TOC

Exhibit P1

Exhibit P1M

DEPARTMENT OF THE ARMY

Procurement Programs

Committee Staff Procurement Backup Book
FY 2005 Budget Request

AIRCRAFT PROCUREMENT, ARMY

APPROPRIATION

February 2004

Table of Contents - Aircraft Procurement, Army

Table of Contents - Aircraft Procurement, Army

DEPARTMENT OF THE ARMY

FY 2005 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2005

EXHIBIT P-1
DATE: 15-Jan-2004 9:59

TABLE OF CONTENTS

DEPARTMENT OF THE ARMY

FY 2005 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2005

EXHIBIT P-1
DATE: 15-Jan-2004 10:00

APPROPRIATION SUMMARY

DOLLARS IN THOUSANDS

APPROPRIATION	FY 2003	FY 2004	FY 2005	PAGE
Aircraft Procurement, Army	2,540,874	2,137,051	1,830,580	**3**
TOTAL PROCUREMENT PROGRAM	**2,540,874**	**2,137,051**	**1,830,580**	

DEPARTMENT OF THE ARMY

FY 2005 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2005

EXHIBIT P-1
DATE: 15-Jan-2004 10:00

APPROPRIATION Aircraft Procurement, Army

DOLLARS IN THOUSANDS

	ACTIVITY	**FY 2003**	**FY 2004**	**FY 2005**	**PAGE**
01	Aircraft	316,088	297,377	148,394	**4**
02	Modification of aircraft	2,050,666	1,545,813	1,429,652	**5**
03	Spares and repair parts	3,911	11,215	10,857	**7**
04	Support equipment and facilities	170,209	282,646	241,677	**8**
	APPROPRIATION TOTALS	**2,540,874**	**2,137,051**	**1,830,580**	

DEPARTMENT OF THE ARMY

EXHIBIT P-1

FY 2005 PROCUREMENT PROGRAM (WORKSETS INCLUDED)

DATE: 15-Jan-2004 10:00

President's Budget 2005

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2003 QTY	FY 2003 COST	FY 2004 QTY	FY 2004 COST	FY 2005 QTY	FY 2005 COST
	FIXED WING							
1	UTILITY F/W AIRCRAFT (A11300)		1	8,240	2	42,681		11,967
	SUB-ACTIVITY TOTAL			*8,240*		*42,681*		*11,967*
	ROTARY							
2	COMANCHE (A08300)			8,000				11,967
3	UH-60 BLACKHAWK (MYP) (AA0005)		19	(286,533)	17	(249,654)	8	(113,982)
	Less: Advance Procurement (PY)			(-23,125)		(-22,890)		(-19,719)
				263,408		226,764		94,263
4	UH-60 BLACKHAWK (MYP) (AA0005) Advance Procurement (CY)			26,665		27,932		30,197
5	HELICOPTER NEW TRAINING (A06500)		6	9,775				
	SUB-ACTIVITY TOTAL			*307,848*		*254,696*		*136,427*
	ACTIVITY TOTAL			**316,088**		**297,377**		**148,394**

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2003 QTY	FY 2003 COST	FY 2004 QTY	FY 2004 COST	FY 2005 QTY	FY 2005 COST
	MODIFICATIONS OF AIRCRAFT							
6	GUARDRAIL MODS (TIARA) (AZ2000)			13,987		3,152		2,195
7	ARL MODS (TIARA) (AZ2050)	A		20,518		5,665		
8	AH-64 MODS (AA6605)	A		125,883		64,993		37,201
9	CH-47 CARGO HELICOPTER MODS (AA0252)			(720,734)		(511,048)		(539,203)
	Less: Advance Procurement (PY)			(-13,917)		(-21,185)		(-20,363)
				706,817		489,863		518,840
10	CH-47 CARGO HELICOPTER MODS (AA0252) Advance Procurement (CY)			21,185		20,363		23,832
11	UTILITY/CARGO AIRPLANE MODS (AA0270)			16,434		10,370		10,093
12	OH-58 MODS (AA0400)			199		473		
13	AIRCRAFT LONG RANGE MODS (AA0560)			1,128		756		754
14	LONGBOW (AA6670)			(884,897)		(795,257)		(568,904)
	Less: Advance Procurement (PY)			(-32,048)		(-46,143)		(-14,099)
				852,849		749,114		554,805
15	LONGBOW (AA6670) Advance Procurement (CY)			46,143		14,099		
16	UH-60 MODS (AA0480)			(47,370)		(22,725)		(145,176)
	Less: Advance Procurement (PY)							(-13,500)
				47,370		22,725		131,676
17	UH-60 MODS (AA0480) Advance Procurement (CY)					13,500		6,130
18	KIOWA WARRIOR (AZ2200)			41,257		50,871		33,776
19	AIRBORNE AVIONICS (AA0700)			90,876		74,052		49,091
20	GATM Rollup (AA0711)	A		66,020		23,925		61,259

DEPARTMENT OF THE ARMY

FY 2005 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2005

EXHIBIT P-1
DATE: 15-Jan-2004 10:00

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2003 QTY	FY 2003 COST	FY 2004 QTY	FY 2004 COST	FY 2005 QTY	FY 2005 COST
21	AIRBORNE DIGITIZATION (AA0702)					1,892		
	SUB-ACTIVITY TOTAL			*2,050,666*		*1,545,813*		*1,429,652*
	ACTIVITY TOTAL			**2,050,666**		**1,545,813**		**1,429,652**

DEPARTMENT OF THE ARMY

EXHIBIT P-1

FY 2005 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2005

DATE: 15-Jan-2004 10:00

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2003 QTY	FY 2003 COST	FY 2004 QTY	FY 2004 COST	FY 2005 QTY	FY 2005 COST
	SPARES AND REPAIR PARTS							
22	SPARE PARTS (AIR) (AA0950)			3,911		11,215		10,857
	SUB-ACTIVITY TOTAL			*3,911*		*11,215*		*10,857*
	ACTIVITY TOTAL			**3,911**		**11,215**		**10,857**

DEPARTMENT OF THE ARMY

EXHIBIT P-1

FY 2005 PROCUREMENT PROGRAM (WORKSETS INCLUDED)

DATE: 15-Jan-2004 10:00

President's Budget 2005

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2003 QTY	FY 2003 COST	FY 2004 QTY	FY 2004 COST	FY 2005 QTY	FY 2005 COST
	GROUND SUPPORT AVIONICS							
23	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)			3,078		17,250		7,319
24	ASE INFRARED CM (AZ3507)					75,151		79,226
	SUB-ACTIVITY TOTAL			*3,078*		*92,401*		*86,545*
	OTHER SUPPORT							
25	AIRBORNE COMMAND & CONTROL (AA0710)			11,284		28,928		26,603
26	AVIONICS SUPPORT EQUIPMENT (AZ3000)			11,300		24,357		5,140
27	COMMON GROUND EQUIPMENT (AZ3100)			19,257		16,474		21,933
28	AIRCREW INTEGRATED SYSTEMS (AZ3110)			14,956		32,848		28,609
29	AIR TRAFFIC CONTROL (AA0050)			63,292		59,518		59,449
30	INDUSTRIAL FACILITIES (AZ3300)			692		1,194		1,216
31	LAUNCHER, 2.75 ROCKET (A50100)			2,632		2,493		2,413
32	AIRBORNE COMMUNICATIONS (AA0705)			43,715		24,433		9,769
33	CLOSED ACCOUNT ADJUSTMENT (AZ9999)			3				
	SUB-ACTIVITY TOTAL			*167,131*		*190,245*		*155,132*
	ACTIVITY TOTAL			**170,209**		**282,646**		**241,677**
	APPROPRIATION TOTAL			**2,540,874**		**2,137,051**		**1,830,580**

NOMENCLATURE INDEX

SSN INDEX

Exhibit P-1M, Procurement Programs - Modification Summary

System/Modification	2002 & Prior	2003	2004	2005	2006	2007	2008	2009	To Complete	Total Program
GUARDRAIL MODS (TIARA) (AZ2000)										
SIGINT Transition Program (STP)	5.1									5.1
Interference Cancellation Sys/Radio Relay Sys	3.7	0.5								4.2
JTT Upgrades		1.1								1.1
Airborne Tactical Common Data Link		6.2	3.2	2.2						11.6
Guardian Eagle System 4 Upgrades		6.1								6.1
Total	**8.8**	**13.9**	**3.2**	**2.2**						**28.0**
ARL MODS (TIARA) (AZ2050)										
Aircraft Survivability Equipment (ASE)		5.7	5.7							11.4
Upgrade to DAMA Compliant Radio	5.9	1.8								7.7
Comint Upgrades	2.3	8.0								10.3
Aircraft Standardization		1.1								1.1
IMINT Digital Framing		3.2								3.2
Joint Tactical Terminal (JTT) Integration		0.7								0.7
Total	**8.2**	**20.5**	**5.7**							**34.4**
AH-64 MODS (AA6605)										
TADS/PNVS Upgrades	65.9	13.9	15.0	13.5	9.9					118.3
MISC Mods and R&S Mods $5M or less (no P3a set)	585.3	51.1	17.0	8.9	109.7	24.5	7.6	8.4		
National Guard Fielding/Transformation	4.1	5.3	9.1							18.5
Modernized TADS/PNVS (M-TADS)	9.0	14.8	21.1	14.2	29.6	101.4				257.4
Airframe Modifications (no P3a set)	69.6	1.4	2.7	0.6						35.5
TADS/PNVS Block Modifications (no P3a set)					3.3	7.8	9.6	11.0		
Combat Mission Simulator (CMS) (no P3a set)	20.0	30.0								40.0
701C Engines (no P3a set)		40.0								
Total	**753.9**	**156.6**	**65.0**	**37.2**	**152.6**	**133.6**	**84.3**	**19.4**		**469.7**
CH-47 CARGO HELICOPTER MODS (AA0252)										
Total Ownership Cost Reduction	2.9	1.7								

Exhibit P-1M, Procurement Programs - Modification Summary

System/Modification	2002 & Prior	2003	2004	2005	2006	2007	2008	2009	To Complete	Total Program
Improved Battery	2.8	0.4								
Engine Filtration System	4.4	8.0	7.6	6.5	6.8	1.3	0.2	0.2	1.6	36.6
Extended Range Fuel System	47.5	17.6	3.9							69.0
Engine Upgrade to T55-GA-714A Configuration	487.3	140.8	132.7	165.2	148.9	64.7				1145.3
APU Upgrade	10.5									
Installation of Modifications Kits Various	29.9	0.9	1.6	1.4						
CH-47D Flight Simulator Upgrade	5.4	5.0	10.2							20.6
CH-47F	148.5	200.2	321.5	325.7	396.5	399.1	474.3	506.7	3896.4	6669.0
Low Maintenance Rotor Hub		3.7	12.3	9.6	13.0	11.4	10.8	11.3		72.2
Engine Fire Extinguisher (Halon Replacement)				2.6	8.2	8.4	8.4	8.6	9.5	45.7
Aviation Combined Arms Tactical Trainer (AVCATT)					4.2	4.1				11.9
Crashworthy Crew Chief Seat	2.0	4.0	0.1							6.1
Aircraft Replenishment		324.5					0.0	275.0		
Ballistic Protection, Blade Fold Kits, SKOs				7.8	5.1	5.8	6.8	8.6		34.0
Total	**741.2**	**706.8**	**489.9**	**518.8**	**582.8**	**494.7**	**509.8**	**810.4**	**3907.5**	**8110.4**
CH-47 ICH (AA0254)										
Improved Cargo Helicopter	179.8	152.2	213.6	237.6	33.7				1541.2	527.6
Total	**179.8**	**152.2**	**213.6**	**237.6**	**33.7**				**1541.2**	**527.6**
LONGBOW APACHE MODS (AA6607)										
Longbow Apache Mods	3417.2	827.7	732.2	549.9	459.6	378.7	369.8	276.5	2193.2	9204.9
Total	**3417.2**	**827.7**	**732.2**	**549.9**	**459.6**	**378.7**	**369.8**	**276.5**	**2193.2**	**9204.9**
UH-60 BLACK HAWK MODS (AA0492)										
Crashworthy External Fuel System (CEFS)	25.0	13.1	12.0	14.2	19.7	18.9				102.9
HH-60L Medical Equip Package (MEP)	20.8	28.1	5.2	36.8						90.9
Adv Hel Transmission Lubricant (AHTL)		3.0	1.6	2.4						3.5

Exhibit P-1M, Procurement Programs - Modification Summary

System/Modification	2002 & Prior	2003	2004	2005	2006	2007	2008	2009	To Complete	Total Program
UH-60M/HH-60M RECAP/UPGRADE				71.8	87.7	198.5	589.5	617.4	11399.1	12964.0
Military District of Washington (MDW) MODs			4.8							4.8
Brigade Sets				7.7	13.6	10.8	12.8	10.8		55.7
Total	**45.8**	**44.2**	**23.6**	**132.9**	**121.0**	**228.2**	**602.3**	**628.2**	**11399.1**	**13221.8**
KIOWA WARRIOR (AZ2200)										
Safety Enhancement Program (SEP)	182.6	41.4	44.7	33.7	22.4	21.9	7.1	3.8	0.2	357.5
Safety Enhancement Program - Weight Reduction	6.4		4.2			20.1	13.6	11.4	24.7	80.5
Helmet-Mounted Optical Display			2.0							
Total	**189.0**	**41.4**	**50.9**	**33.7**	**22.4**	**42.0**	**20.7**	**15.2**	**24.9**	**438.1**
AIRBORNE AVIONICS (AA0700)										
Improved Data Modem (IDM)	157.1	57.0	34.8	23.3	20.0	36.7	57.4	32.6	869.1	1288.0
Aviation Mission Planning System (AMPS)	74.7	22.4	24.6	12.6	9.9	11.8	12.5	12.7	218.9	400.2
Embedded GPS Inertial Navigation System (EGI) P3I	22.5	4.3	1.9	2.0	1.5	1.7	1.3	11.5	234.2	280.9
DGNS (AN/ASN-128B) P3I	12.0	7.2	12.8	11.0	9.0	12.8	19.1	13.2	1.6	98.7
Joint Tactical Radio System (JTRS)					19.1	61.6	55.0	66.2	700.0	
Joint Precision Approach and Landing Sys (JPALS)									562.7	
Total	**266.3**	**91.0**	**74.1**	**48.9**	**59.5**	**124.6**	**145.3**	**136.2**	**2586.5**	**2067.7**
GATM - Fixed Wing Aircraft (AA0703)										
Global Air Traffic Management - FW	20.7	36.3		41.7	8.8	7.8	9.2	8.3		132.7
Blue Force Tracking (BFT)		8.2								4.1
Total	**20.7**	**44.5**		**41.7**	**8.8**	**7.8**	**9.2**	**8.3**		**136.8**
AIRBORNE DIGITIZATION (AA0702)										
Laser Detecting Set AN/AVR-2A(V)	30.6									25.3

Exhibit P-1M, Procurement Programs - Modification Summary

System/Modification	2002 & Prior	2003	2004	2005	2006	2007	2008	2009	To Complete	Total Program
Advanced Threat Infrared Countermeasures (ATIRCM)	20.2									20.2
Total	**50.9**									**45.6**
GATM (AA0701)										
Global Air Traffic Management - RW	6.0									6.0
Global Air Traffic Management - FW	13.8									7.4
Total	**19.9**									**13.4**
ASE MODS (ATIRCM) (AA0722)										
Advanced Threat Infrared Countermeasures	4.9									4.9
Total	**4.9**									**4.9**
Grand Total	**5706.4**	**2098.7**	**1658.1**	**1603.0**	**1440.5**	**1409.6**	**1741.5**	**1894.1**	**21652.3**	**34303.3**

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
UTILITY F/W AIRCRAFT (A11300)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	22	1	1	1	2	1			5	10		43
Gross Cost	117.4	7.5	44.8	8.2	42.7	12.0			46.8	93.8		373.3
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	117.4	7.5	44.8	8.2	42.7	12.0			46.8	93.8		373.3
Initial Spares												
Total Proc Cost	117.4	7.5	44.8	8.2	42.7	12.0			46.8	93.8		373.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The budget line covers the procurement of utility fixed wing aircraft. These aircraft are required to replace the aging fixed wing fleet that will meet the end of their service life within the current Extended Planning Program (EPP). Utility aircraft will be commercial-off-the-shelf, non-developmental, fixed wing aircraft systems. Furthermore, these aircraft are being fielded using the concept of Life Cycle Contractor Support. This system supports the Current to Future Force transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 05 funds will purchase a critically needed medium range aircraft. This aircraft will be used to support senior army leadership, providing transport for commanders, staff, and key personnel.

