8.4	10.3	11.2	14.0	145.0	351.9
Auxiliary Power Unit	6	3	46.8	3.0	3.6	5.9	3.6	4.4	5.1	5.9	61.8	140.1
Armored Crew Seat	6	3	23.4									23.4
Hover Infrared Suppressor	14	3	36.0	4.5	5.9	8.6	5.3	6.6	7.4	8.9	92.5	175.7
Elastomeric Bearings	10	3	1.5									1.5
Miscellaneous	0	3	42.2									42.2
Total Advance Procurement			2613.9	185.1	116.0	137.2	94.1	132.8	173.6	165.5	1694.5	5312.7

Advance Procurement Requirements Analysis-Funding (P-10B)					Date: February 20	08
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft		P-1 Line Item Nomencla UH-60 BLA	ture / Weapon System: ACKHAWK (MYP)			
			(\$ in Millions)		
					2009	
	PLT (mos)	Quantity Per Assembly	Unit Cost	Qty	Contract Forecast Date	Total Cost Request
CFE Airframe	18	1		63.0		46.4
Engines	13	2	670.0	126.0		63.6
Avionics				63.0		12.7
Auxiliary Power Unit	6	1	69.0			5.9
Hover Infrared Suppressor	14	1	103.0	63.0		8.6
Total Advance Procurement						137.2

Avionics includes numerous items procured by CECOM. Unit cost of the T701D Engine, APU, and IHIRSS are the latest option price for delivery at leadtime.

Advance Procurement Requirements Analysis-Funding (P-10C)		Date:	February 2008
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature / Weapon System: UH-60 BLACKHAWK (MYP)		

				l	(\$ in M	(illions)				
	Pr Yrs	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	To Comp	Total
Proposal w/o AP										
Then Year Cost	14	248	780	921	1068	1156	888	315	193	5583
Constant Year Cost	14	242	747	864	981	1040	781	271	161	5101
Present Value	14	232	692	776	855	879	641	216	122	4427
AP Proposal										
Then Year Cost	14	237	741	876	1019	1101	846	300	184	5318
Constant Year Cost	14	232	710	822	935	990	744	258	153	4858
Present Value	14	222	658	739	815	837	610	205	116	4216
AP Savings (Difference)										
Then Year Cost		-11	-39	-45	-49	-55	-42	-15	-9	-265
Constant Year Cost		-10	-37	-42	-46	-50	-37	-13	-8	-243
Present Value		-10	-34	-37	-40	-42	-31	-11	-6	-211
		1	1	1		l	I			

Advance Procurement Requ	uirements A	nalysis-Exec	cution (P-10D))				Date	e: February 2008	
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 /	Aircraft				P-1 Line Item Nomer UH-60 F	nclature / Weapon Sy BLACKHAWK (MY				
						(\$ in Millions)				
				2007			200	8	20	09
	PLT (mos)	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Contract Forecast Date	Qty	Contract Forecast Date	
End Item Quantity		38			38.0				63	
CFE Airframe	18	113	Nov 2007		138.1		42		63	
Engines	13	41	Dec 2006		33.1		84		126	
Avionics		29	Dec 2006		6.4		42		63	
Auxiliary Power Unit	6				3.0					
Armored Crew Seat	6									
Hover Infrared Suppressor	14	3	Dec 2006		4.5		42		63	
Elastomeric Bearings	10									
Miscellaneous										
Total Advance Procurement					185.1					

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	Eahmany 2009	
Ammonistics / Dudget Activity / Same	al Na.				Item Nomencla	tumo			February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 1 / Airc				P		iture ICOPTER (A05008))			
Program Elements for Code B Items:		Code:	Other	Related Program	Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty			(16	7	7	5	5	2	48
Gross Cost			156.8	476.3	215.9	211.6	138.6	153.5	155.0	1507.6
Less PY Adv Proc				32.8						32.8
Plus CY Adv Proc			32.8							32.8
Net Proc P1			189.6	443.5	215.9	211.6	138.6	153.5	155.0	1507.6
Initial Spares										
Total Proc Cost			189.6	443.5	215.9	211.6	138.6	153.5	155.0	1507.6
Flyaway U/C										
Weapon System Proc U/C			31.6	27.7	30.8	30.2	27.7	30.7	77.5	256.3

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 CH-47 is vital to the War On Terrorism 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 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. (Prior to FY08, "New Build" aircraft were funded on the CH-47 Cargo Helicopter Mod budget line; 3 ea and 6 ea for FY's 06 and 07, respectively.)

Justification:

FY 2009 procures 16 new build aircraft to equip new Chinook units forming under the Army's Aviation Transformation Plan.

FY 2008 Advance procurement funding will be applied to FY 2009 procurement. Subsequent to FY 2009, change in Acquisition Strategy eliminated requirement for Advance Procurement.

Item No. 8 Page 1 of 4

Exhibit P-40 Budget Item Justification Sheet

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft			-1 Line Item N H-47 HELICC	omenclature: PTER (A05008)			Weapon System	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	Total Cos	st 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						119809	6	19968	390440	16	24403
Engine/Accessories						10839	12	903	29514	32	922
CFE Avionics						6496			17570)	
GFE						6999			19058	3	
ECO (Flyaway)						2907			7854	1	
Other Costs						2105			2426	5	
Support Costs											
PSE						1135			716	5	
Peculiar Training Equipment						192			364	1	
Publications/Tech Data						221			420)	
ECO (Support Items)						244			154	1	
Other Costs						5115			5640)	
Initial Spares											
Initial Spares						779			2122	2	
Subtotal Support Costs						156841			476278	3	
Advance Procurement						32759			-32759		
Total:						189600			443519		

Exhibit P-5a, Budget Procur	ement History	and Planning							ate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 1/ Aircraft		Weapon System Type:		Nomenclature: COPTER (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		AMCOM	Mar 08	Feb 11	6	19968	YES		Apr-0
FY 2009	g Company g, PA	SS/FFP	AMCOM	Jan 09	Dec 11	16	24403				

REMARKS:

		F	F Y 11 /	12 BU	DGE	Γ PR(ODUC	CTIO	N SCI	HEDU	LE			P-1 ITE CH-47 F									Dat	te:	Februa	ry 2008				
	C	OST	ELEM	IENTS	}						Fiscal '	Year 1	1										Fiscal Y	Year 12						
		S	PROC	ACCEP	BAL									Calenda	w Voor 1	1					I			Color	ndar Ye	on 12				
M		E	QTY	PRIOR	DUE									Calenda	ir rear i	1								Cale	ildar 1e	ar 12				
F R	FY	R V	Each	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Air	frames/0	CFE																												
1	FY 08	A	6	0	6					3	3																			0
1	FY 09	A	16	0	16															3	3	3	3	3	1					0
			 					<u> </u>																						
								<u> </u>																						
			+																											
			+																											
			+																											
			+																											
Tot	al		22		22					3	3									3	3	3	3	3	1					
				•		O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
									•					•										•	,	•		•		
M]	PRODU	ICTION	RATES						Α	DMIN I	LEAD T	TME		MFR		TOTA	AL	REMA	RKS				
F											Reac	hed N	1FR			Pri	or 1 Oct	Afte	er 1 Oct	Aft	ter 1 Oct		After 1	Oct						
R			Nam	ne - Locati	on		N	MIN	1-8-5	MAX	D-	+	1 1	Initial			5		5		35		40							
1	The B	oeing C	Company, l	Ridley Par	k, PA			12	24	54]	Reorder			0		0		0		0							
]	Initial																
]	Reorder																
													1	Initial																
]	Reorder																
]	Initial																
]	Reorder																
]	Initial																
										1]	Reorder						1										

A05008 CH-47 HELICOPTER Item No. 8 Page 4 of 4 41 Exhibit P-21 Production Schedule

Exhibit P-40, Budget Item	Justification	Sheet						Date:	February 2008	
Appropriation / Budget Activity / Seri Aircraft Procurement, Army / 1 / Air					P-1 Item Nome CH-4	enclature 7 HELICOPTER (A0:	5008)			
Program Elements for Code B Items:		Code:	Othe	r Related Pro	gram Elements:					
	Prior Years	FY 2007	FY 2008	FY 200	9 FY 201	0 FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost										
Less PY Adv Proc										
Plus CY Adv Proc			32	.8						32.8
Net Proc P1			32	.8						32.8
Initial Spares										
Total Proc Cost			32	.8						32.8
Flyaway U/C										
Weapon System Proc U/C										
To 1 11										

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 product improvements reduce by 60 percent the time required for aircraft tear down and build-up after C-5/C-17 deployment. These improvements significantly enhance the Chinook's strategic deployment capability.

Justification:

FY 2008 funding procures long lead time parts materials required to preserve the production delivery schedule.

Item No. 9 Page 1 of 5

Exhibit P-40 Budget Item Justification Sheet

Advance Procurement Requir	ement	s Anal	ysis-Fundin	ng (P-10A)	First System	Award Date:	First S	ystem Completion I	Date:	Date:	February 2008	
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Airc	raft						P-1 L	ne Item Nomenclatu CH-47 HELIO		1:		
							(\$ in Mil	lions)				
	PLT (mos)	When Rqd (mos)	Pr Yrs	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	To Comp	Total
End Item Quantity												
Airframes	13	14			19.8							19.8
Avionics	15	16			13.0							13.0
Total Advance Procurement			0.0	0.0	32.8	0.0	(0.0	0.0	0.0	0.0	32.8

Advance Procurement Requirements Analysis-Fun	ding (P-10B)				Date: February 20	08
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Aircraft		P-1 Line Item Nomenclat CH-47 HEL				
			(\$	in Millions)		
					2009	
	PLT (mos)	Quantity Per Assembly	Unit Cost	Qty	Contract Forecast Date	Total Cost Request
Airframes	13	1	1.0			
Avionics	15	1	1.0			
Total Advance Procurement						

Advance Procurement R	equirements Anal	ysis-Funding	g (P-10C)						Date: Febru	uary 2008
Appropriation / Budget Activity / Serial 1 Aircraft Procurement, Army				P-1	Line Item Nomencla CH-47 HEI		m:		•	
					(\$ in N	Millions)				
	Pr Yrs	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	To Comp	Total
Proposal w/o AP										
Then Year Cost			149							149
Constant Year Cost			145							145
Present Value			144							144
AP Proposal										
Then Year Cost			143							143
Constant Year Cost			140							140
Present Value			138							138
AP Savings (Difference)										
Then Year Cost			-6							-6
Constant Year Cost			-6							-6
Present Value			-5							-5

Constant Year Dollars are fiscal year 2005.

Advance Procurement Requir	ements A	Analysis-Exe	cution (P-10I	O)				Date:	February 2008	
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 1 / Airc	craft					nclature / Weapon Sy HELICOPTER	vstem:			
						(\$ in Millions)				
				2007			20	08	20	009
	PLT (mos)	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Qty	Contract Forecast Date
End Item Quantity										
Airframes	13						6	Mar 08		
Avionics	15						6	Mar 08		
Total Advance Procurement										

Exhibit P-40, Budget Item	Justification	Sheet						I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 1 / Airc					P-1	Item Nomencla	ature ER NEW TRAININ	G (A06500)		1 Columny 2008	
Program Elements for Code B Items:		Code:		Other I	Related Program	Elements:					
	Prior Years	FY 2007	FY 2	2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty	183				1	1		2	2		189
Gross Cost	189.7				2.4	2.4		4.6	4.6		203.5
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc P1	189.7				2.4	2.4		4.6	4.6		203.5
Initial Spares											
Total Proc Cost	189.7				2.4	2.4		4.6	4.6		203.5
Flyaway U/C											
Weapon System Proc U/C					0.0	0.0		0.0	0.0		0.0

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.

Exhibit P-40

Justification:

FY 2009 procures one TH-67 helicopter for training.

February 2008	Date:	em Type:	Weapon System		(A06500)	omenclature: NEW TRAINING				Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft	Exhibit P-5, Weapon ACFT Cost Analysis
19	FY 09			FY 08			FY 07		ID		ACFT
Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	CD	ts	Cost Elemen
s \$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000			
1 1628	28 1	1628									AIRCRAFT
	i3	753									SUPPORT COSTS
	31	2381									Total:
s 1	28 1	1628 753	\$000	Units	\$000	\$000	Units	\$000			AIRCRAFT SUPPORT COSTS

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo]	2-1 Item Nomencl GUARDR	ature AIL MODS (MIP) (A	Z2000)		1 cordary 2000	
Program Elements for Code B Items:		Code:	Othe	Related Progra	m Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	772.4	90.8	148	.1 119	.1 29.7	30.7	46.1	46.7		1283.6
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	772.4	90.8	148	.1 119	.1 29.7	30.7	46.1	46.7		1283.6
Initial Spares										
Total Proc Cost	772.4	90.8	148	.1 119	.1 29.7	30.7	46.1	46.7		1283.6
Flyaway U/C									·	
Weapon System Proc U/C			·							

- Guardrail Common Sensor (GRCS) is an Airborne Signal Intercept and Emitter Location System designed to provide tactical commanders with critical battlefield information via a Joint Tactical Terminal (JTT) and other DOD Tactical and Fixed Communications Systems (e.g., Guardrail Reporting Shelter (GRS). It currently provides intelligence data via Joint Tactical Terminal (JTT) to other INTEL users, such as Common Ground System (CGS), and All Source Analysis System (ASAS) via the Tactical Information Broadcast Service (TIBS), and Tactical Reconnaissance Intelligence Exchange System (TRIXS), etc networks. The Army's GR/CS System provides a highly flexible architecture to allow rapid deployment to support contingency operations, and was designed to support field commanders until a future system 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/Q 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 commercially available hand-held 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 the Global War on Terrorism (GWOT). GR/CS contributes directly to the success of Army Modernization by serving as an operational platform for verification of new or improved technologies.

Justification:

The FY09 Budget 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 "Special Signals (SS)" to enhance interception; and continuation of "Electronic Intelligence (ELINT)". Provides critical upgrade capability to collect insurgent threats in support of current OIF/OEF operations.

Exhibit P-40, Budget Item Justification S	Sheet			Date: February 2008
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft			P-1 Item Nomenclature GUARDRAIL MODS (MIP) (AZ2000)	
Program Elements for Code B Items:	Code:	Other Related Pro	ogram Elements:	
FY2007 funding total includes \$33.0 million received: FY2008 funding totals do not include \$33.0 million pre	n GWOT suppler viously requested	mental. I for current FY2008 C	GWOT requirements.	

E 1 11 14 D 403		4° G1 4						Date:			
Exhibit P-40N	M, Budget Item Justifica	ation Sheet							February 2008		
Appropriation / Budget A	Activity / Serial No:				P-1 Item Nomeno	clature					
Aircraft Pro	ocurement, Army / 2 / Modification of aircr	aft			GUA	ARDRAIL MODS	(MIP) (AZ2000)				
Program Elements for Co	ode B Items:						Code:	Other R	elated Program Elem	ents:	
Description		Fiscal Years					I	L			
OSIP No.	Classification	Prior Yrs.	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TC	Total
Comm High Accurac	y Location Sys-Compact (CHALS-C										
1-06-111-2006		7.8	6.6	8.3	8.5	1.7	0.0	0.0	0.0	0.0	32.9
Special Signals (SS) S	Subsystem										<u>, </u>
1-07-333-2007		0.0	0.6	4.2	3.9	0.9	0.4	0.5	0.5	0.0	11.0
Enhance Situational A	Awareness (ESA) Subsystem										
1-06-333-2006		0.0	74.0	118.4	90.7	22.7	26.9	40.1	40.6	0.0	413.4
Guardrail Ground Bas	se Sub-System										
1-07-111-2007		0.0	4.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0	6.8
High Band Comint (F	HBC) Subsystem										
1-07-222-2007		0.0	0.5	7.4	7.2	3.3	3.4	0.9	0.9	1.8	25.4
Electronic Intelligenc	ee (ELINT)										
1-07-444-2007		0.0	5.0	7.1	8.8	1.1	0.0	4.6	4.7	0.0	31.3
Totals		7.8	90.8	148.1	119.1	29.7	30.7	46.1	46.7	1.8	520.8

Date:

February 2008

MODIFICATION TITLE: Comm High Accuracy Location Sys-Compact (CHALS-C [MOD 1] 1-06-111-2006

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

DESCRIPTION / JUSTIFICATION:

CHALS-C will provide commercial off-the-shelf hardware for Guardrail, resulting in enhanced precision geo-location capability to the warfighter. The CHALS-C extends the frequency range of GRCS precision geo-location of high value threats and supports Theater Net-Centric Geolocation (TNG) Architecture Cooperative Operations. This provides risk reduction for future Army ISR systems. GRCS provides the only Signal Intelligence (SIGINT) precision geo-location capability available to the warfighter, as well as the majority of total threater-wide SIGINT reporting. Without these critical upgrades, the system will not remain relevant as evolving technology begins to exceed current capabilities. The goal is to replace CHAALS and CHALS-X Precision Location Sub-systems on four (4) GRCS Systems with CHALS-C. This provides reduced size and weight, increases frequency coverage and throughput, and provides data archiving for improved performance and TNG Cooperative Operations.

Justification: The FY09 funding provides for continued recurring equipment purchases and minimal PM support. Installation and fielding of the B Kits will be performed by the GRCS Integration contractor under the Enhanced Situational Awareness (ESA) Mod.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

20FY071st Contract Awd - Production Start

1QFY082nd Contract Awd

2QFY08Flight Test

1QFY09 3rd Contract Awd 2QFY10Field (1st System) with ESA

NOTE: Systems installation will occur as units become available between deployments.

Installation Schedule

Inputs Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
										7				8						7
														7				8		

		FY 2	2012			FY 2	2013			FY	2014			FY 2	2015		То	Totals
ı	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs						7												29
Outputs				7						7								29

METHOD OF IMPLEMENTATION: Contractor ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 12 months Contract Dates: FY 2008 - FY 2009 - FY 2010 -

Delivery Dates: FY 2008 - FY 2009 - FY 2010 -

Item No. 12 Page 4 of 11

Date: Februa

February 2008

MODIFICATION TITLE (cont): Comm High Accuracy Location Sys-Compact (CHALS-C [MOD 1] 1-06-111-2006

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	13	TO	C	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Non-Recurring A-Kits																				
Prototype/Lab	5	4.0																	5	4.0
Non-recurring CHALS-C		3.8																		3.8
Recurring CHALS-C HW			9	4.5	8	4.5	9	5.5	3	1.7									29	16.2
Manuals/Training Doc						0.7														0.7
Production 1553 Cards				1.2		1.5														2.7
Test Support						0.3		0.3												0.6
Initial Spares			1	0.5	1	0.6	3	1.8											5	2.9
Integration/Field Supt				0.2		0.5		0.7												1.4
PM Support/TDY				0.2		0.2		0.2												0.6
Installation of Hardware																				
FY 2005 & Prior Equip Kits																				
FY 2006 Kits																				
FY 2007 Equip Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		7.8		6.6		8.3		8.5		1.7		0.0		0.0		0.0		0.0		32.9

Item No. 12 Page 5 of 11 53

Date:

February 2008

MODIFICATION TITLE: Enhance 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 and infrastructure on the GRCS aircraft, provides a capability against modern commercial targets and 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 and signal exploitation tools. Upgrades are needed to keep system relevant against evolving threat signals.

ESA also includes the integration, test and fielding for the CHALS-C subsystem, High Band COMINT (HBC), Special Signals (SS), integration of current X-Midas, data link equipment, and for the Re-Capitalization of (9) RC-12N Model Aircrafts. ESA will provide data link and cockpit upgrades for the first seven aircraft. ESA provides greatly improved COMINT infrastructure and Core COMINT capability allowing more open architecture and increased capabilities against emerging OEF/OIF threats.

Justification: FY09 provides ESA A&B Kits for the 2nd system, aircraft cockpit modifications for training aircraft, and program management support to include ESA, CHALS-C, GRCS Ground Base Modifications, and HBC. Installation of ESA includes contract costs to integrate/test/fielding ESA, CHALS-C, HBC and SS. GRCS GGB installation and fielding costs are provided by customer funds. Systems installation will occur as units become available between deployments.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

10FY09 Factory Acceptance Test

10FY10 System Assessment Test

20FY10 Field 1st ESA Upgrade; 20FY11 Field 2nd; 40FY12 Field 3rd; and 20FY14 Field 4th.

	nstal	lation	Sc	hed	lu	le
--	-------	--------	----	-----	----	----

Inputs Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010		FY 2011				
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
										7				8						7	
														7				8			

[FY 2012					FY 2	2013			FY	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs						7												29
Outputs				7						7								29

METHOD OF IMPLEMENTATION:

Contractor

ADMINISTRATIVE LEADTIME:

3 months

PRODUCTION LEADTIME: 12 months

Contract Dates:

FY 2008 -

FY 2009 -

FY 2010 -

Delivery Dates:

FY 2008 -

FY 2009 -

FY 2010 -

AZ2000 GUARDRAIL MODS (MIP) Item No. 12 Page 6 of 11

Exhibit P-3A Individual Modification

Date: February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20)12	20	13	TO	С	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
PROCUREMENT																				
Non-Recur				37.1		33.6		1.4						10.0						82.1
Recur ESA B-Kit			1	3.0	6	18.0	10	32.3	2	6.6	1	3.4	2	6.8	7	24.5			29	94.6
Recur A-Kit (Racks/Cable)			1	1.5	8	12.0	9	14.5			4	6.7	4	6.9	3	5.2			29	46.8
Recur A-Kit (Airframe)			3	3.5	10	11.5	5	6.2	4	5.0	4	5.2	4	5.3	3	4.0			33	40.7
Recur Nav/Timing			3	1.7	6	3.5	9	5.6			4	2.5	4	2.6	3	2.0			29	17.9
Recur Data Link Air			8	3.6	5	2.3	4	2.0											17	7.9
Recur Data Link Ground			4	1.8															4	1.8
Spare ESA B-Kit					1	3.0	1	3.2											2	6.2
Eng Lab Asset ESA B-Kit			2	4.9															2	4.9
Aircraft Upgrade Cockpit			4	9.8	9	17.5	3	5.8											16	33.1
Sys Assessment/Test Supt						5.0		5.9		3.8		2.0		2.0						18.7
Training Supt								0.4		0.5		0.5		0.5						1.9
Fielding (CHALS/ESA/HBC)								3.1		3.4		3.5		2.0		2.0				14.0
PM Support				7.1		12.0		10.3		3.0		2.6		3.6		2.5				41.1
ESA Installations FY 2010 Installation FY 2011 Installation FY 2012 Installation FY 2013 Installation									7	0.4	8	0.5	7	0.4	7	0.4			7 8 7 7	0.4 0.5 0.4 0.4
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	7	0.4	8	0.5	7	0.4	7	0.4	0	0.0	29	1.7
Total Procurement Cost		0.0		74.0		118.4		90.7		22.7		26.9		40.1		40.6		0.0		413.4
	1					l	l	l		l						l				

Item No. 12 Page 7 of 11 55

Exhibit P-3A Individual Modification

Date:

February 2008

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

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

DESCRIPTION / JUSTIFICATION:

Provides enhanced 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 required to provide capability against modern threat signals. 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.

Justification: FY09 funding provides Recurring Engr to support hardware purchases. 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):

10FY08 Contract Award

10FY10 System Assessment

2QFY10 Field 1st System

2QFY11 Field 2nd System

4OFY12 Field 3rd System

2QFY14 Partial Fielding of 4th System (2 Aircrafts Only)

NOTE: Systems installation will occur as units become available between deployments.

Installation Schedule

Inputs
Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010		FY 2011				
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
										7				8						7	
														7				8			

Į.																			
			FY 2	2012			FY 2	2013			FY :	2014			FY	2015		То	Totals
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inpu	ıts						2											5	29
Out	puts				7						2							5	29

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

2 months

PRODUCTION LEADTIME: 12 months

Contract Dates:

FY 2008 -

FY 2009 -

FY 2010 -

Delivery Dates:

FY 2008 -

FY 2009 -

FY 2010 -

AZ2000 GUARDRAIL MODS (MIP)

Item No. 12 Page 8 of 11

Exhibit P-3A Individual Modification

Date: February 2008

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

FINANCIAL PLAN: (\$ in Millions)

			1																	
	Prior	r Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	13	TO	C	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits																				
Nonrecurring				0.5		1.4														1.9
Recurring HBC B-Kits					7	5.3	7	5.6	4	3.3	4	3.4	1	0.9	1	0.9	2	1.8	26	21.2
Initial Spare					1	0.7	2	1.6											3	2.3
Engineering Change Orders																				
Data																				
Support Equipment																				
Installation of Hardware FY 2006 & Prior Equip Kits FY 2007 Kits FY 2008 Equip Kits FY 2009 Equip Kits FY 2010 Equip Kits																				
FY 2011 Equip Kits FY 2012 Equip Kits FY 2013 Equip Kits TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.5		7.4		7.2		3.3		3.4		0.9		0.9		1.8		25.4

Item No. 12 Page 9 of 11 57

Exhibit P-3A Individual Modification

Date:

February 2008

MODIFICATION TITLE: Electronic Intelligence (ELINT) [MOD 6] 1-07-444-2007

MODELS OF SYSTEM AFFECTED:

DESCRIPTION / JUSTIFICATION:

Standardizes the ELINT Airborne Quick Look (AQL) Processing hardware standardization across the GRCS Fleet. Migrates current airborne processing software into ESA's Commerical Based Architecture. Provides for Enhanced Processing speed, higher signal throughput, while reducing aircraft weight, and improves system sustainability.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

2QFY10 Field AQL Processing w/ESA 1st System

2QFY11 Field AQL Processing w/ESA 2nd System

4QFY12 Field AQL Processing w/ESA 3rd System

2QFY14 Field AQL Processing w/ESA 4th System

Installation Schedule

Inputs Outputs

Pr Yr		FY 2	2007			FY 2008				FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
										7				8						7
														7				8		

		FY 2	2012			FY 2	2013			FY	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs						7												29
Outputs				7						7								29

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

0 months

PRODUCTION LEADTIME: 12 months

Contract Dates:

FY 2008 -

FY 2009 -

FY 2010 -

Delivery Dates:

FY 2008 -

FY 2009 -

FY 2010 -

Date: Feb

February 2008

MODIFICATION TITLE (cont): Electronic Intelligence (ELINT) [MOD 6] 1-07-444-2007

FINANCIAL PLAN: (\$ in Millions)

	Prior	r Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	13	TO	2	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits																				
AQL Processing B-Kits					7	0.9	8	1.1	7	1.0					7	1.1			29	4.1
Recurring P-Pod			5	5.0	2	2.0	7	7.6					4	4.6	3	3.4			21	22.6
Non-Recurring						4.1														4.1
Spare AQL Process B-Kits					1	0.1	1	0.1	1	0.1					1	0.2			4	0.5
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2006 & Prior Equip Kits																				
FY 2007 Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
FY 2013 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		5.0		7.1		8.8		1.1		0.0		4.6		4.7		0.0		31.3

Item No. 12 Page 11 of 11 59

Exhibit P-40, Budget Item	Justification	Sheet					Ι	Date:	February 2008	
Appropriation / Budget Activity / Seri Aircraft Procurement, Army / 2 / Mo				P	-1 Item Nomencla MULTI SE	ature NSOR ABN RECON	V (MIP) (AZ2001)			
Program Elements for Code B Items:		Code:	Other	Related Progra	m Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	92.6	123.3	42.	0 23	.3 16.6	17.5	2.6	2.7		320.6
Less PY Adv Proc										
Plus CY Adv Proc]
Net Proc P1	92.6	123.3	42.	0 23	.3 16.6	17.5	2.6	2.7		320.6
Initial Spares]
Total Proc Cost	92.6	123.3	42.	0 23	.3 16.6	17.5	2.6	2.7		320.6
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 SOUTHCOM, CENTCOM 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 09 funding procures the continued baselining and modernization of the ARL fleet; ARL-M in CENTCOM and 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.

- 1. FY2007 funding total includes \$15.0 million received in GWOT supplemental.
- 2. FY2008 funding totals do not include \$25.0 million previously requested for current FY2008 GWOT requirements.

Item No. 13 Page 1 of 14

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Mod				P	1 Item Nomencla ARL MOD	ature S (MIP) (AZ2050)				
Program Elements for Code B Items:		Code:	Other	Related Prograi	n Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	92.6	123.3	42.	23.	3 16.6	17.5	2.6	2.7		320.6
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	92.6	123.3	42.	23.	3 16.6	17.5	2.6	2.7		320.6
Initial Spares										
Total Proc Cost	92.6	123.3	42.	23.	3 16.6	17.5	2.6	2.7		320.6
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 electro-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) to mid intensity conflict environments. ARL also conducts daily JCS Sensitive Reconnaissance Operations, 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. FY 07 Funding and Upgr

Justification:

FY09 procures the continued standardization and modernization of the ARL fleet. ARL has evolved into three different system configurations: ARL-M in CENTCOM (OIF), ARL-C and ARL-M in SOUTHCOM and ARL-Ms in Republic of Korea (ROK). The budget in FY09 continues the baselining of the fleet by providing a common architecture for sensor management and workstation Man-Machine Interface (MMI), downlinks and communications, common sensors across the fleet, and standardization. This standardization will also address reducing the maintenance burden and operational support costs. Sensors will also be modernized to address emerging threats and requirements (resulting in Radar, COMINT, and IMINT upgrades).

Item No. 13 Page 2 of 14 61

Exhibit P-40M	, Budget Item Justific	ation Sheet						Date:	February 2008		
Appropriation / Budget Ac	tivity / Serial No:				P-1 Item Nomeno	clature					
Aircraft Procu	rement, Army / 2 / Modification of airc	raft			ARI	MODS (MIP) (AZ	Z2050)				
Program Elements for Cod	e B Items:						Code:	Other Re	elated Program Elem	ents:	
Description		Fiscal Years									
OSIP No.	Classification	Prior Yrs.	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TC	Total
Comint Upgrades	·										
6-66-66-0000	Operational	25.2	6.6	5.0	5.6	4.9	4.0	0.0	0.0	0.0	51.3
System Interoperability											
0-00-08-8888	Operational	0.0	6.0	10.3	7.2	6.5	3.0	0.0	0.0	0.0	33.0
Radar											
0-00-05-2222	Operational	11.0	6.0	9.1	2.0	1.0	1.5	0.0	0.0	0.0	30.6
Workstation Architectu	re										
1-08-11-0000	Operational	0.0	4.0	4.2	3.0	0.5	2.0	0.0	0.0	0.0	13.7
Imagery											
0-00-05-3333	Operational	6.5	2.9	10.9	5.0	3.7	7.0	2.6	2.7	0.0	41.3
ARL-C to ARL-M Con	version										
0-00-07-7777	Operational	0.0	8.4	1.1	0.5	0.0	0.0	0.0	0.0	0.0	10.0
Safety Upgrades											
9-99-99-0000	Operational	11.4	4.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	16.8
Constant Hawk InfraRe	ed (IR) Sensor										
07-1211044-02	Operational	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
Constant Hawk A/C Su	rvivability Equipment (ASE)										
07-12101044-03	Operational	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Constant Hawk Gimbal	Upgrade										
07-12101044-04	Operational	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Constant Hawk System	s 3 and 4										
07-1211044-01	Operational	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
ABN ISR Mods, Ft Ho	od Trainer										
07-12101046-01	Operational	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
MARSS IV Aircraft Re	pairs										
07-12101042	Operational	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
ARMS MARSS TFO Q	RC										
07-12101042-01	Operational	6.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9

AZ2001 (AZ2050) ARL MODS (MIP) Item No. 13 Page 3 of 14 62

Exhibit P-40M Budget Item Justification Sheet

Exhibit P-40M, B	Sudget Item Justifi	ication Sheet						Date:	February 2008		
Appropriation / Budget Activity	y / Serial No:				P-1 Item Nomen	clature		'			
Aircraft Procureme	ent, Army / 2 / Modification of a	ircraft			ARI	L MODS (MIP) (AZ	Z2050)				
Program Elements for Code B l	tems:						Code:	Other R	elated Program Eler	ments:	
Description		Fiscal Years						<u> </u>			
OSIP No.	Classification	Prior Yrs.	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TC	Total
Totals		60.1	123.3	42.0	23.3	16.6	17.5	2.6	2.7	0.0	288.1

Date:

February 2008

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

MODELS OF SYSTEM AFFECTED: ARL-M

DESCRIPTION / JUSTIFICATION:

The Communications Intelligence (COMINT) upgrade modification adds a COMINT System to M1, M2, M3, M4, M5, and M6. 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 Operation Enduring Freedom (OEF) Global War on Terrorism (GWOT). 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. This upgrade is to support capability requirements in OIF, OEF, and GWOT. Fielding schedule is dependent on aircraft availability due to unit supporting current OIF and OEF operations. This effort provides for installation and testing of 6 systems. The installation for one ARL-C system will be funded as part of the ARL-C to M conversion.

FY09 installs two systems.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

40FY05 Contract Award

3QFY08 Air Worthiness Certification

20FY08 First System Fielded

2QFY09 Second System Fielded

3QFY09 Third System Fielded

Installation Schedule

Inputs Outputs

uic																					
	Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
						1				1	1			1	1			1			
							1				1	1			1	1			1	1	

İ		FY	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	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:

3 months FY 2009 - PRODUCTION LEADTIME: 12 months

Contract Dates: Delivery Dates: FY 2008 -FY 2008 -

FY 2009 -

FY 2010 -FY 2010 -

AZ2001 (AZ2050) ARL MODS (MIP) Item No. 13 Page 5 of 14

Date:

February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	r Yrs.	20	007	20	800	20	09	20	10	20)11	20	12	20	13	Т	C	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				I
Diamondback NRE		2.9		1.6																4.5
Diamondback B Kits	3	4.8	1	1.6	2	3.1	1	1.6											7	11.1
Calibration & Test		2.9		1.6																4.5
Contractor & Govt Mgt		1.4		0.2		0.2		0.2		0.2		0.2								2.4
Freq Extension								0.5		1.3		2.1								3.9
Spares			1	1.6															1	1.6
Sunk Costs		13.2																		13.2
Installation of Hardware																				
FY 2006 & Prior - Kits					1	1.7	2	3.3											3	5.0
FY 2007 Equip Kits									1	1.7									1	1.7
FY 2008 Equip Kits									1	1.7	1	1.7							2	3.4
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				<u> </u>
Total Installment	0	0.0	0	0.0	1	1.7	2	3.3	2	3.4	1	1.7	0	0.0	0	0.0	0	0.0	6	10.1
Total Procurement Cost		25.2		6.6		5.0		5.6		4.9		4.0		0.0		0.0		0.0		51.3

Date:

February 2008

MODIFICATION TITLE: System Interoperability [MOD 2] 0-00-08-8888

MODELS OF SYSTEM AFFECTED: ARL-C and ARL-M (8)

DESCRIPTION / JUSTIFICATION:

This modification provides system interoperability with other Army and National Sensors and procures new data links that provide an Air to Ground, Air to Air and Air to Satellite capability. This allows connectivity into the Distributed Common Ground Station - Army (DCGS-A) enterprise. The system interoperability upgrade supports capability requirements in Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and the Global War on Terrorism (GWOT).

FY07 procured modifications to assure interoperability with current systems in Iraq. These modifications included the integration of Pacific Wind Full Motion Video (FMV) downlinks (two per ARL) and PRC-117 High Performance Wavelength (HPW) tactical satellite capability. Also included in the modifications was software development to allow a Situational Awareness Data Link (SADL) radio capability (the ability to provide ARL aircraft and sensor coordinates to Air Force fast movers). Systems were installed and tested and are currently operational in theater. FY08 procured 3 three MultiRole-Tactical Common Data Links (MR-TCDL) installation kits.

FY09 procures 2 MR-TCDLs and begins installation. Installation is dependent on aircraft availability.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

20FY08 Contract Award

4QFY08 Air Worthiness Certification

10FY09 Fieldings Begin

Inputs Outputs

Inputs Outputs

Pr Yr		FY 2	2007			FY 2008				FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
									1	1	1		1	1			1	1		
											1	1	1		1	1			1	1

	FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	Totals
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
																	7
																	7

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

3 months

PRODUCTION LEADTIME: 9 months

Contract Dates: Delivery Dates: FY 2008 -FY 2008 - FY 2009 -FY 2009 - FY 2010 -FY 2010 -

AZ2001 (AZ2050) ARL MODS (MIP) Item No. 13 Page 7 of 14 66

Date:

February 2008

MODIFICATION TITLE (cont): System Interoperability [MOD 2] 0-00-08-8888

FINANCIAL PLAN: (\$ in Millions)

	Prior	r Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	13	TO		То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Eng Design, Software Dev				2.0								1.2								3.2
Installation Kits & BKits					3	7.8	2	5.2	2	5.2									7	18.2
Contractor & Govt Mgt				0.9		0.3		0.1				0.5								1.8
Spares						2.2														2.2
OIF AF Interop				3.1																3.1
Installation of Hardware																				
FY 2006 & Prior Equip Kits																				
FY 2007 Kits																				
FY 2008 Equip Kits							3	1.9											3	1.9
FY 2009 Equip Kits									2	1.3									2	1.3
FY 2010 Equip Kits											2	1.3							2	1.3
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
FY 2013 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	3	1.9	2	1.3	2	1.3	0	0.0	0	0.0	0	0.0	7	4.5
Total Procurement Cost		0.0	 	6.0		10.3		7.2		6.5		3.0		0.0		0.0		0.0		33.0
		1	1	1	l	1	l	–				- 10						- 10		

Item No. 13 Page 8 of 14 67

Date:

February 2008

MODIFICATION TITLE: Radar [MOD 3] 0-00-05-2222

MODELS OF SYSTEM AFFECTED: ARL-M

DESCRIPTION / JUSTIFICATION:

This modification procures the upgrade and reconfiguration of 7 Hughes Integrated Synthetic Aperture Radar (HISAR) radars to a Phoenix Eye configuration for all ARL-M Radars. The antenna gimbal assembly and servo assembly and transmitter will be replaced with modern and sustainable subsystems. Radio Frequency components will also be upgraded to take advantage of vanishing vendors/technology improvements. Advanced radar modes will be applied to address capabilities such as; super resolution Ground Moving Target Indicators, three dimensional Synthetic Aperture Radar (SAR), SAR/Imagery fusion, complex data exploitation, etc. Installations will be plug and play and will be done in conjunction with other planned upgrades.

FY09 procures software based mode enhancements and one radar hardware upgrade.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

10FY05 Contract Award

1QFY08 Air Worthiness Certification

2QFY08 Software Upgrade Fieldings Begin

Instal	lation	Sc	hed	hil	Ι۵

Inputs Outputs	
Outputs	

Inputs Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
7																				
7																				

	FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	Totals
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
																	7
																	7

METHOD OF IMPLEMENTATION:

Contractor

ADMINISTRATIVE LEADTIME:

2 months

PRODUCTION LEADTIME: 0 months

Contract Dates:

FY 2008 - 10FY08

FY 2009 -

FY 2010 -

Delivery Dates:

FY 2008 - 1QFY09

FY 2009 -

FY 2010 -

AZ2001 (AZ2050) ARL MODS (MIP) Item No. 13 Page 9 of 14

Date:

February 2008

MODIFICATION TITLE (cont): Radar [MOD 3] 0-00-05-2222

FINANCIAL PLAN: (\$ in Millions)

	Prior	r Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	13	TO	C	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Non Recurring Eng		1.5																		1.5
Complete 7 Phoenix Eye	2	4.0	1	2.0	3	6.1	1	1.5											7	13.6
HW, SW Improvements		2.3		2.9						0.5		1.0								6.7
Lynx GMTI						0.8														0.8
Fielding/User Assessmt		1.7		0.6		1.7														4.0
Contractor & Govt Mgt		1.5		0.5		0.5		0.5		0.5		0.5								4.0
Installation of Hardware																				
FY 2005 & Prior Equip Kits																				
FY 2006 Kits																				
FY 2007 Equip Kits																				
FY 2008 Equip Kits FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		11.0		6.0		9.1		2.0		1.0		1.5		0.0		0.0		0.0		30.6
		1	l		l	1			l			, - J								

AZ2001 (AZ2050) ARL MODS (MIP) Item No. 13 Page 10 of 14 69

Date:

February 2008

MODIFICATION TITLE: Imagery [MOD 5] 0-00-05-3333

MODELS OF SYSTEM AFFECTED: ARL-M

DESCRIPTION / JUSTIFICATION:

The Imagery upgrade standardizes all ARL video sensors. The ARLs will be outfitted with a digital pan camera for wide field of view high resolution imaging. The pan cameras will also include a mid wave Infra-red capability for night use. This capability will be used for near real time mapping, Battle Damage Assessment (BDA), coherent change detection, and spatial/spectral filtering. Keeping the IMINT capability current will provide the ability to exploit any manner of targets expected to be encountered in the GWOT. Quantities below reflect modification kits for the ARL-M fleet. The MX-20 cameras will be modified to reflect the current standard (to include the addition of laser illuminators, haze filters, geo-position software, and image processing algorithms). The MX-15D cameras will also be upgraded with improved daylight color cameras. The MX-15Ds are needed for their laser designation capability. This upgrade is to support capability requirements in Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and the Global War on Terrorism (GWOT).

FY09 completes the final Imagery hardware procurements. Software upgrades will continue through FY09 and beyond to exploit imagery identification.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

40FY05 Contract Award

4QFY07 Air Worthiness Ceritification

4OFY07 Fieldings Begin

Installation Schedule																								
		Pr Yr			FY 200	7			FY 20)8]	FY 200)9			FY	2010			FY	2011	
	,	Totals		1	2	3	4	1	2	3	4	1	2	2	3	4	1	2	3	4	1	2	3	4
Inputs																								
Outputs																								
			-	-				•				•		•										
ı		FY	FY 2012 FY 2013								FY 201	14			F	Y 2015					То			Totals
	1	2	3	4	1	2	3	4	1	2	2	3	4	1	2	3	3	4		Co	mplete			
Inputs																								
Outputs																								
METHOD OF IMPLE	EMENT	FATION: Contractor ADMINISTRA						TIVE LI	EADTIM	E:	3	months			PRO	DUCTI	ON LEA	ADTIME	6 moi	nths				
Contract Dates:	FY 2008 -										F	Y 2009 -						1	FY 2010 -	-				
Delivery Dates:		FY 2008 -									F	Y 2009 -						1	FY 2010 -	-				

Item No. 13 Page 11 of 14

Date:

February 2008

MODIFICATION TITLE (cont): Imagery [MOD 5] 0-00-05-3333

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	013	Т	С	Tot	al
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement	6	6.5																	6	6.5
Upgrade M20 to MX20			1	0.3	3	0.9	1	0.3	1	0.3			1	0.3	1	0.3			8	2.4
Buy 3 MX20 & 5 MX15			1	1.4	3	4.1	1	1.4	1	1.4	1	1.4	1	1.4					8	11.1
NRE Digital Pan Camara						5.1														5.1
HW Digital Pan Camara							3	2.5	1	1.0	5	4.8				1.0			9	9.3
Contractor & Govt Mgt				0.4		0.4		0.4		0.4		0.4		0.4		0.4				2.8
Software Upgrades				0.4						0.2				0.1		0.6				1.3
Fielding/User Assessmt				0.4		0.4		0.4		0.4		0.4		0.4		0.4				2.8
Installation of Hardware																				
FY 2006 -& Prior - Kits																				
FY 2007 Equip Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		6.5		2.9		10.9		5.0		3.7		7.0		2.6		2.7		0.0		41.3
																			•	

Item No. 13 Page 12 of 14 71

Date:

February 2008

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

MODELS OF SYSTEM AFFECTED: ARL C1 to ARL M7

DESCRIPTION / JUSTIFICATION:

The ARL C to M conversion consists of a Triport (three sensor positions) modification to allow for the installation of Elector Optical/Infrared (EO/IR), Digital Camera, or radar payloads (the radar payload will be purchased under the Radar modification); aircraft navigation modification; ASE modification; aircraft power modification; and COMINT antenna modifications. 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 OIF, OEF, and GWOT.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

3QFY07 Award Contract and begin NRE

30FY09 Field C to M

Installation Schedule

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
						1														
											1									

Inputs
Outputs

Inputs Outputs

	FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	Totals
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
																	1
																	1

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

0 months FY 2009 - PRODUCTION LEADTIME: 0 months

Contract Dates: Delivery Dates: FY 2008 -FY 2008 -

FY 2009 -

FY 2010 -FY 2010 -

AZ2001 (AZ2050) ARL MODS (MIP) Item No. 13 Page 13 of 14

INDIVIDUAL MODIFICATION Date: February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	13	TO	C	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Reconfigure Platforms				6.9																6.
Aircraft Certification				1.0																1.0
Contractor & Govt Mgt				0.5		0.1		0.1												0.
Integ & Test						1.0														1.
Fielding								0.4												0.
Installation of Hardware																				
FY 2005 & Prior Equip Kits																				
FY 2006 Kits																				
FY 2007 Equip Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.
Total Procurement Cost		0.0		8.4		1.1		0.5		0.0		0.0		0.0		0.0		0.0		10.

Exhibit P-40, Budget Item	Justification	Sheet					Γ	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo				P-	1 Item Nomencla AH-64 MO	ature DS (AA6605)			restuary 2000	
Program Elements for Code B Items:		Code:	Other	Related Program	n Elements: 51, PE23744 D12 & I	D17				
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	1861.6	1484.8	812.	648.	472.8	449.2	581.7	611.9	5746.4	12669.5
Less PY Adv Proc		38.7	38.	9 40.	7 29.4	9.4	12.0	12.5	137.7	319.4
Plus CY Adv Proc	38.7	38.9	40.	7 29.	9.4	12.0	12.5	13.6	124.2	319.4
Net Proc P1	1900.3	1485.0	814.	2 637.	452.9	451.8	582.2	612.9	5732.8	12669.5
Initial Spares	893.2	2.9	3.	9						900.0
Total Proc Cost	2793.6	1487.8	818.	1 637.	452.9	451.8	582.2	612.9	5732.8	13569.5
Flyaway U/C										
Weapon System Proc U/C										

Description:

Program provides for an Apache Attack Helicopter fleet consisting of 96 AH-64A model and 634 AH-64D model Apache attack helicopters, 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 3 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 a fire and forget Longbow HELLFIRE missile.

Justification:

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, and the Apache Block III (AB3). Modifications also include the remanufacture of an additional 120 AH-64A to the AH-64D configuration (AH-64 Apache Extended Block II Upgrade) via a single year contract, with options. 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 2009 funds procure: Apache Sensors Life Extension and Upgrades, Miscellaneous mods, M-TADS/PNVS and associated displays, Internal Auxiliary Fuel System (IAFS), Reliability & Safety (R & S) modifications, Selected Component Recapitalization, AB3, Advanced Procurement items, Apache Transformation, 32 ea AH-64 Extended Block II Upgrade aircraft, and Apache Post Production Organic Support.

AA6605 AH-64 MODS Item No. 14 Page 1 of 23 Exhibit P-40
74 Budget Item Justification Sheet

Exhibit P-40, Budget Item Justification	Sheet			Date: February 2008
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft			P-1 Item Nomenclature AH-64 MODS (AA6605)	
Program Elements for Code B Items:	Code:	Other Related Pro	ogram Elements: AA0951, PE23744 D12 & D17	
FY2007 funding total includes \$685.2 million receive FY2008 funding total includes \$105.0 million receive FY2008 funding totals do not include \$312.8 million	ed in the Consolid	oplemental. idated Appropriations Act	t, 2008 (P.L. 110-161).	

Date: Exhibit P-40M, Budget Item Justification Sheet February 2008 Appropriation / Budget Activity / Serial No: P-1 Item Nomenclature Aircraft Procurement, Army / 2 / Modification of aircraft AH-64 MODS (AA6605) Program Elements for Code B Items: Code: Other Related Program Elements: AA6670, AA0951, PE23744 D12 & D17 Fiscal Years Description OSIP No. FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 TC Classification Prior Yrs. Total Apache Sensors Life Extension & Upgrade 1-94-01-2005 7.6 7.7 8.8 121.9 10.6 8.6 9.0 9.2 0.0 183.4 AH-64A MISC Mods \$5M or less (no P3a set) OSIP 713.6 7.9 6.5 8.2 8.0 6.4 9.6 6.3 0.0 766.5 Apache Transformation OSIP 34.6 5.9 5.7 4.9 0.0 0.0 4.0 0.0 0.0 55.1 Modernized TADS/PNVS (M-TADS) 1-01-01-0022 309.7 253.9 145.4 101.4 0.0 0.0 0.0 0.0 0.0 810.4 Aircraft Survivability Product Improvement (ASPI) 000-000-0 0.0 64.2 61.6 0.0 0.0 0.0 0.0 0.0 0.0 125.8 AH-64 R&S & Recap OSIP 135.8 41.5 20.6 22.9 20.3 6.0 21.2 8.3 0.0 276.6 Apache Block III 0.0 0.0 0.0 11.1 160.7 430.6 538.4 589.1 5732.7 7462.6 AH-64 Extended Block II Upgrade OSIP 49.0 446.5 451.5 427.0 216.7 0.0 0.0 0.0 0.0 1590.7 Internal Auxiliary Fuel System (IAFS) OSIP 26.4 34.7 8.1 39.0 10.0 0.0 0.0 0.0 0.0 118.2 Fire Control Radar (FCR)Obsolescence & Integration OSIP 0.5 0.0 0.0 0.0 0.0 0.0 0.0 4.9 0.0 5.4 AH-64 Post Production Organic Support OSIP 1.1 1.3 2.1 12.2 28.6 0.0 0.0 0.0 0.0 45.3 AH-64D Longbow War Replacement Aircraft (WRA) 0-00-00-0000 419.1 621.0 105.0 0.0 0.0 0.0 0.0 0.0 0.0 1145.1 Totals 1816.1 1485.0 814.2 637.3 452.9 451.8 582.2 612.9 5732.7 12585.1

AA6605 AH-64 MODS Item No. 14 Page 3 of 23 76 Exhibit P-40M Budget Item Justification Sheet

Date:

February 2008

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.

Provides system upgrade through new/updated hardware integration into Lots III thru XIII TADS/PNVS systems. This is a critical stage in the Longbow remanufacturing effort as it produces a single configuration TADS/PNVS to the AH-64D through the end of MY II (501 aircraft) and AH64 Extended Block II Upgrade (120 aircraft). This mod facilitates maintainers' access to TADS/PNVS 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. Starting in FY09 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

Inputs Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
513	6	6	9	9	9	9	9	9	6	6	6	9	9	9	9	9	9	9	9	9
489	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

		FY	2012			FY 2	2013			FY	2014			FY	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	9	9	9	9	9	9	6	5										743
Outputs	9	9	9	9	10	10	9	9										743

METHOD OF IMPLEMENTATION:

Contract

ADMINISTRATIVE LEADTIME:

2 months

PRODUCTION LEADTIME: 1 months

Contract Dates:

FY 2008 - Sep 07

FY 2009 - Dec 08

FY 2010 -

Delivery Dates:

FY 2008 - Oct 07

FY 2009 - Jan 09

FY 2010 -

AA6605 AH-64 MODS Item No. 14 Page 4 of 23

Date: Fel

February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	201	11	20	12	20	13	T	C	Tot	al
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity	501		24		36		36		36		36		36		38				743	
T/P FFP/T&M/CFE/O&A		83.7		4.6		4.7		6.2		6.8		8.0		8.1		8.2				130.3
Equipment (GFE)		35.9		2.2		2.2		3.6		1.0										44.9
Other		2.3		0.8		0.8		0.8		0.8		0.8		0.9		1.0				8.2
Installation of Hardware																				
FY 2005 & Prior Equip Kits	458																		458	
FY 2006 Kits	31		24																55	
FY 2007 Equip Kits			12		12														24	
FY 2008 Equip Kits					24		12												36	
FY 2009 Equip Kits							24		12										36	
FY 2010 Equip Kits									24		12								36	
FY 2011 Equip Kits											24		12						36	
FY 2012 Equip Kits													24		12				36	
FY 2013 Equip Kits															26				26	
Total Installment	489	0.0	36	0.0	36	0.0	36	0.0	36	0.0	36	0.0	36	0.0	38	0.0	0	0.0	743	0.0
Total Procurement Cost		121.9		7.6		7.7		10.6		8.6		8.8		9.0		9.2		0.0		183.4

Item No. 14 Page 5 of 23 78

				IND	IVIDUA	L MODI	FICATI	ON							D	ate:	Februar	y 2008			
MODIFICATION TI	ΓLE: Apache Transfo	rmation [l	MOD 3]	OSIP																	
MODELS OF SYSTE	EM AFFECTED: AH-	64 Apach	ne																		
DESCRIPTION / JUS Funding supports Reserve Compon Integrated Helme	Force Structure rent units. Army A	viation	Transf	ormatio	on direc	tives p	ovides	for the	direct	purchas	e of Al	H-64A A									
DEVELOPMENT ST	ATUS / MAJOR DE	VELOPM	ENT MI	LESTON	NE(S):																
Installation Schedule																					
	Pr Yr		FY	2007			FY	2008			FY	2009			FY :	2010			FY	2011	
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					
!	FY 2012	2			FY 2013	3			FY 2014	4			FY 2015	<u> </u>				То			Totals

		FY 2	2012			FY:	2013			FY :	2014			FY 2	2015		То	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 2008 -

FY 2009 -

FY 2010 -

Delivery Dates:

FY 2008 -

FY 2009 -

FY 2010 -

AA6605 AH-64 MODS

Item No. 14 Page 6 of 23 79

INDIVIDUAL MODIFICATION Date: February 2008

MODIFICATION TITLE (cont): Apache Transformation [MOD 3] OSIP

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	13	Т	С	Tot	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits																				
Sets, Kits & Outfits (SKO)		3.5		5.9		5.7		4.9						4.0						24.0
Equipment, NGF		29.1																		29.1
ASL/PLL		2.0																		2.0
Installation of Hardware																				
FY 2005 & Prior Equip Kits																				
FY 2006 Kits																				
FY 2007 Equip Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		34.6		5.9		5.7		4.9		0.0		0.0		4.0		0.0		0.0		55.1

Date:

February 2008

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 (LRU), 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 470 of a total of 634 M-TADS production units and associated displays. The Longbow budget line augmented funding for 141 M-TADS production units (FY04-FY06). In FY07 23 M-TADS, towards the fleet requirement of 634, were authorized to be funded from War Time Replacement (WRA) funding. Funding for other MTADS required for WRA is not included in this display. M-TADS installation costs are not separately priced. Other Support procures TDA Salaries, In-house Matrix and Contractor Support, TEDAC, and IHDSS output schedule planning is based on aircraft availability and deployment schedules.

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)

Installation Schedule

Inputs
Outputs

Inputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
4	8	18	18	18	20	24	24	24	36	36	36	36	36	36	36	36	24			
4	8	18	18	18	20	24	24	24	36	36	36	36	36	36	36	36	24			

Totals	То		2015	FY :			2014	FY 2			2013	FY 2			2012	FY 2	
	Complete	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1
470																	
470																	

METHOD OF IMPLEMENTATION:

Contract Lot 5

ADMINISTRATIVE LEADTIME:

4 months

PRODUCTION LEADTIME: 17 months

Contract Dates:

FY 2008 - Feb 08

FY 2009 - Dec 08

FY 2010 -

Delivery Dates:

FY 2008 - Jun 09

FY 2009 - Jun 10

FY 2010 -

AA6605 AH-64 MODS Item No. 14 Page 8 of 23

81

Date:

February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	T	C	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits																				
SDU								1.4												1.4
Equipment	141	219.2	180	229.5	94	139.6	55	90.0											470	678.3
Equipment, Nonrecurring		21.3																		21.3
TEDAC/IHDSS		49.2		12.2		0.8		5.0												67.2
Other Support		20.0		12.2		5.0		5.0												42.2
Installation of Hardware																				
FY 2005 & Prior Equip Kits	4		62																66	
FY 2006 Kits					75														75	
FY 2007 Equip Kits					17		144		19										180	
FY 2008 Equip Kits									94										94	
FY 2009 Equip Kits									31		24								55	
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- 0 Kits																				
Total Installment	4	0.0	62	0.0	92	0.0	144	0.0	144	0.0	24	0.0	0	0.0	0	0.0	0	0.0	470	0.0
Total Procurement Cost		309.7		253.9		145.4		101.4		0.0		0.0		0.0		0.0		0.0		810.4

Date:

February 2008

MODIFICATION TITLE: Aircraft Survivability Product Improvement (ASPI) [MOD 5] 000-000-0

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION / JUSTIFICATION:

Funding will be used to procure improved IR/Thermal suppressor system enhancements for Apache aircraft (18 Battalion sets, toward a fleet requirement of 21). IR suppression modifications would reduce IR thermal signature from hot metal components (e.g., engine, exhaust, de-rotation unit, nose gear box, transmission bay door, chain-gun turret, etc.). This modification will enable the Apache aircraft to be much less susceptible to IR signature threat weapons. This initiative significantly improves war-fighter and aircraft survivability in combat operations. Mod installation costs are included in the contract for 360 kits and are not separately identifiable.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

FY 08 Contract Award -- Nov 07

Installation Schedule

	Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs			32	32	32	36	36	36	36	30	30	30	30								
Outputs			32	32	32	36	36	36	36	30	30	30	30								

•		FY	2012			FY	2013			FY 2	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		360
Outputs																		360

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 1 months PRODUCTION LEADTIME: 2 months Contract Dates: FY 2008 - Nov 07 FY 2009 - FY 2010 -

Delivery Dates: FY 2008 - Jan 08 FY 2009 - FY 2010 -

Date: February 2008

MODIFICATION TITLE (cont): Aircraft Survivability Product Improvement (ASPI) [MOD 5] 000-000-0

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20)13	Т	C	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity			240	64.2	192	61.6													432	125.8
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2006 & Prior Equip Kits																				
FY 2007 Kits			96		144														240	
FY 2008 Equip Kits							120												120	
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
FY 2013 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	96	0.0	144	0.0	120	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	360	0.0
Total Procurement Cost		0.0		64.2	_	61.6	_	0.0	_	0.0	_	0.0	_	0.0		0.0		0.0		125.8

Item No. 14 Page 11 of 23 84

Date:

February 2008

MODIFICATION TITLE: AH-64 R&S & Recap [MOD 6] 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. This funding supports the incorporation of recapitalized components for the remanufacture of 120 additional aircraft to the Longbow configuration (Extended Block II). 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. In-house support procures TDA Salaries, In-house Matrix and Contractor Support for the Apache Project Manager's Office. Beginning FY 2007, Condition Based Maintenance (CBM) was programmed to begin for fleet retrofit of the AH-64D to incorporate a Modernized Signal Processing Unit (MSPU). Inputs/Outputs in FY 07 thru FY 09 represents the installation of both R&S and CBM kits.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Jan 06 - FFP Contract

Jan 07 - FFP Contract Option,

Jul 07 - FFP Contract restructure to support the 96 additional aircraft

Dec 07 -- CBM contract

Installation Schedule

	mstanation benedute																					
		Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
ľ		Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
•	Inputs	309	40	40	40	40	36	36	35	35	36	36	37	37	18	18	18	18	15	15	15	15
	Outputs	309	40	40	40	40	36	36	35	35	36	36	37	37	18	18	18	18	15	15	15	15