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 1 / Aircraft			P-1 Line Item Nomenclature: UTILITY F/W AIRCRAFT (A11300)			Weapon System Type:			Date: February 2004		
ACFT Cost Elements	ID CD				**FY 03**			**FY 04**			**FY 05**		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Units	$000	$000	Units	$000	$000	Units	$000	$000	Units	$000
C-37 Aircraft													
Hardware and Associated Support								34800	1	34800			
Air Force Program Management Fees								200					
C-37 Total								**35000**					
UC-35 Aircraft													
Hardware and Associated Support					8240	1	8240	7681	1	7681			
UC-35 Total					**8240**			**7681**					
Utility Aircraft													
Hardware and Associated Support											11967	1	11967
Utility Aircraft Total											**11967**		
Total					**8240**			**42681**			**11967**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
COMANCHE (A08300)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty								15	23	35	573	646
Gross Cost				8.0		12.0		1029.7	1504.4	1944.7		4498.8
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	289.1	224.1	248.8		762.1
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	289.1	224.1	248.8	334.6		1096.7
Net Proc (P-1)				8.0		12.0	289.1	964.7	1529.1	2030.5		4833.4
Initial Spares												
Total Proc Cost				8.0		12.0	289.1	964.7	1529.1	2030.5		4833.4
Flyaway U/C												
Wpn Sys Proc U/C								68.6	65.4	55.6		

Description:
The RAH-66 Comanche will be the Army's next generation Armed Reconnaissance aircraft system. Comanche will be the first fielded capability of the Future Combat System in the Future Force. It will provide the Army with Network Centric capability, both from a Joint and Combined Arms perspective. Comanche's technology will provide the Army with a system capable of operating in adverse weather conditions across a wide spectrum of threat environments. Comanche's innovative design will provide the Army with much lower operating costs through the use of integrated diagnostics and component functional partitioning, eliminating the requirement for Aviation Intermediate Maintenance. Comanche advanced airframe design incorporates composite airframe structures, bearingless main rotor system, and reduced signatures. The Comanche Mission Equipment Package will feature an open systems architecture integrating 2nd generation target acquisition and night vision sensors. Pilot workload from targeting to navigation is significantly reduced due to introduction of cognitive decision aiding and fully integrated weapon systems. The Comanche system supports the Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures material and components in support of initial Low Rate Initial Production (LRIP) resolving obsolescence issues associated with diminished manufacturing sources. These materials must be procured prior to Advance Procurement funds, FY06, in order to support the transition from Engineering and Manufacturing Development to LRIP.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
UH-60 BLACKHAWK (MYP) (AA0005)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	1531	18	12	19	17	8	28	24	10	7	14	1688
Gross Cost	8456.3	196.0	213.3	286.5	249.7	114.0	311.3	403.4	205.3	166.0	357.1	10958.9
Less PY Adv Proc	2371.6	16.6	31.9	23.1	22.9	19.7	45.8	36.5	25.1	21.9	43.2	2658.2
Plus CY Adv Proc	2388.1	31.9	26.8	26.7	27.9	30.2	36.5	25.1	21.9	20.5	22.6	2658.2
Net Proc (P-1)	8472.8	211.3	208.2	290.1	254.7	124.5	301.9	392.0	202.1	164.7	336.6	10958.9
Initial Spares	421.3											421.3
Total Proc Cost	8894.1	211.3	208.2	290.1	254.7	124.5	301.9	392.0	202.1	164.7	336.6	11380.2
Flyaway U/C		8.0	10.1	12.0	11.3	10.7	10.0	15.4	17.3	19.7		
Wpn Sys Proc U/C		10.9	17.8	15.1	14.7	14.2	11.1	16.8	20.5	23.7	25.5	

Description:
UH-60 BLACK HAWK and associated equipment. This system supports the Current-to-Future transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
UH-60 BLACK HAWK (MYP) (A05002)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	1528	18	12	19	17	8	28	24	10	7	14	1685
Gross Cost	8416.8	196.0	213.3	286.5	249.7	114.0	311.3	403.4	205.3	166.0	357.1	10919.4
Less PY Adv Proc	2371.6	16.6	31.9	23.1	22.9	19.7	45.8	36.5	25.1	21.9	43.2	2658.2
Plus CY Adv Proc	2388.1	31.9	26.8	26.7	27.9	30.2	36.5	25.1	21.9	20.5	22.6	2658.2
Net Proc (P-1)	8433.3	211.3	208.2	290.1	254.7	124.5	301.9	392.0	202.1	164.7	336.6	10919.4
Initial Spares	421.3											421.3
Total Proc Cost	8854.6	211.3	208.2	290.1	254.7	124.5	301.9	392.0	202.1	164.7	336.6	11340.7
Flyaway U/C		8.0	10.1	11.7	11.3	10.7	10.0	15.4	17.3	19.7		
Wpn Sys Proc U/C		10.9	17.8	15.1	14.7	14.2	11.1	16.8	20.5	23.7	25.5	

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

Justification:
FY 05 funds are required for the procurement of aircraft, continuation of fielding, and to provide for Program Management Office operations. The current multiservice, airframe multiyear contract began in FY 2002 and concludes in FY 2006.

Flyaway unit cost is for gross recurring Flyaway cost; Weapon System Procurement Unit Cost includes gross Weapon System cost plus Initial Spares.

The Budget Request reflects production incorporation of the modifications being developed in the UH-60 BLACK HAWK upgrade program (UH-60M) following completion of the FY02-06 airframe multiyear contract.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 1 / Aircraft	P-1 Line Item Nomenclature: UH-60 BLACK HAWK (MYP) (A05002)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Aircraft Flyaway Costs													
Airframes/CFE					155891	19	8205	151657	17	8921	66736	8	8342
Engines/Accessories					39617	59	671	17622	26	678	10905	16	682
Avionics (GFE)					8758			12821			4566		
Other GFE					5831			3114			1759		
Armament													
ECO (All FLYAWAY Components)					4771			5406			1332		
Other Costs (Mission Equipment)					7473			1889					
Tooling Equipment													
Other Nonrecurring Cost					7314								
Total FLYAWAY					**229655**			**192509**			**85298**		
Support Cost													
Airframe PGSE													
Engine PGSE													
Peculiar Training Equipment					24521			25000					
Publications/Tech Data					4195			2203			1960		
Engineering Change Orders													
PM Administration					24239			24547			23271		
Fielding					3923			5395			3453		
Subtotal Support Cost					**56878**			**57145**			**28684**		
Gross P-1 End Item Cost					**286533**			**249654**			**113982**		
Less: Prior Year Adv Proc					23125			22890			19719		
Net P-1 Full Funding Cost					**263408**			**226764**			**94263**		
Plus: P-1 CY Adv Proc					26665			27932			30197		
Initial Spares													
Total					**290073**			**254696**			**124460**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

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

Weapon System Type:

P-1 Line Item Nomenclature:
UH-60 BLACK HAWK (MYP) (A05002)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Airframes/CFE										
FY 2002	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Sep 02	Sep 02	12	7430	Yes		Sep 00
FY 2003	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 02	Jan 04	12	7837	Yes		Sep 00
FY 2003	Sikorsky Aircraft Stratford CT	SSP/FP	AMCOM	Mar 03	May 04	7	8835	Yes		Sep 00
FY 2004	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 03	Jan 05	17	8921	Yes		Sep 00
FY 2005	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 04	Nov 05	8	8342	Yes		Sep 00

REMARKS: March, 2003 award for seven aircraft is for the Congressional plus up of four UH-60Ls and three HH-60Ls.

FY 04 / 05 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: UH-60 BLACK HAWK (MYP) (A05002)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05										LATER
							Calendar Year 04												Calendar Year 05										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Airframes/CFE																													
	1	FY 02	A	12	9	3									1	1		1											0
	1	FY 03	A	19	7	12				2	2	1					1	1	1	1	1	1								0
	1	FY 04	A	17	0	17			A		1	1	1									1	1	2	2	2	2	1	1	1	1
	1	FY 05	A	8	0	8															A										8
	1	FY 03	FMS	2	0	2			2																						0
	1	FY 03	FMS	2	0	2												2													0
	1	FY 03	NA	15	3	12	2	1	1	1	1	1	1	2	2																0
	1	FY 04	NA	13	0	13										2	1	1	1	1	1	1	1	1	1	1	1				0
	1	FY 05	NA	15	0	15																						1	1	2	11
Total				103	19	84	2	1	3	3	4	3	2	2	3	3	2	5	2	2	2	3	3	3	3	3	3	2	2	3	20

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Sikorsky Aircraft , Stratford CT	2.00	5.00	8.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	8	3	6	9
	REORDER	0	3	6	9
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

FY 06 / 07 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: UH-60 BLACK HAWK (MYP) (A05002)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06												Fiscal Year 07										LATER
							Calendar Year 06												Calendar Year 07										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Airframes/CFE																													
	1	FY 02	A	12	12	0																							0
	1	FY 03	A	19	19	0																							0
	1	FY 04	A	17	16	1	1																						0
	1	FY 05	A	8	0	8		1	1	1	1	1	1	1	1														0
	1	FY 03	FMS	2	2	0																							0
	1	FY 03	FMS	2	2	0																							0
	1	FY 03	NA	15	15	0																							0
	1	FY 04	NA	13	13	0																							0
	1	FY 05	NA	15	4	11	1	2	1	1	1	2	1	1	1														0
Total				103	83	20	2	3	2	2	2	3	2	2	2														

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Sikorsky Aircraft , Stratford CT	2.00	5.00	8.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	8	3	6	9
	REORDER	0	3	6	9
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	2388.1	31.9	26.8	26.7	27.9	30.2	36.5	25.1	21.9	20.5	22.6	2658.2
Net Proc (P-1)	2388.1	31.9	26.8	26.7	27.9	30.2	36.5	25.1	21.9	20.5	22.6	2658.2
Initial Spares												
Total Proc Cost	2388.1	31.9	26.8	26.7	27.9	30.2	36.5	25.1	21.9	20.5	22.6	2658.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The Advance Procurement for the UH-60 BLACK HAWK contains funding for the airframe and engine contracts as well as funding for Government Furnished Equipment(GFE) to support the UH-60 aircraft and mission kit production. GFE includes such items as the Auxiliary Power Unit (APU), Hover Infrared Suppressor System (HIRSS), Armored Crew Seats, and other miscellaneous equipment. This system supports the Current-to-Future transition path of the Transformation Campaign Plan (TCP).

Justification:
Funding in FY 05 is for both Economic Order Quantity (EOQ) and long lead items on the proposed FY02-06 multiyear contract. Advance procurement is also required for the procurement of GFE items, including the T700-GE-700 engine, APU, Crew Seats, and HIRSS, since their leadtime exceeds the leadtime of the aircraft (with long lead funding).

Advance Procurement Requirements Analysis-Funding (P10A)

First System Award Date:

First System Completion Date:

Date: February 2004

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

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

($ in Millions)

	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
End Item Quantity			1528	18	12	19	17	8	28	24	10	7	14	1685
CFE Airframe	18	6	1475.5	17.0	13.7	16.3	18.3	10.7	17.5	11.5	13.1	11.6	13.6	1618.7
Engines	14	3	652.1	12.9	10.5	8.1	8.1	13.8	14.0	11.4	7.2	7.4	7.5	753.0
Avionics		3	124.6											124.6
Auxiliary Power Unit	15	3	42.9	0.8	0.8	0.5	0.5	1.9	1.7	0.7	0.5	0.5	0.5	51.2
Armored Crew Seat	12	3	21.1	0.5	0.8	0.6	0.4	1.6	1.4	0.6	0.4	0.4	0.4	28.4
Hover Infrared Suppressor	14	3	28.9	0.7	0.9	0.7	0.6	2.2	1.9	0.8	0.6	0.6	0.6	38.5
Elastomeric Bearings	10	3	1.5											1.5
Miscellaneous		3	41.6		0.1	0.5								42.2
Total Advance Procurement			2388.1	31.9	26.8	26.7	27.9	30.2	36.5	25.1	21.9	20.5	22.6	2658.2

Leadtime shown is the manufacturing (production) leadtime, i e the time from contract award to first delivery. 'When required' reflects the number of months after funding is received (December)that delivery is required. GFE delivery to prime contractor is required at least three months prior to end item delivery. CFE airframe is termination liability funding of both long leadtime as well Econonomic Order Quantity (EOQ) items. Engines are fully funded. Due to low production rates, avionics items are now being requisitioned from stock. Avionics and miscellaneous items include numerous items with differing lead times.

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2004

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

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

($ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004 Qty	2004 Contract Forcast Date	2004 Total Cost Request	2005 Qty	2005 Contract Forcast Date	2005 Total Cost Request
CFE Airframe	18	1		8	Dec 03	18.277	28	Dec 04	10.691
Engines	14	2	0.680	12	Jan 04	8.115	20	Dec 04	13.755
Auxiliary Power Unit	15	1	0.069	8	Dec 03	0.505	28	Dec 04	1.875
Armored Crew Seat	12	2	0.033	16	Dec 03	0.447	56	Dec 04	1.640
Hover Infrared Suppressor	14	1	0.074	8	Dec 03	0.588	28	Dec 04	2.236
Total Advance Procurement						27.932			30.197

Airframe will be procured on an FY02 through FY06 joint service multiyear contract. The funding requested is for the termination liability associated with the procurement of parts in Economic Order Quantities (EOQ). Engine award for FY04 reflects a Not to Exceed (NTE) contract. Expected definitization (including option pricing)is July, 2004. Advance procurement funding is required for GFE, since engines, APUs, Crew Seats, and HIRSS are required at the contractor's facility three months after funding becomes available. The production leadtime of these items, coupled with the projected contract award date, necessitates the use of advance procurement funding. Unit price not included for airframe (price is on P5), since funding requested is for termination liability.

Advance Procurement Requirements Analysis-Funding (P10C)

Date: February 2004

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

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

($ in Millions)

	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
Proposal w/o AP												
Then Year Cost		8	67	175	236	226	204	221	93	24	17	1265
Constant Year Cost		8	67	175	232	219	195	208	86	22	16	1224
Present Value		8	64	162	212	197	173	182	74	19	13	1100
AP Proposal												
Then Year Cost		8	64	168	228	219	194	208	87	23	16	1210
Constant Year Cost		8	65	168	224	212	186	195	81	21	15	1171
Present Value		8	62	156	205	191	165	171	70	18	12	1053
AP Savings (Difference)												
Then Year Cost			-3	-7	-9	-8	-10	-14	-6	-2	-2	-55
Constant Year Cost			-3	-7	-8	-8	-10	-13	-6	-2	-2	-53
Present Value			-3	-6	-8	-7	-9	-11	-5	-2	-1	-48

Costs shown are total program outlays. The AP proposal represents the current budget, including the Advance Procurement necessary to execute an FY02-06 airframe multiyear contract. Proposal without AP represents the estimated cost of single year contracting over the same time span. Savings does not include any savings realized in the procurement of unexercised option aircraft or other Customers (Other Service/FMS). Constant dollars shown are FY03. A 3.1% discount factor was applied to the constant year dollars. It should be noted that even assuming single year contracting, some AP is required, since actual production lead time is greater than the effective production lead time. GFE items procured using Advance Procurement funds are not included, since they provide no cost benefit--they are procured in advance in order to support the airframe delivery schedule.

Advance Procurement Requirements Analysis-Execution (P10D)

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

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

($ in Millions)

	PTL (mos)	2002 Qty	2002 Contract Forecast Date	2002 Actual Contract Date	2002 Total Cost Request	2002 Actual Contract Cost	2003 Qty	2003 Contract Forecast Date	2003 Actual Contract Date	2003 Total Cost Request	2003 Actual Contract Cost	2004 Qty	2004 Contract Forecast Date	2005 Qty	2005 Contract Forecast Date
End Item Quantity															
CFE Airframe	18	12	Jun 02		13.7	13.7	10	Dec 02	Dec 02	16.3	16.3	8	Dec 03	28	Dec 04
Engines	14	16	Dec 01	Dec 01	10.5	10.5	14	Dec 02	Dec 02	8.1	8.1	12	Jan 04	20	Dec 04
Avionics															
Auxiliary Power Unit	15	12	Mar 02	Jun 02	0.8	0.8	10	Mar 03	Dec 02	0.5	0.5	8	Dec 03	28	Dec 04
Armored Crew Seat	12	24	Mar 02	May 02	0.8	0.8	20	Mar 03	Mar 03	0.6	0.6	16	Dec 03	56	Dec 04
Hover Infrared Suppressor	14	12	Mar 02	May 02	0.9	0.9	10	Mar 03	Dec 02	0.7	0.7	8	Dec 03	28	Dec 04
Elastomeric Bearings	10														
Miscellaneous					0.1	0.1				0.5	0.5				
Total Advance Procurement					26.8	26.8				26.7	26.7				

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
HELICOPTER NEW TRAINING (A06500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	137	17	15	6								175
Gross Cost	118.2	23.8	24.9	9.8								176.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	118.2	23.8	24.9	9.8								176.6
Initial Spares												
Total Proc Cost	118.2	23.8	24.9	9.8								176.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The TH-67 Creek is a non-developmental commercial, three-seated, single engine, training helicopter with two main rotor blades. It is a variant of the Bell Helicopter Textron, Incorporated 206B-3 helicopter. It is used exclusively at the U.S. Army Aviation Center, Fort Rucker, AL, for Initial Entry Rotor Wing (IERW) training and is being considered for use by the Combined Training Centers. A mix of aircraft with Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) are used. The VFR version is ideal for early stages of flight school because it is lighter, simpler, and less sensitive to the harsher flight maneuvering generated during the students' primary training. The IFR is equipped for the more advanced instrument phase and is more complex and and heavier, but does not undergo the harsher primary flight maneuvering generated in earlier training phases. An enhanced configuration of the VFR is in production 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.

This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 1 / Aircraft			P-1 Line Item Nomenclature: HELICOPTER NEW TRAINING (A06500)			Weapon System Type:			Date: February 2004		
ACFT Cost Elements	ID CD				**FY 03**			**FY 04**			**FY 05**		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
AIRCRAFT					9583	6	1597						
SUPPORT COSTS					192								
Total					**9775**								

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

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

Weapon System Type:

P-1 Line Item Nomenclature:
HELICOPTER NEW TRAINING (A06500)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
AIRCRAFT										
FY 2002	Bell Helicopter Ft. Worth, TX	ID/IQ	Redstone Arsenal, AL	May 02	Mar 03	15	1594	Yes		Oct 00
FY 2003	Bell Helicopter Ft. Worth, TX	ID/IQ	Redstone Arsenal, AL	Dec 02	Oct 03	6	1597	Yes		Oct 00

REMARKS: RFP issued Oct 00 resulted in a 5-year Indefinite Delivery Indefinite Quantity contract.

FY 03 / 04 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: HELICOPTER NEW TRAINING (A06500)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03												Fiscal Year 04										LATER
							Calendar Year 03												Calendar Year 04										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AIRCRAFT																													
	1	FY 02	A	15	0	15						1	2	2	2	2	2	2	2											0
	1	FY 03	A	6	0	6			A										1	2	2	1								0
Total				21		21						1	2	2	2	2	2	2	3	2	2	1								

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Bell Helicopter , Ft. Worth, TX	1.00	3.00	5.00	3

MFR Number			ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL		5	5	7	12
	REORDER		0	0	0	0
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
GUARDRAIL MODS (TIARA) (AZ2000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	672.6	22.4	13.7	14.0	3.2	2.2						728.0
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	672.6	22.4	13.7	14.0	3.2	2.2						728.0
Initial Spares	17.1											17.1
Total Proc Cost	689.7	22.4	13.7	14.0	3.2	2.2						745.1
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
GUARDRAIL 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 Commanders Tactical Terminal (CTT) 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 GUARDRAIL/Common Sensor (GRCS) System provides a highly flexible architecture to allow rapid deployment to support contingency operations, and was designed to support field commanders until Aerial Common Sensor (ACS) is fully fielded to the Future Force in FY17.

The GRCS has integrated the Improved GUARDRAIL V capability for 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 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 Integrated Processing Facility (IPF). Key performance requirements include a real-time COMINT and ELINT collection and high accuracy target location capability in communications and radar frequencies. The Interoperable Data Link (IDL)/Multi-Role Data Link (MRDL) connects the airborne elements and the ground processing element. A satellite remote relay provides rapid deployment capability. The GUARDRAIL Information Node(GRIFN)is the GRCS downsized and deployable integrated processing facility (IPF), and building block towards the Army Distributed Common Ground Station (DCGS-A). GRIFN will play a vital role in interim DCGS-A which is planned to be demonstrated at the 18th Airborne Corps in FY 04.

GRCS contributes directly to the success of Army Transformation by serving as an operational platform for verification of new or improved technologies necessary for the future Aerial Common Sensor (ACS). The GRCS will support current operations until it is replaced by ACS in FY17.

GRCS Guardian Ealge (GE) System 4 hardware and software upgrades capability will process non-traditional signals, providing intercept military communication emitters, and commercially available hand-held communication devices.

This supports the Current Force transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40C, Budget Item Justification Sheet		Date: February 2004
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army /2/Modification of aircraft		P-1 Item Nomenclature: GUARDRAIL MODS (TIARA) (AZ2000)
Program Elements for Code B Items:	Code:	Other Related Program Elements:

Justification:
FY 05 funds provide for the fielding of the GRCS Systems 1 and 4 Interoperable Airborne Datalink with the Tactical Common Datalink. This is a Total Ownership Cost Reduction (TOCR) initiative which will significantly lower sustainment costs by fielding a more reliable and supportable commercial-based link.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature: GUARDRAIL MODS (TIARA) (AZ2000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
SIGINT Transition Program (STP)											
1-02-111-1111		5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
Interference Cancellation Sys/Radio Relay Sys											
1-02-222-2222		3.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
JTT Upgrades											
1-03-111-1111		0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Airborne Tactical Common Data Link											
1-03-222-2222		0.0	6.2	3.2	2.2	0.0	0.0	0.0	0.0	0.0	11.6
Guardian Eagle System 4 Upgrades											
1-03-333-3333		0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1
Totals		8.7	13.9	3.2	2.2	0.0	0.0	0.0	0.0	0.0	28.0

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Airborne Tactical Common Data Link [MOD 4] 1-03-222-2222

MODELS OF SYSTEM AFFECTED: Guardrail System 1 & 4

DESCRIPTION/JUSTIFICATION:

This modification will replace the GRCS critically obsolete Interoperable Airborne Data Link (IADL) with the reliable, available and maintainable state-of-the-art Tactical Common Data Link (TCDL). Increased data link capability will permit the exploitation of new emitters on the battlefield. This initiative will keep the Army platform interoperable with the Air Force and able to meet the power, space and weight capabilities of the RC-12. Hardware and Software is being developed under the Aerial Common Sensor (ACS) RDT&E,A PE/Project 273744/D028. The RDT&E funding was provided under OSD Total Ownership Cost Reduction (TOCR) initiative.
FY03 funds non-recurring engineering, fabrication and build of ATCDL for System 1 & 4. FY04 funds Airborne TCDLs for System 4. FY05 funds support the installation and fielding of ATCDL to System 1 & 4.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Award Contract System 1	4QFY03
Award Contract System 4	2QFY04
Install/Field TCDLs System 1	1QFY05
Install/Field TCDLs System 4	4QFY05

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0									8			7								
Outputs	0									8			7								

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		15
Outputs																		15

METHOD OF IMPLEMENTATION: Contractor: L3COMM ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 18 Months

Contract Dates:	FY 2004	FY 2005	FY 2006
Delivery Date:	FY 2004	FY 2005	FY 2006

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Airborne Tactical Common Data Link [MOD 4] 1-03-222-2222

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Kit Quantity	0																			
Installation Kits	0		8	0.3	7	0.3													15	0.6
Installation Kits, Nonrecurring	0			0.7		0.2														0.9
Equipment - TCDLs	0			4.3		1.8														6.1
Spares	0			0.2																0.2
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Gov't In-House/Program Mgt	0			0.7		0.8		0.2												1.7
Interim Contractor Support	0							0.5												0.5
Test Support - Lakehurst						0.1														0.1
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0						8	0.8											8	0.8
FY2004 Equip -- Kits	0						7	0.7											7	0.7
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0	15	1.5		0.0		0.0		0.0		0.0		0.0	15	1.5
Total Procurement Cost		0.0		6.2		3.2		2.2		0.0		0.0		0.0		0.0		0.0		11.6

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /2/Modification of aircraft	ARL MODS (TIARA) (AZ2050)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	5.8	6.5	12.2	20.5	5.7							50.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	5.8	6.5	12.2	20.5	5.7							50.6
Initial Spares												
Total Proc Cost	5.8	6.5	12.2	20.5	5.7							50.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

DESCRIPTION: Airborne Reconnaissance Low Multifunctional (ARL-M) evolved from two complementary tactical airborne systems ARL-I (Imagery Intelligence (IMINT)), an elecro-optic reconnaissance and surveillance system, and ARL-C (communications intelligence (COMINT)) which provides real-time highly accurate radio intercept and location. The ARL-M program integrates the capabilities of ARL-I and ARL-C into a single system to satisfy requirements identified by validated Combat 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 DEA and FEMA. ARL is currently providing an indications and warnings capability to U.S. Forces in Korea. ARL is configured to allow interoperability with other Army and DOD Intell nodes such as Common Ground Station (CGS) and Tactical Exploitation System (TES). ARL uses Tactical Common Data Links (TCDL) to provide Line of Sight (LOS) communication and Joint Tactical Terminals (JTT) to provide intelligence data thru the Tactical Information Broadcast Service (TIBS)and Tactical Reconnaissance Intelligence Exchange System (TRIX) networks. ARL contributes directly to the success of Army Transformation by serving as an operational platform for verification of new or improved technologies necessary for the Future Force Aerial Common Sensor. ARL will continue to support current operations until they are replaced by ACS in FY 17. This system supports the Current transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature: ARL MODS (TIARA) (AZ2050)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Aircraft Survivability Equipment (ASE)											
9-99-99-0000	Operational	0.0	5.7	5.6	0.0	0.0	0.0	0.0	0.0	0.0	11.3
Upgrade to DAMA Compliant Radio											
3-33-333-0000	Operational	5.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
Comint Upgrades											
6-66-66-0000	Operational	2.3	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3
Aircraft Standardization											
8-88-88-0000	Operational	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
IMINT Digital Framing											
0-10-00-0000	Operational	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Joint Tactical Terminal (JTT) Integration											
0-11-00-0000	Operational	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Totals		8.2	20.5	5.6	0.0	0.0	0.0	0.0	0.0	0.0	34.3

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Aircraft Survivability Equipment (ASE) [MOD 1] 9-99-99-0000

MODELS OF SYSTEM AFFECTED: ARL-C and ARL-M

DESCRIPTION/JUSTIFICATION:

Modification provides for the addition of aircraft survivability equipment (ASE) suite to include the non-recurring engineering and interference test and analysis with electronic mission equipment. The ASE includes APR-39 Radar Warning Receivers, ALE-47 Flare and Chaff dispensing system and the AAR-47 Missile Warning System. FY03 funds four ASE suites for two ARL-Cs and two ARL-Ms. FY 04 funds four ARL-M Systems (M1, M2, M3 and M6) for ASE.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract Option	1QFY03 2QFY04
System Review	2QFY03 3QFY04
Integrated System Test	3QFY04 1QFY05
Field Modification Complete	4QFY04 2QFY05

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0							4		4											
Outputs	0								4		4										

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		8
Outputs																		8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 12 Months

Contract Dates:	FY 2004	FY 2005	FY 2006
Delivery Date:	FY 2004	FY 2005	FY 2006

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Aircraft Survivability Equipment (ASE) [MOD 1] 9-99-99-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Kit Quantity	0																			
Installation Kits	0		4	1.2	4	1.2													8	2.4
Installation Kits, Nonrecurring	0			1.9																1.9
Equipment	0			0.6		0.6														1.2
Equipment, Nonrecurring	0			0.8																0.8
Engineering Change Orders/Data	0			0.3																0.3
Software Modifications	0			0.2																0.2
Training Equipment	0			0.2		0.2														0.4
Testing	0																			
Gov't In-House/Prog Mgt	0			0.2		0.3														0.5
Contractor Engineering	0			0.3		0.3														0.6
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0				4	1.5													4	1.5
FY2004 Equip -- Kits	0				4	1.5													4	1.5
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0	8	3.0		0.0		0.0		0.0		0.0		0.0		0.0	8	3.0
Total Procurement Cost		0.0		5.7		5.6		0.0		0.0		0.0		0.0		0.0		0.0		11.3

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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 Program Elements:
AA6607, AA6608, AA0978, PE23744 D508 & D12

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	622.4	45.4	41.3	125.9	65.0	37.2	152.6	133.6	84.3	19.4		1327.2
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	622.4	45.4	41.3	125.9	65.0	37.2	152.6	133.6	84.3	19.4		1327.2
Initial Spares												
Total Proc Cost	622.4	45.4	41.3	125.9	65.0	37.2	152.6	133.6	84.3	19.4		1327.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The AH-64 is a single main rotor, twin engine, tandem seat attack helicopter armed with HELLFIRE antitank missiles, 2.75 inch rockets, and 30MM gun. The AH-64 is capable of defeating armor in day, night, and adverse weather. 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.

This system supports the Current-to-Future transition path of the Transformation Campaign Plan (TCP).

Justification:
As the Army's primary Attack Helicopter, the AH-64 has been integrated in maneuver and fire plans of the combined arms team and will have the primary mission of destroying high value targets. The firepower, speed and agility of the AH-64 will provide a versatility to the combined arms team not otherwise available. Modifications are based on fleetwide reliability, availability, and maintainability (RAM) improvements and limited operational enhancements identified as a result of lessons learned during Operation Desert Storm, and Albania/Kosovo operations.

FY05 procures TADS/PNVS Upgrades, Modernized TADS/PNVS (M-TADS), Airframe Modifications, and miscellaneous mods $5 million or less.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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 Program Elements: AA6607, AA6608, AA0978, PE23744 D508 & D12

Description		Fiscal Years								
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
TADS/PNVS Upgrades											
1-94-01-2005		65.9	13.9	15.0	13.5	9.9	0.0	0.0	0.0	0.0	118.2
MISC Mods and R&S Mods $5M or less (no P3a set)											
NA		585.3	51.1	17.0	8.9	109.7	24.5	7.6	8.4	0.0	812.5
National Guard Fielding/Transformation											
NA		4.1	5.3	9.1	0.0	0.0	0.0	0.0	0.0	0.0	18.5
Modernized TADS/PNVS (M-TADS)											
1-01-01-0022		9.0	14.9	21.1	14.2	29.6	101.4	67.2	0.0	0.0	257.4
Airframe Modifications (no P3a set)											
1-95-01-2007		34.8	0.7	2.7	0.6	0.0	0.0	0.0	0.0	0.0	38.8
TADS/PNVS Block Modifications (no P3a set)											
0-00-00-0000		0.0	0.0	0.0	0.0	3.3	7.8	9.6	11.0	0.0	31.7
Combat Mission Simulator (CMS) (no P3a set)											
1-01-01-0021		10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
701C Engines (no P3a set)											
0-00-00-0000		0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0
Totals		709.1	125.9	64.9	37.2	152.5	133.7	84.4	19.4	0.0	1327.1

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: TADS/PNVS Upgrades [MOD 1] 1-94-01-2005

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION/JUSTIFICATION:

Operational, and logistical improvement.
Provides for system upgrade through new/updated hardware integration into Lots III thru XII 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). 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.

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	359	10	10	10	10	10	10	10	10	10	10	10	10	11	11						
Outputs	274	13	13	13	13	15	17	18	18	18	16	15	15	15	14	14					

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																	0	501
Outputs																		501

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

Contract Dates:	FY 2004	Dec 03	FY 2005	Dec 04	FY 2006	Dec 05
Delivery Date:	FY 2004	Jan 04	FY 2005	Jan 05	FY 2006	Jan 06

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): TADS/PNVS Upgrades [MOD 1] 1-94-01-2005

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Kit Quantity	274		60		68		64		35										501	
T/P FFP/T&M/CFE/O&A	0	43.0		11.4		11.6		10.7		7.0										83.7
Installation Kits, Nonrecurring	0																			
Equipment (GFE)	0	22.9		2.5		2.6		2.2		2.0										32.2
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
M-TADS/RECAP/HF/DSA	0																			
Support Equipment	0																			
Other	0					0.8		0.6		0.9										2.3
Interim Contractor Support	0																			
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- 274 Kits	274																		274	
FY2003 Equip -- 60 Kits	0		52		8														60	
FY2004 Equip -- 68 Kits	0				60		8												68	
FY2005 Equip -- 64 Kits	0						56		8										64	
FY2006 Equip -- 35 Kits	0								35										35	
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	274	0.0	52	0.0	68	0.0	64	0.0	43	0.0		0.0		0.0		0.0		0.0	501	0.0
Total Procurement Cost		65.9		13.9		15.0		13.5		9.9		0.0		0.0		0.0		0.0		118.2

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: National Guard Fielding/Transformation [MOD 3] NA

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION/JUSTIFICATION:

Funding supports the Transformation driven fielding of the A Model Peculiar Ground Support Equipment (PGSE)-- sets, kits, tools, and outfits -- that the National Guard units need to operate and maintain the aircraft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0																				
Outputs	0																				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		

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

Contract Dates:	FY 2004	FY 2005	FY 2006
Delivery Date:	FY 2004	FY 2005	FY 2006

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): National Guard Fielding/Transformation [MOD 3] NA

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Kit Quantity	0																			
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment, Nonrecurring		4.1		5.3		9.1														18.5
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		4.1		5.3		9.1		0.0		0.0		0.0		0.0		0.0		0.0		18.5

INDIVIDUAL MODIFICATION Date: February 2004

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

MODELS OF SYSTEM AFFECTED: AH-64A Apache Helicopter

DESCRIPTION/JUSTIFICATION:

Funding will procure M-TADS/PNVS modifications for 203 AH-64A Apache helicopters thru FY 08. M-TADS/PNVS is a U.S. Army program to develop, test, integrate, and produce a Second Generation FLIR (SGF) for the Army's entire fleet of AH-64A and AH-64D aircraft. Modification includes M-TADS/PNVS LRU upgrades, TADS Electronic Display and Control (TEDAC) assemblies, and the Improved Helmet Display Sight System (IHDSS) assemblies. The FLIR system enables pilotage of the aircraft and the engagement of targets during night operations and adverse weather conditions. M-TADS/PNVS will leverage technology already invested in electronics, sensors and optics to provide the best sensor available at the lowest cost. Enhancements, over the present Apache FLIR, include increased range for detection, recognition and identification of targets; higher resolution and improved sensitivity for improved safety and pilotage performance, especially in adverse weather; increased capability to identify friend versus foe during hostilities; and increased reliability with a corresponding reduction in O&S costs. TEDAC and IHDSS improve displays in the cockpit to enable pilots to realize the benefits of the FLIR sensor upgrade. These enhancements will improve the overall warfighting capability of the Apache aircraft by: 1) significantly enhancing the pilot's visibility and safety while improving target designation and acquisition; 2) providing improved clarity and ability to fly and navigate using advanced FLIR imagery; 3) improving aircraft survivability with increased standoff ranges; and 4) reducing the risk of fratricide. Installation is included in the contract costs and are not separated out. System supports the Current-to-Future transition path of the Transformation Campaign Plan (TCP).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Oct 00 -- MTADS/PNVS EMD/SDD contract award
Jan 01 -- Preliminary Design Review (PDR); Aug 01 -- Critical Design Review (CDR)
May 02 -- Qualification testing
Jul 03 -- MTADS/PNVS Advanced Procurement Contract award
Dec 03 -- MTADS/PNVS Production Contract Award
Apr 04 -- SDD Contract completion

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0											3	3	3	3	2	2	3	5	6	6
Outputs	0											3	3	3	3	2	2	3	5	6	6

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	5	22	20	20	20	30	30	20										203
Outputs	5	22	20	20	20	30	30	20										203

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 21 Months

Contract Dates:	FY 2004	Dec 03	FY 2005	Dec 04	FY 2006	Dec 05
Delivery Date:	FY 2004	Jun 05	FY 2005	Mar 06	FY 2006	Mar 07