L																		
ı		FY 2	2012			FY 2	2013			FY 2	2014			FY	2015		То	Totals
ı	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs					15	15	15	15										949
Outputs					15	15	15	15										949

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: Contract

FY 2008 - Jan 08

3 months

PRODUCTION LEADTIME: 3 months

Delivery Dates: FY 2008 - Mar 08 FY 2009 - Jan 09 FY 2009 - Mar 09

FY 2010 -FY 2010 -

AA6605 AH-64 MODS

Contract Dates:

Item No. 14 Page 12 of 23

Date:

February 2008

MODIFICATION TITLE (cont): AH-64 R&S & Recap [MOD 6] OSIP

FINANCIAL PLAN: (\$ in Millions)

		Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	T	C	Tot	tal
		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E	<u> </u>																				
Procure	ment																				
	CBM Hardware	100		100	5.6	96	5.5	72	5.0	60	4.0			60	4.5					488	24.6
	Other Recap				8.4		4.5		7.8		8.3		1.5		9.7		5.9				46.1
	Installation Kits, Nonrecurring																				
	R&S Equipment (Kits)	607	98.6	48	9.6															655	108.2
	CBM Services		15.4		14.0		6.2		3.9		4.0		3.3		2.8						49.6
	Non-recurring engineering		11.0																		11.0
	In-House Support								2.5		2.5				4.2		1.1				10.3
Installat	tion of Hardware																				
	FY 2006 & Prior Equip R&S	309	10.8	60	2.1	42	1.9	50	2.0											461	16.8
Kits																					
,	FY 2007 R&S Kits																				
ļ.	FY 2008 Equip R&S Kits																				
,	FY 2009 Equip R&S Kits																				
,	FY 2010 Equip R&S Kits																				
,	EV 2007 E : 100 CDM			100	1.0															100	1.0
Kits	FY 2007 Equip 100 CBM			100	1.8															100	1.8
1	FY 2008 Equip 100CBM Kits					100	2.5													100	2.5
ļ	FY 2009 Equip 96 CBM Kits							96	1.7											96	1.7
ł	FY 2010 Equip 72 CBM Kits									72	1.5									72	1.5
•	FY 2011 Equip 60 CBM Kits											60	1.2							60	1.2
•	F Y 2012 Equip 60 CBM															60	1.3			60	1.3
<u> </u>	TC Equip- Kits																				
Total Ins	stallment	309	10.8	160	3.9	142	4.4	146	3.7	72	1.5	60	1.2	0	0.0	60	1.3	0	0.0	949	26.8
	ocurement Cost		135.8		41.5		20.6		22.9		20.3		6.0		21.2	,,,	8.3	-	0.0		276.6
- Juli 1 10	searchieff Cost		133.0		11.5		20.0		22.7		20.3		0.0		21.2		0.5		0.0		2,0.0

Item No. 14 Page 13 of 23 86

Date:

February 2008

MODIFICATION TITLE: Apache Block III [MOD 7] OSIP

MODELS OF SYSTEM AFFECTED: AH-64D Longbow Apache

DESCRIPTION / JUSTIFICATION:

AH-64D Apache Longbow modernization is an evolutionary acquisition program implemented in block configurations. Apache Block III (AB3) will provide Network-Centric capabilities to 634 Apache Longbows at a critical time as the Army transitions from the current force to the future force. AB3 capability enhancements are achieved via planned technology insertions such as: Future Force (FF) Connectivity-Seamless Global Information Grid Communications (Interim Communications Suite embedded in an Open Systems Architecture (OSA); Off-Board Sensors - Extended Range Sensing; Increased Survivability; Cognitive Decision Aiding System (CDAS) which speeds Critical Battle Tasks; Improved Aircraft Performance: Reduced Operations and Support (O&S) Cost and Logistics Footprint, and Increased Aircraft Readiness. To Complete (TC) funding procures the remaining components required to achieve fully configured AB3 aircraft. AB3 satisfies the updated Apache Capability Development Document (CDD) requirements for modernization. Other Support procures Table of Distribution and Allowances (TDA) Salaries, In-house Matrix and Contractor Support. Non-recurring engineering for AB3 in FY05 through FY13 is found in PE 0203744A -- Aircraft Modifications/Product Improvement Program, Project D17.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

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

Low Rate Initial Production Contract Award - Third Quarter FY10

First Apache Block III Delivery - Third Quarter FY11

Full Rate Production Contract Award - Second guarter FY12

r . 1	11	O 1	1 1	
netal	llation	Sche	dull	Δ

Pr Yr FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 Totals 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 2 3 4 7 9 9 1 Inputs 1 7 Outputs

1		FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	7	7	10	10	10	11	11	12	12	12	12	12	12	12	12	12	416	634
Outputs	9	9	9	9	7	7	10	10	11	11	11	11	12	12	12	12	464	634

METHOD OF IMPLEMENTATION: Firm Fixed Price ADMINISTRATIVE LEADTIME:

8 months

PRODUCTION LEADTIME: 12 months

Contract

Contract Dates: FY 2008 -

FY 2009 -

FY 2010 -

Delivery Dates:

FY 2008 -

FY 2009 -

FY 2010 -

AA6605 AH-64 MODS Item No. 14 Page 14 of 23

INDIVIDUAL MODIFICATION Date: February 2008

MODIFICATION TITLE (cont): Apache Block III [MOD 7] OSIP

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	Т	С	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Apache Block III Upgrades									8	130.1	36	374.4	45	483.4	45	532.8	500	5195.5	634	6716.2
Other Support										21.2		39.1		42.5		42.7		413.0		558.5
Long Lead Items								11.1		9.4		12.0		12.5		13.6		124.2		182.8
Training Devices												5.1								5.1
Installation of Hardware																				
FY 2005 & Prior Equip Kits																				
FY 2006 Kits																				
FY 2007 Equip Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip - 8 Kits											8								8	
FY 2011 Equip 36 Kits													36						36	
FY 2012 Equip 45 Kits															34		11		45	
TC Equip - 545 Kits																	545		545	
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8	0.0	36	0.0	34	0.0	556	0.0	634	0.0
Total Procurement Cost	_	0.0		0.0		0.0		11.1		160.7		430.6		538.4		589.1		5732.7	_	7462.6

Date:

February 2008

MODIFICATION TITLE: AH-64 Extended Block II Upgrade [MOD 8] OSIP

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION / JUSTIFICATION:

Funding for the AH-64 Extended Block II Upgrade supports the revised Modernized Strategy for the Apache Helicopter which was approved by the VCSA 1 Nov 2004. The plan allows for the remanufacture of an additional 120 AH-64A aircraft to the AH-64D (Lots 11-14) configuration. The schedule generates greater attack helicopter combat power for the Warfight 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. Other Support procures TDA Salaries, In-house Matrix and Contractor Support for Apache Project Manager's Office. Long lead procurement is identified in P-10 exhibits. Procurement is thru a single year FFP contract, FY 07, with options FY08-FY10.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Contract Award Dec 2006 (FY 07)

Contract Options (FY 08-09)

Installation Schedule

Inputs	
Outpute	

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	9	9	9	9	9	9	9	9	9	9	8	6	6	6	4					
					9	9	9	9	9	9	9	9	9	9	8	6	6	6	4	

		FY	2012			FY	2013			FY 2	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		120
Outputs																		120

METHOD OF IMPLEMENTATION: Firm Fixed Price ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 10 months

Contract

Contract Dates: FY 2008 - Dec 07 FY 2009 - Dec 08 FY 2010 -

Delivery Dates: FY 2008 - Oct 08 FY 2009 - Oct 09 FY 2010 -

AA6605 AH-64 MODS Item No. 14 Page 16 of 23 Exhibit P-3A
89 Individual Modification

Date:

February 2008

MODIFICATION TITLE (cont): AH-64 Extended Block II Upgrade [MOD 8] OSIP

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	200	07	200	08	200)9
	Qty	\$	Qty	\$	Qty	\$	Qty	\$
Procurement								
Kit Quantity/Equipment			36	378.2	36	375.9	32	372.0
Long Lead		38.7		38.9		40.7		18.3
Other Support		10.3		29.4		34.9		36.7
Training								
Installation of Hardware								
FY 2005 & Prior Equip Kits								
FY 2006 Kits								
FY 2007 Equip Kits					36			
FY 2008 Equip Kits							36	
FY 2009 Equip Kits								
FY 2010 Equip Kits								
FY 2011 Equip Kits								
FY 2012 Equip Kits								
TC Equip- Kits								
Total Installment	0	0.0	0	0.0	36	0.0	36	0.0
Total Procurement Cost		49.0		446.5		451.5		427.0

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	T	С	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
ts		38.7	36	378.2 38.9 29.4	36		32	372.0 18.3 36.7	16										120 36 36 36 32 16	
	0	0.0	0	0.0	36	0.0	36	0.0	32	0.0		0.0	0	0.0	0	0.0	0	0.0		0.0
		49.0		446.5		451.5		427.0		216.7		0.0		0.0		0.0		0.0		1590.7

Item No. 14 Page 17 of 23 90

Date:

February 2008

MODIFICATION TITLE: Internal Auxiliary Fuel System (IAFS) [MOD 9] OSIP

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION / JUSTIFICATION:

FY09-10 funding will procure 180 Internal Auxiliary Fuel System (IAFS) Combo-paks (B-Kits), A-kit installation (FY08 only, 48 each), and IAFS support equipment (including one battalion's of spares). 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. The total IAFS program will procure 746 A Kits and 718 B Kits which includes spares. (Prior Apache funding lines, AA6670 SSN, procured 698 A Kits and 327 B Kits.)

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

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

Installation Schedule

Inputs Outputs

Inputs Outputs

Ī	Pr Yr	FY 2007 FY 2008 FY 2009 FY 2010									FY 2011										
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Ī	210	12	11	11	11	12	12	12	12												
Ī	210	12	11	11	11	12	12	12	12												

Totals	То		2015	FY 2			2014	FY 2			FY 2013				2012	FY	
	Complete	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1
303																	
303																	

METHOD OF IMPLEMENTATION:

Contract

ADMINISTRATIVE LEADTIME:

1 months

PRODUCTION LEADTIME: 9 months

Contract Dates:

FY 2008 - Nov 07

FY 2009 - Nov 08

FY 2010 -

Delivery Dates:

FY 2008 - Jul 08

FY 2009 - Jul 08

FY 2010 -

AA6605 AH-64 MODS Item No. 14 Page 18 of 23

Date:

February 2008

MODIFICATION TITLE (cont): Internal Auxiliary Fuel System (IAFS) [MOD 9] OSIP

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	Т	С	Tot	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity																				
A Kits	45	1.0	48	1.0															93	2.0
B Kits	108	23.1	120	30.0	25	6.3	148	37.0	32	8.0									433	104.4
Other Support & Equipment		0.9		3.4		1.5		2.0		2.0										9.8
Installation of Hardware																				
FY 2005 & Prior Equip Kits	210	1.4																	210	1.4
FY 2006 A Kits			45	0.3															45	0.3
FY 2007 Equip A Kits					48	0.3													48	0.3
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				
Total Installment	210	1.4	45	0.3	48	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	303	2.0
Total Procurement Cost		26.4		34.7		8.1		39.0		10.0		0.0		0.0		0.0		0.0		118.2

Item No. 14 Page 19 of 23 92

	Deter	E-1 2000
INDIVIDUAL MODIFICATION	Date:	February 2008

MODIFICATION TITLE: AH-64 Post Production Organic Support [MOD 11] 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 occurring in phases from the least to the most complex Transition Package.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

FY08 funds -- MIPR to CCAD, Nov 07

Insta	llation	Schec	lule
-------	---------	-------	------

Inputs
Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010		FY 2011			
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

		FY 2012 FY 2013								FY 2	2014			FY 2	2015		То	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: 0 months PRODUCTION LEADTIME: 0 months Contract Dates: FY 2008 - FY 2010 -

Delivery Dates: FY 2008 - FY 2009 - FY 2010 -

AA6605 Item No. 14 Page 20 of 23 Exhibit P-3A
AH-64 MODS 93 Individual Modification

Date: February 2008

MODIFICATION TITLE (cont): AH-64 Post Production Organic Support [MOD 11] OSIP

FINANCIAL PLAN: (\$ in Millions)

																				ļ
	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	T	С	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
Procurement																				
Other - Transition Packages		1.1		1.3		2.1		9.7		26.1										40.3
Installation of Hardware																				
FY 2005 & Prior Equip Kits																				
FY 2006 Kits																				
FY 2007 Equip Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
TC Equip Kits																				
Other Support								2.5		2.5										5.0
Total Installment	0	0.0	0	0.0	0	0.0	0	2.5	0	2.5	0	0.0	0	0.0	0	0.0	0	0.0	0	5.0
Total Procurement Cost		1.1		1.3		2.1		12.2		28.6		0.0		0.0		0.0		0.0		45.3

AA6605 AH-64 MODS Item No. 14 Page 21 of 23 94

Date:

February 2008

MODIFICATION TITLE: AH-64D Longbow War Replacement Aircraft (WRA) [MOD 12] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: Longbow Apache

DESCRIPTION / JUSTIFICATION:

FY08 Supplemental funding procures three (3) Longbow WRA, with Fire Control Radar, Modernized TADS/PNVS, and Aircraft Survivability Equipment (to include common missile warning system) to replace those helicopters attrited during Operation Iraqi Freedom and Operation Enduring Freedom (OIF/OEF). Essentially, these 3 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. (FY06 funding procured fourteen a/c & FY07 funding procured twenty WRA'. Thirteen additional WRA were procured thru a FY05 Supplemental -- that funding was housed within the SSN AA6670 Longbow Apache P Forms.)

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Boeing submittal of Proposal, January 2007

Contract award (UCA), March 2007

War Replacement Aircraft funded in GWOT Supplementals.

1	Instal	10	tic	m	S	٦h	0	4	11	l۵

Inputs Outputs

Inputs Outputs

Contract Dates:

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
14		4	4	4	4	2	2	3												
								2	2	3	5	6	5	7	2	2	3			

Totals	То		2015	FY 2			2014	FY 2			2013	FY 2			2012	FY 2	
	Complete	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1
37																	
37																	

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 27 months

FY 2008 - March 07 FY 2009 - FY 2010 -

Delivery Dates: FY 2008 - July 09 FY 2009 - FY 2010 -

AA6605 AH-64 MODS Item No. 14 Page 22 of 23

Date: February 2008

MODIFICATION TITLE (cont): AH-64D Longbow War Replacement Aircraft (WRA) [MOD 12] 0-00-00-0000

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	T	C	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement	14	419.1	20	621.0	3	105.0													37	1145.1
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 2005 & Prior Equip Kits																				
FY 2006 Kits					2		11		1										14	
FY 2007 Equip Kits							5		15										20	
FY 2008 Equip Kits											3								3	
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	2	0.0	16	0.0	16	0.0	3	0.0	0	0.0	0	0.0	0	0.0	37	0.0
Total Procurement Cost		419.1		621.0		105.0	_	0.0		0.0		0.0	_	0.0		0.0		0.0		1145.1

Item No. 14 Page 23 of 23 96

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo				P	-1 Item Nomencla AH-64 MO	ature DS (AA6605)		<u> </u>		
Program Elements for Code B Items:		Code:	Othe	Related Progra	m Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost										
Less PY Adv Proc										
Plus CY Adv Proc	38.7	38.9	40	.7 29	4 9.4	12.0	12.5	13.6	124.2	319.4
Net Proc P1	38.7	38.9	40	.7 29	4 9.4	12.0	12.5	13.6	124.2	319.4
Initial Spares										
Total Proc Cost	38.7	38.9	40	.7 29	4 9.4	12.0	12.5	13.6	124.2	319.4
Flyaway U/C										
Weapon System Proc U/C										

Description:

The AH-64 MODS upgrade program encompasses modification of 120 AH-64A Apaches (FY07-FY10) to AH64D Apache Longbow configuration (Block II and Extended Block II) and the follow-on upgrade of 634 aircraft systems (FY10-FY24) to the Apache Block III configuration. The Longbow weapon system includes an adverse weather fire-and-forget missile capability that increases lethality and survivability. The Longbow Apache also retains the capability to fire the Semi-Active Laser Hellfire. The design enhancements increase operational capability of the crew and provide increased survivability and lethality.

Justification:

Justification:

FY09 Advanced Procurement funds long-lead items in support of the Apache Extended Block II (EB2) remanufacture and the Apache Block III programs.

AA6605 AH-64 MODS Item No. 15 Page 1 of 4 97 Exhibit P-40 Budget Item Justification Sheet

Advance Procurement Requir	ement	s Anal	ysis-Fundin	ng (P-10A)	First System A	Award Date:	First S	ystem Completion	Date:	Date:	February 2008					
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Moo	dification of	of aircraft					P-1 L	ne Item Nomenclat AH-64 MOD	rre / Weapon System S	1:						
			То													
	PLT (mos)	When Rqd (mos)	Pr Yrs	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	_	Total				
End Item Quantity																
Longbow Extended Block II	12	12	38.7	38.9	40.7	18.3						136.6				
Apache Block III	12	12				11.1	!	0.4 12.	0 12.5	13.6	124.2	182.8				
Total Advance Procurement			38.7	38.9	40.7	29.4	!	0.4 12	0 12.5	13.6	124.2	319.4				

Advance Procurement Requirements Analysis-Funding	g (P-10B)				Date: February 20	08
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft		P-1 Line Item Nomencla AH-64 MO				
			(\$ in Millions)		
					2009	
	PLT (mos)	Quantity Per Assembly	Unit Cost	Qty	Contract Forecast Date	Total Cost Request
Longbow Extended Block II	12			16.0	1Q FY09	18
Apache Block III	12			8.0	1Q FY09	11
Total Advance Procurement						29

Advance Procurement Require	ements A	Analysis-Exe	cution (P-10I	D)				Date:	February 2008	
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Mod	lification of a	ircraft			P-1 Line Item Nome AH-64 I		stem:			
						(\$ in Millions)				
				2007			200	08	200	09
•	PLT (mos)	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Qty	Contract Forecast Date
End Item Quantity										
Longbow Extended Block II Apache Block III	12 12	36	1Q FY07	1Q FY07	38.9	38.9	32	1Q FY08	16 8	1Q FY09 1Q FY09
Total Advance Procurement					38.9	38.9				

Exhibit P-40, Budget Item	Justification	Sheet]	Date:		
									February 2008	
Appropriation / Budget Activity / Ser Aircraft Procurement, Army / 2 / Mo				P	1 Items 1 (omenes	ture GO HELICOPTER	MODS (AA0252)			
Program Elements for Code B Items:		Code:	Other	Related Progra RDTE PE 020						
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	7078.9	1296.8	907.	7 713	5 695.8	902.5	1214.9	697.2	6672.5	20179.
Less PY Adv Proc	1019.2	24.7	36.	6 38	9 49.6	50.7	57.8	55.0	349.7	1682.
Plus CY Adv Proc	1043.9	36.6	38.	9 49	6 50.7	57.8	55.0	60.3	289.4	1682.
Net Proc P1	7103.6	1308.8	910.	0 724	2 696.8	909.6	1212.	702.6	6612.2	20179.
Initial Spares	8593.3	2.0	2.	0 2	0 2.0	2.0				8603.
Total Proc Cost	15696.9	1310.8	912.	0 726	2 698.8	911.6	1212.1	702.6	6612.2	28783.
Flyaway U/C										
Weapon System Proc U/C										

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 War On Terrorism 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 modifications integrate a new-machined airframe, an upgraded T55-GA-714A engine to restore performance capability, Common Avionics Architecture System, Air Warrior, Common Missile Warning System, enhanced air transportability, digital AFCS, and an Extended Range Fuel System II for self-deployment missions. The CH-47F program extends the Army's Chinook fleet 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 Handling Floor 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 and procures 24 aircraft for the National Guard. This program is funded to meet the Army Aviation Transformation Plan full requirement for Chinook aircraft.

Justification:

FY 2009 procures conversion of 23 CH-47Ds to CH47F, 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 Fire Extinguisher, Engine Filtration System, Aviation Combined Arms Tactical Trainer, Transportable Flight Proficiency Simulators, Ballistic Protection Systems, Aircraft Component Parts-marking, Combining Transmission Fan Drive Shaft, Electric Pump Utility System Hydraulic Accumulator (EPUSHA), Crashworthy Seats, Adjustable Pitch Change Link, Aft Pylon Work Platform, Special Test Sets, Kits, and Outfits, M240 Window Door Gunner Mount, the T55 Electronic Control Unit (ECU), and T55 P3 Check Value to equip new Chinook units forming under the Army's Aviation Transformation Plan.

- 1. FY2007 funding total includes \$631.5 million received in GWOT supplemental.
- 2. FY2008 funding total includes \$334.1 million received in the Consolidated Appropriations Act, 2008 (P.L. 110-161).
- 3. FY2008 funding totals do not include \$311.1 million previously requested for current FY2008 GWOT requirements.

Date: Exhibit P-40M, Budget Item Justification Sheet February 2008 Appropriation / Budget Activity / Serial No: P-1 Item Nomenclature Aircraft Procurement, Army / 2 / Modification of aircraft CH-47 CARGO HELICOPTER MODS (AA0252) Program Elements for Code B Items: Code: Other Related Program Elements: RDTE PE 0203744A Fiscal Years Description OSIP No. Classification FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 TC Prior Yrs. Total Engine Filtration System 1-93-01-0807 34.3 8.5 0.2 0.3 0.0 Operational 0.3 0.2 0.0 0.0 43.8 Engine Upgrade to T55-GA-714A Configuration 1-96-01-0828 Operational 2493.6 46.6 14.4 30.3 22.3 14.5 13.3 29.4 36.1 2700.5 CH-47 "D" to "F" Conversion 0-00-00-0000 Operational 1477.2 1215.3 841.5 621.1 616.6 850.7 1154.5 628.5 4067.6 11473.0 Maintenance Training Devices (MTD) 0-00-00-0000 4.3 3.6 5.3 8.3 9.9 7.0 6.4 0.7 52.6 7.1 Engine Fire Extinguisher (Halon Replacement) 0-00-00-0000 Operational 9.8 8.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 18.0 AVCATT 0-00-00-0000 0.0 5.0 4.7 1.2 0.0 0.0 0.0 0.0 0.0 10.9 Cargo Handling Floor System 0-00-00-0000 0.0 0.0 0.0 17.9 9.3 9.2 14.0 18.0 23.5 91.9 M240 Window/Door Gun Mount 0-00-00-0000 Operational 0.0 9.3 4.5 5.8 5.1 5.7 5.9 6.3 1.5 44.1 Transformation Sets, Kits and Outfits 0-00-00-0000 30.6 4.9 7.7 10.3 12.1 12.3 12.7 3.2 102.4 Safety 8.6 CH-47 MISC Mods \$5M or Less 0-00-00-0000 Operational 1.5 6.1 18.4 18.9 15.0 7.1 2.5 2.5 1.0 73.0 Aircraft Component Parts-Marking 0-00-00-0000 8.8 3.5 0.0 1.3 7.4 0.0 0.0 0.0 0.0 21.0 Ballistic Protection System (BPS) 0-00-00-0000 0.0 0.0 4.5 2.7 2.8 2.8 2.8 2.2 0.0 17.8 Totals 4051.3 1308.8 910.0 724.2 696.8 909.6 1212.1 702.6 4133.6 14649.0

Date: February 2008

MODIFICATION TITLE: Engine Upgrade to T55-GA-714A Configuration [MOD 2] 1-96-01-0828

MODELS OF SYSTEM AFFECTED: CH-47D Chinook and Trainers

DESCRIPTION / JUSTIFICATION:

Type of Improvement _ Improved Operational Capability, Improved reliability and lower Operational/Support Costs. This modification will replace the T55-L-712 engine with the T55-GA-714A engine which results in increased power to allow the aircraft to carry its primary payloads under high altitude/temperatures. The CH-47D as configured does not meet its existing 1975 Required Operational Capability (ROC), i.e. 15,000 lbs payload for 30 Nautical Miles radius at 4,000 feet/95 degrees Fahrenheit. With the T55-GA-714A engine the CH-47D does meet the required operational capability. 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. 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 numerous mods of varied schedules, delivery dates, and methods of implementation are included. Contract and delivery are shown in Development Status below.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

ECU: ECP Delivery September 2007; Contract Award Fielding Kits: June 2008; First Kit Delivery April 2009.

Improved Torque Meter: ECP Delivery 2Q 2008, ECP Approval 3Q 2008, Contract Award for Kits: 1Q 2009, First Kit Delivery 3Q 2009.

T55 DECU Remote Readout: ECP Delivery 2Q 2008, ECP Approval 3Q 2008, Contract Award for Kits: 1Q 2009, First Kit Delivery 3Q 2009.

T55 P3 Check Valve: ECP 2Q 2007, Contract Award for Kits 1Q 2008

Installation Schedule

Inputs
Outputs

Inputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
381	7	7	7	8	17	15														
381	7	7	7	8	17	15														

	FY 2	2012			FY 2	2013			FY :	2014			FY :	2015		То	Totals
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
																	442
																	442

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 6 months PRODUCTION LEADTIME: 0 months

Contract Dates: FY 2008 - FY 2010 -

Delivery Dates: FY 2008 - FY 2009 - FY 2010 -

Item No. 16 Page 3 of 16 103

Date:

February 2008

MODIFICATION TITLE (cont): Engine Upgrade to T55-GA-714A Configuration [MOD 2] 1-96-01-0828

FINANCIAL PLAN: (\$ in Millions)

ľ		Prior	Yrs.	20	07	20	08	20	09	20	10	201	11	20	12	20	13	TC	C	То	tal
		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E	Ē																				
Procure	ement																				
	New Engines	1200	2426.5	50	41.8															1250	2468.3
(ECU)	T55 Engine Control Unit Prog					56	6.1	131	7.9	103	6.2	85	5.4	95	5.4	338	20.8	442	26.5	1250	78.3
	P3 Check Value					139	2.4	234	2.5	112	1.1									485	6.0
	Digital ECU Remote Readout							234	9.4	175	7.2	82	3.4					80	3.1	571	23.1
	Improved Torque Meter							260	9.1	185	6.5	140	4.9	213	7.5	225	7.9	187	6.5	1210	42.4
	PM Admin Support						0.5		1.4		1.3		0.8		0.4		0.7				5.1
Ļ	Logistics		46.3		2.8		1.5														50.6
Installat	tion of Hardware FY 2005 & Prior Equip Kits FY 2006 Kits FY 2007 Equip Kits FY 2008 Equip Kits FY 2009 Equip Kits FY 2010 Equip Kits FY 2011 Equip Kits	371 10	20.1	29	2.0	9 23	0.6													371 48 23	20.1 3.3 3.3
	FY 2012 Equip Kits TC Equip- Kits	201	20.0	20	2.0	22	2.0		0.0		0.0		0.0		0.0		0.0		0.0		255
	stallment	381	20.8	29	2.0	32	3.9	0	0.0	0	0.0		0.0	0	0.0	0	0.0	0	0.0	442	26.7
Total Pro	ocurement Cost		2493.6		46.6		14.4		30.3		22.3		14.5		13.3		29.4		36.1		2700.5

Item No. 16 Page 4 of 16 104

Date:

February 2008

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 War on Terrorism 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), 24 National Guard aircraft and 333 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.