INDIVIDUAL MODIFICATION Date: February 2004

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

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Kit Quantity	0																			
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0			2.5	9	21.1	10	14.2	22	29.6	82	101.4	80	67.2					203	236.0
Equipment, Nonrecurring	0	9.0		12.4																21.4
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- 0 Kits	0																			
FY2003 Equip -- 0 Kits	0																			
FY2004 Equip -- 9 Kits	0						6		3										9	
FY2005 Equip -- 10 Kits	0								7		3								10	
FY2006 Equip -- 22 Kits	0										17		5						22	
FY2007 Equip -- 82 Kits	0												62		20				82	
FY2008 Equip -- 80 Kits	0														80				80	
FY2009 Equip -- 0 Kits	0																			
TC Equip- 0 Kits	0																			
Total Installment	0	0.0		0.0		0.0	6	0.0	10	0.0	20	0.0	67	0.0	100	0.0		0.0	203	0.0
Total Procurement Cost		9.0		14.9		21.1		14.2		29.6		101.4		67.2		0.0		0.0		257.4

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
CH-47 CARGO HELICOPTER MODS (AA0252)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
RDTE PE 0203744A

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	3952.7	123.0	253.9	720.7	511.0	539.2	606.7	517.4	536.1	839.2	5258.8	13858.8
Less PY Adv Proc	940.0	0.0	0.0	13.9	21.2	20.4	23.8	22.7	26.3	28.7	236.0	1333.0
Plus CY Adv Proc	940.0	0.0	13.9	21.2	20.4	23.8	22.7	26.3	28.7	31.6	204.4	1333.0
Net Proc (P-1)	3952.7	123.0	267.8	728.0	510.2	542.7	605.5	521.0	538.5	842.0	5227.3	13858.8
Initial Spares												
Total Proc Cost	3952.7	123.0	267.8	728.0	510.2	542.7	605.5	521.0	538.5	842.0	5227.3	13858.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The CH-47 heavy lift helicopter is a day/night tandem rotor helicopter powered by two T-55 turbine engines. The CH-47 is the Army's only active heavy cargo helicopter and is a key element in the Contingency CORPS. The Chinook integrates in a system of systems fashion to enhance battlefield mobility for tactical vehicles, artillery and engineer equipment, personnel and logistical support equipment. Cargo Helicopters provide the logistical base for Air-Land operations. The Chinook also provides support of operations other than war. The CH-47F Operational Requirements Document (ORD) contains interoperability key performance parameters allowing the Chinook to operate on the digitized battlefield. The ORD is being revised to include the specific information exchange requirements. This system supports the Current Force-to-Future Force transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 05 funding procures safety and operational modifications to the CH-47D fleet and trainers to maintain the latest configuration. Safety and operational modifications, to include component recapitalization, are planned for all fielded aircraft. These changes contribute to the effectiveness of heavy lift capability, maintainability, reliability, and aircraft/crew safety. The major modifications are procurement of kits for Improved Battery, Conversion of the T55-L-712 to T55-GA-714A Engines, Auxiliary Power Unit Upgrade, Extended Range Fuel System, Engine Fire Extinguisher, Engine Filtration System, Low Maintenance Rotor Head, Aviation Combined Arms Tactical Trainer and conversion of 287 CH-47Ds to CH-47Fs, Ballistic Protection Systems, Blade Fold Kits, 50 Special Operations Aircraft and Sets, Kits and Outfits.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature: CH-47 CARGO HELICOPTER MODS (AA0252)

Program Elements for Code B Items:

Code:

Other Related Program Elements: RDTE PE 0203744A

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Total Ownership Cost Reduction											
0-00-00-0000	Operational	2.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
Improved Battery											
1-95-01-0822	Operational	2.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Engine Filtration System											
1-93-01-0807	Operational	4.3	8.0	7.6	6.7	6.9	1.4	0.2	0.2	1.6	36.9
Extended Range Fuel System											
1-97-01-822	Operational	47.5	17.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	69.0
Engine Upgrade to T55-GA-714A Configuration											
1-96-01-0828	Operational	487.4	140.9	132.7	165.3	149.0	64.7	5.6	0.0	0.0	1145.6
APU Upgrade											
	Safety	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5
Installation of Modifications Kits Various											
Various	Operational/Safety	29.9	0.9	1.6	1.4	0.0	0.0	0.0	0.0	0.0	33.8
CH-47D Flight Simulator Upgrade											
	Safety	5.4	5.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0	20.6
CH-47F											
0-00-00-0000	Operational	148.5	200.3	321.5	325.7	396.5	399.1	474.3	506.8	3896.4	6669.1
Low Maintenance Rotor Hub											
0-00-00-0000	Operational	0.0	3.7	12.4	9.7	13.1	11.4	10.8	11.4	0.0	72.5

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature: CH-47 CARGO HELICOPTER MODS (AA0252)

Program Elements for Code B Items:

Code:

Other Related Program Elements: RDTE PE 0203744A

Description		Fiscal Years								
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Engine Fire Extinguisher (Halon Replacement)											
0-00-00-0000	Operational	0.0	0.0	0.0	2.6	8.3	8.4	8.5	8.6	9.5	45.9
Aviation Combined Arms Tactical Trainer (AVCATT)											
0-00-00-0000		0.0	0.0	0.0	0.0	4.3	4.1	3.6	0.0	0.0	12.0
Crashworthy Crew Chief Seat											
0-00-00-0000	Safety	2.0	4.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	6.1
Aircraft Replenishment											
0-00-00-0000		0.0	324.5	0.0	0.0	0.0	0.0	0.0	275.0	0.0	599.5
Ballistic Protection, Blade Fold Kits, SKOs											
0-00-00-0000	Safety	0.0	0.0	0.0	7.7	5.1	5.7	6.8	8.6	0.0	33.9
Totals		741.2	707.0	490.0	519.1	583.2	494.8	509.8	810.6	3907.5	8763.2

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Engine Filtration System [MOD 3] 1-93-01-0807

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

DESCRIPTION/JUSTIFICATION:

Type of Improvement - Improved Operational Capability. This funding provides an engine filtration system to separate sand and dust at the engine inlet to allow clean air to flow into the engine. For missions requiring extended operation at very low altitudes over sand and dust terrain, separation of sand and dust at engine inlet is a necessity to assure normal engine life for sustained operations. Procurement of this system is essential to assure operation in sandy or dusty regions. This effort is a follow-on to modify an existing engine filtration system design, modify existing kits and procure new kits.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Design Review - Sep 99
Production Contract - Oct 01
Hardware Delivery - Oct 02
Field Installation - Jan 03

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0		3	3	3	4	4	4	5	4	5	5	5	6	6	7	7	6	6	6	6
Outputs	0		3	3	3	4	4	4	5	4	5	5	5	6	6	7	7	6	6	6	6

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	6	6	7	7	6	7	7	7	6	6	7	7	6	6	7	7	137	337
Outputs	6	6	7	7	6	7	7	7	6	6	7	7	6	6	7	7	137	337

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 12 Months

Contract Dates:	FY 2004	Jan 04	FY 2005	Jan 05	FY 2006	Jan 06
Delivery Date:	FY 2004	Jan 05	FY 2005	Jan 06	FY 2006	Jan 07

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Engine Filtration System [MOD 3] 1-93-01-0807

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
B-Kit Quantity	15	3.8	16	5.2	16	5.4	16	5.5	16	5.6									79	25.5
A-Kits	35	0.4	180	2.0	122	1.4													337	3.8
Logistics	0			0.3		0.4		0.7		0.8		0.9								3.1
PM Support	0	0.1		0.4		0.3		0.3		0.3		0.3								1.7
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits			9	0.1	17	0.1	9	0.1											35	0.3
FY2003 Equip -- Kits							10	0.1	26	0.2	24	0.2	26	0.2	27	0.2	67	0.5	180	1.4
FY2004 Equip -- Kits																	122	1.1	122	1.1
FY2005 Equip -- Kits																				
FY2006 Equip -- Kits																				
FY2007 Equip -- Kits																				
FY2008 Equip -- Kits																				
FY2009 Equip -- Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	9	0.1	17	0.1	19	0.2	26	0.2	24	0.2	26	0.2	27	0.2	189	1.6	337	2.8
Total Procurement Cost		4.3		8.0		7.6		6.7		6.9		1.4		0.2		0.2		1.6		36.9

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Engine Upgrade to T55-GA-714A Configuration [MOD 5] 1-96-01-0828

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

DESCRIPTION/JUSTIFICATION:

Type of Improvement - Improved Operational Capability. This modification will upgrade the T55-L-712 engine to T55-GA-714A configuration increasing 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. The addition of numerous engineering changes to provide safety, the latest in operational technology, and improved communications has increased the empty weight of the aircraft. Upgrade of the T55-L-712 engine to T55-GA-714A configuration will meet the required operational capability. The program consists of: New Engines - two per aircraft plus spares, Engine Fielding Kits - two per aircraft, Airframe Mod Kits - one per aircraft, the installation of the Airframe Kit and Converted Engines on the aircraft, and Logistic Support (training, fielding support).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Low Rate Initial Production Contract Award - Dec 97
First Production Hardware Delivery - Aug 99
Verification/Testing - Sep 99
Engine Fielding Initiated - Nov 99

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	166	13	14	14	14	10	10	10	11	12	12	13	13	17	17	17	18	7	7	7	8
Outputs	166	13	14	14	14	10	10	10	11	12	12	13	13	17	17	17	18	7	7	7	8

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	17	15																442
Outputs	17	15																442

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 18 Months

Contract Dates:	FY 2004	Jan 04	FY 2005	Jan 05	FY 2006	Jan 06
Delivery Date:	FY 2004	Jun 05	FY 2005	Jun 06	FY 2006	Jun 07

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Engine Upgrade to T55-GA-714A Configuration [MOD 5] 1-96-01-0828

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
New Engines	482	361.9	141	108.6	126	100.1	160	129.7	147	121.3	69	57.9							1125	879.5
Engine Fielding Kits	434	52.2	108	11.9	121	13.3	142	15.8	79	9.1									884	102.3
Airframe Kits	275	24.9	48	5.5	48	5.6	48	5.7	23	2.8									442	44.5
PM Admin Support	0	17.3		5.9		5.5		5.5		5.6		3.9		1.7						45.4
Logistics	0	24.6		5.5		5.5		5.2		5.5		0.9		1.7						48.9
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	166	6.5	55	3.5	41	2.7	13	0.9											275	13.6
FY2003 Equip -- Kits	0						37	2.5	11	0.7									48	3.2
FY2004 Equip -- Kits	0								48	3.3									48	3.3
FY2005 Equip -- Kits	0								10	0.7	29	2.0	9	0.6					48	3.3
FY2006 Equip -- Kits	0												23	1.6					23	1.6
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	166	6.5	55	3.5	41	2.7	50	3.4	69	4.7	29	2.0	32	2.2		0.0		0.0	442	25.0
Total Procurement Cost		487.4		140.9		132.7		165.3		149.0		64.7		5.6		0.0		0.0		1145.6

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: CH-47D Flight Simulator Upgrade [MOD 8]

MODELS OF SYSTEM AFFECTED: CH-47D and Trainers

DESCRIPTION/JUSTIFICATION:

Type of Improvement - Safety. The six 2B31 flight simulators are based on 1970's technology and are very expensive to operate and maintain. This program upgrades the remaining four simulators not funded by other sources. Additionally, aircraft concurrency modifications to the simulator have fallen well behind the actual CH-47D aircraft, resulting in negative habit training transfer. Correction of this deficiency will reduce maintenance, resolve safety concerns, and increase reliability and maintainability.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0																				
Outputs	0																				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		0

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 12 Months

Contract Dates:	FY 2004	Jan 04	FY 2005	Jan 05	FY 2006	Jan 06
Delivery Date:	FY 2004	Dec 04	FY 2005	Dec 05	FY 2006	Dec 06

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): CH-47D Flight Simulator Upgrade [MOD 8]

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Upgrade	1	5.0	1	5.0	2	10.2													4	20.2
Verification	0	0.4																		0.4
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		5.4		5.0		10.2		0.0		0.0		0.0		0.0		0.0		0.0		20.6

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: CH-47F [MOD 9] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D/F

DESCRIPTION/JUSTIFICATION:

The CH-47F is a rebuild program with selected upgrades. This program extends airframe service life, introduces an open electronic architecture that is compatible with the Army XXI digitized battlefield, and reduces Operating and Support (O&S) cost. This heavy lift helicopter program will be based on a recapitalization approach with a common cockpit configuration. The airframe will be rebuilt, mission capability improved, and vibrations reduced through airframe stiffening to provide for long term O&S cost reductions. The CH-47F will sustain the aging CH-47D fleet and bridge the gap until the development of a follow-on aircraft. It will be fielded as a direct replacement for 287 of the 431 CH-47D fleet and 50 Special Operations Aircraft. Recap will replace the present concept of Inspect and Repair Only As Necessary to a systematic recapitalization of key components to a zero time, zero mile condition. Recapped components will include Power Train, Auxiliary systems , Electrical / Electronic, Hydraulic, Pneumatic, Structural, and Power plant systems. Aircraft in totality will be Recapped based on the functional analysis completed on all the discrete subsystems. The analysis will be used to insure that the components or structure replaced will enhance reliability, increase safety and/or reduce O&S costs.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

EMD Contract Award - May 98
Plant Facilitization - Apr 01
LRIP I Contract Award - Dec 02
LRIP II Contract Award - Dec 03
MS III Production Decision - Nov 04

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0																				
Outputs	0																				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		0

METHOD OF IMPLEMENTATION: contract ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 18 Months

Contract Dates:	FY 2004	Dec 03	FY 2005	Dec 04	FY 2006	Dec 05
Delivery Date:	FY 2004	Jun 04	FY 2005	Mar 05	FY 2006	Dec 05

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): CH-47F [MOD 9] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
--	0																			
Recurring Production	0		7	71.3	16	215.3	16	192.4	23	266.5	22	256.3	25	292.6	26	306.8	202	2399.6	337	4000.8
Other Flyaway	0	109.1		79.2		30.4		40.4		45.5		43.6		47.7		47.1		372.6		815.6
Training Devices	0	15.0		14.4		14.1		37.7		8.4		6.0		13.9		16.9		132.2		258.6
Other Support	0	24.4		9.8		12.4		12.0		11.3		41.5		47.8		53.1		405.8		618.1
-Recap Components	0			25.6		49.3		43.2		64.8		51.7		72.3		82.9		586.2		976.0
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		148.5		200.3		321.5		325.7		396.5		399.1		474.3		506.8		3896.4		6669.1

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Low Maintenance Rotor Hub [MOD 10] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47D&F

DESCRIPTION/JUSTIFICATION:

The Low Maintenance Rotor (LMR) hub will replace the current hubs that are the number two and number three Operation and Support cost drivers in the CH-47 fleet. Utilizing elastomeric and self-lubricating bearing design features, the LMR will eliminate an average of ten days of unscheduled maintenance per year/per aircraft. The new hub will have about 60 percent fewer parts and a projected 4500-hour life for all machined part components. All components will be field replaceable and will not require scheduled overhaul by Depot. The LMR will be inter-changeable with the existing hub and retain the same flight dynamics. The initial production contract will procure new Hubs for the CH-47F production line to meet component recapitalization standards until LMR hubs are delivered.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Critical Design Review (CDR) - Dec 00
Production Contract Award - Mar 04
LMRH Production Contract Award - Mar 05

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0																				
Outputs	0																				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 15 Months

Contract Dates:	FY 2004	Mar 04	FY 2005	Mar 05	FY 2006	Mar 06
Delivery Date:	FY 2004	Jun 05	FY 2005	Jun 06	FY 2006	Jun 07

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Low Maintenance Rotor Hub [MOD 10] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Low Maintenance Rotor Head	0					11.3		8.5		11.9		11.1		10.5		11.1				64.4
Training	0					0.5		0.6		0.6										1.7
Logistics	0			3.5		0.3		0.3		0.3										4.4
PM Support	0			0.2		0.3		0.3		0.3		0.3		0.3		0.3				2.0
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	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		3.7		12.4		9.7		13.1		11.4		10.8		11.4		0.0		72.5

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Ballistic Protection, Blade Fold Kits, SKOs [MOD 15] 0-00-00-0000

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

DESCRIPTION/JUSTIFICATION:

Type of Improvement - Improved Operational and Safety Capability. This funding provides a mission flexible Ballistic Protection System (BPS) to protect crews, passengers, cargo and critical aircraft components from small arms damage. This survivability system was designed and implemented under contract through U.S. Special Forces for the 160th SOAR. In the CH-47D/F the system is modularly designed to fly with 100 percent of troop seat configurations, crew and troop areas, or crew area only. Full weight is about 2500 pounds. Few aircraft modifications are required to apply the BPS. The majority of this effort will involve adapter/mounting brackets which are bolted into place (i.e. on the jettisonable door assy, etc) to mount the plates. This is not an OLR type effort but all CE/FE (unit level) skills. Once the aircraft is modified for BPS, two soldiers can install the BPS in approximately 90 minutes.

Improved Operation and Safety Capability. This funding purchases existing blade folding racks for both CH-47D and CH-47F aircraft. Currently aircraft have no means to quickly fold the blades during shipboard operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 Months PRODUCTION LEADTIME: 15 Months

Contract Dates:	FY 2004	Mar 05	FY 2005	Mar 06	FY 2006	Mar 07
Delivery Date:	FY 2004	Jun 05	FY 2005	Jun 06	FY 2006	Jun 07

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Ballistic Protection, Blade Fold Kits, SKOs [MOD 15] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Crew B-Kits (Blankets)							10	0.6					10	0.6	15	0.9			35	2.1
Passenger (PAX) B-Kits (Blankets)							10	0.7					10	0.8	15	1.2			35	2.7
A-Kits							80	0.4	75	0.4	102	0.6	80	0.5	80	0.5			417	2.4
Blade Fold Kits							55	1.1	10	0.2	20	0.4	20	0.4	20	0.4			125	2.5
SKOs								4.9		4.5		4.7		4.5		5.6				24.2
Installation of Hardware																				
FY 2002 & Prior Equip -- Kits																				
FY 2003 -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
FY 2008 Equip -- Kits																				
FY 2009 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
Total Procurement Cost		0.0		0.0		0.0		7.7		5.1		5.7		6.8		8.6		0.0		33.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /2/Modification of aircraft	CH-47 CARGO HELICOPTER MODS(Adv Proc) (AA0252)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	940.0	0.0	13.9	21.2	20.4	23.8	22.7	26.3	28.7	31.6	204.4	1333.0
Net Proc (P-1)	940.0		13.9	21.2	20.4	23.8	22.7	26.3	28.7	31.6	204.4	1333.0
Initial Spares												
Total Proc Cost	940.0		13.9	21.2	20.4	23.8	22.7	26.3	28.7	31.6	204.4	1333.0
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The CH-47F will be a modification to the current CH-47D helicopter to extend airframe service life, introduce an open electronic architecture that is compatible with the Army XXI digitized battlefield, and reduce Operating and Support (O&S) cost. This heavy lift helicopter program will be based on a remanufacture approach. The airframe will be rebuilt, mission capability improved, and vibrations reduced through airframe stiffening to provide for long term O&S cost reductions. Continued support, coverage, and sustainment of Maneuver, Fire Support, Air Defense, and Survivability mission areas will be provided by the CH-47F. Its mission is transportation of ground forces, class III/class V supplies, and battle critical cargo in support of all future contingencies.
A service life extension program, the CH-47F will sustain the aging CH-47D fleet and bridge the gap until the development of a follow-on aircraft. It will be fielded as a direct replacement for 287 of the CH-47D fleet to Fs and 50 Special Operations Aircraft to Gs. This system supports the Current Force-to-Future Force transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 05 funding procures Advanced Procurement to support deliveries of avionics and airframe components. Long Lead is required to provide funding for those parts, tooling, test equipment, and materiels which are lead time critical to the end item modification. Long lead funding is required to preserve the planned helicopter delivery schedule.

Advance Procurement Requirements Analysis-Funding (P10A)

First System Award Date:

First System Completion Date:

Date: February 2004

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)

	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
Avionics	13	14		0.0	9.0	13.6	13.1	15.4	14.7	17.0	18.6	20.5	132.9	254.9
Airframe	15	16			4.9	7.6	7.3	8.4	8.0	9.2	10.0	11.0	71.6	138.1
Total Advance Procurement			0.0	0.0	13.9	21.2	20.4	23.8	22.7	26.3	28.7	31.6	204.4	392.9

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2004

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)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004 Qty	2004 Contract Forcast Date	2004 Total Cost Request	2005 Qty	2005 Contract Forcast Date	2005 Total Cost Request
End Item Quantity:									
Avionics	13	1	0.822	16	Mar 2004	13.060	16	Mar 2005	15.426
Airframe	15	1	0.459	16	Mar 2004	7.303	16	Mar 2005	8.406
Total Advance Procurement						20.363			23.832

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
UTILITY/CARGO AIRPLANE MODS (AA0270)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	29.8	11.0	15.6	16.4	10.4	10.1	13.6	9.7	7.0	6.4		
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	29.8	11.0	15.6	16.4	10.4	10.1	13.6	9.7	7.0	6.4		
Initial Spares												
Total Proc Cost	29.8	11.0	15.6	16.4	10.4	10.1	13.6	9.7	7.0	6.4		
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
This modification updates and modernizes the C-12, RC-12, UC-35, C-23, and C-26 fixed wing aircraft communication, navigation, surveillance and Department of Defense (DoD) mandated safety equipment to current and evolving international standards. Furthermore, any spares and test equipment necessary to support the modification will be procured. In addition, it provides for the procurement and installation of military unique equipment such as Joint Precision Aircraft Landing System (JPALS). These modifications ensure continued worldwide deployment capability, and safe operations into the 21st Century. These systems supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 05 procures communications, navigation, and surveillance equipment that supports 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.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature: UTILITY/CARGO AIRPLANE MODS (AA0270)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years								
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Avionics System Cockpit Upgrade											
1-96-01-0612	UNCLASSIFIED	56.3	16.4	10.4	10.1	13.6	9.7	7.0	6.4	0.0	129.9
Totals		56.3	16.4	10.4	10.1	13.6	9.7	7.0	6.4	0.0	129.9

INDIVIDUAL MODIFICATION Date: February 2004

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

MODELS OF SYSTEM AFFECTED: C-12F3, D1, D2, T, J, R, U; RC-12K, N, P, Q, D, H; C-26; UC-35A, B; C-23C

DESCRIPTION/JUSTIFICATION:

This effort will modernize 5 types of Fixed Wing aircraft communications, navigation, surveillance, and safety equipment to current 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 MILESTONES:

Development is not required for Avionics System Cockpit Upgrade.

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	66			11				6				9				10					11
Outputs	66				11				6				9				10				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs			8	9			9	9										148
Outputs	11			8	9			9	9									148

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 6 Months

Contract Dates:	FY 2004	Feb 04	FY 2005	Feb 05	FY 2006	Feb 06
Delivery Date:	FY 2004	Jul 05	FY 2005	Jul 05	FY 2006	Jul 06

INDIVIDUAL MODIFICATION Date: February 2004

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

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits	66	41.1	11	11.3	6	6.9	9	7.0	10	9.5	11	6.6	17	5.1	18	4.7			148	92.2
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data		0.2		0.1		0.1		0.1		0.1		0.1		0.1		0.1				0.9
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	66	15.0																	66	15.0
FY2003 Equip -- Kits			11	5.0															11	5.0
FY2004 Equip -- Kits					6	3.4													6	3.4
FY2005 Equip -- Kits							9	3.0											9	3.0
FY2006 Equip -- Kits									10	4.0									10	4.0
FY2007 Equip -- Kits											11	3.0							11	3.0
FY2008 Equip -- Kits													17	1.8					17	1.8
FY2009 Equip -- Kits															18	1.6			18	1.6
TC Equip- Kits																				
Total Installment	66	15.0	11	5.0	6	3.4	9	3.0	10	4.0	11	3.0	17	1.8	18	1.6		0.0	148	36.8
Total Procurement Cost		56.3		16.4		10.4		10.1		13.6		9.7		7.0		6.4		0.0		129.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
OH-58 MODS (AA0400)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	323.8	0.9	0.5	0.2	0.5							325.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	323.8	0.9	0.5	0.2	0.5							325.8
Initial Spares	1.2											1.2
Total Proc Cost	325.0	0.9	0.5	0.2	0.5							327.0
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The OH-58A&C model helicopters are low silhouette, single rotor helicopters powered by a single gas turbine engine (T63-A-720) used for observation, scout (no weapons), and command and control. This is a single pilot aircraft with provisions for a second pilot and the capability to carry two passengers or cargo in the rear cargo area. The OH-58C is an upgraded OH-58A model with a more powerful transmission, navigational upgrades and state of the art instrumentation. This aircraft serves as the bridge for aviator training and pilot proficiency until modernized aircraft are fielded. The program provides for integration of the Single Channel Ground & Airborne Radio System (SINCGARS), which will provide improved VHF FM airborne communications and is required to safely achieve compatibility with other equipment with which affected equipment will be operated.

This system supports the Current transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
AIRCRAFT LONG RANGE MODS (AA0560)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	11.5	0.9	0.4	1.1	0.8	0.8	0.8	0.8	0.6	0.6		18.1
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	11.5	0.9	0.4	1.1	0.8	0.8	0.8	0.8	0.6	0.6		18.1
Initial Spares												
Total Proc Cost	11.5	0.9	0.4	1.1	0.8	0.8	0.8	0.8	0.6	0.6		18.1
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
This modification updates and modernizes the C-20F, C-20E and C-37 fixed wing aircraft communications, and navigation equipment, enhancing the aircraft's capability for worldwide deployments. Furthermore, the C-20 and C-37 aircraft will receive additional operational capability with the installation of Joint Precision Landing Systems (JPALS) and Joint Tactical Radio Systems (JTRS). These aircraft support the Army's executive flight detachment at the three star and above level. This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 05 procures new C-20/C-37 Communication, Navigation, and Surveilance equipment needed to support the crew in meeting the demands of the future air navigation system. 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 Plan requirements.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
LONGBOW (AA6670)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
SSNs AA6607/6608, PE 273744 508 & D12

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	232	52	60	74	64	19						501
Gross Cost	2791.0	749.6	912.6	884.9	795.3	568.9	464.5	383.6	373.7	276.5	2193.2	10393.7
Less PY Adv Proc	243.9	37.5	43.2	32.0	46.1	14.1	0.0	0.0	0.0	0.0		416.9
Plus CY Adv Proc	281.4	43.2	32.0	46.1	14.1	0.0	0.0	0.0	0.0	0.0		416.9
Net Proc (P-1)	2828.6	755.2	901.5	899.0	763.2	554.8	464.5	383.6	373.7	276.5	2193.2	10393.7
Initial Spares	39.2	3.0	0.9	1.9	6.5	7.1	19.9	19.1	8.5			106.2
Total Proc Cost	2867.8	758.3	902.4	900.9	769.7	561.9	484.4	402.7	382.2	276.5	2193.2	10500.0
Flyaway U/C												
Wpn Sys Proc U/C		14.5	15.0	12.1	11.9	29.2						

Description:
The Longbow Weapon System (AH-64D) consists of a modified AH-64 airframe, a Fire Control Radar (FCR)/ Radar Frequency Interferometer (RFI) mission kit, and a fire and forget Longbow HELLFIRE missile. The 18 October 95 Acquisition Decision Memorandum authorized Longbow Apache to proceed into production and award of single year contract not to exceed quantity of 18 aircraft in FY96. A Multi-Year II Contract (FY01-FY05) was signed on 29 September 2000. Airframe quantities and funding reflect the multi-year (MY) scenario. Multiyear contracts for the FCR mission kit were signed in Nov 97. Quantities and funding reflect this multiyear scenario. 501 AH-64A Apaches will be remanufactured to the AH-64D configuration with 227 Longbows being equipped with the FCR/RFI mission kits and 701C engines. Two hundred twenty-seven AH-64Ds will incorporate the General Electric T700-GE-701C engines for improved performance when carrying the FCR mission kits. Those AH-64D aircraft fielded without the FCR/RFI mission kits will have the T700-GE-701 engines, but can accept the FCR/RFI mission kit with the addition of T700-GE-701C engines. The Longbow Weapon System will provide the AH-64 with automatic target detection, classification, prioritization and a true fire-and-forget engagement capability, greatly increasing weapon system effectiveness and aircraft survivability. The weapon system will be employable day or night, in adverse weather and in obscurants. The weapon system will effectively engage and destroy advanced threat armor on the AirLand Battlefield of the 21st century. To be effective and survive on this future battlefield, the attack helicopter team will rapidly engage multiple targets with minimum exposure time, and deploy a system that is inherently resistant to threat countermeasures (CMs). Funding provides for the procurement of 501 Modernized Target Acquisition Designation Sight/Pilot Night Vision Sensor (M-TADS/PNVS)for the Longbow fleet. Provides funding, starting in FY05, for the initiation of non-recurring engineering (NRE) for Longbow Open System Architecture upgrades. This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures 19 aircraft, including associated support equipment, tooling, government furnished equipment (GFE), training devices, reman/retrofit of reliability/safety fixes, focused component recap on Longbow aircraft, M-TADS/PNVS (including TADS Electronic Display and Control (TEDAC) assemblies), begins funding NRE for Longbow Open System Architecture improvements, and Improved Helmet Display Sight System (IHDSS). Funds continued FCR production integration, fielding sustainment, obsolescence resolution.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
LONGBOW APACHE MODS (AA6607)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
SSNs AA6670/6608, PE273744 508 & D12

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	232	52	60	74	64	19						501
Gross Cost	2229.1	621.2	792.9	859.7	778.4	564.0	459.6	378.7	369.8	276.5	2193.2	9523.2
Less PY Adv Proc	164.9	26.5	34.6	32.0	46.1	14.1	0.0	0.0	0.0	0.0		318.2
Plus CY Adv Proc	191.3	34.6	32.0	46.1	14.1	0.0	0.0	0.0	0.0	0.0		318.2
Net Proc (P-1)	2255.6	629.3	790.4	873.8	746.3	549.9	459.6	378.7	369.8	276.5	2193.2	9523.2
Initial Spares	39.2	3.0	0.9	1.9	6.5	7.1	19.9	19.1	8.5			106.2
Total Proc Cost	2294.8	632.3	791.3	875.7	752.8	557.0	479.5	397.9	378.4	276.5	2193.2	9629.4
Flyaway U/C												
Wpn Sys Proc U/C		12.1	13.2	11.8	11.7	28.9						

Description:
The Longbow Heavy Attack Helicopter (AH-64D) consists of a modified AH-64 airframe, a Fire Control Radar (FCR)/ Radar Frequency Interferometer (RFI) mission kit, fire and forget Longbow HELLFIRE missiles, semi-active laser guided missiles, 70MM rockets, and a 30MM chain gun. These changes consist of increased electrical power management system, enhanced navigation and communication systems and MANPRINT Crew station. The AH-64A airframe is remanufactured to integrate the FCR/RFI mission kit and share the data within the tactical internet. AH-64Ds will incorporate the General Electric T700-GE-701C engines for improved performance when carrying the FCR/RFI mission kit. Those AH-64D aircraft fielded without the FCR mission kits will have the T700-GE-701 engines, but can accept the FCR mission kit with the addition of T700-GE-701C engines. The Longbow Weapon System will provide the AH-64 with automatic target detection, classification, prioritization and a true fire-and-forget engagement capability, greatly increasing weapon system effectiveness and aircraft survivability. The weapon system will be employable day or night, in adverse weather and in obscurants. The weapon system will effectively engage and destroy advanced threat armor on the Air Land Battlefield of the 21st century. To be effective and survive on this future battlefield, the attack helicopter team will rapidly engage multiple targets with minimum exposure time, and deploy a system that is inherently resistant to threat countermeasures. Funding provides for the procurement of 501 Modernized Target Acquisition Designation Sight/Pilot Night Vision Sensor (M-TADS/PNVS)for the Longbow aircraft fleet. Provides funding, starting in FY05, for the initiation of nonrecurring engineering for Longbow Open System Architecture upgrades. This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures 19 aircraft, including associated support equipment, tooling, government furnished equipment (GFE), training devices, reman/retrofit reliability and safety fixes, focused component recap on Longbow aircraft, M-TADS/PNVS (including TADS Electronic Display and Control (TEDAC) assemblies,Improved Helmet Display Sight System (IHDSS), and initiation of nonrecurring engineering for Longbow Open System Architecture upgrades. A total of 501 AH-64A Apaches will be remanufactured to the AH-64D configuration.

FY 04 / 05 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: LONGBOW APACHE MODS (AA6607)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05										LATER
							Calendar Year 04												Calendar Year 05										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Airframe																													
	1	FY 02	A	60	35	25	5	5	5	5	5																		0
	1	FY 03	A	74	0	74						5	5	6	6	6	6	6	6	6	6	6	6	4						0
	1	FY 04	A	64	0	64			A															2	6	5	5	5	5	5	31
	1	FY 05	A	19	0	19															A										19
Fire Control Radar (FCR)																															
	2	FY 02	A	57	30	27	6	6	5	5	5																				0
Total				274	65	209	11	11	10	10	10	5	5	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5	50

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Boeing , Mesa, AZ	48.00	72.00	120.00	36
2	Longbow Limited Liability , Orlando, FL	48.00	72.00	120.00	36

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	10	3	28	31
	REORDER	2	3	15	18
2	INITIAL	10	2	28	30
	REORDER	2	3	16	19
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

FY 06 / 07 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: LONGBOW APACHE MODS (AA6607)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06 / Calendar Year 06 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 07 / Calendar Year 07 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
Airframe																															
	1	FY 02	A	60	60	0																									0
	1	FY 03	A	74	74	0																									0
	1	FY 04	A	64	33	31	5	5	5	5	5	5	1																		0
	1	FY 05	A	19	0	19							4	5	5	5															0
Fire Control Radar (FCR)																															
	2	FY 02	A	57	57	0																									0
Total				274	224	50	5	5	5	5	5	5	5	5	5	5															

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Boeing , Mesa, AZ	48.00	72.00	120.00	36
2	Longbow Limited Liability , Orlando, FL	48.00	72.00	120.00	36

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	10	3	28	31
	REORDER	2	3	15	18
2	INITIAL	10	2	28	30
	REORDER	2	3	16	19
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature		
Aircraft Procurement, Army /2/Modification of aircraft	LONGBOW APACHE MODS (AA6607)		
Program Elements for Code B Items:	**Code:**	**Other Related Program Elements:**	
		SSNs AA6670/6608, PE273744 508 & D12	

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Longbow Apache Mods											
NA	NA	3417.2	827.7	732.1	550.0	459.6	378.7	369.8	276.5	2193.2	9204.8
Totals		3417.2	827.7	732.1	550.0	459.6	378.7	369.8	276.5	2193.2	9204.8

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Longbow Apache Mods [MOD 1] NA

MODELS OF SYSTEM AFFECTED: Longbow Apache

DESCRIPTION/JUSTIFICATION:

The Longbow Weapon System (AH-64D) consists of a modified AH-64A airframe, a Fire Control Radar (FCR)/Radar Frequency Interferometer (RFI) mission kit and a fire and forget Longbow Hellfire missile. The AH-64 aircraft will be modified with those changes necessary to effectively and efficiently integrate the FCR/RFI mission kit. These changes consist of increased electrical power, expanded forward avionics bays, increased cooling, upgraded processors, MANPRINT crew station and 701C engines. These upgrades will significantly enhance warfighting capability and battlefield survivability by providing for advanced digitized avionics and the employment of true fire and forget engagement capablity. Provides funding for Modernized Target Aquisition Designation Sight/Pilot Night Vision Sensor(M-TADS/PNVS) on 501 aircraft starting in FY03. Procures reman/retrofit reliability and safety fixes, and focused component recap on Longbow aircraft. Procures 27 Longbow Crew Trainers (LCTs), one Longbow Collective Training System (LCTS), maintenance trainers, Parts Task Trainers (PTT), and Tactical Engagement Simulation System (TESS). Funding provides for the procurement of Internal Auxiliary Fuel Systems, and Longbow Open System Architecture upgrades.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone 1B (DAB) Jul 89,
Milestone II (DAB) Dec 90,
Milestone III(DAB) Oct 95
MY Lot 1 contract award Aug 96,
First Production Delivery Mar 97,
First Unit Equipped Jul 98
IOC Accomplished Nov 98.