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 200	7			FY 2008	3			FY	2009				FY 2	2010			FY	2011	
		Totals		1	2	3	4	1	2	3	4	1	2	3	4	1	1	2	3	4	1	2	3	4
Inputs																								
Outputs																								
																								,
		FY 2012					2013			FY	2014				FY 20)15					То			Totals
	1	2	3	4	1	2	3	4	1	2	3	4		1	2	3	4			Co	mplete			
Inputs																								
Outputs																								
METHOD OF IMPLI	EMENT	ATION:	Co	ntract		ADMIN	NISTRAT	TIVE LE	ADTIME	:	10 m	onths		PR	ODUC	TION I	LEADT	IME:	25 mg	onths				
Contract Dates:			FY	2008 - N	Mar 08						FY 2	009 - Jar	ı 09					F	Y 2010 -					
Delivery Dates:			FY	2008 - A	Apr 10						FY 2	009 - Fe	b 11					F	Y 2010 -					

AA0252 CH-47 CARGO HELICOPTER MODS Item No. 16 Page 5 of 16 105

Date: February 2008

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

FINANCIAL PLAN: (\$ in Millions)

		Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	Т	C	To	tal
		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																					
Procure	ment																				
	Recurring Production (Suppl)			17	511.5	11	334.1													28	845.6
	Recurring Production (Mods)	87	982.1	15	259.5	23	432.7	23	545.6	26	521.3	28	564.4	28	563.8	24	526.2	159	3527.7	413	7923.3
Build)	Recurring Production (New			6	177.5															6	177.5
	Recurring (New Build NG)			4	120.0							6	180.0	18	540.0					28	840.0
	Omnibus			1	30.0															1	30.0
	Other Flyaway		253.0		51.7		46.3		41.5		40.7		82.2		36.5		79.5		415.5		1046.9
	Other Support		127.8		41.5		19.7		10.2		18.6		17.9		8.4		13.6		81.3		339.0
	Training		104.8		19.9		3.4		21.0		29.2		0.5		0.4		0.7		4.3		184.2
	Support Equipment		9.5		3.7		5.3		2.8		6.8		5.7		5.4		8.5		38.8		86.5
Installati	ion of Hardware																				
	FY 2005 & Prior Equip Kits																				
	FY 2006 Kits																				
	FY 2007 Equip Kits																				
	FY 2008 Equip Kits																				
	FY 2009 Equip Kits																				
	FY 2010 Equip Kits																				
	FY 2011 Equip Kits																				
	FY 2012 Equip Kits																				
	TC Equip- Kits																				
Total Ins	tallment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Pro	ocurement Cost		1477.2		1215.3		841.5		621.1		616.6		850.7		1154.5		628.5		4067.6		11473. 0
						<u> </u>			l						l				<u> </u>		- 0

INDIVIDUAL MODIFICATION	Date:	February 2008
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	2007			FY	2008			FY 2	2009			FY	2010			FY :	2011	
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

		FY	2012			FY	2013			FY 2	2014			FY 2	2015		То	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: 12 months

Contract Dates: FY 2008 - Jan 08 FY 2010
Delivery Dates: FY 2008 - Jan 09 FY 2010
FY 2009 - Jan 10 FY 2010 -

Date: February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20)13	Т	C	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
MTD Upgrades				2.3	2	3.1	4	7.2	5	8.3	3	5.4	4	4.7	4	5.4			22	36.4
Engineering Support		4.1		1.2		2.1		0.9		1.3		1.3		1.4		1.4				13.7
Logistics		0.2		0.1		0.1		0.2		0.3		0.3		0.3		0.3		0.7		2.5
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2006 & Prior Equip Kits																				
FY 2007 Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
FY 2013 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		4.3		3.6		5.3		8.3		9.9	•	7.0	_	6.4		7.1		0.7	_	52.6

Date:

February 2008

MODIFICATION TITLE: Cargo Handling Floor System [MOD 7] 0-00-00-0000

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

DESCRIPTION / JUSTIFICATION:

The Cargo Handling Floor Systems 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 Mar 09

Production Contract Award Mar 10

Installation 3	Sched	lule
----------------	-------	------

ı	
Inputs	
Outputs	

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

1		FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	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:

6 months

PRODUCTION LEADTIME: 6 months

Contract Dates:

FY 2008 -

FY 2009 - Mar 09

FY 2010 -

Delivery Dates:

FY 2008 -

FY 2009 - Dec 09

FY 2010 -

INDIVIDUAL MODIFICATION Date: February 2008

MODIFICATION TITLE (cont): Cargo Handling Floor System [MOD 7] 0-00-00-0000

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	007	20	800	20	09	20	10	20	11	20	12	20)13	T	С	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Cargo Handling Floor System								17.2			65	8.8	99		128			23.5	501	89.4
PM Support								0.7		0.5		0.4		0.4		0.5				2.5
Installation of Hardware																				
FY 2006 & Prior Equip Kits																				
FY 2007 Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
FY 2013 Equip Kits																				
TC Equip- Kits																				
Total Installment	0			0.0		0.0		0.0		0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		0.0		0.0		17.9		9.3		9.2		14.0		18.0		23.5		91.9

Date:

February 2008

MODIFICATION TITLE: M240 Window/Door Gun Mount [MOD 8] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D and F

DESCRIPTION / JUSTIFICATION:

Type of Improvement. Replace 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.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Contract Award - April 08

First Production Hardware Delivery - Sep 08

Installation Schedule

Inputs Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
													10	20	20	20	20	20	20	20
													10	20	20	20	20	20	20	20

		FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	20	20	20	10	20	20	20	16	20	20	20	20	24	24	24	25		473
Outputs	20	20	20	10	20	20	20	16	20	20	20	20	24	24	24	25		473

METHOD OF IMPLEMENTATION:

Contract

ADMINISTRATIVE LEADTIME:

5 months

PRODUCTION LEADTIME: 18 months

Contract Dates:

FY 2008 - Apr 08

FY 2009 - Apr 09

FY 2010 -

Delivery Dates:

FY 2008 - Sep 09

FY 2009 - Sep 10

FY 2010 -

Date: F

February 2008

MODIFICATION TITLE (cont): M240 Window/Door Gun Mount [MOD 8] 0-00-00-0000

FINANCIAL PLAN: (\$ in Millions)

	Prior	r Yrs.	20	007	20	08	200	09	20	10	20	11	20	12	20	13	TO	7)	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Door Gunner Mount A Kits				9.0	50	0.8	100	1.5	80	1.2	100	1.5	100	1.5	70	1.1		1.2	500	17.8
Door Gunner Mount B Kits					70	3.4	80	4.0	70	3.5	76	3.8	80	4.0	97	4.8			473	23.5
PM Support				0.3		0.3		0.3		0.3		0.3		0.3		0.3		0.1		2.2
Installation of Hardware																				
FY 2006 & Prior Equip Kits																				
FY 2007 Kits																				
FY 2008 Equip Kits									70	0.1									70	0.1
FY 2009 Equip Kits											80	0.1							80	0.1
FY 2010 Equip Kits													70	0.1					70	0.1
FY 2011 Equip Kits															76	0.1			76	0.1
FY 2012 Equip Kits																	80	0.1	80	0.1
FY 2013 Equip Kits																	97	0.1	97	0.1
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	70	0.1	80	0.1	70	0.1	76	0.1	177	0.2	473	0.6
Total Procurement Cost		0.0		9.3		4.5		5.8		5.1		5.7		5.9		6.3		1.5		44.1

Item No. 16 Page 12 of 16 112

INDIVIDUAL MODIFICATION	Date:	February 2008
MODIFICATION TITLE: Transformation Sets, Kits and Outfits [MOD 9] 0-00-00-0000		

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

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

Inputs Outputs
Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

'		FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	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 2008 -

FY 2009 -

FY 2010 -

Delivery Dates:

FY 2008 -

FY 2009 -

FY 2010 -

AA0252 CH-47 CARGO HELICOPTER MODS Item No. 16 Page 13 of 16 113

INDIVIDUAL MODIFICATION Date: February 2008

MODIFICATION TITLE (cont): Transformation Sets, Kits and Outfits [MOD 9] 0-00-00-0000

FINANCIAL PLAN: (\$ in Millions)

ı	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	T	С	Tot	tal
•	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
SKOs	12	30.6	2	4.7	3	7.5	4	10.0	4	12.1	4	12.3	4	12.7	3	8.6	1	3.2	37	101.7
PM Support				0.2		0.2		0.3												0.7
Installation of Hardware																				
FY 2005 & Prior Equip Kits																				
FY 2006 Kits																				
FY 2007 Equip Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		30.6		4.9		7.7		10.3		12.1		12.3		12.7		8.6		3.2		102.4

					IN	DIVIDUA	AL MOD	IFICA	TION								I	Date:	Februar	y 2008			
MODIFICATION	N TITLE: Ai	rcraft Cor	nponent I	Parts-Mark	ing [MOI	11] 0-00	-00-0000																
MODELS OF SY	STEM AFF	ECTED: (CH-47D	Chinook, N	1H-47E, 0	CH-47F																	
documentation CH-47 fleet. DEVELOPMENT							s projec	t will	locate	mob	oile pa	rtsmarl	king fac	ilities t	o allow	the Ca	argo He	licopte	r PMO 1	o effect	tively n	nanage	the
Installation Sched	dule																						
		Pr Yr		F	Y 2007			F	Y 2008				FY	2009			FY	2010			FY	2011	
		Totals		1 2	3	4	1	2	3		4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																							
Outputs																							
		FY	2012			FY 201	3			F	Y 2014				FY 201:	5				То			Total
	1	2	3	4	1	2.	3	4	1	2.			4	1	2.		4		Co	mplete			

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

0 months

PRODUCTION LEADTIME: 0 months

Contract Dates:

Inputs Outputs

FY 2008 -

FY 2009 -

FY 2010 -

Delivery Dates:

FY 2008 -

FY 2009 -

FY 2010 -

AA0252 CH-47 CARGO HELICOPTER MODS

Item No. 16 Page 15 of 16 115

INDIVIDUAL MODIFICATION Date: February 2008

MODIFICATION TITLE (cont): Aircraft Component Parts-Marking [MOD 11] 0-00-00-0000

FINANCIAL PLAN: (\$ in Millions)

	Prior	r Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	13	TO	C	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Component Markings				1.3		8.8		7.4		3.5										21.0
•																				
•																				
•																				
•																				
Installation of Hardware																				
FY 2006 & Prior Equip Kits																				
FY 2007 Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
FY 2013 Equip Kits																				
TC Equip- Kits																				
Total Installment	0		1	0.0	0				0	0.0		0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		0.0		1.3		8.8		7.4		3.5		0.0		0.0		0.0		0.0		21.0

Item No. 16 Page 16 of 16Exhibit P-3A116Individual Modification

Exhibit P-40, Budget Item	Justification	Sheet						Γ	Date:	E-1 2009	
										February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo					P-1	Item Nomencla CH-47 CAR	ture GO HELICOPTER	MODS (AA0252)			
Program Elements for Code B Items:		Code:	Oth	er Related Prog	ram I	Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009)	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty											
Gross Cost											
Less PY Adv Proc											
Plus CY Adv Proc	1043.9	36.6	3	8.9	9.6	50.7	57.8	55.0	60.3	289.4	1682.1
Net Proc P1	1043.9	36.6	3	8.9	9.6	50.7	57.8	55.0	60.3	289.4	1682.1
Initial Spares											
Total Proc Cost	1043.9	36.6	3	8.9	9.6	50.7	57.8	55.0	60.3	289.4	1682.1
Flyaway U/C											
Weapon System Proc U/C			•								

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 2009 funding procures long lead time parts and materials required to preserve the production delivery schedule.

Advance Procurement Requir	ement	s Anal	ysis-Fundir	ng (P-10A)	First System	Award Date:	First	System Con	npletion Da	te:	Date:	February 2008	
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Moo	dification of	of aircraft					P-1 I			/ Weapon System HELICOPTER N			
	PLT (mos)	When Rqd (mos)	Pr Yrs	FY 07	FY 08	FY 13	To Comp	Total					
End Item Quantity													
Avionics	13	14	417.6	14.6	15.6	19.8	2	20.3	23.1	22.0	24.1	191.0	748.1
Airframe	25	16	626.3	22.0	23.4 29.8 30.4 34.7 33.0 36.2 98.4								
Total Advance Procurement			1043.9	36.6	39.0	49.6	5	50.7	57.8	55.0	60.3	289.4	1682.3

Advance Procurement Requirements Analysis-Funding (P-10B)					Date: February 20	008					
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft	_	P-1 Line Item Nomencla CH-47 CAR	ture / Weapon System: RGO HELICOPTER MOD	os.							
			(\$ in Millions)							
	PLT (mos)	Quantity Per Assembly	Unit Cost	Qty	Contract Forecast Date	Total Cost Request					
Avionics	13	1	1.0	23.0	Jan 09	19.8					
Airframe	25	1	1.0	23.0	Jan 09	29.8					
Total Advance Procurement						49.6					

Advance Procurement Requirements Analysis-Funding (P-10C)		Date: February 2008
A CONTRACTOR OF THE CONTRACTOR	Division of the control of the contr	

Appropriation / Budget Activity / Serial No:
Aircraft Procurement, Army / 2 / Modification of aircraft

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

(\$ in Millions)

					(\$ in M	lillions)				
	Pr Yrs	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	To Comp	Total
Proposal w/o AP										
Then Year Cost			409	426	539	736	1053			3163
Constant Year Cost			399	415	525	716	1024			3078
Present Value			395	403	499	668	937			2901
AP Proposal										
Then Year Cost			393	500	484	673	979			3029
Constant Year Cost			383	487	471	655	952			2947
Present Value			379	472	448	611	871			2782
AP Savings (Difference)										
Then Year Cost			-16	74	-55	-62	-74			-134
Constant Year Cost			-16	72	-53	-61	-72			-130
Present Value			-16	70	-51	-57	-66			-119

Constant Year Dollars are Fiscal Year 2005.

Advance Procurement Require	ements .	Analysis-Exe	cution (P-10I	D)				Date:	February 2008	
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Mod	lification of a	ircraft			P-1 Line Item Nome CH-47 (nclature / Weapon Sy CARGO HELICOPTI				
						(\$ in Millions)				
				08	20	09				
	PLT (mos)	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Qty	Contract Forecast Date
End Item Quantity										
Avionics	13	32	Dec 06	Dec 06	14.6	14.6	23	Mar 08	23	Jan 09
Airframe	25	32	Dec06	Dec 06	22.0	22.0	23	Mar 08	23	Jan 09
Total Advance Procurement					36.6	36.6				

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo				F	-1 Item Nomencl UTILITY/0	ature CARGO AIRPLANE	MODS (AA0270)		2000	
Program Elements for Code B Items:		Code:	Other	Related Progra	m Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	107.8	17.3	17.	6 14	.9 18.5	10.4	10.2	10.4		207.2
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	107.8	17.3	17.	6 14	.9 18.5	10.4	10.2	10.4		207.2
Initial Spares										
Total Proc Cost	107.8	17.3	17.	6 14	.9 18.5	10.4	10.2	10.4		207.2
Flyaway U/C										
Weapon System Proc U/C										

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 test equipment, military unique equipment, and other support equipment. These modifications ensure continued worldwide deployment capability and safe operations.

Justification:

FY 2009 procures 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 obsolete communication and navigation systems will enhance reliability and maintainability by employing commercial systems thereby improving aircraft availability for mission requirements. The associated aircraft modifications will assure worldwide deployability.

EXHIBIT P-40N	A, Budget Item Justifi	cation Sneet							February 2008		
Appropriation / Budget A	Activity / Serial No:				P-1 Item Nomeno	clature					
Aircraft Pro	curement, Army / 2 / Modification of air	rcraft			UTI	LITY/CARGO AII	RPLANE MODS (AA0270)			
Program Elements for Co	ode B Items:						Code:	Other Re	elated Program Eler	ments:	
Description		Fiscal Years									
OSIP No.	Classification	Prior Yrs.	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TC	Total
Avionics System Coc	kpit Upgrade										
1-96-01-0612	UNCLASSIFIED	107.8	17.3	17.6	14.9	18.5	10.4	10.2	10.4	0.0	207.1
Totals		107.8	17.3	17.6	14.9	18.5	10.4	10.2	10.4	0.0	207.1

Date:

February 2008

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, safety equipment, and engines to current and future international requirements, enhance fleet standardization, allow worldwide deployments and continued safe operations into 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 upgrade, Satellite Communications (SATCOM), Traffic Alert Collision Avoidance System II, Flight Data Recorder, Cockpit Voice Recorder, High Frequency Radios, Weather Radars, Data Link Capability, and Communications Management Unit. 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.

r ,	1:			a	1	1	1	
Insta	ш	เลท	ıon	-50	ne	a	m	le

Inputs Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
100			13	13			3	4			3	4			4	5			2	3
94	6			13	13			3	4			3	4			4	5			2

		FY 2	2012			FY 2	2013			FY	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs			2	2			38	37										233
Outputs	3			2	2			38	37									233

METHOD OF IMPLEMENTATION:

Contract

ADMINISTRATIVE LEADTIME:

4 months

PRODUCTION LEADTIME: 6 months

Contract Dates:

FY 2008 - Feb 08

FY 2009 - Feb 09

FY 2010 -

Delivery Dates:

FY 2008 - Jul 08

FY 2009 - Jul 09

FY 2010 -

AA0270 UTILITY/CARGO AIRPLANE MODS Item No. 18 Page 3 of 4 124

Date: February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	200	09	201	10	20	11	20	12	20	13	TO	2	Tot	al
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits	100	76.7	26	11.1	7	12.2	7	11.8	9	14.3	5	7.9	4	7.4	75	6.8			233	148.2
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data		0.6		0.1		0.1		0.1		0.1		0.1		0.1		0.1				1.3
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2006 & Prior Equip Kits	100	30.5																	100	30.5
FY 2007 Equip Kits			26	6.1															26	6.1
FY 2008 Equip Kits					7	5.3													7	5.3
FY 2009 Equip Kits							7	3.0											7	3.0
FY 2010 Equip Kits									9	4.1									9	4.1
FY 2011 Equip Kits											5	2.4							5	2.4
FY 2012 Equip Kits													4	2.7					4	2.7
FY 2013 Equip Kits															75	3.5			75	3.5
TC Equip-Kits																				
Total Installment	100	30.5	26	6.1	7	5.3	7	3.0	9	4.1	5	2.4	4	2.7	75	3.5	0	0.0	233	57.6
Total Procurement Cost		107.8		17.3		17.6		14.9		18.5		10.4		10.2		10.4		0.0		207.1

Exhibit P-40, Budget Item .	<u>Justification</u>	Sheet						Γ	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo					P-1	Item Nomencla AIRCRAFT	ture LONG RANGE MO	DDS (AA0560)		1 cordary 2000	
Program Elements for Code B Items:		Code:	Oth	er Related Pro	ogram	Elements:					
	Prior Years	FY 2007	FY 2008	FY 20	09	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty											
Gross Cost	16.1	1.9		0.3	0.6	0.8	0.8	0.8	0.8		22.2
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc P1	16.1	1.9		0.3	0.6	0.8	0.8	0.8	0.8		22.2
Initial Spares											
Total Proc Cost	16.1	1.9		0.3	0.6	0.8	0.8	0.8	0.8		22.2
Flyaway U/C											
Weapon System Proc U/C											

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.

Justification:

FY 2009 procures 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 worldwide navigation transition to Global Positioning System (GPS) enroute and approach systems, and Chairman of the Joint Chief of Staff Master Navigation Communication Plan requirements.

Exhibit P-40, Budget Item	Date: February 2008										
Appropriation / Budget Activity / Seri Aircraft Procurement, Army / 2 / Mo				I	-1 Item Nomencl	ature HELICOPTER MODS	S (AA0480)				
Program Elements for Code B Items:		Code:	Other	Related Program Elements:							
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog	
Proc Qty											
Gross Cost	818.9	67.8	24.	7 10	.9 10.9	10.9	11.9	12.4		968.4	
Less PY Adv Proc	13.5									13.5	
Plus CY Adv Proc	13.5									13.5	
Net Proc P1	818.9	67.8	24.	7 10	.9 10.9	10.9	11.9	12.4		968.4	
Initial Spares											
Total Proc Cost	818.9	67.8	24.	7 10	.9 10.9	10.9	11.9	12.4		968.4	
Flyaway U/C											
Weapon System Proc U/C											

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 2009 procures and installs the Crashworthy External Fuel System (CEFS) / Conformal Auxilliary Fuel System (CAFS) and procures Brigade Sets, mission kits and equipment. CEFS/CAFS is a safety modification that reduces the risk of a post-crash fire. The Brigade Sets, mission kits and equipment is provided to the aviation division and brigade structure to support Army Transformation and Modularity.

Item No. 20 Page 1 of 7 Exhibit P-40
127 Budget Item Justification Sheet

Exhibit P-40, Budget Item	Γ	Date: February 2008								
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo	P	P-1 Item Nomenclature UTILITY HELICOPTER MODS (AA0492)								
Program Elements for Code B Items:	Code:	Code: Other Related Program Elements:								
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	809.8	67.8	24	.7 10.	9 10.9	10.9	11.9	12.4		959.3
Less PY Adv Proc	13.5									13.5
Plus CY Adv Proc	13.5									13.5
Net Proc P1	809.8	67.8	24	.7 10.	9 10.9	10.9	11.9	12.4		959.3
Initial Spares										
Total Proc Cost	809.8	67.8	24	.7 10.	9 10.9	10.9	11.9	12.4		959.3
Flyaway U/C										
Weapon System Proc U/C										

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 2009 procures and fields the Crashworthy External Fuel System (CEFS)/ Conformal Auxilliary Fuel System (CAFS) and Brigade Sets. CEFS/CAFS is a safety modification that reduces the risk of a post-crash fire. The Brigade Sets exhibit includes peculiar ground support equipment - deployment support kits (PGSE-DSK) for UH-60 helicopters. PGSE-DSK are provided to the aviation division and brigade structure to support Army Transformation and Modularity requirements.

Budget Item Justifi	Date: February 2008											
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 R	Other Related Program Elements:				
	Fiscal Years					1	,					
Classification	Prior Yrs.	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TC	Total		
uel System (CEFS)		•	•						•			
Safety	102.2	19.1	9.7	7.8	10.9	10.9	11.9	12.4	0.0	184.9		
e Fuel System (Internal 200)												
Safety	0.0	2.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0	6.3		
c Control												
Operational	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0		
nversion												
Operational	0.0	8.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	9.9		
g System (HUMS)												
RAM	19.6	17.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	40.2		
ent Package												
Operational	0.0	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8		
ram												
Safety	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0		
AAQ-22)												
Operational	4.8	2.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	9.2		
Operational	22.7	6.6	3.1	3.1	0.0	0.0	0.0	0.0	0.0	35.5		
	149.3	67.8	24 7	10.9	10.9	10.9	11 9	12.4	0.0	298.8		
	vity / Serial No: ement, Army / 2 / Modification of ai B Items: Classification Del System (CEFS) Safety Fuel System (Internal 200) Safety C Control Operational Description of ai Description	Fiscal Years Classification Prior Yrs. Pruel System (CEFS) Safety Pruel System (Internal 200) Safety Control Operational	vity / Serial No: ement, Army / 2 / Modification of aircraft B Items: Fiscal Years Classification Prior Yrs. FY 2007 Prior Yrs.	Vity Serial No: ement, Army 2 Modification of aircraft	P-1 Item Nomence	P-1	P-1 Item Nomenclature	P-1 Item Nomenclature P-1 Item Nomenclature P-1 Item Nomenclature	Pattern Patt	Part Part		

Date:

February 2008

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

Inputs Outputs
Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
349	65	65	65	65	21	21	21	21	10	10	10	10	9	9	9	8	18	18	18	18
349	50	50	50	50	60	21	21	21	21	10	10	10	10	9	9	9	8	18	18	18

		FY 2	2012			FY 2	2013			FY :	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	18	18	18	16	35	35	35	36										1051
Outputs	18	18	18	18	51	35	35	36										1051

METHOD OF IMPLEMENTATION:

Contract Teams

ADMINISTRATIVE LEADTIME:

2 months

PRODUCTION LEADTIME: 9 months

FY 2010 -

Contract Dates: Delivery Dates: FY 2008 - Nov 07 FY 2008 - Aug 08 FY 2009 - Nov 08 FY 2009 - Aug 09

FY 2010 -

Date:

February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	Т	C	Tot	al
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
A-Kits (A/L)	609	33.4	84	4.5	40	2.7	35	2.4	72	4.9	70	4.8	70	4.8	71	4.9			1051	62.4
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	323	42.8	50	7.2	25	3.8	20	3.0	20	3.0	20	3.0	25	3.8	25	3.8			508	70.4
Support Equipment/Other		20.5		5.1		2.3		2.0		2.6		2.3		2.6		2.3				39.7
Installation of A-Kits																				
FY2006 & Prior Equip 349	349	2.2	260	2.3															609	4.5
Kits																				
FY2007 Equip 84 Kits					84	0.9													84	0.9
FY2008 Equip40 Kits							40	0.4											40	0.4
FY2009 Equip 35 Kits									35	0.4									35	0.4
FY2010 Equip 72 Kits											72	0.8							72	0.8
FY2011 Equip 70 Kits													70	0.7					70	0.7
FY2012 Equip 70 Kits															70	0.7			70	0.7
FY2013 Equip 70 Kits															71	0.7			71	0.7
TC Equip																				
Total Installment	349	2.2	260	2.3	84	0.9	40	0.4	35	0.4	72	0.8	70	0.7	141	1.4	0	0.0	1051	9.1
Total Procurement Cost		102.2		19.1		9.7		7.8		10.9		10.9		11.9		12.4		0.0		184.9

					IN	DIVIDU	AL MOD	IFIC	ATION									Date	: F	ebruary	2008			
MODIFICATION T	TTLE: Bri	gade Sets	[MOD 9] OSIP																				
MODELS OF SYST	ΓEM AFFI	ECTED: U	JH-60A/	L																				
DESCRIPTION / JU	JSTIFICA	TION:																						
Provides fundin	g to proc	cure Pec	uliar G	round Su	ipport I	Equipme	nt (PGS	SE)-	Deploy	ment S	Suppor	t Kits (DSK)	and n	nissior	kits to	suppo	ort the	new A	Aviati	on Div	ision a	nd Brig	ade
Structure. Also,																								
pilot, co-pilot, a																								
collection of too																								
	ns and c	quipino	iii iicia	od do d p	ienage.	Equipi		s P	1004100	15 501	it to un	crare a	iii tii	CICIOI	c the i	iis taira	iioii se	110001		450	os not u	ppij to	tins or	ior.
DEVELOPMENT S	TATES /	MAIOD	DEVIELO	DMENTER	AH ECTO	NIE(C).																		
			DEVELC	PMENT	IILEST	NE(3):																		
Development is	complet	e.																						
Installation Schedul							1																	
		Pr Yr		F	Y 2007				FY 2008				FY 2	009			I	FY 201	0			FY	2011	
•	,	Totals	1	1 2	3	4	1	2	2 3	3	4	1	2	3	4	1	2		3	4	1	2	3	4
Inputs																								
Outputs																								
		FY 2	2012			FY 201	3			FY	2014				FY 20	15					То			Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1		2	3	4			Cor	nplete			
Inputs																								
Outputs																								
METHOD OF IMP	LEMENTA	ATION:	Fiel	d Units	A	DMINIS	TRATIVE	E LEA	DTIME:		0 mont	ths	1	PR	ODUC	TION LE	EADTIN	1E: (0 month	s	<u> </u>			
Contract Dates:			FY	2008 -							FY 20	09 -						FY 2	2010 -					
Delivery Dates:			FY	2008 -							FY 20	09 -						FY 2	2010 -					

INDIVIDUAL MODIFICATION Date: February 2008

MODIFICATION TITLE (cont): Brigade Sets [MOD 9] OSIP

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20)13	Т	C	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				İ
Ballistic Protection Systems (BPS)		4.6		3.2																7.8
Modularity Kits/Sets		18.1		3.4		3.1		3.1												27.7
Interim Contractor Support																				1
Installation of Hardware																				1
FY 2005 & Prior Equip Kits																				İ
FY 2006 Kits																				1
FY 2007 Equip Kits																				1
FY 2008 Equip Kits																				1
FY 2009 Equip Kits																				İ
FY 2010 Equip Kits																				İ
FY 2011 Equip Kits																				1
FY 2012 Equip Kits																				1
TC Equip- Kits																				1
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		22.7		6.6		3.1		3.1		0.0		0.0		0.0		0.0		0.0		35.5
				•									•	•	•	•	•		•	

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo				P	-1 Item Nomencla KIOWA W	ature (ARRIOR (AZ2200)			recruary 2000	
Program Elements for Code B Items:		Code:	Other	Related Progra	m Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	3206.8	51.1	51	.5 13	7 3.4	2.4	1.3	1.9	13.2	3345.1
Less PY Adv Proc	223.3									223.3
Plus CY Adv Proc	223.3									223.3
Net Proc P1	3206.8	51.1	51	.5 13	7 3.4	2.4	1.3	1.9	13.2	3345.1
Initial Spares										
Total Proc Cost	3206.8	51.1	51	.5 13	7 3.4	2.4	1.3	1.9	13.2	3345.1
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, Air-to-Air Stinger (ATAS), 2.75-inch rockets, and a .50caliber 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 Warrior missions.

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.

Exhibit P-40

Justification:

FY 2009 request funds the continuation of SEP, and the Weight Reduction efforts. It procures modifications which allow the Kiowa Warrior to safely serve as the Army's night, armedreconnaissance, aviation capability until replaced/retired.

Exhibit P-40N	A, Budget Item Justif	ication Sheet						Date:	February 2008		
Appropriation / Budget A	Activity / Serial No:				P-1 Item Nomeno	clature		•			
Aircraft Pro	curement, Army / 2 / Modification of a	ircraft			KIO	WA WARRIOR (A	AZ2200)				
Program Elements for C	ode B Items:						Code:	Other R	elated Program Elem	ents:	
Description		Fiscal Years					-1	l .			
OSIP No.	Classification	Prior Yrs.	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TC	Total
Safety Enhancement	Program (SEP)	<u> </u>									
2-97-01-0115	Safety	309.2	10.5	45.3	1.9	0.1	0.0	0.0	0.0	0.0	367.0
Safety Enhancement	Program - Weight Reduction										
2-02-01-0116	Safety	19.5	39.5	6.2	7.1	0.0	0.0	0.0	0.0	0.0	72.3
Program Support and	Other										
0-00-00-0000		2.0	1.1	0.0	4.7	3.3	2.4	1.3	1.9	13.2	29.9
Totals		330.7	51.1	51.5	13.7	3.4	2.4	1.3	1.9	13.2	469.2

Date:

February 2008

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 346 Kiowa Warriors, 285 (including nine Category B trainers) will receive SEP modifications; 208 are being accomplished on the contractor's modification line and 77 additional aircraft had been partially equipped in prior remanufacture/retrofit lines. Twenty-eight 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 346 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			FY 2007	7			FY 200)8			F	Y 2009				FY	2010			FY	2011	
		Totals		1	2	3	4	1	2	3	4	1	2	3		4	1	2	3	4	1	2	3	4
Inputs																								
Outputs																								
		FY	2012			FY	2013			F	Y 2014				FY 2	2015					To			Totals
	1	2	3	4	1	2	3	4	1	2	3	3	4	1	2	3	4	4		Co	mplete			
Inputs																								
Outputs																								
METHOD OF IMPL	EMENT	ATION:	Kr	line & fl	d retrofit	ADMIN	IISTRA	TIVE LE	ADTIM	E:	0 m	onths			PRODU	CTION	LEA	DTIME:	0 moi	nths				
Contract Dates:			FY	2008 -							FY	2009 -						F	Y 2010 -					
Delivery Dates:			FY	2008 -							FY	2009 -						F	Y 2010 -					

AZ2200 KIOWA WARRIOR Item No. 21 Page 3 of 6 136

Date:

February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prio	or Yrs.	20	007	20	08	200	09	20	10	20	11	20	12	20	13	TC	2	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Aircraft Modified - Bell Helicopter	1 28.	5			27														312	
Nonrecurring		35.3				3.6														38.9
Recurring - Bell Helico	pter	122.2				27.2														149.4
Government-Furnished Equipment		102.9		0.5		4.5														107.9
Engineering Change Or	ders	0.2		0.5				0.8												1.5
Aircraft Preparation		15.0		1.0		1.4														17.4
Fielding		3.5		1.0		0.3		0.1		0.1										5.0
Training/Training Device	ces	9.1																		9.1
Other		13.1		6.3		7.3														26.7
Technical Support		4.5		0.5		0.5		0.3												5.8
Installation of Hardware - Field																				
FY 2002 & Prior Equip	Kits	0.5																		0.5
FY 2003 Kits		0.7																		0.7
FY 2004 Equip Kits		0.7																		0.7
FY 2005 Equip Kits		0.8																		0.8
FY 2006 Equip Kits		0.7																		0.7
FY 2007 Equip Kits				0.7																0.7
FY 2008 Equip Kits						0.5														0.5
FY 2009 Equip Kits								0.7												0.7
TC Equip- Kits																				
Total Installment		3.4	0	0.7	0	0.5	0	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	5.3
Total Procurement Cost		309.2		10.5		45.3		1.9		0.1		0.0		0.0		0.0		0.0		367.0

Item No. 21 Page 4 of 6 137

Date:

February 2008

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

MODELS OF SYSTEM AFFECTED: OH-58D, Kiowa Warrior

DESCRIPTION / JUSTIFICATION:

Installation Schedule

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 345 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 critical Control Display Symbology, version 4 (CDS4) configuration.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Aircraft will be equipped/modified via field retrofits.