MYII Contract Award 29 Sep 00
Funding Action Lot IX 17 Nov 03
Last Production Delivery Jul 06

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0																				
Outputs	0																				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 15 Months

Contract Dates:	FY 2004	Nov 03	FY 2005	Dec 04	FY 2006
Delivery Date:	FY 2004	Mar 05	FY 2005	Apr 06	FY 2006

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Longbow Apache Mods [MOD 1] NA

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Kit Quantity	344		74		64		19												501	
Recurring	0	2023.2		466.5		420.5		146.5												3056.7
Other Flyaway	0	681.4		206.2		110.8		101.1		121.2		105.5		39.3		40.9		7.6		1414.0
Training Devices	0	420.2		106.3		86.2		64.5		44.2										721.4
Other Support	0	292.4		43.7		40.3		40.0		36.9		51.1		53.4		54.9		496.2		1108.9
Modernized TADS/PNVS	0			5.0		74.3		142.9		243.2		184.4		28.8						678.6
Block III Improvements	0							55.0		14.1		37.7		248.3		180.7		1689.4		2225.2
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		3417.2		827.7		732.1		550.0		459.6		378.7		369.8		276.5		2193.2		9204.8

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
APACHE LONGBOW FCR (AA6608)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
SSNs AA6670/6607, PE273744 508 & D12

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	126	44	57									227
Gross Cost	561.9	128.4	119.7	25.2	16.9	4.9	4.9	4.9	3.8			870.5
Less PY Adv Proc	79.0	11.1	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0		98.7
Plus CY Adv Proc	90.1	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		98.7
Net Proc (P-1)	573.0	126.0	111.1	25.2	16.9	4.9	4.9	4.9	3.8			870.5
Initial Spares												
Total Proc Cost	573.0	126.0	111.1	25.2	16.9	4.9	4.9	4.9	3.8			870.5
Flyaway U/C												
Wpn Sys Proc U/C		2.9	1.9									

Description:
The Longbow Weapon System (AH-64D) consists of a modified AH-64 airframe, 227 Fire Control Radar (FCR)/ Radar Frequency Interfermoter mission kits and a fire and forget Longbow HELLFIRE missile. Two hundred twenty-seven AH-64Ds will incorporate the General Electric T700-GE-701C engines for improved performance when carrying the FCR/RFI mission kit. Those AH-64D aircraft fielded without the FCR/RFI mission kit will have the T700-GE-701 engines installed, but can accept the FCR/RFI mission kit with the addition of T700-GE-701C engines. The Longbow Weapon System will provide the AH-64 with automatic target detection, classification, prioritization and a true fire-and-forget engagement capability, greatly increasing weapon system effectiveness and aircraft survivability. The weapon system will be employable day or night, in adverse weather and in obscurants. The Longbow weapon system, as part of the future force, will effectively engage and destroy advanced threat armor on the battlefields of the 21st century. To be effective and survive on the current and the future battlefield, the attack helicopter team will rapidly engage multiple targets with minimum exposure time, and deploy a system that is inherently resistant to threat countermeasures (CMs). This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP)

Justification:
FY 05 funds continued FCR/RFI mission kit production integration on the Longbow remanufacture line, post production fielding sustainment, obsolescence resolution. The FCR/RFI mission kit quantities and funding reflects multiyear procurements for FY 98-02. 501 AH-64A Apaches will be remanufactured to the AH-64D configuration with 227 Longbow aircraft being equipped with the FCR/RFI mission kits and 701C engines.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature	
Aircraft Procurement, Army /2/Modification of aircraft	APACHE LONGBOW FCR (AA6608)	
Program Elements for Code B Items:	**Code:**	**Other Related Program Elements:**
		SSNs AA6670/6607, PE273744 508 & D12

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Apache Longbow FCR											
NA	NA	711.3	25.2	16.9	4.9	4.9	4.9	3.8	0.0	0.0	771.9
Totals		711.3	25.2	16.9	4.9	4.9	4.9	3.8	0.0	0.0	771.9

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Apache Longbow FCR [MOD 1] NA

MODELS OF SYSTEM AFFECTED: Longbow Apache

DESCRIPTION/JUSTIFICATION:

Longbow Fire Control Radar (FCR) is a millimeter wave target acquisition system developed for integration on the Apache. FCR provides three tactical modes of operation. Ground Targeting Mode (GTM), Air Targeting Mode (ATM), and Terrain Profile Mode (TPM). In GTM, the FCR provides the capability to rapidly scan up to approximately 50 square kilometers of the battlefield using selectable scan widths which are directionally controllable by the crew. In this mode, the FCR detects, locates, classifies, and prioritizes moving and stationary targets. Targets are classified as air defense units, track vehicles, wheel vehicles, helicopters, fixed wing aircraft, or unknown. It has the capability to detect stationary targets out to a range of six kilometers and moving targets out to eight kilometers. In the ATM, the FCR detects, classifies and prioritizes airborne targets. TPM provides terrain avoidance information to the crew for navigation during periods of reduced visibility. FCR does all the above day or night and during periods of reduced visibility caused by atmospheric conditions and/or battlefield obscuration. Procures a total of 227 FCR/RFI mission kits. FY05 funds are required to continue FCR/RFI mission kit continued integration into the Longbow remanufacture line, post production fielding sustainment, obsolescence resolution.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone 1B (DAB)	Jul 89	Date of last delivery Feb 04
Milestone II (DAB)	Dec 90	
Milestone III (DAB)	Oct 95	
Lot 1 contract award	Mar 96	
First Production Delivery	Mar 97	
Multi-year contract awarded	Nov 97	
Lot VII contract award	28 Dec 01	

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0																				
Outputs	0																				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		

METHOD OF IMPLEMENTATION: Modification ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 16 Months

Contract Dates:	FY 2004	FY 2005	FY 2006
Delivery Date:	FY 2004	FY 2005	FY 2006

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Apache Longbow FCR [MOD 1] NA

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Quantity	227																		227	
Recurring	0	711.3																		711.3
Other Flyaway	0																			
Other	0			25.2		16.9		4.9		4.9		4.9		3.8						60.6
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		711.3		25.2		16.9		4.9		4.9		4.9		3.8		0.0		0.0		771.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
LONGBOW(Adv Proc) (AA6670)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
SSNs AA6607/6608, PE273744 508 & D12

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	281.4	43.2	32.0	46.1	14.1	0.0	0.0	0.0	0.0	0.0		416.9
Net Proc (P-1)	281.4	43.2	32.0	46.1	14.1							416.9
Initial Spares												
Total Proc Cost	281.4	43.2	32.0	46.1	14.1							416.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The Longbow program encompasses modification to 501 AH-64A Apaches as well as upgrades to the aircraft systems for the AH-64D series to efficiently and effectively integrate the Fire Control Radar (FCR)/ Radar Frequency Interferometer (RFI) mission kits, and the Longbow HELLFIRE missile. Longbow provides 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 increases operational capability of the crew and provides increased survivability and lethality. This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP)

Advance Procurement Requirements Analysis-Funding (P10A)

First System Award Date:

First System Completion Date:

Date: February 2004

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

P-1 Line Item Nomenclature / Weapon System
LONGBOW

($ in Millions)

SSNs AA6607/6608, PE273744 508 & D12

	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
End Item Quantity			232	52	60	74	64	19						501
Airframe	12	12	191.3	34.6	32.0	46.1	14.1							318.2
GFE-FCR Kit	12	12	90.1	8.6										98.7
Total Advance Procurement			281.4	43.2	32.0	46.1	14.1	0.0	0.0	0.0	0.0	0.0	0.0	416.9

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2004

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

P-1 Line Item Nomenclature / Weapon System
LONGBOW

($ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004 Qty	2004 Contract Forcast Date	2004 Total Cost Request	2005 Qty	2005 Contract Forcast Date	2005 Total Cost Request
End Item Quantity:									
Airframe	12			19	Nov 03	14.099			
GFE-FCR Kit	12								
Total Advance Procurement						14.099			0.000

FY 04 Advance Procurement Funding provides longlead items.

Advance Procurement Requirements Analysis-Execution (P10D)

Appropriation/Budget Activity/Serial No:	P-1 Line Item Nomenclature / Weapon System
Aircraft Procurement, Army /2/Modification of aircraft	LONGBOW

($ in Millions)

		2002					2003					2004		2005	
	PTL (mos)	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Qty	Contract Forecast Date
End Item Quantity															
Airframe	12	74	Dec 01	Dec 01	32.0		64	Dec 02	Nov 02	46.1		19	Nov 03		
GFE-FCR Kit	12														
Total Advance Procurement					32.0	0.0				46.1	0.0				

SSN: AA6607/6608, PE273744 508 & D12

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
UH-60 MODS (AA0480)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
0203744A/Project 504

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty						5	5	14	58	61	1070	1213
Gross Cost	512.2	25.4	58.5	47.4	22.7	145.2	127.2	245.4	673.4	702.9	12710.9	15271.2
Less PY Adv Proc						13.5	6.1	17.2	71.1	74.8	1311.8	1494.5
Plus CY Adv Proc					13.5	6.1	17.2	71.1	74.8	65.0	1246.8	1494.5
Net Proc (P-1)	512.2	25.4	58.5	47.4	36.2	137.8	138.2	299.3	677.1	693.1	12645.9	15271.2
Initial Spares												
Total Proc Cost	512.2	25.4	58.5	47.4	36.2	137.8	138.2	299.3	677.1	693.1	12645.9	15271.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The UH-60 BLACKHAWK helicopter is the Army's utility helicopter in the future force.

Justification:
FY05 funding initiates the UH-60M RECAP/UPGRADE program and continues modification of the UH-60A/L fleet with safety, cost reduction, and operational improvements.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
UH-60 BLACK HAWK MODS (AA0492)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
0203744A/Project 504

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty						5	5	14	58	61	1070	1213
Gross Cost	512.2	25.4	58.5	47.4	22.7	145.2	127.2	245.4	673.4	702.9	12710.9	15271.2
Less PY Adv Proc						13.5	6.1	17.2	71.1	74.8	1311.8	1494.5
Plus CY Adv Proc					13.5	6.1	17.2	71.1	74.8	65.0	1246.8	1494.5
Net Proc (P-1)	512.2	25.4	58.5	47.4	36.2	137.8	138.2	299.3	677.1	693.1	12645.9	15271.2
Initial Spares												
Total Proc Cost	512.2	25.4	58.5	47.4	36.2	137.8	138.2	299.3	677.1	693.1	12645.9	15271.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The UH-60 BLACK HAWK will serve as 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 & equipment transport, command & control, and medical evacuation (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 and in adverse weather conditions. The UH-60 is designed to carry a crew of four plus eleven combat equipped troops or an external load up to 9,000 pounds. The UH-60 BLACK HAWK fleet consists of the UH-60A, first fielded in FY78, and the newer UH-60L which was fielded in FY89 and is still in production today. The oldest UH-60As are now over 25 years old, and the average age of the UH-60A fleet is 21 years. This system supports the Current-to-Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 funding initiates the UH-60M RECAP/UPGRADE program, continues procurement and installation of the Crashworthy External Fuel System (CEFS), continues procurement of MEDEVAC mission kits for new production UH-60L aircraft, completes the qualification of the Advanced Helicopter Transmission Lubricant (AHTL) which will lower Operations & Support (O&S) costs by reducing unscheduled maintenance and procures Brigade/Mission Kits. The UH-60M RECAP/UPGRADE program addresses current UH-60 fleet aging problems such as decreasing Operational Readines (OR) and increasing O&S costs, including all top-ten cost drivers, and provides a common, modernized platform for the UH-60 Utility and HH-60M MEDEVAC fleet of the future. The MEDEVAC kit upgrades UH-60L models to an air ambulance configuration providing en-route patient treatment which is critical to patient survival. CEFS is a safety modification that reduces the risk of a post-crash fire. The Brigade/Mission kits provide adapter hoist kits,winterization kits, blackout kits and set, kits, outfit modularity sets that will improve capability of maintenance brigades/units.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature: UH-60 BLACK HAWK MODS (AA0492)

Program Elements for Code B Items:

Code:

Other Related Program Elements: 0203744A/Project 504

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Crashworthy External Fuel System (CEFS)											
	Safety	25.0	13.1	12.0	14.2	19.7	18.9	0.0	0.0	0.0	102.9
HH-60L Medical Equip Package (MEP)											
	Operational	20.8	28.1	5.2	36.8	0.0	0.0	0.0	0.0	0.0	90.9
Adv Hel Transmission Lubricant (AHTL)											
	RAM	0.0	1.5	0.8	1.2	0.0	0.0	0.0	0.0	0.0	3.5
UH-60M/HH-60M RECAP/UPGRADE											
	Selected Upgrade	0.0	0.0	0.0	71.8	87.7	198.5	589.5	617.3	11399.1	12963.9
Military District of Washington (MDW) MODs											
	Operational	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Brigade Sets											
	Operational	0.0	0.0	0.0	7.7	13.6	10.8	12.8	10.8	0.0	55.7
Totals		45.8	42.7	22.8	131.7	121.0	228.2	602.3	628.1	11399.1	13221.7

INDIVIDUAL MODIFICATION Date: February 2004

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

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

DESCRIPTION/JUSTIFICATION:

The Crashworthy External Fuel System (CEFS) 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 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 MILESTONES:

Development is complete.

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0	0	0	0	117	20	21	21	21	15	14	12	12	16	17	17	17	44	44	44	44
Outputs	0	0	0	0	0	29	50	50	50	21	15	14	12	12	16	17	17	17	44	44	44

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		496
Outputs	44																	496

METHOD OF IMPLEMENTATION: Contract Teams ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 9 Months

Contract Dates:	FY 2004	Nov 03	FY 2005	Jan 05	FY 2006	Jan 06
Delivery Date:	FY 2004	Jul 04	FY 2005	Sep 05	FY 2006	Sep 06

INDIVIDUAL MODIFICATION Date: February 2004

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

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
A-Kits (Aircraft Installion Kits)	131	6.6	69	4.3	53	3.4	67	4.5	83	5.7	93	6.4							496	30.9
B-Kits (Installed Equipment)	97	12.5	44	5.7	54	7.0	47	6.6	72	10.4	57	8.6							371	50.8
ESSS Wing Kits	127	2.2	111	1.9			60	1.1	83	1.6	94	1.9							475	8.7
SAR Kits	10	1.3																	10	1.3
Support Equipment	0	1.9		0.3		0.1		0.1		0.1		0.2								2.7
Technical Support	0	0.5		0.1				1.0		0.8		0.1								2.5
First Destination Trans (FDT)	0					0.6		0.5		0.5		0.2								1.8
Installation of A-Kits	**0**																			
FY2002 & Prior Equip -- 131 Kits	0		117	0.8	14	0.1													131	0.9
FY2003 Equip -- 69 Kits	0				69	0.8													69	0.8
FY2004 Equip -- 53 Kits	0						53	0.4											53	0.4
FY2005 Equip -- 67 Kits	0								67	0.6									67	0.6
FY2006 Equip -- 83 Kits	0										83	0.7							83	0.7
FY2007 Equip -- 93 Kits	0										93	0.8							93	0.8
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0	117	0.8	83	0.9	53	0.4	67	0.6	176	1.5		0.0		0.0		0.0	496	4.2
Total Procurement Cost		25.0		13.1		12.0		14.2		19.7		18.9		0.0		0.0		0.0		102.9

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: HH-60L Medical Equip Package (MEP) [MOD 2]

MODELS OF SYSTEM AFFECTED: UH-60L

DESCRIPTION/JUSTIFICATION:

Modifies UH-60L helicopters to the HH-60L MEDEVAC configuration. The modification kit is called the Medical Equipment Package (MEP) which consists of FLIR II, external high performance rescue hoist (HPH), personal locating system (PLS), environmental control system (ECS), improved digital avionics package and advanced medical interior. The MEP will be installed on new production UH-60L aircraft as the aircraft goes through the production line, therefore installation costs are not shown separately on the following page nor is the installation schedule below completed.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The HH-60L Medical Equipment Package (MEP) is approved for production. The Army continues to address obsolescence issues on some components; additional evaluation/testing is on-going/scheduled on these components.

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0																				
Outputs	0																				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		0

METHOD OF IMPLEMENTATION: Contractor ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 12 Months

Contract Dates:	FY 2004	FY 2005	Dec 04	FY 2006
Delivery Date:	FY 2004	FY 2005	Dec 05	FY 2006

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): HH-60L Medical Equip Package (MEP) [MOD 2]

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
HH-60L MEP Production Kits	2	10.8	4	21.0			4	23.8											10	55.6
Installed Equipment	0	8.2		4.4		2.7		6.8												22.1
GFE/Total Package Fielding	0	0.8		2.7				4.0												7.5
Training Devices	1	1.0																	1	1.0
ECP - Component Obsolescence	0					2.5		2.2												4.7
--																				
--																				
--																				
--																				
--																				
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		20.8		28.1		5.2		36.8		0.0		0.0		0.0		0.0		0.0		90.9

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: UH-60M/HH-60M RECAP/UPGRADE [MOD 4]

MODELS OF SYSTEM AFFECTED: UH-60A/L

DESCRIPTION/JUSTIFICATION:

The UH-60M BLACK HAWK will serve as the Army's utility helicopter in the Future Force. Many helicopters in the UH-60 fleet have exceeded the aircraft's designed 20 year service life. The oldest UH-60A models in the fleet were fielded over 25 years ago, and the average age of the UH-60A fleet is 21 years old. The increased operational tempo, coupled with the technological age of the basic airframe, components, and systems, is having an adverse impact on the operational readiness (OR) and operational and support (O&S) costs of the over 1500 aircraft fleet. The current UH-60A/L fleet lacks the necessary digital avionics architecture to meet current and future Army and Joint Service interoperability communication requirements. The Army has determined that a recapitalization/upgrade program is required to address these issues. Transformation of the current UH-60 fleet will be accomplished using an evolutionary, block modification approach. The program will upgrade the UH-60A/L fleet to the UH-60M configuration. The upgrade includes service life extension, structural improvements, upgrade of the propulsion system (UH-60A T700-GE-700 engine and drivetrain to the UH-60L T700-GE-701D engine & drivetrain), and a digital cockpit. The upgrades will meet lift, range, survivability, and interoperability requirements while addressing all top ten O&S cost drivers and extending the useful life of these aircraft another 20 years. The UH-60M provides a common platform for the modernized air ambulance MEDEVAC Mission Equipment Package (MEP). The designation for the MEDEVAC UH-60M is HH-60M. This system supports the Current-to-Future transition path of the Transformation Campaign Plan.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone B Approval	3QFY01
Integration & Qualification Contract Award	3QFY01
Milestone C Approval	2QFY05
LRIP Lot 1 Contract Award	2QFY05
First Unit Equipped	1QFY08

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0										1	2	1	1	1	2	1	1	1	2	4
Outputs	0																1	2	1	1	1

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	7	13	15	15	15	15	16	15	15	14	13	13	13	14	15	15	973	1213
Outputs	2	1	1	1	2	4	7	13	15	15	15	15	16	15	15	14	1056	1213

METHOD OF IMPLEMENTATION: At Contractor Plant ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 18 Months

Contract Dates:	FY 2004		FY 2005	Feb 05	FY 2006	Jan 06
Delivery Date:	FY 2004		FY 2005	Jul 06	FY 2006	Jun 07

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): UH-60M/HH-60M RECAP/UPGRADE [MOD 4]

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E	**0**																			
Procurement	**0**																			
Non-Recurring Procurement	0							0.6		0.1		1.2		5.7		1.3		24.5		33.4
UH-60M Upgrade	0						5	46.0	5	47.0	14	130.6	58	500.6	61	507.1	1070	8834.7	1213	10066.0
Other Flyaway	0							6.2		9.7		17.3		23.7		33.3		746.0		836.2
Training Devices	0							7.9		16.9		15.4		2.8		17.5		41.8		102.3
Other Support	0							11.1		14.0		17.7		22.5		22.2		409.4		496.9
MEDEVAC (HH-60M) Kits											4	16.3	8	34.2	8	35.9	276	1342.7	296	1429.1
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	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		71.8		87.7		198.5		589.5		617.3		11399.1		12963.9

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Brigade Sets [MOD 6]

MODELS OF SYSTEM AFFECTED: UH-60A/L

DESCRIPTION/JUSTIFICATION:

Provides funding to procure mission kits for fielded UH-60 aircraft and Army modularity sets to support the new Aviation Division and Brigade Structure. Included are Ballistic Protection Systems (BPS) mission kits that provides increased protection from small arms significantly improving the safety of the pilot, co-pilot, and cargo area/transported troops. BPS is a fully qualified kit and is compatible with UH-60A MEDEVAC mission kit and troop seats. Also includes Brigade SKO/Mission Modularity Kits that may include adapter hoist kits, winterization kits, blackout kits and modularity kits comprised of a variety of sets, kits and outfits that provide improved capability to fielded maintenance units/brigades. The exact configuration of each set may vary depending on the location and/or unit's mission. Installation will be accomplished by field units.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Development is complete.

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs													20	20	20	21	29	40	40	40	30
Outputs														20	20	20	21	29	40	40	40

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	30	30	36	40	40	40	35	30	30	30	32							633
Outputs	30	30	30	36	40	40	40	35	30	30	30	32						633

METHOD OF IMPLEMENTATION: Field Units ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 6 Months

Contract Dates: FY 2004 FY 2005 Jan 05 FY 2006 Jan 06

Delivery Date: FY 2004 FY 2005 Jul 05 FY 2006 Jul 06

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Brigade Sets [MOD 6]

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Ballistic Protection Systems (BPS)							81	5.0	149	9.3	126	8.0	155	10.0	122	8.0			633	40.3
Modularity Kits/Sets							18	2.7	27	4.3	18	2.8	18	2.8	17	2.8			98	15.4
Interim Contractor Support																				
Installation of Hardware																				
FY 2002 & Prior Equip -- Kits																				
FY 2003 -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
FY 2008 Equip -- Kits																				
FY 2009 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
Total Procurement Cost		0.0		0.0		0.0		7.7		13.6		10.8		12.8		10.8		0.0		55.7

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
UH-60 MODS(Adv Proc) (AA0480)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
0203744A/Project 504

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc					13.5	6.1	17.2	71.1	74.8	65.0	1246.8	1494.5
Net Proc (P-1)					13.5	6.1	17.2	71.1	74.8	65.0	1246.8	1494.5
Initial Spares												
Total Proc Cost					13.5	6.1	17.2	71.1	74.8	65.0	1246.8	1494.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The UH-60 BLACKHAWK will serve as 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 & equipment transport, command & control, and medical evacuation (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 and in adverse weather conditions. The UH-60 is designed to carry a crew of four plus eleven combat equipped troops or an external load up to 9,000 pounds. The UH-60A entered service in fiscal year 1978 (FY78), and the newer model UH-60L in FY89. The Army continues to procure UH-60L helicopters today. The oldest UH-60As are now over 25 years old, and the average age of the UH-60A fleet is 21 years. This system supports the Current-to-Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05-09 Advanced Procurement funding procures long leadtime avionics, airframe and transmission components required to meet the planned delivery schedule for the UH-60M RECAP/Upgrade program.

Advance Procurement Requirements Analysis-Funding (P10A)

First System Award Date:	First System Completion Date:	Date:
2QFY05	4QFY06	February 2004

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

P-1 Line Item Nomenclature / Weapon System
UH-60 MODS

($ in Millions)

0203744A/Project 504

	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
UH-60M							13.5	6.1	17.2	71.1	74.8	65.0	1246.8	1494.5
Total Advance Procurement			0.0	0.0	0.0	0.0	13.5	6.1	17.2	71.1	74.8	65.0	1246.8	1494.5

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2004

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

P-1 Line Item Nomenclature / Weapon System
UH-60 MODS

($ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004 Qty	2004 Contract Forcast Date	2004 Total Cost Request	2005 Qty	2005 Contract Forcast Date	2005 Total Cost Request
End Item Quantity:									
UH-60M				5	Mar 04	13.500	5	Feb 05	6.130
Total Advance Procurement						13.500			6.130

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
KIOWA WARRIOR (AZ2200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	2971.8	41.5	42.1	41.3	50.9	33.8	22.4	42.1	20.7	15.3	24.9	3306.7
Less PY Adv Proc	223.3											223.3
Plus CY Adv Proc	223.3											223.3
Net Proc (P-1)	2971.8	41.5	42.1	41.3	50.9	33.8	22.4	42.1	20.7	15.3	24.9	3306.7
Initial Spares	181.3											181.3
Total Proc Cost	3153.1	41.5	42.1	41.3	50.9	33.8	22.4	42.1	20.7	15.3	24.9	3488.0
Flyaway U/C												
Wpn Sys 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 .50-caliber machine gun. The aircraft operates autonomously at standoff ranges providing armed reconnaissance, command and control, and target acquisition/designation for Apache helicopters and other airborne weapons platforms in day, night, and adverse-weather conditions. The Active Army, the Army Reserves, and the National Guard all fly Kiowa Warrior missions.

The Army's transition to the digitized battlefield requires that the OH-58D incorporate both safety and operational compatibility modifications. 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. SEP improves engine reliability, reducing the probability of engine failure and exposure to emergency autorotations and protects engines from corrosion from sand/dust. SEP enables both the inclusion and expansion of critical digitization capabilities which will improve system reliability and maintainability and will provide an enhanced message completion rate for digital messages and situational awareness over the Tactical Internet. Partial SEP improvements had previously been incorporated into the later lots of Bell Helicopter's Kiowa Warrior remanufacture/retrofit modification 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 initiative will improve operational and autorotational characteristics as well as increase system reliability and lower support costs. The goal is to reduce aircraft operational gross weight by 300-400 pounds. Multiple, related initiatives have been identified to attain the weight reduction. Efforts include removing obsolete and extraneous hardware, removing excess layers of paint, replacing the AN/ALQ-144 Infrared Jammer with an infrared exhaust diffuser, replacing the current bomb rack, updating the multifunction displays (MFD) with lightweight MFDs, and adding the GAU-19 .50-caliber, three-barrel Gatling Gun in lieu of the M2 .

-caliber machine gun. The initiation of procurement activities for Weight Reduction have been accelerated due to Congressional action.

FY 2004 funds include a $4.2 million congressional increase for the GAU-19 Gun, accelerating its qualification and initial acquisition; and a $2 million increase for a helmet-mounted optical display.

This system supports both the Current and the Stryker Brigade Combat Team (SBCT) transition paths of the Transformation Campaign Plan (TCP). One Kiowa Warrior unit will support the SBCT.

Justification:
FY05 procures additional/continuing modification efforts which allow the Kiowa Warrior to safely serve as the Army's night, armed-reconnaissance, aviation capability until Comanche fielding begins and to complement the Comanche aircraft until displaced in approximately 2016/17.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature: KIOWA WARRIOR (AZ2200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Safety Enhancement Program (SEP)											
2-97-01-0115	Safety	182.7	41.3	44.7	33.8	22.4	21.9	7.1	3.9	0.2	358.0
Safety Enhancement Program - Weight Reduction											
2-02-01-0116	Safety	0.0	0.0	4.2	0.0	0.0	20.2	13.6	11.4	24.7	74.1
Helmet-Mounted Optical Display											
2-XX-08-0117	Operation Capability	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Totals		182.7	41.3	50.9	33.8	22.4	42.1	20.7	15.3	24.9	434.1

INDIVIDUAL MODIFICATION Date: February 2004

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 368 Kiowa Warriors, 304 (including nine Category B trainers) will receive SEP modifications; 227 will be accomplished on the contractor's modification line and 77 additional aircraft had been partially equipped in prior remanufacture/retrofit lines. Thirteen of those 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 and some will have seats, airbags, and engine barrier filters installed in the field. The full fleet of 368 aircraft will be equipped with engine barrier filters, seats, and airbags.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Note: Installation Schedule data not provided below. Majority of aircraft will be block-modified at the Bell Helicopter Textron, Inc. facility via annual contractual orders to modify aircraft to be delivered over a 12-month period. Some but not all aircraft will receive the complete complement of modifications at that facility. Some aircraft will receive portions of the modification efforts via field retrofit and; similarly, not all field retrofit aircraft will receive all field retrofit modifications. Hardware installation dollars on Page 2 of this form represent a compilation of the 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 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0																				
Outputs	0																				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		

METHOD OF IMPLEMENTATION: Kr line & fld retrofit ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 13 Months

Contract Dates:	FY 2004	Mar 04	FY 2005	Mar 05	FY 2006	Mar 06
Delivery Date:	FY 2004	Mar 05	FY 2005	Mar 06	FY 2006	Mar 07

INDIVIDUAL MODIFICATION Date: February 2004

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

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Aircraft Modified - Bell Helicopter	124		24		22		20		18		19								227	
Nonrecurring		23.5		3.3		3.2		3.1		3.0		2.9								39.0
Recurring - Bell Helicopter		64.5		14.1		13.7		12.0		9.9		9.0								123.2
Government-Furnished Equipment		69.9		15.3		14.8		9.5		2.7		2.2		0.7		0.3				115.4
Engineering Change Orders				0.8		0.2		0.6		0.1		0.4		0.3		0.4		0.2		3.0
Aircraft Preparation		9.5		1.9		1.7		1.8		1.8		2.0		0.8						19.5
Fielding		2.2		1.1		1.6		1.7		1.0		1.0		1.0		0.0				9.6
Training/Training Devices		5.8		0.9		5.3		0.9												12.9
Other		4.5		2.3		2.9		2.9		2.9		3.0		3.4		2.9				24.8
Technical Support		2.3		0.8		0.6		0.6		0.6		0.6		0.6						6.1
Installation of Hardware - Field	**0**																			
FY 2002 & Prior Equip -- Kits		0.5																		0.5
FY 2003 -- Kits				0.8																0.8
FY 2004 Equip -- Kits						0.7														0.7
FY 2005 Equip -- Kits								0.7												0.7
FY 2006 Equip -- Kits										0.4										0.4
FY 2007 Equip -- Kits												0.8								0.8
FY 2008 Equip -- Kits														0.3						0.3
FY 2009 Equip -- Kits																0.3				0.3
TC Equip- Kits																				
Total Installment	0	0.5		0.8		0.7		0.7		0.4		0.8		0.3		0.3		0.0		4.5
Total Procurement Cost		182.7		41.3		44.7		33.8		22.4		21.9		7.1		3.9		0.2		358.0

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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 Program Elements:
PE 0604201A, PE 0305114A, SSN AA0704

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	361.3	52.4	76.9	90.9	74.1	49.1	59.4	124.5	145.3	136.3		1170.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	361.3	52.4	76.9	90.9	74.1	49.1	59.4	124.5	145.3	136.3		1170.0
Initial Spares	54.5	2.0	1.6	2.0	4.7	3.8	4.6	4.5	3.3	2.8		83.8
Total Proc Cost	415.8	54.4	78.5	92.9	78.8	52.8	64.0	129.0	148.6	139.1		1253.7
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The Airborne Avionics budget line includes the Global Positioning System (GPS), the Improved Data Modem (IDM), the Aviation Mission Planning System (AMPS), the Joint Precision Approach and Landing System (JPALS) and the Joint Tactical Radio System (JTRS). The GPS, IDM, AMPS, and JTRS 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)/AN/ASN-128B is used for the utility and cargo helicopters. The Embedded GPS Inertial Navigation System (EGI) is integrated into the Attack and Special Operations fleets of helicopters. A Pre-Planned Product Improvement 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 IDM is the key to digitizing Army Aviation. It is the centerpiece of Aviation's connectivity with the Tactical Internet (TI) and Fire Support (FS) Internet. This hardware/software solution allows Army Aviation interoperability with other weapon and ground systems. The IDM provides a common Aviation platform solution for processing Situational Awareness and Joint Variable Message Format messages. IDM will be installed on the AH-64D, OH-58D, CH-47F, Special Operations Aircraft (SOA), UH/HH-60M, and Tactical Airspace Integration Systems (TAIS).

AMPS is a mission planning/battle-synchronization tool that automates aviation mission planning tasks that include tactical command and control, mission planning, and flight planning. It interfaces with the Maneuver Control System (MCS) and associated networks which will 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 which are loaded onto the aircraft platforms, initializing the communication, navigation, and situational awareness systems on the modernized fleet aircraft, including the AH-64A Apache Modernization, AH-64D Longbow Apache, CH-47D/F Chinook, OH-58D Kiowa Warrior, RAH-66 Comanche, and UH-60A/L/M/Q and HH-60L/M Blackhawk. To support the required future capabilities of the Aviation fleet in the Future Force, AMPS will migrate to the Joint Mission Planning System (JMPS)in FY05. JMPS is a congressionally directed Multi-Service system.

Exhibit P-40C, Budget Item Justification Sheet		Date: February 2004
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 Program Elements: PE 0604201A, PE 0305114A, SSN AA0704

Migration to JMPS is being accomplished in two phases: support of near term Army Aviation fleet requirements and risk reduction by developing platform-specific modules for the Army variant of Portable Flight Planning Software (PFPS), and modification of those modules and development of additional capabilites under the JMPS architecture. The architecture inherent in JMPS will accommodate modifications required to support the Future Combat System and associated family of Unmanned Aerial Vehicles that are to be deployed within Aviation Brigades.

The Joint Precision Approach Landing Sytems (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.

The Joint Tactical Radio System (JTRS) aircraft installation is the transformational system that will provide Army Aviation the required interoperability capability for Future Force and Joint Force operations. The JTRS is a DoD directed replacement for all legacy radio systems. The JTRS provides the foundation for achieving network centric warfare operations across the radio frequency (RF) spectrum providing digital information exchange for situational awareness, both vertically and horizontally, between Joint Warfighting elements, while enabling connectivity to civil and national authorities in support of Homeland Defense. The JTRS will provide an internal capability through an open systems architecture approach in compliance with the Joint Technical Architecture which improves system performance and provides a growth capability for technology insertion at a minimal cost and effort.

All of these systems support the Current to Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures GPS (EGI & DGNS) modification kits for field retrofit on the UH-60A/L, CH-47D and Special Operations Aircraft. P3I is required to meet the Chairman of the Joint Chiefs of Staff (CJCS)-directed security requirement (Selective Availability Anti-Spoofing Module (SAASM)) dated 2 January 2001 and to provide a box level IFR navigation capability. GPS P3I, GATM and JPALS programs are closely linked and have joint perspective/participation.