•		Pr Yr			FY 2	2007				FY 200)8			F	Y 2009)			FY	2010			FY	2011	
•		Totals		1	2	3	4	1	1	2	3	4	1	2		3	4	1	2	3	4	1	2	3	4
Inputs																									
Outputs																									
																									'
		FY	2012				FY 20	13			F	Y 2014				FY	2015					To			Totals
	1	2	3	4	1	-	2	3	4	1	2	3	3	4	1	2	3	4	4		Co	mplete			
Inputs																									
Outputs																									
METHOD OF IMPL	HOD OF IMPLEMENTATION: Field Retrofit ADM								IVE LE	EADTIM	E:	0 m	onths			PRODU	JCTION	N LEA	DTIME:	0 mor	nths				

Contract Dates: FY 2008 - FY 2009 - FY 2010
Delivery Dates: FY 2008 - FY 2009 - FY 2010 -

Item No. 21 Page 5 of 6 138

Date: February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	T	С	Tot	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity																				
Nonrecurring				0.7																0.7
Recurring Labor		1.8		1.1																2.9
Hardware		16.4		30.7		3.5		4.9												55.5
Data/Pubs/Manuals		1.0				0.9		0.3												2.2
Support Equipment		0.1																		0.1
Other		0.1		6.3		0.6		1.5												8.5
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				0.7																0.7
FY 2008 Equip Kits						1.2														1.2
FY 2009 Equip Kits								0.4												0.4
FY 2010 Equip Kits																				
FY2011 Equip Kits																				
TC Eqiup Kits																				
Total Installment	0	0.1	0	0.7	0	1.2	0	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	2.4
Total Procurement Cost		19.5		39.5		6.2		7.1		0.0		0.0		0.0		0.0		0.0		72.3

Exhibit P-40, Budget Item .	Justification	Sheet					Ι	Date:	E-1 2000	
				T					February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo					P-1 Item Nomencl AIRBORN	ature E AVIONICS (AA01	700)			
Program Elements for Code B Items:		Code:	Oth	er Related Progr PE 06042012	am Elements: , PE 0305114A, SSN	AA0704, SSN AZ352	0			
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	800.2	142.9	17	3.4	5.0 257.	284.9	356.0	315.4		2509.9
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	800.2	142.9	17	3.4	5.0 257.	284.9	356.0	315.4		2509.9
Initial Spares	69.5	4.5		3.3	1.9 7.2	7.5	4.5	4.6		106.0
Total Proc Cost	869.7	147.4	18	1.7	0.8 264.3	3 292.4	360.4	320.0		2615.9
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), the Joint Precision Approach and Landing System (JPALS), 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 Chinook (CH-47D) aircraft. The P3I EGI is being installed on UH-60M, CH-47F, Longbow Apache (AH-64D), Armed Reconnaissance Helicopter (ARH-70A), and Special Operations Aircraft (SOA). M-code is a new GPS security architecture and signal in space, mandated to support navigation warfare (NAVWAR) requirements IAW 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. 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, situational awareness, and weapons systems on modernized fleet aircraft including the AH-64A Mod, AH-64D, ARH-70A, CH-47D/F, Kiowa Warrior (OH-58D), UH-60A/L/M/Q, HH-60L/M, and Unmanned Aerial Systems (UAS). AMPS is the aviator's mission planning toolset and integrates several related applications: Tactical Operational SCENE (TOPSCENE); an automated risk assessment module; and a 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

Exhibit P-40, Budget Item Justification S	heet			Date:	ebruary 2008
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 2 / Modification of aircraft			P-1 Item Nomenclature AIRBORNE AVIONICS (AA0700)		
Program Elements for Code B Items:	Code:	Other Related Prog PE 0604201	gram Elements: IA, PE 0305114A, SSN AA0704, SSN AZ3520		

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, UH/HH-60M, and ARH-70A.

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. ATCS will procure JTRS A-Kits beginning in FY13.

The JPALS is a precision approach and landing system providing joint operational capability for U.S. forces assigned to conventional and special operations missions including those operating from fixed base, ship, tactical, and austere environments.

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:

FY09 procures DGNS AN/ASN-128D B-Kits and 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.

FY09 procures 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.

FY09 procures 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. 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.

FY09 procures EGI programmatic, engineering and logistics support for aircraft integration efforts. GPS P3I, GATM, and JPALS programs are closely linked and have joint perspective/participation.

FY09 procures Alt Comms A-Kits and B-Kits for AH-64D, CH-47F, UH/HH-60M, 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 each ARC-201D SINCGARS, an Improved Frequency Modulation (IFM) Power Amplifier (two IFM's for CH-47F), and a suite of ARC-231 sets. Additionally, FY09 funds modifications to crypto and satellite communications through ECPs.

FY09 procures and installs 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.

AA0700 Item No. 22 Page 2 of 13 Exhibit P-40
AIRBORNE AVIONICS 141 Budget Item Justification Sheet

Exhibit P-40M	I, Budget Item Justifi	cation Sheet						Date:	February 2008		
Appropriation / Budget A	Activity / Serial No:				P-1 Item Nomeno	clature		<u>,</u>			
Aircraft Prod	curement, Army / 2 / Modification of ai	rcraft			AIR	BORNE AVIONIC	CS (AA0700)				
Program Elements for Co	ode B Items:				•		Code:		elated Program Elem 1201A, PE 0305114		SSN AZ3520
Description		Fiscal Years									
OSIP No.	Classification	Prior Yrs.	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TC	Total
DGNS (AN/ASN-128	B) P3I		•							•	
OSIP	Oper/Log	47.5	12.6	20.1	24.4	30.5	19.9	26.5	5.0	0.0	186.
Aviation Mission Plan	nning System (AMPS)										•
1-95-01-2185	Oper/Log	160.6	19.2	19.0	16.4	18.6	17.0	22.2	23.2	0.0	296.2
Embedded GPS Inerti	al Navigation System (EGI) P3I										
OSIP	Legislative	21.6	3.7	1.0	1.2	1.3	1.5	1.1	18.2	0.0	49.
Improved Data Moder	m (IDM)										
OSIP	Oper/Log	321.0	50.9	61.4	53.7	65.0	72.9	106.6	90.7	0.0	822.
Aviation Tactical Con	nmunication Systems										
OSIP	Operational	51.4	54.4	62.1	64.4	97.9	84.7	89.0	102.1	0.0	606.
Joint Precision Approa	ach and Landing Sys (JPALS)										
OSIP	Operational	0.0	0.0	0.0	0.0	28.9	74.0	110.6	76.2	0.0	289.
Mil Flight Operation (Quality Assurance (MFOQA)										
OSIP		0.0	2.1	14.8	14.9	14.9	14.9	0.0	0.0	0.0	61.0
Totals		602.1	142.9	178.4	175.0	257.1	284.9	356.0	315.4	0.0	2311.

Date:

February 2008

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

MODELS OF SYSTEM AFFECTED: UH60A/L, CH47D

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 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 and CH-47D aircraft. A-Kit unit procurement and installation costs vary by platform.

FY09 procures DGNS AN/ASN-128D B-Kits and 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. All A-Kits have been developed and tested for each aircraft being modified.

Installation Schedule

Inputs Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
229	52	54	62	80	75	75	75	75	69	60	46	40	35	33	30	30	30	30	34	36
108	62	56	54	54	70	73	75	75	75	75	69	60	46	40	35	33	30	30	30	30

		FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	30	30	30	28	30	28	28	28										1482
Outputs	34	36	30	30	30	28	30	28	28	28								1482

METHOD OF IMPLEMENTATION:

On Site Log/Repair ADMINISTRATIVE LEADTIME:

6 months

PRODUCTION LEADTIME: 6 months

Team

Contract Dates: FY 2008 - Apr 08

FY 2009 - Apr 09

FY 2010 -

Delivery Dates:

FY 2008 - Oct 08

FY 2009 - Oct 09

FY 2010 -

AA0700 AIRBORNE AVIONICS Item No. 22 Page 4 of 13 143

Date:

February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	200	07	20	08	20	09	20	10	20	11	20	12	20	13	TO	()	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity - B-Kit	223	10.0	83	4.8	218	11.8	235	13.2	266	18.2	192	10.7	265	17.6					1482	86.3
B-Kit Nonrecurring		13.5																		13.5
Kit Quantity A-Kit	506	7.7	300	2.2	186	3.0	128	2.4	130	2.4	118	2.2	114	2.2					1482	22.1
Aircraft Integration -		4.3																		4.3
Nonrecurring																				
ECPs		0.7		1.6		0.1		1.0		1.5		1.0		1.0		0.6				7.5
Data		0.7		0.4		0.2		0.9		0.9		0.7		0.4		0.6				4.8
Training Equipment		0.4		0.2		0.1		0.6		0.9		0.3		0.3		0.5				3.3
Systems Engineering		6.1		1.0		1.4		2.2		2.6		1.7		1.7		1.4				18.1
Other - PM Admin		2.1		0.6		1.0		1.9		2.2		1.5		1.6		0.9				11.8
Other																				
Installation of Hardware																				
FY 2006 & Prior Equip Kits	229	2.0	248	1.8	29	0.2													506	4.0
FY 2007 Equip Kits					271	2.3	29	0.2											300	2.5
FY 2008 Equip Kits							186	2.0											186	2.0
FY 2009 Equip Kits									128	1.8									128	1.8
FY 2010 Equip Kits											130	1.8							130	1.8
FY 2011 Equip Kits													118	1.7					118	1.7
FY 2012 Equip Kits															114	1.0			114	1.0
FY2013 Equip Kits																				
Total Installment	229	2.0	248	1.8	300	2.5	215	2.2	128	1.8	130	1.8	118	1.7	114	1.0	0	0.0	1482	14.8
Total Procurement Cost		47.5		12.6		20.1		24.4	_	30.5		19.9	_	26.5		5.0		0.0		186.5

Item No. 22 Page 5 of 13 144

Date:

February 2008

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

MODELS OF SYSTEM AFFECTED: AH-64A/D, ARH-70A, CH-47D/F, OH-58D, UH-60A/L/M/Q, HH-60L/M, and UASs

DESCRIPTION / JUSTIFICATION:

The AMPS, with the integrated TOPSCENE and CAFRS applications, is used to automate Aviation mission planning tasks. The AMPS includes 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.

FY09 procures 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.

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. As the AMPS has been fielded, it has increasingly become more useful, resulting in expanded numbers of systems per operational unit and also in more types of units now using the system.

		Pr Yr			FY 2007				FY 200	18			FY	2009				FY	2010			FY	2011	
		Totals				3 4	1	1	2	3	4	1	2	3	4		1	2	3	4	1	2	3	4
Inputs								-	_		·	-			+		-							
Outputs																								
					ı				1				1											
		FY	2012			FY 2	2013			F	Y 2014				FY 2	015					То			Totals
	1	2	3	4	1	2	3	4	1	2	3	4	ļ	1	2	3	4			Co	mplete			
Inputs																								
Outputs																								
METHOD OF IMP	LEMENT	ATION:	N/A	1		ADMIN	ISTRAT	IVE LE	ADTIMI	E:	0 me	onths		F	RODU	CTION	LEAD'	TIME:	0 mor	nths				
Contract Dates:			FY	2008 -							FY 2	2009 -						F	Y 2010 -					
Delivery Dates:			FY	2008 -							FY 2	2009 -						F	Y 2010 -					

AA0700 Item No. 22 Page 6 of 13 Exhibit P-3A
AIRBORNE AVIONICS 145 Individual Modification

Date:

February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	TO	C	Tot	al
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity-B Kit (Computer)	2411	31.3									318	2.8	585	5.2	803	7.1			4117	46.4
Kit Quantity- B Kit (Upgrades)	650	3.0	742	3.1															1392	6.1
Kit Quantity -B Kit (Peripherals)		15.8		1.4								0.6		0.8		0.6				19.2
B Kit (Nonrecurring)		10.3								0.4										10.7
ECPs		75.1		7.2		10.3		7.8		8.7		5.3		6.8		7.2				128.4
Systems Engineering		2.3		1.2		1.3		1.3		1.4		1.4		1.4		1.4				11.7
System Test & Eval		2.5		0.7		0.5		0.7		0.8		0.8		0.8		0.8				7.6
Fielding/Training		12.4		4.6		5.9		5.6		6.3		5.1		6.2		5.0				51.1
Other - PM Admin		7.9		1.0		1.0		1.0		1.0		1.0		1.0		1.1				15.0
Installation of Hardware																				
FY 2006 & Prior Equip Kits																				
FY 2007 Equip Kits																				
FY 2008 Equip Kits																				
FY 2009 Equip Kits																				
FY 2010 Equip Kits																				
FY 2011 Equip Kits																				
FY 2012 Equip Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		160.6		19.2		19.0		16.4		18.6		17.0		22.2		23.2		0.0		296.2

Item No. 22 Page 7 of 13 146

Date:

February 2008

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

MODELS OF SYSTEM AFFECTED: IDM MD-1359/A:Aircraft: AH-64D, OH-58D, CH-47F, UH/HH-60M, ARH-70A

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, UH/HH-60M, and ARH-70A.

FY09 procures 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 OH-58D Safety Enhancement Program. FY09 funds are also required to complete IDM Software Block 3 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 FY09 to support B-kit procurements in FY09 and out.

Installation Schedule																									
•		Pr Yr			FY 2	2007				FY 20	008				FY 20	009			FY	2010			FY	2011	
ı		Totals		1	2	3	4		1	2	3	4	1		2	3	4	1	2	3	4	1	2	3	4
Inputs																									
Outputs																									
															•								•		•
•		FY	2012				FY 20	13				FY 201	4]	FY 201:	5				To			Totals
•	1	2	3	4	1	1	2	3	4	1		2	3	4	1	2		3	4		Co	mplete			
Inputs																									
Outputs																									
METHOD OF IMPL	EMENT.	ATION:			•	AΓ	MINIS	TRAT	IVE LE	EADTIN	ЛЕ:	0 :	nonths			PRC	DUCT	ON LEA	ADTIME:	0 mor	nths				
Contract Dates:			FY	2008	-							F	2009 -	-					I	FY 2010 -					
Delivery Dates:			FY	2008	-							F	2009 -	-					I	FY 2010 -					

AA0700 Item No. 22 Page 8 of 13 Exhibit P-3A AIRBORNE AVIONICS 147 Individual Modification

Date:

February 2008

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

FINANCIAL PLAN: (\$ in Millions)

		Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	Т	C	Tot	ıal
		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																					
Procure	ment																				
	Kit Quantity - B -Kits(IDM)	1037	31.6	231	5.7	67	2.5	139	5.2	150	5.8	157	6.2	164	6.5	157	6.4			2102	69.9
	Kit Quantity- B -Kits (IDM	206	4.5											658	33.2	442	22.8			1306	60.5
Mods)																					
	B-Kit NonRecurring		71.7		7.1		7.9		15.0		20.8		14.8		14.4		8.7				160.4
	Kit Quantity- A-Kits	240	11.9																	240	11.9
	Aircraft Integration		162.6		24.7		40.4		23.0		28.2		40.1		39.1		39.8				397.9
	ECP (B-Kit HW)		0.7		7.0		0.4		0.4		0.4		0.4		0.5		0.5				10.3
	ECP (B-Kit SW)		6.7		1.2		3.4		3.5		3.3		3.6		3.7		3.8				29.2
	Data		1.8		0.2		0.2		0.2		0.2		0.2		0.2		0.2				3.2
	Systems Engineering		4.5		3.1		3.4		3.3		3.4		3.6		4.0		3.9				29.2
	Systems Test and Evaluation		2.6		0.1		0.3		0.3		0.3		0.4		0.4		0.4				4.8
	Fielding/Training		5.8		0.5		1.1		1.3		1.3		1.5		1.8		1.7				15.0
	Other-PM Admin		16.6		1.3		1.8		1.5		1.3		2.1		2.8		2.5				29.9
Installat	ion of Hardware																				
	FY 2006 & Prior Equip Kits																				
	FY 2007 Equip Kits																				
	FY 2008 Equip Kits																				
	FY 2009 Equip Kits																				
ľ	FY 2010 Equip Kits																				
ľ	FY 2011 Equip Kits																				
ľ	FY 2012 Equip Kits																				
ı	TC Equip- Kits																				
Total Ins	tallment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Pro	ocurement Cost		321.0		50.9		61.4		53.7		65.0		72.9		106.6		90.7		0.0		822.2

AA0700 AIRBORNE AVIONICS Item No. 22 Page 9 of 13 148

Date:

February 2008

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

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

DESCRIPTION / JUSTIFICATION:

Aviation Tactical Communication Systems (ATCS) is an Army Aviation Program to procure Alt Comms A-Kits and B-Kits to meet minimum acceptable near-term communication requirements as defined by the U.S. Army Aviation Warfighting Center (USAAWC) 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.

FY09 procures Alt Comms A-Kits and B-Kits for AH-64D, CH-47F, UH/HH-60M, 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 each ARC-201D SINCGARS, an Improved Frequency Modulation (IFM) Power Amplifier (two IFM's for CH-47F), and a suite of ARC-231 sets. Additionally, FY09 funds modifications to crypto and satellite communications through ECPs.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

Alt Comms is a non-developmental program in the production and deployment phase.

Installation Schedule																								
		Pr Yr			FY 200	7			FY 20	08				FY 20)09			FY	2010			FY	2011	
		Totals		1	2	3	4	1	2	3	4	1		2	3	4	1	2	3	4	1	2	3	4
Inputs																								
Outputs																								
•		FY	2012			FY	2013				FY 20	14				FY 201:	5				To			Totals
•	1	2	3	4	1	2	3	4	1	- 1	2	3	4	1	1	2	3	4		Co	mplete			
Inputs																								
Outputs																								
METHOD OF IMPL	EMENT	ATION:				ADMI	NISTRA	TIVE L	EADTIN	IE:	0	month	S		PRO	DUCT	ION LEA	ADTIME:	0 moi	nths				
Contract Dates:			FY	2008 -							F	Y 2009	-					F	FY 2010 -					
Delivery Dates:			FY	2008 -							F	Y 2009	-					F	Y 2010 -					

AA0700 Item No. 22 Page 10 of 13 Exhibit P-3A
AIRBORNE AVIONICS 149 Individual Modification

Date: February 2008

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

FINANCIAL PLAN: (\$ in Millions)

į.																					
		Prior	Yrs.	20	07	200	98	20	09	20	10	20	11	20	12	20	13	T	C	Tot	tal
		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																					
Procuren	nent																				
231/Sets)	Kit Quantity - B-Kit (ARC-	239	22.8	115	10.2	161	14.7	149	14.0	171	16.5	178	17.1	171	16.7	165	15.5			1349	127.5
201D)	Kit Quantity - B-Kit (ARC-	548	13.5	180	4.6	210	7.2	226	8.0	252	9.1	294	10.7	302	11.2	306	11.7			2318	76.0
(SINCGA	Kit Quantity - B-Kit ARS/IFM)	317	6.3	153	2.6	146	3.2	133	3.0	122	2.8	126	3.0	131	3.2	144	3.5			1272	27.6
ľ	Kit Quantity - A-Kit			91	15.2	137	16.0	129	15.4	126	15.3	147	18.2	151	19.1	253	30.7			1034	129.9
ľ	ECP				14.2		11.8		14.8		42.9		24.8		27.3		22.8				158.6
ĺ	System Engineering		6.1		3.1		3.2		3.3		3.5		3.7		3.9		6.1				32.9
	System Test & Evaluation				1.7		1.8		1.8		1.9		2.0		2.1		4.2				15.5
Ĭ	Fielding/Training						1.0		1.0		1.0		1.0		1.0		2.2				7.2
	Other - PM Admin		2.7		2.8		3.2		3.1		4.9		4.2		4.5		5.4				30.8
Installati	ion of Hardware																				
Ī	FY 2006 & Prior Equip Kits																				
	FY 2007 Equip Kits																				
	FY 2008 Equip Kits																				
	FY 2009 Equip Kits																				
	FY 2010 Equip Kits																				
	FY 2011 Equip Kits																				
	FY 2012 Equip Kits																				
	TC Equip- Kits																				
Total Inst	allment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Pro	curement Cost		51.4		54.4		62.1		64.4		97.9		84.7		89.0		102.1		0.0		606.0

AA0700 AIRBORNE AVIONICS Item No. 22 Page 11 of 13 150

Date:

February 2008

MODIFICATION TITLE: Mil Flight Operation Quality Assurance (MFOQA) [MOD 7] OSIP

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

Instal	lation	Scl	ned	lul	le
--------	--------	-----	-----	-----	----

Inputs Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
					70	24	28		70	24	26		70	24	20		70	24	16	
					50	44	16	12	50	44	14	12	50	44	10	10	50	44	16	

		FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		466
Outputs																		466

METHOD OF IMPLEMENTATION:

OLR Team

ADMINISTRATIVE LEADTIME:

1 months

PRODUCTION LEADTIME: 1 months

Contract Dates:

FY 2008 - Oct 07

FY 2009 - Oct 08

FY 2010 -

Delivery Dates:

FY 2008 - Nov 07

FY 2009 - Nov 08

FY 2010 -

AA0700 AIRBORNE AVIONICS Item No. 22 Page 12 of 13 151

Date:

February 2008

MODIFICATION TITLE (cont): Mil Flight Operation Quality Assurance (MFOQA) [MOD 7] OSIP

FINANCIAL PLAN: (\$ in Millions)

•	
ŀ	
RDT&E	
Procuren	nent
ľ	Kit Quantity B-Kits
	Kit Quantity A-Kits
Ī	Fielding
Ī	Other-PM Admin
Installatio	on of Hardware
Ī	FY 2006 & Prior Equip Kits
Ī	FY 2007 Equip Kits
Ī	FY 2008 Equip Kits
	FY 2009 Equip Kits
	FY 2010 Equip Kits
	FY 2011 Equip Kits
	FY 2011 Equip Kits
	FY 2012 Equip Kits
	TC Equip- Kits
Total Insta	allment
Total Proc	curement Cost

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	Т	C	То	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
S				2.1	122 122	6.5 4.3 1.6	120 120		114										466 466	26.1 17.2 8.6
_					122	2.4	120		114	2.4	110	2.4							122 120 114 110	2.4
	0	0.0	0	0.0	122	2.4	120	2.5	114	2.4	110	2.4	0	0.0	0	0.0	0	0.0	466	9.7
Ĺ		0.0		2.1		14.8		14.9		14.9		14.9		0.0		0.0		0.0		61.6

	Justification	Sheet						Date:		
Lambie 1 10, Budget Item	3 u stilleution	SHEEL							February 2008	
Appropriation / Budget Activity / Seri Aircraft Procurement, Army / 2 / Mo	al No: dification of aircraft			P-1 1	tem Nomenclati GATM Rollu	ure p (AA0711)				
Program Elements for Code B Items:		Code:	Other R	elated Program I	Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	217.3	31.5	52.7	79.2	105.0	102.7	108.0	88.2		784.
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	217.3	31.5	52.7	79.2	105.0	102.7	108.0	88.2		784.
Initial Spares										
Total Proc Cost	217.3	31.5	52.7	79.2	105.0	102.7	108.0	88.2		784.
Flyaway U/C										
Weapon System Proc U/C										

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 2 / Modificat	ion of ai		ne Item No I Rollup (A	omenclature: AA0711)			Weapon System	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	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)			8084			9494			8567	7	
Rotary Wing Aircraft (AA0704)			23454			43218			70656	5	
Total:			31538			52712			79223	3	

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Mo				F	-1 Item Nomencl GATM - F	ature ixed Wing Aircraft (A	AA0703)			
Program Elements for Code B Items:		Code:	Other	Related Progra	m Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	110.4	8.1	9	.5 8	.6 13.4	13.4	13.9	13.9		191.2
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	110.4	8.1	9	.5 8	.6 13.4	13.4	13.9	13.9		191.2
Initial Spares										
Total Proc Cost	110.4	8.1	9	.5 8	.6 13.4	13.4	13.9	13.9		191.2
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 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 2009 procures GATM equipment for Fixed Wing aircraft. Fixed Wing aircraft were purchased with avionics and navigation equipment 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 support GATM. 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, elimination of obsolete communication and navigation systems will enhance reliability and maintainability by employing commercial systems thereby improving aircraft availability for mission requirements.

Exhibit P-40N	A, Budget Item Justifi	cation Sheet						Date:	February 2008		
Appropriation / Budget A	Activity / Serial No:				P-1 Item Nomeno	clature					
Aircraft Pro	curement, Army / 2 / Modification of a	ircraft			GAT	ΓM - Fixed Wing A	ircraft (AA0703)				
Program Elements for Co	ode B Items:						Code:	Other Re	elated Program Eler	ments:	
Description		Fiscal Years									
OSIP No.	Classification	Prior Yrs.	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TC	Total
Global Air Traffic Ma	nnagement - FW										
GATM-FW	Operational	110.4	8.1	9.5	8.6	13.4	13.4	13.9	13.9	0.0	191.2
Totals		110.4	8.1	9.5	8.6	13.4	13.4	13.9	13.9	0.0	191.2

Date:

February 2008

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.

r . 11		G 1	1 1	
[nstal]	ation	Sch	edul	ϵ

Inputs Outputs

Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
121			3	3			20	19			2	2			3	3			3	3
115	6			3	3			20	19			2	2			3	3			3

		FY 2	2012			FY 2	2013			FY 2	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs			2	3			16	16										219
Outputs	3			2	3			16	16									219

METHOD OF IMPLEMENTATION:

Contract

ADMINISTRATIVE LEADTIME:

4 months

PRODUCTION LEADTIME: 6 months

FY 2010 -

Contract Dates:

FY 2008 - Feb 08

FY 2009 - Feb 09

Delivery Dates:

FY 2008 - Jul 08

FY 2009 - Jul 09

FY 2010 -

AA0711 (AA0703) GATM - Fixed Wing Aircraft Item No. 23 Page 5 of 10 157

Date: February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	007	20	08	20	09	20	10	20	11	20	12	20	13	TO		To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Installation Kits	121	71.4	6	5.2	39	7.0	4	6.2	6	9.3	6	9.6	5	8.6	32	9.3			219	126.6
Kit Quantity																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data		0.4		0.1		0.1		0.1		0.1		0.1		0.1		0.1				1.1
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2006 & Prior Equip Kits	121	38.6																	121	38.6
FY 2007 Equip Kits			6	2.8															6	2.8
FY 2008 Equip Kits					39	2.4													39	2.4
FY 2009 Equip Kits							4	2.3											4	2.3
FY 2010 Equip Kits									6	4.0									6	4.0
FY 2011 Equip Kits											6	3.7							6	3.7
FY 2012 Equip Kits													5	5.2					5	5.2
FY 2013 Equip Kits															32	4.5			32	4.5
TC Equip- Kits																				
Total Installment	121	38.6	6	2.8	39	2.4	4	2.3	6	4.0	6	3.7	5	5.2	32	4.5	0	0.0	219	63.5
Total Procurement Cost		110.4		8.1		9.5		8.6		13.4		13.4		13.9		13.9		0.0		191.2

Exhibit P-40, Budget Item	Justification	Sheet						Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 2 / Moo					P-1 Item Nomen GATM -	clature Rotary Wing Aircrat	it (AA0704)			
Program Elements for Code B Items:		Code:	Othe	r Related Progr SSN AA070	am Elements: , SSN AA0711					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	106.9	23.5	43	.2 7).7 91	.6 89	.2 94.2	74.3		593.6
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	106.9	23.5	43	.2 7).7 91	.6 89	.2 94.2	74.3		593.6
Initial Spares										
Total Proc Cost	106.9	23.5	43	.2 7).7 91	.6 89	2 94.2	74.3		593.6
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 for Mode 5 capability. Funding beyond FY09 includes upgrades to meet requirements for 8.33KHz channel spacing and area navigation (RNAV), non-precision approach lateral navigation (LNAV), and vertical navigation distance measuring equipment.

Justification:

FY09 procures and installs APX-123 B-Kits and A-Kits for the AH-64D, CH-47D, UH-60A/L/M, and Special Operations Aircraft (SOA) which will allow Rotary Wing aircraft to meet near-term GATM requirements and 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 Mode S transponders.

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 8.33 kHz 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-40N	1, Budget Item Justifi	cation Sheet						Date:	February 2008		
Appropriation / Budget A	activity / Serial No:				P-1 Item Nomeno	clature					
Aircraft Pro	curement, Army / 2 / Modification of a	ircraft			GA	ΓM - Rotary Wing	Aircraft (AA0704)				
Program Elements for Co	ode B Items:						Code:		elated Program Ele A0703, SSN AA071		
Description		Fiscal Years									
OSIP No.	Classification	Prior Yrs.	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TC	Total
Global Air Traffic Ma	nagement - RW		•								
GATM-RW	Unclassified	106.9	23.5	43.2	70.7	91.6	89.2	94.2	74.3	0.0	593.6
Totals		106.9	23.5	43.2	70.7	91.6	89.2	94.2	74.3	0.0	593.6

Exhibit P-40M

Date:

February 2008

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 is an upgrade to the Mode S Identification Friend or Foe (IFF) transponder for Mode 5 capability. Funding beyond FY09 includes upgrades to meet requirements for 8.33KHz channel spacing and area navigation (RNAV), non-precision approach lateral navigation (LNAV), and vertical navigation distance measuring equipment, FY09 procures and installs APX-123 B-Kits and A-Kits for the AH-64D, CH-47D, UH-60A/L/M, and Special Operations Aircraft (SOA) which will allow Rotary Wing aircraft to meet near-term GATM requirements and 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 Mode S transponders. GATM provides Army aircraft improved deployment capabilities and allows operation in civil airspace without potential exclusion.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

The APX-123 provides enhanced security and greatly improved performance over IFF Mode 4. It reached Milestone C in July 06. 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; the APX-118 to APX-123 retrofit kits for previously fielded Mode S transponders do not require an A-Kit; and some B-Kits are for trainers and simulators' and kits vary by platform.

Installation Schedule

Inp	uts
Out	puts

-																					
	Pr Yr		FY 2	2007			FY 2	2008			FY 2	2009			FY 2	2010			FY 2	2011	
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ſ	904			2		45	47	45	47	80	81	80	81	79	245	245	242	288	293	293	293
	727	61	61	29	26	2		45	47	45	47	80	81	80	81	79	245	245	242	288	293

		FY 2	2012			FY 2	2013			FY :	2014			FY 2	2015		То	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	295	217	217	217	218	166	166	166	166	75	75	75	78					5521
Outputs	293	293	295	217	217	217	218	166	166	166	166	75	75	75	78			5521

METHOD OF IMPLEMENTATION:

OLR Team

ADMINISTRATIVE LEADTIME:

6 months

PRODUCTION LEADTIME: 11 months

Contract Dates:

FY 2008 - Mar 08

FY 2009 - Mar 09

FY 2010 -

Delivery Dates:

FY 2008 - Feb 09

FY 2009 - Feb 10

FY 2010 -

Item No. 23 Page 9 of 10 161

Date: Feb

February 2008

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

FINANCIAL PLAN: (\$ in Millions)

	Prior	Yrs.	20	07	20	08	20	09	20	10	20	11	20	12	20	13	T	C	Tot	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity - B Kits	1400	51.7	441	14.4	806	27.8	919	34.7	1150	58.7	899	67.2	627	73.9	322	61.2			6564	389.6
B-Kits, Nonrecurring		2.8		1.0		1.9		3.8		2.8										12.3
Kit Quantity - A Kits	1178	5.0			313	1.6	1020	11.6	1174	11.4	869	9.9	664	9.3	303	5.9			5521	54.7
Aircraft Integration -		14.9		2.4		4.1		5.3		3.0		1.0		1.0		0.1				31.8
Nonrecurring																				
ECP		1.7		0.3		0.2		2.5		1.5		0.7		0.7		0.2				7.8
Data		3.3		0.4		0.1		1.2		0.6		0.2		0.3		0.4				6.5
Training Equipment		1.1		0.2		0.2		1.3		0.6		0.2		0.2		0.3				4.1
Systems Engineering		4.8		2.4		2.5		3.0		2.7		1.6		1.6		0.7				19.3
Fielding/Training		1.4		0.4		0.8		1.5		1.5		0.2		0.3		0.5				6.6
System Test & Evaluation				0.5		0.7		1.0		1.1		0.6		0.5		0.4				4.8
Other PM Admin		1.2		1.5		2.3		3.0		3.0		0.8		0.7		0.3				12.8
Other		13.2																		13.2
TC Equip-Kits																				
Installation of Hardware																				
FY 2006 & Prior Equip Kits	904	5.8	2		184	1.0	88	0.5											1178	7.3
FY 2007 Equip Kits																				
FY 2008 Equip Kits							234	1.3	79	0.5									313	1.8
FY 2009 Equip Kits									732	4.2	288	1.7							1020	5.9
FY 2010 Equip Kits											879	5.1	295	1.8					1174	6.9
FY 2011 Equip Kits													651	3.9	218	1.3			869	5.2
FY 2012 Equip Kits															498	3.0	166		664	3.0
FY 2013 Equip Kits																	303		303	
Total Installment	904	5.8	2	0.0	184	1.0	322	1.8	811	4.7	1167	6.8	946	5.7	716	4.3	469	0.0	5521	30.1
Total Procurement Cost		106.9		23.5		43.2		70.7		91.6		89.2		94.2		74.3		0.0		593.6

Item No. 23 Page 10 of 10 162

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 3 / Spar				P-	1 Item Nomenclar SPARE PAR	ture RTS (AIR) (AA0950))			
Program Elements for Code B Items:		Code:	Other	Related Program	n Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	1282.6	9.4	9.2	2 6.9	9 9.2	9.5	4.5	4.6		1335.9
Less PY Adv Proc							1			
Plus CY Adv Proc										
Net Proc P1	1282.6	9.4	9.2	2 6.9	9 9.2	9.5	4.5	4.6		1335.9
Initial Spares							1			
Total Proc Cost	1282.6	9.4	9.2	2 6.9	9 9.2	9.5	4.5	4.6		1335.9
Flyaway U/C										
Weapon System Proc U/C										

Justification:
FY 2009 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					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Sup		ilities		P	-1 Item Nomencla AIRCRAFT	ature F SURVIVABILITY	EQUIPMENT (AZ	3504)		
Program Elements for Code B Items:		Code:	Other	Related Progra SSN AA0720;	n Elements: PE/Project 0604270A/	/665				
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	524.2	23.7	47.	8 56	9 69.5	67.8	73.0	76.1	607.7	1546.6
Less PY Adv Proc	11.6									11.6
Plus CY Adv Proc	11.6									11.6
Net Proc P1	524.2	23.7	47.	8 56	9 69.5	67.8	73.0	76.1	607.7	1546.6
Initial Spares										
Total Proc Cost	524.2	23.7	47.	8 56	9 69.5	67.8	73.0	76.1	607.7	1546.6
Flyaway U/C										
Weapon System Proc U/C										

Description:

FY09 procures the following Aircraft Survivability Equipment (ASE): ASE Laser Countermeasures, ASE Trainers, and ASE Radio Frequency Countermeasures (RFCM). The description and justification for each project are included on the system specific P-Form.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support ed facilities	quipmer			omenclature: RVIVABILITY E0	QUIPMENT (AZ3	504)	Weapon System	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	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			1488			1720			197	7	
ASE Laser CM			7072			9836			1801	4	
Radio Frequency CM			15120			36239			3691	5	
Total:	Total:					47795			5690	6	

Exhibit P-40, Budget Item	Justification	Sheet					Ι	Date:		
	<u> </u>								February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Sup		cilities		P-1	Item Nomencla ASE Traine	ature ers (AZ3506)				
Program Elements for Code B Items:		Code:	Othe	r Related Program	Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	352.8	1.5	1	.7 2.0	2.1	2.2	4.0	5.0	30.6	401.8
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	352.8	1.5	1	.7 2.0	2.1	2.2	4.0	5.0	30.6	401.8
Initial Spares										
Total Proc Cost	352.8	1.5	1	.7 2.0	2.1	2.2	4.0	5.0	30.6	401.8
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 2009 fields man portable CMWS stimulators for aviation Maneuver Combat Training Centers (MCTC) and home stations.

Exhibit P-40, Budget Item	Justification	Sheet					Γ	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Sup		cilities		P	1 Item Nomencla ASE Laser	ature CM (AZ3508)	·			
Program Elements for Code B Items:		Code:	Other	Related Program SSN AA0720;	n Elements: PE/Project 0604270A/	/665				
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	167.7	7.1	9.	8 18.	0 10.6	11.7	64.4	66.9	577.1	933.4
Less PY Adv Proc	11.6									11.6
Plus CY Adv Proc	11.6									11.6
Net Proc P1	167.7	7.1	9.	8 18.	0 10.6	11.7	64.4	66.9	577.1	933.4
Initial Spares										
Total Proc Cost	167.7	7.1	9.	8 18.	0 10.6	11.7	64.4	66.9	577.1	933.4
Flyaway U/C										
Weapon System Proc U/C			•							

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. Detects aircraft illumination by laser rangefinders, designators, and beam rider surface to air missiles. Provides aircrew visual and audio warnings according to threat lethality. Provides 360 degree azimuth and 90 degree elevation field of view coverage. Detects aircraft illumination by Multiple Integrated Laser Engagement/Air Ground Engagement System (MILES/AGES) II lasers.

Justification:

FY 2009 procures AN/AVR-2B systems for selected aircraft in support of required operational capabilities.

									1		
Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support ed facilities	quipmer		Line Item No E Laser CM (Weapon System	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	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			56	564 32	177	6535	62	105	780	0 62	126
Engineering Change Proposals											
Non-Recurring Production									3440	0	
Program Management			4	00		500			92	1	
System Engineering/Logistics			10	008		1817			487	8	
Spares						984			97:	5	
Total:			70	72		9836			1801	4	

Exhibit P-5a, Budget Procuremen	nt History and Planning							Oate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 4/ Support equipment and facil	Weapon System Type:	P-1 Line Item ASE Laser CN	Nomenclature: M (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										
FY 2007	Goodrich Danbury, CT	C/FFP	CECOM, Ft. Monmouth, NJ	Dec 06	Feb 08	32	177	Yes		
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		

REMARKS: FY2007 unit cost is for 6 sensor units, FY2008 & FY2009 are for 4 sensor units. The FY2008 to FY2009 unit price change is attributable to lesser quantity orders from other (other than Army) customers.

		F	Y 08 /	09 BU	DGET	ΓPRO	ODUC	CTIO	N SCI	HEDU	LE			P-1 ITEN ASE Las									Dat	te:	Februa	ry 2008					
	C	OST	ELEM	IENTS	}						Fiscal Y	Year 08	3										Fiscal Y	Year 09							
		S	PROC	ACCEP	BAL									Calenda	w Voor 0	.0								Color	ndar Ye	ow 00					
M		E	QTY	PRIOR	DUE									Calenda	riearo	0								Calei	idar 1e	ar uy					
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later	
ΑN	/AVR-2	B Syste	m Acquis	ition																											
1	FY 07	A	32	0	32							4		5 5	5	5	5	3											<u> </u>	(0
1	FY 07	FMS	31	0	31	5	5	5	5	5	5	1																	<u> </u>	(0
1	FY 08	A	62	0	62				A									5	5	5	5	5	5	5	5	5	5	5	5	2	2
1	FY 09	A	62	0	62																A								<u> </u>	62	2
																													<u> </u>		
																													<u> </u>		
																															
														+															 		
														-															Ь—		
														-																	
														+																	
														+																	
														-																	
To	al		187		187	5	5	5	5	5	5	5	5	5	5	5	5	8	5	5	5	5	5	5	5	5	5	5	5	64	
-						0	N	D	J	F	M	A	M	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S		_
						C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P		
							,		•		· ·			,					,							,					
M							I	PRODU	CTION	RATES						A	DMIN I	LEAD T	IME		MFR		TOTA	AL	REMA	RKS					
F											Reac	hed M	FR			Pric	or 1 Oct	Afte	r 1 Oct	Aft	er 1 Oct		After 1	Oct							
R			Nam	ne - Locati	on		N	ΛIN	1-8-5	MAX	D-	+	1 In	itial			0		1		9		10								
1	Goodr	ich, Dar	bury, CT	,				60	120	240			R	eorder			0		1		9		10								
													In	itial																	
													R	eorder																	
														itial											1						
	1												<u> </u>	eorder				1							1						
														itial				1				1			1						
	1												-	eorder				1							1						
	1												In	itial											1						
													R	eorder											1						

AZ3504 (AZ3508) ASE Laser CM Item No. 25 Page 7 of 13 170 Exhibit P-21 Production Schedule

		F	Y 10 /	11 BU	DGE	Γ PR(ODUC	CTIO	N SCI	HEDU	LE			P-1 ITEN ASE Las									Dat	te:	Februa	ry 2008				
	C	OST	ELEM	IENTS	}						Fiscal `	Year 10)										Fiscal Y	Year 11						
	ı	I ~							ı												1									
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year 1	.0								Cale	ndar Ye	ar 11				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
ΑN	I/AVR-2	B Syste	m Acquis	ition			•	•					•	•									•	•	•		•	•		
_	FY 07	A	32	32																										0
	FY 07	FMS	31	31																										0
	FY 08	A	62	60	2	2																								0
1	FY 09	A	62	0	62	5	5	5	5	5	5	5	i	5 5	5	5	5	2												0
														+																
To	tal	I	187	123	64	7	5	5	5	5	5	5	5	5	5	5	5	2												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M								PRODU	ICTION	RATES						Α	DMIN I	LEAD T	IME		MFR		TOTA	AL	REMA	RKS				
F												hed M	IFR			Pri	or 1 Oct	Afte	r 1 Oct	Aft	er 1 Oct		After 1	Oct						
R				ne - Locati	on			MIN	1-8-5	MAX	D-	+	_	itial			0		1		9		10							
1	Goodr	ich, Dan	bury, CT	1				60	120	240				eorder			0		1		9		10	1						
	-												_	itial																
	-													eorder																
													_	itial																
	1													eorder		\perp		1							4					
	1												_	itial				1		ļ					4					
	+						_						_	eorder				-							4					
	1											_	_	itial		+		+							1					
	1										1		R	eorder		1		1		1					1					

AZ3504 (AZ3508) ASE Laser CM Item No. 25 Page 8 of 13 171 Exhibit P-21 Production Schedule

Exhibit P-40, Budget Item	Justification	Sheet					Γ	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Sup	ll No: port equipment and fac	ilities		P	-1 Item Nomencla Radio Frequ	ature uency CM (AZ3511)				
Program Elements for Code B Items:		Code:	Other	Related Progra 0604270A.665	n Elements: A/C Surv Equip Dev					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	3.7	15.1	36	.2 36	9 56.8	54.0	4.6	4.3		211.5
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	3.7	15.1	36	.2 36	9 56.8	54.0	4.6	4.3		211.5
Initial Spares										
Total Proc Cost	3.7	15.1	36	.2 36	9 56.8	54.0	4.6	4.3		211.5
Flyaway U/C										
Weapon System Proc U/C										

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 Phase 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 2009 APA funds Phase 1 upgrade kits for the APR-39A(V)1.

Item No. 25 Page 9 of 13 172 Exhibit P-40 Budget Item Justification Sheet

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support ed facilities	quipmen			menclature: CM (AZ3511)			Weapon System	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	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			157	1	
Recurring Production						28184	700	40	812	3 200	41
Training						113			32	2	
Data						96			23	8	
Fielding						5908			179:	5	
Test and Evaluation						986			284	4	
Support Equipment						141			4	1	
Other Procurement			1512	0		77			2504	1	
•											
Total:			1512	0		36239			3691	5	

Exhibit P-5a, Budget Procurement	History and Plan	ning							ate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 4/ Support equipment and faciliti	Weapon System 7	Гуре:		Nomenclature: ncy CM (AZ3511)				•			
WBS Cost Elements:	Date of First Delivery	QTY Units	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFF 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	Dec 08	Jul 10	200	41			

REMARKS:

		F	Y 08 /	09 BU	DGET	r PR(ODUC	CTIO	N SCI	HEDU	LE			P-1 ITEI Radio Fi									Dat	te:	Februa	ry 2008				
	C	OST	ELEM	IENTS							Fiscal '	Year 08	3										Fiscal Y	Year 09	ı					
			1	ı																	1									_
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year (08								Cale	ndar Ye	ar 09				
F R	FY	R V	Each	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Rec	urring F	roducti	on	I.					ı	1				· ·		ı										ı	ı			
1	FY 08	A	700	0	700									A																700
1	FY 09	A	200	0	200															A										200
														-																
														+																
														+																
Tot	al		900		900																									900
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
														·																
M								PRODU	ICTION	RATES						Α	DMIN L	EAD T	IME		MFR		TOTA	AL	REMA	RKS				•
F												hed M				Prio	or 1 Oct	After	r 1 Oct	Aft	er 1 Oct		After 1							
R			Nan	ne - Locati	on			MIN	1-8-5	MAX	D-	+	—	nitial			3		4		15		19							
	TBD,							240	960	1200				eorder			0	-	0		0		0							
2	North	up Grui	mman, Ro	olling Mea	dows, IL			120	960	1200	-		-	nitial			3		4		15		19							
														eorder			0		0		0		0							
													_	nitial																
-	<u> </u>										-			eorder nitial				-							-					
	-										+			eorder				1							1					
											+	-		nitial		+		1				-			1					
													-	eorder											1					

		F	Y 10 /	11 BU	DGET	r PR(DUC	CTIO	N SCI	HEDU	LE			P-1 ITEN Radio Fr									Da	te:	Februa	ry 2008				
	C	OST	ELEM	IENTS	}						Fiscal Y	ear 10											Fiscal Y	Year 11						
			1	1	1																1									
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year 1	0								Cale	ndar Ye	ar 11				
F R	FY	R V	Each	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Rec	urring I	roducti	on	•																			•	•					•	
	FY 08	A	700	0	700	10	30	60	100	100	100	100	100	100																0
1	FY 09	A	200	0	200										100	100														0
.																														
Tot	al		900		900	10	30	60	100	100	100	100	100	100	100	100														
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M]	PRODU	CTION	RATES						Α	DMIN L	EAD T	IME		MFR		TOT	AL	REMA	RKS				•
F												ned M	FR			Pri	or 1 Oct	After	r 1 Oct	Aft	ter 1 Oct		After 1	Oct						
R	1		Nan	ne - Locati	on			MIN	1-8-5	MAX	D-	1	-				3	-	4		15		19							
	TBD,							240	960	1200				order			0	+	0		0		0		_					
2	North	up Grui	mman, Ro	olling Mea	idows, IL			120	960	1200		_ 2	-				3	-	4		15		19		-					
														order			0		0		0		0		-					
							-	+			+	_	Ini												-					
-							-	+			+	_	Ini	order											-					
								+			+		-	order		-									-					
											+		Ini												1					
											+		-	order											1					

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Ser Aircraft Procurement, Army / 4 / Su	ial No: pport equipment and fac	ilities		F	-1 Item Nomencl ASE INFR	ature ARED CM (AZ3507)			
Program Elements for Code B Items:		Code:	Other	Related Progra	m Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	1002.8	540.0	442.	5 433	.9 331.1	251.9	225.7	221.0	2315.5	5764.4
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	1002.8	540.0	442.	5 433	.9 331.1	251.9	225.7	221.0	2315.5	5764.4
Initial Spares										
Total Proc Cost	1002.8	540.0	442.	5 433	.9 331.1	251.9	225.7	221.0	2315.5	5764.4
Flyaway U/C										
Weapon System Proc U/C										

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 2009 procures nonrecurring engineering and recurring production of the ATIRCM/CMWS A-Kits and B-Kits.

- 1. FY2007 funding total includes \$231.6 million received in GWOT supplemental.
- 2. FY2008 funding totals do not include \$207.4 million previously requested for current FY2008 GWOT requirements.

Item No. 26 Page 1 of 6 177

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support eq facilities	uipmen				menclature: CM (AZ3507)			Weapon System	n Type: D	ate:	February 2008
ACFT			•	F	Y 07			FY 08	•		FY 09	
Cost Elemen	ts	CD	Total Co	ost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	τ	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
A Kit Recurring		В	179	9171	525	341	51070	297	172	37559	178	211
A Kit Installation			4	7867			50757			39949		
A Kit ATIRCM Retrofits							417			3350		
CMWS Recurring Hardware		В	3:	3148	86	385	92825	125	743	101037	214	472
ATIRCM Recurring Hardware		В	4	6000			39832	24	1660	81399	48	1696
ATIRCM B-Kit Nonrecurring			32	2845			33741			32122		
A-Kit Integration			2	1182			40868			41354		
ICS/Spt Eq/Trans/Training			2:	5681			28940			13060		
In House/Matrix Spt			2:	3695			32691			27908		
Program Management			2	1262			20187			6322		
Spares			2	2332			7912			16302		
CTR SEPM/ECO/SW Spt			2:	5175			43221			33579		
RESET			4	4070								
Other Platform Procurement												
CH-47 Suppression			5′	7600								
UH-60 Suppression			:	5000								
AVR2B			1:	5000								
Total:			541	0028			442461			433941		

Exhibit P-5a, Budget Pro	ocurement History and Planning							ate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 4/ Support equi	Weapon System Type:		Nomenclature: EED 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 Recurring										
FY 2007	Various Various	CPFF	Various	Dec 06	May 07	525	341	Yes		
FY 2008	Various Various	CPFF	Various	Dec 07	May 08	297	172	Yes		
FY 2009	Various Various	CPFF	Various	Dec 08	May 09	178	211	Yes		
CMWS Recurring Hardware										
FY 2007	BAE Systems (CMWS) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Dec 06	Aug 07	86	385	Yes		
FY 2008	BAE Systems (CMWS) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Dec 07	Aug 08	125	743	Yes		
FY 2009	BAE Systems (CMWS) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Dec 08	Aug 09	214	472	Yes		
ATIRCM Recurring Hardware										
FY 2008	BAE Systems (ATIRCM) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Jun 08	Apr 09	24	1660			
FY 2009	BAE Systems (ATIRCM) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Jun 09	Apr 10	48	1696			

REMARKS:

		F	Y 07	08 BU	J DGE T	ΓPRO	ODU	CTIO	N SCI	HEDU	LE			P-1 ITEN ASE INF									Dat	te:	Februa	ry 2008				
	C	OST I	ELEN	1ENTS	3]	Fiscal `	Year 07	7										Fiscal Y	Year 08						
М		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	ır Year ()7								Cale	ıdar Ye	ar 08				
F R	FY	R	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A	F E B	M A	A P	M A Y	J U	J U	A U	S E P	O C	N O	D E C	J A	F E B	M A	A P	M A	J U	J U	A U G	S E	Later
	. n			1001	1001	T	V	C	A N	В	R	R	Y	N	L	G	P	T	V	С	A N	В	R	R	A Y	N	L	G	P	Euter
_	it Recu FY 07	ring	525	0	525			A	1				43	3 44	44	44	44	44	44	44	44	44	44	42	l	l				0
_	FY 08	A	297		-			Α.					7.	7						A			77	72	24	25	25	25	25	173
_	FY 09	A	178		 																							- 20		178
_			Hardware		1	1	1	1	1	<u>ı </u>		1	1	1	1	<u> </u>	<u>ı </u>		1	1	1		1	<u>I</u>	l	l	<u> </u>	1		
2	FY 07	A	86	0	86			A								7	7	7	7	7	8	8	7	7	7	7	7			0
2	FY 08	A	125	0	125															A								10	10	105
2	FY 09	A	214	0	214																								<u> </u>	214
_		ecurring	g Hardwa		1					1			1		1		1							Т	Т	Т				
-	FY 08	A	24																							A				24
3	FY 09	A	48	0	48																									48
													1																	
Tot	al		1497		1497								43	44	44	51	51	51	51	51	52	52	51	49	31	32	32	35	35	742
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
						1	I ,		IN.	ь	K	I K	1	14	L	· ·	1		•	C	14	ь	K	K	1	IN .	L	0		
M								PRODU	CTION	RATES						Α	DMIN I	LEAD T	IME		MFR		TOTA	AL	REMA	RKS				
F												ched M	IFR			Pri	or 1 Oct	After	r 1 Oct	Aft	er 1 Oct		After 1	Oct						
R				ne - Locati	ion			MIN	1-8-5	MAX	D	+	1 Ini	tial			0	-	3		3		6							
1		s, Vario						18	200	800				order			0	-	3		3		6		_					
2	-	-), Nashua,				48	200	480				tial			0		3		5		8							
3	BAES	ystems	(ATIRC	M), Nashu	ıa, NH			12	48	240				order			0	-	3		5		8							
-													3 Ini	order			0	+	1		10		14							
-											+			tial			U		1		12		13		1					
-													_	order				+							-					
-														tial																
														order				1												
											-									·					1					

																							ı							
		F	Y 09 /	10 BU	DGE	Γ PR()DU(CTIO	N SCI	HEDU	LE			P-1 ITEN ASE INF									Dat	te:	Februa	ry 2008				
ı	C	OST I	ELEN	IENTS]	Fiscal '	Year 09	9										Fiscal Y	Year 10						
М		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year ()9								Caler	ndar Ye	ar 10				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Αŀ	Cit Recu	ring				1	V	C	IN	ь	K	K	1	IN	L	U	Г	1	v	C	IN	ь	K	K	1	IN	L	u	_ r	
_	FY 07	A	525	525																										0
\vdash	FY 08	A	297	124	173	25	25	25	25	25	25	23	3																	0
1	FY 09	A	178	0	178			A					1-	4 15	15	15	15	15	15	15	15	15	15	14						0
CM	WS Red	urring I	Hardware		•	•	•	•					•	•		•		l	•				•	•	•	•	•	•		
2	FY 07	A	86	86																										0
2	FY 08	A	125	20	105	10	10	11	11	11	11	11	1	0 10	10															0
2	FY 09	A	214	0	214			A								17	18	18	18	18	18	18	18	18	18	18	17			0
_		ecurring	g Hardwa	re		1	1						1			1			1					1	1	1	1			
\vdash	FY 08	A	24	0								2	2	2 2	2	2	2	2	2	2	2	2	2							0
3	FY 09	A	48	0	48									A										4	4	4	4	4	4	24
_																														
\vdash																													-	
Tot	al		1497	755	742	35	35	36	36	36	36	36	26	27	27	34	35	35	35	35	35	35	35	36	22	22	21	4	4	24
						О	N	D	J	F	M	A	M	J	J	A	S	О	N	D	J	F	M	A	M	J	J	A	S	
						C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	
M								PRODU	CTION	RATES						A	ADMIN L	EAD T	IME]	MFR		TOTA	A L	REMA					
F												hed M	1FR			Pri	or 1 Oct	After	r 1 Oct	Aft	er 1 Oct		After 1	Oct	Produc	tion rate	s are ye	arly rate	š.	
R			Nan	ne - Locati	on		1	MIN	1-8-5	MAX	D-	+	1 In	tial			0		3		3		6							
1		s, Vario						18	200	800				order			0	+	3		3		6							
2			<u> </u>), Nashua,				48	200	480	-			itial			0	+	3		5		8		1					
3	BAE S	ystems	(ATIRC	M), Nashu	a, NH			12	48	240	1			order			0	+	3		5		8		_					
<u> </u>														tial			0	+	4		10		14		-					
<u> </u>											-			order			0		1		12		13		-					
-											1			tial								_			-					
\vdash	1									-	+	-		order				-				-			-					
-	1										+		-	tial				1							-					
													Re	order																

AZ3507 ASE INFRARED CM Item No. 26 Page 5 of 6 181 Exhibit P-21 Production Schedule

														1									1							
		F	Y 11 /	12 BU	DGET	ΓPRO	ODU	СТІО	N SCI	HEDU	LE			P-1 ITEI ASE INI									Da	te:	Februa	ry 2008				
	CO	OST 1	ELEM	IENTS	}]	Fiscal Y	Year 11	l										Fiscal Y	Year 12						
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year 1	11	· ·							Cale	ndar Ye	ar 12				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
A Ki	t Recur	ring			I				- '	2				1 -,						Ü						-,		J	1 -	
		A	525	525																										0
1 F	Y 08	A	297	297																										0
1 F	Y 09	A	178	178																										0
CMV	VS Rec	urring F	Iardware																											
		A	86	86																										0
		A	125	125																										0
-		A	214	214																										0
		ecurring	Hardwa		1							ı				1								1	1	1		1	1	T
\vdash		A	24	24																										0
3 F	Y 09	A	48	24	24	4	4	. 4	1 4	4	4																			0
-																														
-																														
-																														
Total			1497	1473	24	4	4	4	4	4	4																			
	·					O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	
						T	V	С	N	В	R	R	Y	N	L	G	P	T	V	С	N	В	R	R	Y	N	L	G	P	
M								PRODU	JCTION :	RATES						A	ADMIN L	EAD T	IME]	MFR		TOT	AL	REMA	RKS				
F												hed M	IFR			Pri	or 1 Oct	Afte	r 1 Oct	Aft	er 1 Oct		After 1	Oct						
R				e - Locati	on			MIN	1-8-5	MAX	D-	+	1 In	itial			0		3		3		6							
1		s, Vario						18	200	800				eorder			0	1	3		3		6		1					
-				, Nashua,			_	48	200	480	-		_	itial			0	1	3		5		8		1					
3	BAE S	ystems	(ATIRCI	M), Nashu	a, NH			12	48	240	1			eorder			0	1	3		5		8		1					
\vdash														itial			0		4		10		14		-					
\vdash							-			-	1	_		eorder			0	1	1		12		13		-					
\vdash											-	_		itial				1		-					-					
\vdash							-				+	_	_	eorder				-							-					
										-				itial				1							-					
													Re	eorder																

Exhibit P-40, Budget Item	Justification	Sheet							Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Supp		cilities			P-3	I Item Nomencla	ature E COMMAND & CO	ONTROL (AA0710		1001441, 2000	
Program Elements for Code B Items:		Code:		Other R	elated Program	Elements:					
	Prior Years	FY 2007	FY 2	2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty	17	8									25
Gross Cost	134.6	45.0									179.6
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc P1	134.6	45.0									179.6
Initial Spares											
Total Proc Cost	134.6	45.0									179.6
Flyaway U/C				_							
Weapon System Proc U/C	7.9	5.6	•								13.5

This project funds the procurement of an Airborne Battle Command On The Move System. Provides the maneuver commander with a highly mobile, self-contained and reliable airborne digital command post with command, control, communications, and computers (C4) systems needed to command and control in joint, interagency, and multi-national environments. Tasks in this project support procurement efforts in the Low Rate Initial Production (LRIP) phase of this system. The Army Airborne Command and Control System (A2C2S) supports the Brigade Combat Teams, Division, Corps and Theater Army Commanders. The A2C2S enables Commanders and their staffs, to traverse the battle space rapidly - maintaining situational awareness of all battlefield systems and maintaining communications. Using Battle Command Software coupled with line-of-sight and non-line-of-sight voice and data communications the A2C2S provides information superiority through a common operational picture and real-time surveillance updates. This system is critical to enhance the Battle Command Group's ability to effectively perform combat operations and serve as a force multiplier in the Future Force. Due to new technology and requirements to be compatible, design integration will be required to retrofit existing A2C2S systems. A2C2S supports the Chief's Vision and the modularity concept of the Army Over Time. In addition, A2C2S is the airborne first-responder for Homeland Defense and disaster relief by providing a robust communications platform for emergency response coordinators of air and ground operations. It will support disaster coordination between state, federal, civilian and military organizations.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support ed facilities	quipmer			menclature: MMAND & CON	ΓROL (AA0710)		Weapon Syste	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A2C2S V1.1 Boeing-Contract Cancelled			2350	0 2	11750						
MNF-I Headquarters System Modification			453	0 2	2265						
A2C2S LITE Integration			126	9 4	317						
Project Mgt/Production Eng			646	1							
Fielding (NET, Spares)			263	9							
System Refresh/Technology Insertion			291	9							
Inmarsat Integration/Retrofit			364	О							
Total:			4495	8							İ

Exhibit P-5a, Budget Procureme	nt History and Planning							ate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 4/ Support equipment and fac	Weapon System Type:		Nomenclature: COMMAND & CONTROL (A	A0710)						
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
A2C2S V1.1 Boeing-Contract Cancelled										
FY 2007	RDECOM, PIF Redstone Arsenal,AL (JVYS)	MIPR	AMCOM, Redstone Arsenal, AL	Dec 06	Dec 07	2	11750			N/A
MNF-I Headquarters System Modification										
FY 2007	RDECOM, PIF Redstone Arsenal,AL (JVYS)	MIPR	AMCOM, Redstone Arsenal, AL	May 07	Oct 07	2	2265			N/A
A2C2S LITE Integration										
FY 2007	AATD Ft. Eustis, VA	MIPR	AATD, Ft. Eustis, VA	Nov 06	Dec 06	4	317			N/A

REMARKS:

Exhibit P-40, Budget Item	Justification	Sheet						Date:	February 2008	
Appropriation / Budget Activity / Seri. Aircraft Procurement, Army / 4 / Sup	al No: oport equipment and fac	cilities		P-1	Item Nomenclat AVIONICS S	ure SUPPORT EQUIPM	IENT (AZ3000)			
Program Elements for Code B Items:		Code:	Other R	elated Program	Elements:					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty	2925									2925
Gross Cost	470.8	5.0	5.1	5.1	5.1	5.1				496.1
Less PY Adv Proc										
Plus CY Adv Proc						_				
Net Proc P1	470.8	5.0	5.1	5.1	5.1	5.1				496.1
Initial Spares										<u> </u>
Total Proc Cost	470.8	5.0	5.1	5.1	5.1	5.1				496.1
Flyaway U/C						_				
Weapon System Proc U/C										
Consists of a family of avionics suppor	rt equipment. Cur	rent program co	nsists of the Av	viators' Night Vis	sion Imaging Sy	stem (ANVIS).				

Exhibit P-40, Budget Item .	Justification	Sheet							Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Supp		cilities			P-1	Item Nomencla ANVIS (K3				Teordary 2008	
Program Elements for Code B Items:		Code:		her Re	elated Program	Elements:					
	Prior Years	FY 2007	FY 200	8	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty	2925										2925
Gross Cost	470.8	5.0		5.0	5.0	5.0	5.0				495.9
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc P1	470.8	5.0		5.0	5.0	5.0	5.0				495.9
Initial Spares											
Total Proc Cost	470.8	5.0		5.0	5.0	5.0	5.0				495.9
Flyaway U/C											
Weapon System Proc U/C											

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. 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 an enhanced 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:

Description:

FY2009 procures 438 AN/AVS-6(V)3 systems for fielding to Active, Army Reserves and National Guard 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.

AZ3000 (K35601) Item No. 28 Page 2 of 6 Exhibit P-40
ANVIS Budget Item Justification Sheet

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support ed facilities	quipmer		ine Item No IS (K35601)	omenclature:			Weapon System	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	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			424	7 753	6	4025	447	9	4030	438	ç
Engineering Support			35	0		353			353	3	
Project Management Admin			18	1		371			368	3	
Engineering Change Orders			5	8		58			58	3	
Fielding			20	7		224			219)	
Total:			504	3		5031			5028	3	

Exhibit P-5a, Budget Procurement	History and Planning							Oate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 4/ Support equipment and facilities	Weapon System Type:	P-1 Line Item ANVIS (K356	Nomenclature: 501)							
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 2007	ITT ROANOKE, VA	C/FP	CECOM	Jan 07	Oct 07	753	5.640	Yes		
FY 2008	TBS TBD	C/FP	RDECOM	Mar 08	Dec 08	447	9.004	Yes		<u> </u>
FY 2009	TBS TBD	C/FP	RDECOM	Jan 09	Oct 09	438	9.201	Yes		

REMARKS:

		F	Y 07 /	08 BU	DGET	r PRC	DUC	CTIO	N SCI	HEDU	LE			P-1 ITEN ANVIS (ΓURE						Dat	e:	Februa	ry 2008				
	C	OST	ELEM	IENTS							Fiscal Y	Year 07											Fiscal Y	ear 08						
		c	DDOC	ACCEP	BAL				1					C-1 1-	\$7 0									C-1	J X 7	00				
M		S E	PROC QTY	PRIOR	DUE									Calenda	r Year u	17								Caler	ıdar Ye	ar us				
F R	FY	R V	Each	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
K3:	5601 AN	IVIS/HU	JD																											
1	FY 07	A	753	0	753				A									60	60	60	60	60	60	60	60	60	60	60	60	33
2	FY 08	A	447	0	447																		A							447
2	FY 09	A	438	0	438																									438
Tot	al		1638		1638													60	60	60	60	60	60	60	60	60	60	60	60	918
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M								PRODU	CTION	RATES						A	DMIN I	EAD T	IME		MFR		TOTA	AL	REMA	RKS				
F												hed M	FR			Pric	or 1 Oct	After	r 1 Oct	Aft	er 1 Oct		After 1	Oct						
R				ne - Locati	on			MIN	1-8-5	MAX	D-		l Ini				1		4		9		13							
	ITT, R		KE, VA					25	210	355	12		-	order			1	+	4		9		13							
2	TBS, T	rBD						25	210	355	12	0 2	2 Ini				1	+	6		9		15							
													-	order			1		4		9		13							
	1											_	Ini												-					
	1											_		order											1					
	-						-					-	Ini												1					
	+							+				-	_	order tial											-					
	1											-	_	order											1					

		F	Y 09 /	10 BU	DGE	r PR(ODUC	CTIO	N SCI	HEDU	LE			P-1 ITEM ANVIS (ΓURE						Dat	e:	Februa	ry 2008				
	C	OST	ELEM	IENTS	}						Fiscal Y	Year 09											Fiscal Y	ear 10	1					
			1	1	1																1									
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE								,	Calenda	r Year 0	9								Caler	ndar Yea	ar 10				
F R	FY	R V	Each	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
K3:	5601 AN	IVIS/HI	JD	l		Į	Į			l							l l				l l									ı
1	FY 07	A	753	720	33	33																								0
2	FY 08	A	447	0	447			41	41	41	41	41	41	41	41	41	41	37												0
2	FY 09	A	438	0	438				A									4	40	40	40	40	40	39	39	39	39	39	39	0
Tot	al		1638	720	918	33		41	41	41	41	41	41	41	41	41	41	41	40	40	40	40	40	39	39	39	39	39	39	
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
	_																													
M								PRODU	CTION	RATES						Α	DMIN I	EAD T	IME		MFR		TOTA	AL	REMA	RKS				•
F												hed M	_			Prio	or 1 Oct	Afte	r 1 Oct	Aft	ter 1 Oct		After 1		_					
R	_			ne - Locati	on			MIN	1-8-5	MAX							1	-	4		9		13							
	+		KE, VA					25	210	355	120		_	order			1	+	4		9		13		_					
2	TBS,	rbd						25	210	355	120	0 2	-				1	+	6		9		15		<u> </u>					
													_	order			1		4		9		13							
	1										-	_	Init												-					
	1												Init	order											1					
														order											1					
	+										+	-	Init									-			1					
	 													order																

Exhibit P-40, Budget Item	Justification	Sheet					Γ	Date:	February 2008	
Appropriation / Budget Activity / Seri Aircraft Procurement, Army / 4 / Sup		ilities		P.	1 Item Nomencla	ature GROUND EQUIPM	ENT (AZ3100)		1 cordary 2000	
Program Elements for Code B Items:		Code:	Other	Related Program 63801/B32 63						
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	556.4	61.4	84.	7 103.	9 86.4	65.0	71.5	98.7		1128.0
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	556.4	61.4	84.	7 103.	9 86.4	65.0	71.5	98.7		1128.0
Initial Spares										
Total Proc Cost	556.4	61.4	84.	7 103.	9 86.4	65.0	71.5	98.7		1128.0
Flyaway U/C										
Weapon System Proc U/C										

Provides various types of ground support equipment.

- FY2007 funding total includes \$4.0 million received in GWOT supplemental.
 FY2008 funding total includes \$10.0 million received in the Consolidated Appropriations Act, 2008 (P.L. 110-161).
 FY2008 funding totals do not include \$0.4 million previously requested for current FY2008 GWOT requirements.

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Sup		cilities		P	1 Item Nomencla AVIATION	ature N GROUND SUPPOI	RT EQUIPMENT (A		2000	
Program Elements for Code B Items:		Code:	Other	Related Progra 63801/B32 63						
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	377.0	61.4	84	.7 103.	9 86.4	65.0	68.4	95.4		942.3
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	377.0	61.4	84	.7 103.	9 86.4	65.0	68.4	95.4		942.3
Initial Spares										
Total Proc Cost	377.0	61.4	84	.7 103.	9 86.4	65.0	68.4	95.4		942.3
Flyaway U/C			•							
Weapon System Proc U/C			•							

Aviation Ground Support Equipment (AGSE) is transitioning away from the role of Sustainment to one of Total Life Cycle Management. 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 (AVA), Aviation Intermediate Maintenance (AVIM) Shop Set Complex, Battle Damage Assessment and Repair (BDAR) System, Aviation Ground Power Unit (AGPU), Generic Aircraft Nitrogen Generator (GANG), Standard Aircraft Towing System (SATS), Shop Equipment Contact Maintenance (SECM), Non-Destructive Test Equipment (NDTE), Digital Aircraft Weighing Scales (DAWS), Unit Maintenance Aerial Recovery Kit (UMARK), Aviation Maintenance Fall Protection Platforms, Aviation - Sets, Kits, Outfits and Tools (A-SKOT) (Fuel Quantity Tester, Jacks, AVUM #2 Tool Set, and Tool Kits, etc) and Flexible Engine Diagnostic System (FEDS). AGSE is critical to the operational readiness of Aviation. AGSE products provide the finest materiel and support solutions to Army Aviation.

Justification:

FY 2009 supports the operational readiness of AH-64, UH-60, CH-47, OH-58D and other Army aircraft. AGSE also corrects safety-of-flight discrepancies which endanger life and property. The modifications to the Unit Maintenance Aerial Recovery Kit (UMARK) provide 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. AVIM Shop Set complexes provide a transportable aviation intermediate and limited depot level maintenance capability in force projection or contingency operations. Aviation Ground Power Units (AGPUs) Service Life Extension Program (SLEP) will allow the capability of meeting Army helicopter servicing requirements into the next decade. The Non-Destructive Test Equipment (NDTE) provides Army Aviation maintenance units with electronic test instruments to inspect aircraft components and structures without complete disassembly or removal of component from the aircraft, thereby increasing operational readiness and decreasing the maintenance burden on the soldier. The Standard Aircraft Towing System (SATS) will fill 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 (A-SKOT) 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 Shop Equipment Contact Maintenance (SECM) will provide the combat maintainer a contact maintenance vehicle for transporting a crew of three and mission essential equipment, expendable supplies, spares and repair parts to repair or recover downed helicopters. The Aviation Vibration Analyzer (AVA) provides a rugged, portable and safe means of performing helicopter vibration reduction for both main and tail rotors. The AVA software enhancement retrofit kit upgrades the hardw

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equip facilities	oment			menclature: UND SUPPORT	EQUIPMENT (A	Z3520)	Weapon Syste	m Type: D	ate:	February 2008
ACFT	п	D		FY 07			FY 08			FY 09	
Cost Element	ts	D	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)						19399			5956		
Unit Maint Aerial Recovery Kit (UMARK)									432		
Aviation Vibration Analyzer (AVA) Kits			816			100			100		
Aviation Ground Power Unit (AGPU) SLEP			12701			16320			28050		
Battle Damage Assess Repair Kit (BDAR)			17412								
Standard Aircraft Towing System (SATS)						2753			11516		
Shop Equipment Contact Maint (SECM)						228			22572		
Avn-Sets, Kits, Outfits, Tools (A-SKOT)			6226			12546			16150		
Aviation Maint Fall Protection Platforms			2900								
Avn Intermediate Maint (AVIM) Shop Sets			17432			12825			8601		
Flexible Engine Diagnostics Sys (FEDS)			246			600			5091		
Generic Aircraft Nitro Generator (GANG)			448			11890					
Digital Aircraft Weight Scales (DAWS)			75			3876					
Program Management Support			2977			4011			5234		
Fielding			30			45			45		
Test and Eval (T&E)			100			120			135		
Subtotal			61363			84713			103882		

Exhibit P-40, Budget Item	Justification	Sheet					Γ	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Sup.		cilities		P.	1 Item Nomencla AIRCREW	ature INTEGRATED SYS	STEMS (AZ3110)			
Program Elements for Code B Items:		Code:	Other	Related Program RDTE 060380	n Elements: (DB45), 0604801(DC	245), 0603827(S51),	0604601(S61)			
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	226.4	61.3	44.8	3 40.	7 56.9	42.5	137.4	124.5		734.6
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	226.4	61.3	44.8	3 40.	7 56.9	42.5	137.4	124.5		734.6
Initial Spares										
Total Proc Cost	226.4	61.3	44.8	3 40.	7 56.9	42.5	137.4	124.5		734.6
Flyaway U/C										
Weapon System Proc U/C										

The Air Warrior system provides improved safety and survivability as well as enhancing the war fighting effectiveness of Army aircrews. Air Warrior effectively integrates the Soldier with all Army rotary wing aircraft including the AH-64A/D Apache, UH/HH-60A/L/M Blackhawk, OH-58D Kiowa Warrior, and CH-47D/F Chinook and provides the flexibility to tailor one modular system to specific missions, threats, and aircraft platforms. Air Warrior is an integrated system-level approach to aviation life support equipment and provides improved aircrew safety, survivability and human performance. It includes the survival and personal protective equipment used by the Soldier during flight and post-crash survival, evasion, resistance and escape. Air Warrior Block 1 systems include the HGU-56/P integrated helmet system, the Air Warrior integrated survival equipment system (ensemble), improved ballistic protection and microclimate cooling. The HGU-56/P helmet system includes laser eye protection equipment and sound attenuation devices. The Air Warrior Block 1 system offers weight and bulk reduction over previously fielded equipment, and includes extraction capability for a downed aviator, standardized placement for communication, survivability, and first aid equipment, microclimate cooling, ballistic protection and over-water survival gear. Air Warrior also includes airframe integration (A Kit) efforts and microclimate cooling (B Kit) hardware on the UH/HH-60A/L Blackhawk and CH-47D Chinook helicopters. Air Warrior Block 1 enables the Army Aviation Warfighter to meet the approved Operational Requirements Document Key Performance Parameter mission length of 5.3 hours while wearing full chemical/biological protective gear. The Air Warrior acquisition strategy adds new capabilities and spiral improvements to current products incrementally. Block 2 introduces the Electronic Data Manager (EDM), a lightweight and portable touch screen computer that provides off-aircraft mission planning, moving map, and interfaces with Blue Force Tracking two-way situational awareness capabilities in the form of a digital kneeboard. Block 2 also adds the Aircraft Wireless Intercom System (AWIS) for CH-47 and UH-60 aircrews, enhancing the safety and operational requirements of current tethered systems. The Cockpit Air Bag System (CABS) is a supplemental restraint system that reduces aviator deaths and injuries caused by body and head impact with cockpit structures in an otherwise survivable crash. The Personnel Recovery Support Equipment (PRSE) program includes the modification, integration, procurement, and fielding of PRSE classified components onto its operational platform and provides the Army significantly enhanced ability to respond to occurrences of isolated, missing, detained or captured Soldiers in a timely and effective manner. Air Warrior Portable Oxygen System for aircrews deployed in OIF/OEF is a man portable oxygen system that allows aircrews to operate at altitudes above 10,000 feet mean sea level for extended periods of time. Tactical "Go Bag" contains tailored survival equipment capable of carrying up to 72 hours of survival equipment in a modular rucksack style bag. Hydration System for aircrews deployed in OIF/OEF provides increased crew survival in a combat survival, evasion, resistance, and escape environment.

Justification:

FY 2009 procures and fields the Air Warrior Block 1 System, including A Kit and B Kit production and installations, the Electronic Data Manager (EDM) for deploying units, procurement of the encrypted Aircraft Wireless Intercom System (AWIS) and production engineering, and procures/modifies 2 PRSE platforms.

Exhibit P-40, Budget Item Justific	ation Sheet			Date: February 2008
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 4 / Support equipme	ent and facilities		P-1 Item Nomenclature AIRCREW INTEGRATED SYSTEMS (AZ3110)
Program Elements for Code B Items:	Code:	Other Related Prog RDTE 060	gram Elements: 3801(DB45), 0604801(DC45), 0603827(S51), 0604601(S61)	
 FY2007 funding total includes \$10.2 million r FY2008 funding totals do not include \$10.2 m 	eceived in GWOT suppl illion previously request	emental. ted for current FY2008 G	WOT requirements.	

Appropriation/Budget Activity/Serial No: P-1 Line Item Nomenclature: Weapon System Type: Date: Exhibit P-5, Weapon ACFT Cost Analysis Aircraft Procurement, Army / 4 / Support equipment and AIRCREW INTEGRATED SYSTEMS (AZ3110) February 2008 ID **ACFT** FY 07 FY 08 FY 09 CD Total Cost Unit Cost Total Cost Unit Cost Total Cost Unit Cost **Cost Elements** Qty Qty Qty \$000 Units \$000 \$000 Units \$000 \$000 Units \$000 Hardware Air Warrior Block 1 Ensembles 10621 5901 1.8 13320 7200 1.9 3684 1939 1.9 Air Warrior A Kits 5238 400 13.1 818 62 13.2 4831 366 13.2 A Kit Installs 993 1421 1984 Air Warrior Microclimate Cooling Garment 375 1500 0.3 1501 5002 0.3 750 2501 0.3 Air Warrior Microclimate Cooling Units 13080 1745 7.5 7607 1001 7.6 9840 1278 7.7 Block 2 Electronic Data Mgr (EDM) 8028 923 8.7 4400 500 8.8 4400 500 8.8 860 500 500 3.8 EDM A Kits 3180 3.7 1914 3.8 1900 Acft Wireless Intercom Sys (AWIS) 180 304 78 3.9 45 250 1.4 63 1.4 AWIS A Kits 471 60 7.9 189 24 7.9 118 15 7.9 EDM/AWIS Installs 734 1114 1150 Portable Helicoptor Oxygen System Portable Oxygen System 4589 1043 4.4 Hydration System Hydration System 402 2000 0.2 Tactical Go Bag 1500 Go Bag 450 0.3 Cockpit Air Bags (CABS) System & Install CABS A Kits 238 40 6.0 CABS B Kits 1000 40 25.0 **CABS** Installs 186 CABS B-Kit Retrofit 628 196 3.2 160 50 3.2 Personel Recovery Survival Equipment

AZ3110 AIRCREW INTEGRATED SYSTEMS Item No. 30 Page 3 of 15 197 Exhibit P-5 Weapon System Cost Analysis

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support eq facilities	uipmen			menclature: GRATED SYSTI	EMS (AZ3110)		Weapon Syste	m Type: D	ate:	February 2008
ACFT		ID	<u> </u>	FY 07			FY 08	· ·		FY 09	
Cost Elemen	ts	CD	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
PRSE Platform Modifications			1750	4	437.5				1585	2	792.5
- Total Hardware Costs			50789			34172			30305		
Other Costs											
Manuals			110			115			117		
New Equipment Training			200			212			215		
Initial Spares & Repair Parts			522			535			537		
Support Equipment			210			213			216		
Systems Test and Evaluation			800			803			807		
Total Other Costs			1842			1878			1892		
Nonrecurring Costs											
Nonrecurring Engineering			892			899			909		
Total Nonrecurring Costs			892			899			909		
Air Warrior ECP			585			594			608		
Systems Integration Engineering			2299			2307			2314		
Project Management Admin			3100			3124			2812		
Total ECP, Sys Int, & Admin Costs			5984			6025			5734		
Support Costs											
Fielding			825			829			833		
Contract Logistics Support			1000			1019			1024		
Total:			61332			44822			40697		

Exhibit P-5a, Budget Procur	ement History and Planning							ate: ebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 4/ Support equipment	Weapon System Type:		Nomenclature: TEGRATED SYSTEMS (AZ	23110)						
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 2007	Simula, Inc. Phoenix, AZ	C/Option	Redstone Arsenal, AL	Dec 06	Feb 07	5901	1.8	Yes		Feb 0
FY 2008	Simula, Inc. Phoenix, AZ	C/Option	Redstone Arsenal, AL	Dec 07	Feb 08	7200	1.9	Yes		Feb 0
FY 2009	TBS TBS	C/Option	Redstone Arsenal, AL	Dec 08	Feb 09	1939	1.9	Yes		
Air Warrior A Kits										
FY 2007	Westwind Corporation Huntsville, AL	C/Option	Rock Island, IL	Dec 06	Apr 07	400	13.1	Yes		Dec 0
FY 2008	Westwind Corporation Huntsville, AL	C/Option	Rock Island, IL	Dec 07	Apr 08	62	13.2	Yes		Dec 0
FY 2009	TBS TBS	C/Option	TBS	Dec 08	Apr 09	366	13.2	Yes		
Air Warrior Microclimate Cooling Garment										
FY 2007	Med Eng, Inc Ogdensburg, NY	C/Option	Redstone Arsenal, AL	Nov 06	Mar 07	1500	0.3	Yes		Jan 05
FY 2008	Med Eng, Inc Ogdensburg, NY	C/Option	Redstone Arsenal, AL	Nov 07	Mar 08	5002	0.3	Yes		Jan 05
FY 2009	TBS TBS	C/Option	Redstone Arsenal, AL	Nov 08	Mar 09	2501	0.3	Yes		Jan 05
Air Warrior Microclimate Cooling Units										
FY 2007	Carleton Technologies, Inc. Orchard Park, NY	C/Option	Redstone Arsenal, AL	Dec 06	Mar 07	1745	7.5	Yes		Aug 0
FY 2008	Carleton Technologies, Inc. Orchard Park, NY	C/Option	Redstone Arsenal, AL	Dec 07	Mar 08	1001	7.6	Yes		Aug 0
FY 2009	TBS TBS	C/Option	Redstone Arsenal, AL	Dec 08	Mar 09	1278	7.7	Yes		
Electronic Data Mgr (EDM)										
FY 2007	Raytheon Technical Services Indianapolis, IN	SS/FP	Redstone Arsenal, AL	Dec 06	Apr 07	923	8.7	Yes		Jan 05
FY 2008	Raytheon Technical Services Indianapolis, IN	SS/FP	Redstone Arsenal, AL	Dec 07	Apr 08	500	8.8	Yes		Jan 05
FY 2009	TBS TBS	C/FP	Redstone Arsenal, AL	Dec 08	Apr 09	500	8.8	Yes		

AZ3110 AIRCREW INTEGRATED SYSTEMS Item No. 30 Page 5 of 15 199 Exhibit P-5a Budget Procurement History and Planning

	Exhibit P-5a, Budget Procuremen	at History and Planning							ate: ebruary	2008	
Appropriati	on/Budget Activity/Serial No: Aircraft Procurement, Army/ 4/ Support equipment and facili	Weapon System Type:		Nomenclature: NTEGRATED SYSTEMS (AZ	23110)						
WBS Cost I	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
EDM A K	Kits										
	FY 2007	JVYS Huntsville, AL	C/FP	Redstone Arsenal, AL	Jan 07	May 07	860	3.7	Yes		Oct 05
	FY 2008	JVYS Huntsville, AL	C/FP	Redstone Arsenal, AL	Jan 08	May 08	500	3.8	Yes		Oct 05
	FY 2009	TBS TBS	C/FP	TBS	Jan 09	May 09	500	3.8	Yes		
Acft Wire	eless Intercom Sys (AWIS)										
•	FY 2007	Telephonics Farmingdale, NY	C/FP	Redstone Arsenal, AL	Jun 07	Oct 07	180	1.4	Yes		Sep 05
•	FY 2008	Telephonics Farmingdale, NY	C/FP	Redstone Arsenal, AL	Jun 08	Oct 08	78	3.9	Yes		Sep 05
ı	FY 2009	Telephonics Farmingdale, NY	C/FP	Redstone Arsenal, AL	Jun 09	Oct 09	45	1.4	Yes		Sep 05
AWIS A	Kits										
•	FY 2007	Westwind Corporation Huntsville, AL	C/FP	Rock Island, IL	Apr 07	Aug 07	60	7.9	Yes		
	FY 2008	Westwind Corporation Huntsville, AL	C/FP	Rock Island, IL	Apr 08	Aug 08	24	7.9	Yes		
•	FY 2009	TBS TBS	C/FP	TBS	Apr 09	Aug 09	15	7.9	Yes		
CABS A 1	Kits										
1	FY 2008	TBS TBS	C/FP	Redstone Arsenal, AL	Jun 08	Oct 08	40	6.0	No		
CABS B I	Kits										
	FY 2008	TBS TBS	C/FP	Redstone Arsenal, AL	Aug 08	Dec 08	40	25.0	No		
CABS B-	Kit Retrofit										
•	FY 2007	Simula, Inc. Phoenix, AZ	SS/FFP	Ft. Eustis, VA	Mar 08	Apr 08	196	3.2	No		
•	FY 2008	Simula, Inc. Phoenix, AZ	SS/FFP	Ft. Eustis, VA	May 08	Jun 08	50	3.2	No		
PRSE Pla	tform Modifications										
•	FY 2007	TBS TBS	SS/FFP	Redstone Arsenal, AL	Aug 07	Dec 07	4	437.5	No		
•	FY 2009	TBS	SS/FFP	Redstone Arsenal, AL	Mar 09	Mar 10	2	792.5	No		

AZ3110 AIRCREW INTEGRATED SYSTEMS Item No. 30 Page 6 of 15 200 Exhibit P-5a Exhibit P-5a, Budget Procurement History and Planning

Exhibit P-5a, Budget Procurement	Histor	y and Planning							Oate: Sebruary	2008	
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army/ 4/ Support equipment and facilitie	J	P-1 Line Item AIRCREW IN	Nomenclature: TEGRATED SYSTEMS (AZ3	3110)							
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?	Revsn	RFP Issue Date
	TBS										

- REMARKS: 1. Unit cost of Air Warrior Block 1 Ensembles is determined by the mix of items that make up a complete ensemble.

 2. The unit cost of Air Warrior A Kits varies by airframe. The mix of A Kits procured will effect the unit cost in that year.

 3. The unit cost of Aircraft Wireless Intercom System (AWIS) combines a mixture of unencrypted and Low Rate Initial Production (LRIP) encrypted AWIS causing a variation in unit cost for FY2008.
- 4. Procurement of CABS A and B Kits will resume following sensor engineering changes.
- 5. TBS stands for To Be Selected.
- 6. The unit prices of PRSE aircraft MOD Kits varies by Fiscal Year due to the uniqueness of the various kits to be applied to the platform aircraft.

		FY	7 07 /	08 BU	DGET	PR(ODUC	CTIO	N SCI	HEDU	LE			P-1 ITEN AIRCRE				EMS (A	AZ3110)				Dat	e:	Februa	ry 2008				
	CO	ST E	LEM	ENTS							Fiscal Y	Zear 07	7										Fiscal Y	Zear 08						
	00		DESIVE	LIVID	·																									
M				ACCEP PRIOR	BAL DUE									Calenda	r Year 0	7								Caler	ndar Ye	ar 08				
F R	FY		Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Air W	arrior B	lock 1 I	Ensemble	es	ļ ļ	<u> </u>	J	J	<u>I</u>	l L				I.			1	I		l l		<u> </u>					I			
1 F	Y 07 A		5901	0	5901			A		492	492	492	49	2 492	492	492	492	492	492	492	489									0
1 F	Y 08 A		7200	0	7200															A		600	600	600	600	600	600	600	600	2400
1 FY 09 A 1939 0 1939																													1939	
Air Warrior A Kits																														
2 F	2 FY 07 A 400 0 400 A 33 33 2 FY 08 A 62 0 62 62 62													33	33	33	33	33	33	34	34	34	34							0
2 F	2 FY 08 A 62 0 62																			A				31	31					0
2 F																														366
Air W	Air Warrior Microclimate Cooling Garment																													
5 F	Air Warrior Microclimate Cooling Garment 5 FY 07 A 1500 0 1500 A 125 125 12 125 1														125	125	125	125	125	125	125	125								0
5 F	5 FY 08 A 5002 0 5002 5 FY 09 A 2501 0 2501																		A				416	416	417	417	417	417	417	2085
5 FY 09 A 2501 0 2501																													2501	
Air W	FY 09 A 2501 0 2501																													
Air Warrior Microclimate Cooling Units 3 FY 07 A 1745 0 1745 A 145 145 145 3 FY 08 A 1001 0 1001													5 145	145	145	145	146	146	146	146	146								0	
3 FY 07 A 1745 0 1745 A 145 145 145 3 FY 08 A 1001 0 1001 3 FY 09 A 1278 0 1278																			A			83	83	83	83	83	83	83	420	
3 F	3 FY 09 A 1278 0 1278																													1278
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M]	PRODU	CTION	RATES						Α	DMIN L	EAD T	IME	1	MFR		TOTA	AL	REMA	RKS				
F											Reacl	_	IFR			Pric	or 1 Oct	+	r 1 Oct	Afte	er 1 Oct		After 1	Oct						
R				- Locati	on			MIN	1-8-5	MAX	D-	-	—	itial			6		4		4		8							
	Simula, I							1000	4000	8000				eorder			0	+	2		3		5		_					
-								190	600	1000			_	itial			5		4		4		8		_					
h	3 Carleton Technologies, Inc., Orchard Park, NY 150 2000 4000													eorder			0	-	3		3		6							
-					ianapolis,	IN		25	600	1200	1	_	_	itial			4		2		4		6		1					
-	Med Eng			ırg, NY				150	2000	5100	1	_		eorder			0	-	2		4		6							
6 .	IVYS, H	untsvill	e, AL					200	600	1000	1		_	itial			0		5		4		9							
											1	_	-+	eorder			0	+	2		4		6							
											1			itial			0		8		1		9							
													R	eorder			0		2		4		6							

		F	Y 07 /	08 BU	DGET	PRO)DU(CTIO	N SCI	HEDU.	LE			P-1 ITE AIRCRE				EMS (A	AZ3110)				Dat	e:	Februa	ry 2008				
	CC	ST I	ELEM	ENTS]	Fiscal Y	Year 0	7										Fiscal Y	ear 08						
H	1	S	PROC	ACCEP	BAL				I					Calenda	3 7 (\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				I				G 1	ndar Ye	00				
M		E		PRIOR	DUE	1		1			1		ı	Calenda	ır Year ()/		ı				1		Caler	ndar re	аг оо				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Elec	tronic D	ata Mgi	r (EDM)						ı	L			1		ı	ı		L			L									
4	FY 07	A	923	0	923			A				76	5	77 77	77	77	77	77	77	77	77	77	77							0
4	FY 08	A	500	0	500															A				42	42	42	42	42	42	248
4	4 FY 09 A 500 0 500																												500	
EDN	EDM A Kits																													
6	6 FY 07 A 860 0 860 A 71 6 FY 08 A 500 0 500												71 71	71	71	72	72	72	72	72	72	72	72						0	
6	6 FY 08 A 500 0 500																				A				42	42	42	42	42	290
6																													500	
Acft	Acft Wireless Intercom Sys (AWIS)																													
7	V 7 - V 1 -																	15	15	15	15	15	15	15	15	15	15	15	15	0
7	FY 08	A	78	0	78																					A				78
7	7 FY 09 A 45 0 45																													45
<u> </u>	FY 09 A 45 0 45 WIS A Kits FY 07 A 60 0 60 A FY 08 A 24 0 24																									•				
\vdash		A		0								A				5	5	5	5	5	5	5	5	5	5	5	5			0
2	FY 08	A		0	1																			A				6	6	12
2	FY 09	A	15	0	15																									15
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
	1							DD OD I	CTT CAL	D. A. MERG			1			<u> </u>	D) M) I	E.D.	D. 65		· · · ·		тот		DED 64	DVC				
M F							-	PRODU	CTION	KATES	Reac	1 1 N	IFR				DMIN L		r 1 Oct	-	MFR er 1 Oct		TOTA		REMA	IKKS				
R			Name	- Locati	on		Ι,	MIN	1-8-5	MAX	D-	_		nitial		Pno	6	+	4	AII	4		After 1	Oct						
1	Simula,	Inc., P	hoenix, Az		OII			1000	4000	8000		'	_	Reorder			0		2		3		5		_					
2	Westwi	nd Corp	poration, I	Huntsville	e, AL			190	600	1000			2 I	nitial			5		4		4		8							
3	Carleto	n Techr	nologies, I	nc., Orch	ard Park,	NY		150	2000	4000			F	Reorder			0		3		3		6							
4			nical Serv					25	600	1200	İ		3 I	nitial			4		2		4		6		1					
5	Med En	g, Inc,	Ogdensbu	rg, NY				150	2000	5100			F	Reorder			0		2		4		6		1					
6	JVYS, I	Huntsvi	lle, AL					200	600	1000			4 I	nitial			0		5		4		9		1					
													F	Reorder			0		2		4		6		1					
													5 I	nitial			0		8		1		9		1					
													F	Reorder			0		2		4		6							

		F	Y 07 /	08 BU	DGET	PRO	DDU	CTIO	N SCI	HEDU:	LE			P-1 ITEN			TURE ED SYST	EMS (A	AZ3110)				Dat	te:	Februa	rv 2008				
	CC	CT I	T FM	IENTS							Fiscal Y	Year 0'	7										Fiscal Y	Year 08						
	CO	011	ואומורומ		•																									
М		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year ()7								Calen	dar Ye	ar 08				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	. U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Porta	ble Oxy	gen Sys	stem			1		1 0	.,		K	I.		1,	L	G		-	'		-11		K	K		-11	L	Ü	.	
	Y 07		1043	0	1043																		A				86	87	87	783
Hydı	ation Sy	stem					ı		ı	l l					ı	1	1						ı				l l			
8 I	Y 07	A	2000	0	2000																		A				166	166	166	1502
Go E																														
22 F	22 FY 07 A 1500 0 1500 CABS A Kits																					A				125	125	125	1125	
	ABS A Kits																													
22 I																									A				40	
CAB	ABS B Kits																													
22 F																												A		40
CAB	S B-Kit	Retrofi	t						4							-							4							
		A	196	0	196																		A	20	20	20	20	20	20	76
1 F	Y 08	A	50	0	50																				A	20	20	10		0
PRS	SE Platform Modifications FY 07 A 4 0 4 A																													
8 F	SE Platform Modifications FY 07 A 4 0 4															A				4										0
8 I	Y 09	A	2	0	2																									2
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	. U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
																				1					ı					
M								PRODU	ICTION :	RATES							ADMIN L			l	MFR		TOTA		REMA	RKS				
F											Reac	_	1FR			Pri	or 1 Oct	+	r 1 Oct	Aft	ter 1 Oct		After 1	Oct						
R				e - Locati	on			MIN	1-8-5	MAX	D-	+	-	Initial			6	+	4		4		8							
1			noenix, A					1000	4000	8000				Reorder			0	+	2		3		5							
				Huntsvill				190	600	1000			-	Initial			5	+	4		4		8							
					nard Park,		_	150	2000	4000	+-	_		Reorder		_	0		3		3	-	6							
_					lianapolis,	IN	_	25	600	1200	+-		-	Initial		_	4		2		4	-	6							
_				urg, NY			_	150	2000	5100	-		-	Reorder			0		2		4	\perp	6							
6	JVYS, I	luntsvi	iie, AL					200	600	1000	 		-	[nitial			0	1	5		4		9							
\vdash											╂—		-	Reorder			0	+	2		4	-	6							
$\vdash \vdash$							_				╂—		-	[nitial			0	-	8		1	\perp	9							
]	Reorder			0		2		4		6							

																							-							
		F	Y 07 /	08 BU	DGE	r PR(ODUC	CTIO	N SCI	HEDU	LE				M NOME EW INTE			TEMS (A	AZ3110))			Dat	e:	Februa	ry 2008				
	C	OST I	ELEN	IENTS							Fiscal Y	ear 07	,	•									Fiscal Y	Zear 08						
				1	1				ı																					
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	ır Year 0	7								Caler	ıdar Ye	ar 08				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
						-	<u> </u>						<u> </u>	- 11		-	1	-	,		-11	ь	K	- 1	1					
			<u> </u>																							<u> </u>		<u> </u>	<u> </u>	
_		$\vdash \vdash \vdash$											₩															 	$\vdash \vdash \vdash$	
		<u> </u>											<u> </u>													<u> </u>		<u> </u>	<u> </u>	
		$\vdash\vdash$											₩																$\vdash \vdash \vdash$	
		$\vdash \vdash$											-		1													$\vdash \vdash$	$\vdash \vdash$	
																										1				
Γot	al		37955		37955					492	762	871	943	943	943	948	949	965	965	970	963	1074	1302	1284	1255	1244	1621	1613	1603	16245
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
M								PRODU	CTION	RATES						А	DMIN L	EAD T	IME		MFR		TOTA	AL	REMA	RKS				
F												ied M				Prio	or 1 Oct	_	r 1 Oct	Aft	er 1 Oct		After 1	Oct						
R	~			ne - Locati	on			MIN	1-8-5	MAX	D+		_	nitial			6		4		4		8							
1			Phoenix, A		a AT			1000	4000 600	8000 1000		+	_	Reorder			0	+	2		3		5							
3				Huntsvill Inc., Orch		NY		150	2000	4000	+	- -	-	nitial Reorder			5		3		3		6		1					
				rvices, Ind				25	600	1200	+	+		nitial			4		2		4		6		-					
5			Ogdensb		- T			150	2000	5100	1	7	_	Reorder			0	_	2		4		6		1					
6			ille, AL					200	600	1000		1	4 I	nitial			0		5		4		9		1					
													F	Reorder			0		2		4		6							
													5 I	nitial			0		8		1		9	-						
										1		- 1	F	Peorder .		1	0	1	2	1	4		6							

														•									1							
		F	Y 09 /	10 BU	DGET	PRO	DUC	TION	N SCI	HEDU	LE			P-1 ITEN AIRCRE				EMS (A	AZ3110))			Da	te:	Februa	ry 2008	;			
	C	OST 1	ELEM	ENTS							Fiscal '	Year 09)										Fiscal Y	Year 10)					
L,			1																											
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year (9								Cale	ndar Ye	ar 10				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Air	Warrior	Block 1	Ensembl	es									1		ı										ı		1	ı		
1	FY 07	A	5901	5901																										0
1	1 FY 08 A 7200 4800 2400 600 600 600 600 1 1 FY 09 A 1939 0 1939 A 168 161 161 161																													0
1	1 FY 09 A 1939 0 1939 A 168 161 161 161													1 161	161	161	161	161	161	161	161									0
Air Warrior A Kits 2 FY 07 A 400 400 1939 A 168 161 161 161																														
Air Warrior A Kits 2 FY 07 A 400 400 2 FY 08 A 62 62 2 FY 09 A 366 0 366 A 30 30																											0			
2	2 FY 07 A 400 400 2 FY 08 A 62 62 2 FY 09 A 366 0 366 A 30 30																													0
2	2 FY 09 A 366 0 366 A 30 30													0 30	30	30	30	31	31	31	31	31	31							0
Air																						•								
5	2 FY 09 A 366 0 366 A 30 30 33 Air Warrior Microclimate Cooling Garment 5 FY 07 A 1500 1500 A B <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td>																													0
5	Air Warrior Microclimate Cooling Garment 5 FY 07 A 1500 1500 Image: Cooling Garment of the cooling Garment of th																													0
5 FY 08 A 5002 2917 2085 417 417 417 417 417 5 FY 09 A 2501 0 2501 A 213 208 208													8 208	208	208	208	208	208	208	208	208								0	
_	5 FY 08 A 5002 2917 2085 417 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td>																							1	1					
Air Warrior Microclimate Cooling Units 3 FY 07 A 1745 1745 3 FY 08 A 1001 581 420 84 84 84 84 84 84																												ļ	0	
-	Air Warrior Microclimate Cooling Units 3 FY 07 A 1745 1745 Image: Cooling Units of the Cooling Un																												<u> </u>	0
3	3 FY 07 A 1745 1745													6 106	106	106	107	107	107	107	107	107							<u> </u>	0
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
	,																			,										
M							I	PRODUC	CTION	RATES							DMIN I			4	MFR		TOT		REMA	RKS				
F											Reac		IFR			Pric	or 1 Oct		r 1 Oct	Afte	er 1 Oct		After 1							
R	G: 1	T D		e - Locati	on				1-8-5 4000	MAX	D-	+	-	itial			6		4		4		8							
1			hoenix, A		AY			000		8000		_		order			0		2		3		5							
2	_		poration, l			NIXZ		190 150	2000	1000			-	itial			5		4		4		8		-					
3	1		nologies, l					25	600	1200				order			0	_	3		3		6		-					
4	+		nnical Serv		ianapoiis,	IIN		150	2000	5100	-		_	itial			4		2		4		6		4					
5	+		Ogdensbu	ng, NY							-			eorder			0	_	5		4		6		4					
0	JV 15,	Huntsv	me, AL				+	200	300	1000		=	<u> </u>				0		2		4	-	6		-					
												-					0		8	-		-	9		-					
													_				0		2		4		6		1					
		Huntsville, AL 200 600 1000 4 Initial Reorder Initial Initial Reorder														U		4		4		0								

		F	Y 09 /	10 BU	DGET	PRO	ODUC	CTION	N SCI	HEDU	LE			P-1 ITEN AIRCRE				EMS (A	AZ3110))			Da	te:	Februa	ary 2008	;			
	CO	OST I	ELEM	IENTS	}						Fiscal '	Year 09)										Fiscal Y	Year 10)					
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year ()9								Cale	ndar Ye	ear 10				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
Ele	ctronic E	ata Mg	r (EDM)			-		-								_				-		_			1 -	1			_	l
	FY 07	A	923	923																										0
4	FY 08	A	500	252	248	42	42	41	41	41	41																			0
4	4 FY 09 A 500 0 500 A 41 41												1 41	41	42	42	42	42	42	42	42	42							0	
ED	EDM A Kits																								1		1		1	I
6	6 FY 07 A 860 860																											0		
6																														0
6	FY 09	A	500	0	500				Α				4	1 41	41	41	42	42	42	42	42	42	42	42	!					0
Act	ft Wirele	ss Intere	com Sys ((AWIS)																										
7	Acft Wireless Intercom Sys (AWIS) 7 FY 07 A 180 180																													0
7	FY 08	A	78	0	78	6	6	6	6	6	6	7		7 7	7	7	7													0
7	7 FY 08 A 78 0 78 6 6 6 6 6 6 7 7 7 FY 09 A 45 0 45												A				7	7	7	8	8	8							0	
ΑW																														
2	AWIS A Kits 2 FY 07 A 60 60 2 FY 08 A 24 12 12 6 6																												0	
2	2 FY 07 A 60 60																												0	
2	2 FY 09 A 15 0 15 A														15														0	
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
_	1						1 -				ı					1 .				1 .					T					
M								PRODUC	CTION I	RATES	_						DMIN L	1		4	MFR		TOT		REMA	ARKS				
F			N	τ				ans.	105	34437	Reac		FR			Pric	or 1 Oct	-	r 1 Oct	Aft	er 1 Oct	_	After 1							
R 1		T T		ne - Locati	on			MIN 000	1-8-5 4000	MAX 8000	D-	+	-	itial			6	+	4		4	_	8		4					
2			hoenix, A		a AT			190	600	1000				eorder			0	+	2		3		5							
_					-	NIX				4000			-	itial			5	1	4		4	_	8							
-	3 Carleton Technologies, Inc., Orchard Park, NY 150 2000													eorder			0		2		3		6		-					
5			Ogdensb		nanapons,	IIN		150	2000	1200 5100			<u> </u>	itial eorder			0		2		4		6		4					
6	_		ille, AL	uig, in f				200	600	1000				eorder itial			0		5		4	-	9		4					
0	JV 15,	THUIRSV	me, AL					200	000	1000		=	<u> </u>				0		2		4	+	6		4					
-	1																0	+	8		1	+	9		-					
-								+					-				0	-	2		4	-+	6		+					
		Reorder														U		۷		4		О								

Ī		F	Y 09 /	10 BU	DGET	PRO	DUC	TION	SCH	IEDU:	LE			P-1 ITEN AIRCRE			TURE ED SYST	EMS (A	AZ3110)				Dat	te:	Februa	ry 2008				
	C	TP	FI FM	ENTS]	Fiscal Y	ear 09											Fiscal Y	Year 10						
	C	<i>,</i>		ILITIO																										
М		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year ()9								Cale	ndar Ye	ar 10				
F	FY	R	Units	TO	AS OF	O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	
R		V		1 OCT	1 OCT	T	v	C	N N	В	R	R	Y	N	L	G	P	T	v	C	N N	В	R	R	Y	N	L	G	P	Later
_	table Ox	gen Sy														1			1		1		1	1	1	1			1	1
_		A	1043	260	783	87	87	87	87	87	87	87	87	87																0
_	dration S	ystem														1			1		1		1	1	1	1			1	
8 FY 07 A 2000 498 1502 166 167 <td>167</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td>												167																0		
											1	1	ı	1 1		1 1		1 1		ı	ı	1	ı	1	1	ı	1			
											125																0			
CABS A Kits 22 FY 08 A 40 0 40 10 10 10 10 10													1	1	ı	1 1		1 1		1 1		ı	ı	1	ı	1	1	ı	1	
22 FY 08 A 40 0 40 10 10 10 10 10																												0		
_	CABS B Kits														1		1 1								I			1		ı
-																														0
-	CABS B-Kit Retrofit 1 FY 07 A 196 120 76 20 20 20 16														1	1					1		1	1	1	1	1	1	1	
						20	20	20	16																					0
1 FY 08 A 50 50																													0	
<u> </u>	PRSE Platform Modifications 8 FY 07 A 4 4 4														1		1 1								ı					I -
\mathbf{H}			4																				_							0
8	8 FY 09 A 2 0 2 A A A A A A A A A A A A A A A A														_						-	-	2						-	0
	9 1 2 9 7 1 2													U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
	1										1		-																	1
M							P	RODUC	TION R	RATES							ADMIN L			4	MFR		TOTA		REMA	RKS				
F											Reach					Pri	or 1 Oct	+	r 1 Oct	Aft	ter 1 Oct		After 1	Oct						
R	~ .			e - Locati	on		_		1-8-5	MAX	D+	1					6	+	4		4		8							
1			hoenix, A						4000	8000			_	order			0	+	2		3		5							
2	+			Huntsville		NIX		90	600	1000		2					5	+	4		4		8		-					
3					ard Park,		_		2000	4000				order			0		3		3		6		4					
4	_				ianapolis,	IIN		50	600 2000	1200 5100		3					4		2		4		6		-					
5	+		Ogdensbi	urg, NY				00		1000				order			0		2		4		6		-					
6	JVYS,	Huntsvi	ille, AL				2	UU	600	1000		4					0	1	5		4		9		-					
	-						-	-				-		order			0	+	2		4		6		-					
-	-						-	-				5					0	-	8	1	1		9		-					
													Re	order			0		2		4		6							

		F	Y 09 /	10 BU	DGE	r PRC	ODUC	CTIO	N SCI	HEDU	JLE			P-1 ITEN				TEMS (AZ3110))			Dat	te:	Februa	ry 2008				
	C	OST I	ELEM	IENTS							Fiscal Y	Zear 09)	u .									Fiscal Y	Year 10						
M		S E	PROC QTY	ACCEP PRIOR	BAL DUE									Calenda	r Year 0	9								Cale	ndar Ye	ar 10				
F R	FY	R V	Units	TO 1 OCT	AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	A U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	Later
		 	 																											
-		$\vdash \vdash \vdash$	\vdash							\vdash																				
-																														
_																														
_																														
			<u> </u>					<u> </u>		igsqcut																				
Γot	al		37955	21710	16245		1606	1609	1604	1146	957	973	97	_	594	610	597	598	598	598	599	438	125	42				<u> </u>		
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	A Y		J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
							1													ı										
M								PRODU	CTION	RATES							DMIN L				MFR		TOTA		REMA	RKS				
F R			Non	e - Locati	on.			MIN	1-8-5	MAX		hed M	-+	T., 141 - 1		Pric	or 1 Oct	Afte	er 1 Oct	Aft	ter 1 Oct		After 1		-					
	Simula	Inc. P	hoenix, A		011			1000	4000	8000	_	_	-	Initial Reorder			0	+	2		3		5		1					
2				Huntsville	e. AL			190	600	1000	_		-+	Initial			5		4		4		8		1					
3				Inc., Orch		NY		150	2000	4000	_			Reorder			0	1	3		3		6							
4				vices, Ind				25	600	1200		:	-+	Initial			4	1	2		4		6		1					
5	Med E	ng, Inc,	Ogdensb	urg, NY				150	2000	5100]	Reorder			0		2		4		6							
6	JVYS,	Huntsvi	ille, AL					200	600	1000		-	4	Initial	•		0		5		4		9	•						
										<u> </u>				Reorder			0	1	2		4		6		_					
										₩			-	Initial			0	1	8		1		9		-					
												ı	1.	Reorder			0		2		4		6							

Exhibit P-40, Budget Item	Justification	Sheet					I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Sup.		ilities		P	-1 Item Nomencla	ature FIC CONTROL (AA	.0050)		2000	
Program Elements for Code B Items:		Code:	Other	Related Progra 0604633A/586	m Elements: Air Traffic Control					
	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty										
Gross Cost	487.5	103.8	103.	9 122	8 78.4	85.2	85.0	87.9		1154.5
Less PY Adv Proc										
Plus CY Adv Proc										
Net Proc P1	487.5	103.8	103.	9 122	8 78.4	85.2	85.0	87.9		1154.5
Initial Spares										
Total Proc Cost	487.5	103.8	103.	9 122	8 78.4	85.2	85.0	87.9		1154.5
Flyaway U/C										
Weapon System Proc U/C										

Tactical Air Traffic Control (ATC) equipment includes Air Traffic Navigation Integration and Coordination System (ATNAVICS), Tactical Airspace Integration System (TAIS), TAIS Airspace Workstation (AWS), 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. TAIS is a highly mobile, airspace synchronization and deconfliction system providing Army Airspace Command and Control (A2C2) and Air Traffic Services (ATS) capabilities at the Combat Aviation Brigade, Division and Corps. TAIS AWS provides for A2C2 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 A2C2 and ATS capability for current requirements and Battle Command migration. ATNAVICS and TAIS serve as effective risk management tools for aviation safety during night, inclement weather, and combat operations. 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). 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 new systems include Department of Defense (DoD) Advanced Automation System (DAAS), Digital Airport Surveillance Radar (DASR), Instrument Landing System (ILS), and Navigational Aids (NAVAIDS). Fixed Base Precision Approach Radar (FBPAR) will be the Army's prima

Justification:

FY09 procures tactical and fixed base ATC systems. Funds for tactical ATC systems provide for production of TAIS, TAIS AWS, ATNAVICS, and modification of TTCS. These tactical ATC systems replace previous generation equipment that is obsolete and not economically supportable, ensuring Army ATC and airspace command and control systems are capable of supporting the path ahead to the Future Force. Fixed base ATC systems (DAAS, DASR, ILS, NAVAIDS, FBPAR) provide the Army a joint service capability required for the DoD/FAA modernization and upgrade of the NAS. 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 interoperability between the Army and FAA systems.

1. FY2007 funding total includes \$14.2 million received in GWOT supplemental.

Exhibit P-40, Budget Item Justific	cation Sheet			Date: February 2008
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 4 / Support equipm	ent and facilities		P-1 Item Nomenclature AIR TRAFFIC CONTROL (AA0050)	
Program Elements for Code B Items:	Code:	Other Related Progr 0604633A/5	ram Elements: 86 Air Traffic Control	
 FY2008 funding total includes \$6.2 million re FY2008 funding totals do not include \$7.8 million 	eceived in the Consolida	ted Appropriations Act, 20 ed for current FY2008 GW	08 (P.L. 110-161). OT requirements.	

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support ed facilities	quipmer			omenclature: CONTROL (AA00	950)		Weapon System	m Type:	Date:	February 2008
ACFT		ID		FY 07			FY 08			FY 09	
Cost Elemen	ts	CD	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			12599						592	2	
Voice Communication Switching Syst(VCSS)			835								
DoD Advanced Automation System (DAAS)			13011			10052			975	0	
Digital Airport Surveillance Radar(DASR)			14397			12598			1545	2	
Tactical Airspace Integration Sys (TAIS)			24363			32321			3834	4	
Air Traffic Navigation and Integration			27892			32144			3625	2	
TAIS Airspace Workstation (AWS)			2484			1678			38	4	
ILS/NAVAIDS			2150			4009			1155	4	
TTCS Upgrades			6038			11136			511	7	
Total:			103769			103938			12277	5	

Exhibit P-40, Budget Item	Justification	Sheet						I	Date:	February 2008	
Appropriation / Budget Activity / Seria Aircraft Procurement, Army / 4 / Sup	al No: port equipment and fac	cilities			P-1	Item Nomencla	ature AL FACILITIES (A	Z3300)		1 cordary 2000	
Program Elements for Code B Items:		Code:	Othe	er Related Pro	gram	Elements:					
	Prior Years	FY 2007	FY 2008	FY 200)9	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog
Proc Qty											
Gross Cost	409.9	2.1		2.4	2.5	1.6	1.6	1.6	1.7		423.4
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc P1	409.9	2.1	,	2.4	2.5	1.6	1.6	1.6	1.7		423.4
Initial Spares											
Total Proc Cost	409.9	2.1		2.4	2.5	1.6	1.6	1.6	1.7		423.4
Flyaway U/C											
Weapon System Proc U/C											

This program provides funding to the 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:

For ATEC, FY 2009 procures various types of airborne instrumentation including analog and inertial sensors, GPS receivers, signal conditioning units, data acquisition equipment and cockpit display components; upgrades to engineering PC based workstations for presentation and reporting; procures on-aircraft data recorders that can record data from multiple aircraft data busses, several video sources and multiple telemetry data streams; replaces obsolete servers, storage systems and other LAN equipment and provides life cycle replacement/upgrade of LAN network components used for data transmission that will allow test directors to more easily access, store, plot, and analyze test data; procures calibration and support equipment for flight test instrumentation; and replaces aged equipment used to perform in-flight airborne icing tests. At YPG, FY 2009 installs down link transmit antennae on top of the hanger(s) with coaxial cables long enough to connect to the aircraft transmitters, so that preflight check out of the entire data/video handling system can be performed with the aircraft still inside the hanger, allowing a thorough check out of the airborne instrumentation system and links to Mission Control prior to the test vehicle being moved to the flight line; replaces and upgrades aircraft instrumentation hardware for the time-stamping of on-board recording and telemetering of standard 1553 multiples bus, analog video from sensors, intercom (voice), and analog sensors, and procures on-board recorders and telemetry equipment that can meet the environment and data speeds needed for production base aviation programs; upgrades Kineto Tracking Mounts (optical tracking equipment) used for trajectory estimates for aircraft fired munitions in the evaluation, integration and fault isolation of aircraft weapons systems, allows remote control of mounts for safety during tests with live munitions; and procures a suite of on-board instrumentation to support testing of the AH-64D Apache helicopter.

Exhibit P-40, Budget Item Justification Sheet										Date: February 2008			
Appropriation / Budget Activity / Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities						P-1 Item Nomenclature LAUNCHER, 2.75 ROCKET (A50100)							
Program Elements for Code B Items:	Code:	Code: Other Related Prog			gram Elements:								
	Prior Years	FY 2007	FY 2008	FY 2009)	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog		
Proc Qty													
Gross Cost	66.4	2.3	,	2.4	2.4	2.8	3.0	3.0	3.3		85.5		
Less PY Adv Proc													
Plus CY Adv Proc													
Net Proc P1	66.4	2.3	,	2.4	2.4	2.8	3.0	3.0	3.3		85.5		
Initial Spares													
Total Proc Cost	66.4	2.3	,	2.4	2.4	2.8	3.0	3.0	3.3		85.5		
Flyaway U/C													
Weapon System Proc U/C													

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 as many as 32 rocket firings 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:

FY09 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: February 2008			
Appropriation / Budget Activity / Seri Aircraft Procurement, Army / 4 / Sup	P-1	P-1 Item Nomenclature AIRBORNE COMMUNICATIONS (AA0705)									
Program Elements for Code B Items:		Code: Other Related Prog			gram Elements:						
	Prior Years	FY 2007	FY 200	08 FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Prog	
Proc Qty											
Gross Cost	383.5			0.1	0.1					383.7	
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc P1	383.5			0.1	0.1					383.7	
Initial Spares											
Total Proc Cost	383.5			0.1	0.1					383.7	
Flyaway U/C											
Weapon System Proc U/C											

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/VRC-100 provides a position reporting and data capability enhancing situational awareness and command and control.

Justification:

FY09 Procures two AN/ARC-220/VRC-100 Ground Radios in support of Grow the Army Initiative.