FY05 procures 122 IDM 304 B-Kits for AH-64D, OH-58D, CH-47F, and UH/HH-60M fielding requirements. The IDM improves Army Aviation's interoperability, lethality, and operational tempo through the exchange of fast and accurate data-burst communications, via the TI and FS Internet; providing a seamless capability to communicate across the digital battlefield.

FY05 procures AMPS upgrades for system hardware as well as upgrading the system software to support aviation fleet modernization programs and migration, and required enhancements, to the Joint Mission Planning System (JMPS).

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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 Program Elements: PE 0604201A, PE 0305114A, SSN AA0704

Description		Fiscal Years								
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Improved Data Modem (IDM)											
	Oper/Log	157.1	57.0	34.8	23.3	20.0	36.7	57.4	32.6	869.1	1288.0
Aviation Mission Planning System (AMPS)											
1-95-01-2185	Oper/Log	74.7	22.4	24.6	12.6	9.9	11.8	12.5	12.7	218.9	400.1
Embedded GPS Inertial Navigation System (EGI) P3I											
	Legislative	22.5	4.3	1.9	2.1	1.4	1.7	1.3	11.6	234.1	280.9
DGNS (AN/ASN-128B) P3I											
	Oper/Log	12.0	7.2	12.8	11.1	9.0	12.7	19.1	13.2	1.6	98.7
Joint Tactical Radio System (JTRS)											
	Operational	0.0	0.0	0.0	0.0	19.1	61.6	55.0	66.2	700.0	901.9
Joint Precision Approach and Landing Sys (JPALS)											
	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	562.7	562.7
Totals		266.3	90.9	74.1	49.1	59.4	124.5	145.3	136.3	2586.4	3532.3

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: Improved Data Modem (IDM) [MOD 1]

MODELS OF SYSTEM AFFECTED: IDM MD-1359/A;Aircraft: Longbow,Kiowa Warrior,Special Operations Aircraft,Chinook, Blackhawk

DESCRIPTION/JUSTIFICATION:

The IDM is the key to digitizing Army Aviation. It is the centerpiece of Aviation's connectivity with the Tactical Internet (TI) and Fire Support (FS) Internet. This hardware/software solution allows Army Aviation interoperability with other weapon and ground systems. The IDM provides a common Aviation platform solution for processing Situational Awareness and Joint Variable Message Format messages. IDM will be installed on the AH-64D, OH-58D, CH-47F, Special Operations Aircraft (SOA), UH/HH-60M, and Tactical Airspace Integration Systems (TAIS).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		0

METHOD OF IMPLEMENTATION: Field retrofit ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 18 Months

Contract Dates:	FY 2004	Jun 04	FY 2005	Jun 05	FY 2006	Jun 06
Delivery Date:	FY 2004	Dec 05	FY 2005	Dec 06	FY 2006	Dec 07

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): Improved Data Modem (IDM) [MOD 1]

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity - B Kits	509	16.8	204	7.6	97	4.5	122	5.5	105	4.7	161	7.2	154	7.1	140	8.3	862	43.2	2354	104.9
Mods - B Kit	206	4.5															3692	181.8	3898	186.3
Installation Kits-A-Kits	240	11.9																	240	11.9
Aircraft Integration		68.2		34.2		19.2		11.2		5.1		14.1		34.3		9.8		299.7		495.8
H/W S/W, Nonrecurring		33.9		11.4		8.5		4.5		8.1		12.4		12.0		11.7		286.8		389.3
Engineering Change Orders		3.9																3.0		6.9
Data		1.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.9		2.7
System Test and Evaluation		0.8		1.0		0.5		0.6		0.6		0.6		0.6		0.6		5.8		11.1
Support Equipment		0.6		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.9		2.2
Other - PM Adm		13.0		1.9		1.6		1.0		1.0		1.8		2.8		1.6		43.4		68.1
Training Equipment																				
Fielding		2.4		0.7		0.3		0.3		0.3		0.4		0.4		0.4		3.6		8.8
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits																				
FY2003 Equip -- Kits																				
FY2004 Equip -- Kits																				
FY2005 Equip -- Kits																				
FY2006 Equip -- Kits																				
FY2007 Equip -- Kits																				
FY2008 Equip -- Kits																				
FY2009 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
Total Procurement Cost		157.1		57.0		34.8		23.3		20.0		36.7		57.4		32.6		869.1		1288.0

INDIVIDUAL MODIFICATION Date: February 2004

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

MODELS OF SYSTEM AFFECTED: Apache (AH-64A Mod./AH-64D), Blackhawk (UH-60A/L/Q and HH-60L), Chinook, Comanche, Kiowa Warrior

DESCRIPTION/JUSTIFICATION:

The AMPS is a mission planning/battle-synchronization tool that automates aviation mission planning tasks. The AMPS includes tactical command and control, mission planning and management. It interfaces with the Maneuver Control System (MCS) and associated networks which will 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 which is loaded on the aircraft platforms, initializing the communication, navigation, and situational awareness systems on the modernized fleet aircraft. Since the airframes have the data receptacles/buses required to interface with AMPS, there is no installation cost/schedule. AMPS is fielded to Aviation Brigade and Battalion Headquarters and Line Company Command Posts. Equipment purchases are on a four year cycle. In the first two years, the computers are replaced. In the second two years computer components are upgraded.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Operational Requirements Document Change 1 approved Apr 1998. JMPS decision in FY 98. JMPS Combat 1 (JC1) software initial operational capability projected Jul 04.

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0																				
Outputs	0																				

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		0
Outputs																		

METHOD OF IMPLEMENTATION: N/A ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 4 Months

Contract Dates:	FY 2004	Feb 04	FY 2005	Feb 05	FY 2006	Feb 06
Delivery Date:	FY 2004	Jun 04	FY 2005	Jun 05	FY 2006	Jun 06

INDIVIDUAL MODIFICATION Date: February 2004

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

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity - B Kit																				
B Kit (Computer)	705	19.7	586	5.6	537	5.2					681	4.8	753	5.5			2866	26.1	6128	66.9
B Kit (Upgrades)							586	1.4	537	1.4					681	1.4	3619	7.2	5423	11.4
B Kit (Peripherals)		11.7																		11.7
Equipment, Nonrecurring		8.4		0.3				0.3								0.3		0.3		9.6
Engineering Change Orders		26.8		13.1		16.1		8.1		5.7		4.1		3.8		7.7		148.2		233.6
System Test & Eval		0.3		0.2		0.1		0.2		0.2		0.2		0.2		0.2		2.2		3.8
Training Equipment		0.1		0.2																0.3
Support Equipment																				
Other - PM Admin		4.1		1.1		1.2		0.6		0.4		0.5		0.6		0.6		10.9		20.0
Fielding		3.6		1.9		2.0		2.0		2.2		2.2		2.4		2.5		24.0		42.8
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits																				
FY2003 Equip -- Kits																				
FY2004 Equip -- Kits																				
FY2005 Equip -- Kits																				
FY2006 Equip -- Kits																				
FY2007 Equip -- Kits																				
FY2008 Equip -- Kits																				
FY2009 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
Total Procurement Cost		74.7		22.4		24.6		12.6		9.9		11.8		12.5		12.7		218.9		400.1

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE: DGNS (AN/ASN-128B) P3I [MOD 4]

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

The Doppler GPS Navigation System (DGNS) is one of the aviation systems required for Digitization of the Battlefield. FY 05 starts the fielding of the Pre-Planned Product Improvement (P3I) for the ASN-128B/DGNS for the UH-60A/L and CH-47D aircraft. This modification will provide enhanced security with the CJCS directed Selective Availability Anti-Spoofing Module (SAASM)and GPS Instrument Flight Rule (IFR) navigation capability. The AN/ASN-128B/DGNS P3I will meet the requirements of civil airspace regulatory requirements for the UH-60A/L and CH-47D aircraft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs										51	51	51	53	45	45	45	42	33	33	33	35
Outputs										34	51	51	53	47	45	45	44	35	33	33	33

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	54	54	55	57	81	81	83	84	50	50	50	52						1268
Outputs	49	54	54	57	73	81	82	84	45	45	58	58	24					1268

METHOD OF IMPLEMENTATION: OLR Team ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 6 Months

Contract Dates:	FY 2004	Apr 04	FY 2005	Apr 05	FY 2006	Apr 06
Delivery Date:	FY 2004	Oct 04	FY 2005	Oct 05	FY 2006	Oct 06

INDIVIDUAL MODIFICATION Date: February 2004

MODIFICATION TITLE (Cont): DGNS (AN/ASN-128B) P3I [MOD 4]

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity					206	9.1	177	7.8	134	6.5	220	9.9	329	14.7	202	9.1			1268	57.1
Installation Kits					206	0.8	177	0.7	134	0.5	220	0.9	329	1.2	202	0.8			1268	4.9
Installation Kits, Nonrecurring		5.4		1.9																7.3
Equipment																				
Equipment, Nonrecurring		5.9		4.1		2.3														12.3
Engineering Change Orders								0.3		0.2										0.5
Data								0.3		0.2		0.3		0.5		0.3				1.6
Training Equipment								0.1		0.1		0.1		0.2		0.1				0.6
Support Equipment																				
Other-PM Admin & Matrix Spt		0.7		1.2		0.6		0.6		0.4		0.6		1.0		0.7		0.2		6.0
Fielding (NETT)																				
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits																				
FY2003 Equip -- Kits																				
FY2004 Equip -- Kits							206	1.3											206	1.3
FY2005 Equip -- Kits									177	1.1									177	1.1
FY2006 Equip -- Kits											134	0.9							134	0.9
FY2007 Equip -- Kits													220	1.5					220	1.5
FY2008 Equip -- Kits															329	2.2			329	2.2
FY2009 Equip -- Kits																	202	1.4	202	1.4
TC Equip- Kits																				
Total Installment	0	0.0		0.0		0.0	206	1.3	177	1.1	134	0.9	220	1.5	329	2.2	202	1.4	1268	8.4
Total Procurement Cost		12.0		7.2		12.8		11.1		9.0		12.7		19.1		13.2		1.6		98.7

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
GATM Rollup (AA0711)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost			40.9	66.0	23.9	61.3	31.5	30.5	51.2	76.9	252.1	634.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)			40.9	66.0	23.9	61.3	31.5	30.5	51.2	76.9	252.1	634.4
Initial Spares												
Total Proc Cost			40.9	66.0	23.9	61.3	31.5	30.5	51.2	76.9	252.1	634.4
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
This budget line supports procurement of Global Air Traffic Management equipment for both Fixed Wing (FW) and Rotary Wing (RW) aircraft. GATM supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 2 / Modification of aircraft	P-1 Line Item Nomenclature: GATM Rollup (AA0711)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Units	$000	$000	Units	$000	$000	Units	$000	$000	Units	$000
Fixed Wing Aircraft (AA0703)					40401						41726		
Rotary Wing Aircraft (AA0704)					25619			23925			19533		
Total					**66020**			**23925**			**61259**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
GATM - Fixed Wing Aircraft (AA0703)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost			20.7	40.4		41.7	8.8	7.8	9.2	8.3		136.8
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)			20.7	40.4		41.7	8.8	7.8	9.2	8.3		136.8
Initial Spares												
Total Proc Cost			20.7	40.4		41.7	8.8	7.8	9.2	8.3		136.8
Flyaway U/C												
Wpn Sys 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. Test equipment and spares necessary to support the modifications will be procured. This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 05 procures GATM equipment for Fixed Wing aircraft. Fixed Wing aircraft were purchased with current avionics and navigation equipment 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-40M, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature: GATM - Fixed Wing Aircraft (AA0703)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years								
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Global Air Traffic Management - FW											
GATM-FW	Operational	20.7	36.3	0.0	41.7	8.8	7.8	9.2	8.3	0.0	132.8
Blue Force Tracking (BFT)											
Unknown	Unknown	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
Totals		20.7	40.4	0.0	41.7	8.8	7.8	9.2	8.3	0.0	136.9

INDIVIDUAL MODIFICATION Date: February 2004

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

MODELS OF SYSTEM AFFECTED: C-12 series; RC-12 series; C-23; C-26; C-37; C-20F,E and UC-35

DESCRIPTION/JUSTIFICATION:

This effort will update and modernize communication, navigation, and surveillance equipment to current international requirements, allow worldwide deployments and continued safe operations into the 21st Century.

As currently equipped, the aircraft are not suitable for worldwide deployment nor capable of using modern navigation and air traffic control capabilities. There is a variety of equipment that will be 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 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 configuration vary based on the aircraft that they will be installed on. Consequently, kit unit and installation cost will vary significantly from year to year.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Development is not required for avionics system cockpit upgrades.

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	39			18	18							22	21			4	4			5	5
Outputs	39				18	18							22	21			4	4			5

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs			11	11			10	11										179
Outputs	5			11	11			10	11									179

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 6 Months

Contract Dates:	FY 2004	FY 2005	Feb 05	FY 2006 Feb 06
Delivery Date:	FY 2004	FY 2005	Jul 05	FY 2006 Jul 06

INDIVIDUAL MODIFICATION Date: February 2004

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

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits	39	15.3	36	26.7	0		43	28.0	8	6.8	10	5.5	22	6.5	21	5.4			179	94.2
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data		0.1		0.1				0.1		0.1		0.1		0.1		0.1				0.7
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits	39	5.3																	39	5.3
FY2003 Equip -- Kits			36	9.5															36	9.5
FY2004 Equip -- Kits					0															
FY2005 Equip -- Kits							43	13.6											43	13.6
FY2006 Equip -- Kits									8	1.9									8	1.9
FY2007 Equip -- Kits											10	2.2							10	2.2
FY2008 Equip -- Kits													22	2.6					22	2.6
FY2009 Equip -- Kits															21	2.8			21	2.8
TC Equip- Kits																				
Total Installment	39	5.3	36	9.5	0	0.0	43	13.6	8	1.9	10	2.2	22	2.6	21	2.8		0.0	179	37.9
Total Procurement Cost		20.7		36.3		0.0		41.7		8.8		7.8		9.2		8.3		0.0		132.8

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature
GATM - Rotary Wing Aircraft (AA0704)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
SSN AA0701, SSN AA0711

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost			20.2	25.6	23.9	19.5	22.8	22.7	42.0	68.6	252.1	497.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)			20.2	25.6	23.9	19.5	22.8	22.7	42.0	68.6	252.1	497.5
Initial Spares												
Total Proc Cost			20.2	25.6	23.9	19.5	22.8	22.7	42.0	68.6	252.1	497.5
Flyaway U/C												
Wpn Sys 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 Identification Friend or Foe (IFF) Mode 5 capability. This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures avionics that will allow Rotary Wing aircraft to meet near-term GATM requirements. Europe mandates a Mode-S transponder for Instrument Flight Rules (IFR) flight after Mar 05 and for all flights after Mar 08. Army aircraft will not be allowed to transit through or operate in European airspace affected by these mandates. 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. IFF Mode 5 provides enhanced security and greatly improved performance over Mode 4. It maintains compatibility with civil ATC with less interference.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2004

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

P-1 Item Nomenclature: GATM - Rotary Wing Aircraft (AA0704)

Program Elements for Code B Items:

Code:

Other Related Program Elements: SSN AA0701, SSN AA0711

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Global Air Traffic Management - RW											
GATM-RW	Unclassified	20.2	25.6	23.9	19.5	22.8	22.7	42.0	68.6	252.1	497.4
Totals		20.2	25.6	23.9	19.5	22.8	22.7	42.0	68.6	252.1	497.4

INDIVIDUAL MODIFICATION Date: February 2004

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

MODELS OF SYSTEM AFFECTED: CH-47D, UH-60A/L, MH-47D/E, MH-60L/K, A/MH-6, TH-67, AH-64/A/D, OH-58D

DESCRIPTION/JUSTIFICATION:

High priority requirements funding will address enhanced communications and surveillance equipment necessary for airspace access for rotary wing aircraft operations (peacetime and wartime missions) in worldwide. Funding will procure and install Mode-S transponders for all rotary wing aircraft and Mode 5 upgrades for all except TH-67.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

NOTE ON KIT AND INSTALLATION QUANTITIES:

B kit quantity exceeds A kit and installation quantities because B kits are bought for the 501 AH-64D fleet. Field retrofit will be performed on the aircraft. 178 aircraft will be addressed on the production line and will not require A kits nor field installations.

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0					117	117	117	119	135	136	135	135	32	32	33	33	65	66	66	66
Outputs	0					78	117	117	118	130	136	135	135	66	32	33	33	54	66	66	66

	FY 2008				FY 2009				FY 2010				FY 2011				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	72	72	72	72	115	115	115	115	168	168	168	166	193	194	193	194	659	4255
Outputs	70	72	72	72	101	115	115	115	150	168	168	168	183	193	194	193	724	4255

METHOD OF IMPLEMENTATION: OLR Team ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 6 Months

Contract Dates:	FY 2004	Apr 04	FY 2005	Apr 05	FY 2006	Apr 06
Delivery Date:	FY 2004	Oct 04	FY 2005	Oct 05	FY 2006	Oct 06

INDIVIDUAL MODIFICATION Date: February 2004

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

FINANCIAL PLAN: ($ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity (B Kits)	470	16.2	337	7.6	395	13.0	200	9.1	300	14.9	308	14.4	469	28.8	670	47.1	1284	173.0	4433	324.1
Installation Kits (A Kits)	470	2.2			541	2.2	130	0.8	263	1.2	288	1.4	460	4.2	670	7.3	1433	25.9	4255	45.2
Installation Kits, Nonrecurring		0.3		9.5		0.7		5.2		3.0				0.3		0.7		3.8		23.5
Equipment																				
Equipment, Nonrecurring				6.7		4.7														11.4
Engineering Change Orders								0.2		0.2		0.2		0.8		1.4		1.7		4.5
Data														0.5		1.1		2.0		3.6
Training Equipment		0.1		0.6								2.6		0.4		0.8				4.5
Support Equipment																				
Other - PM Admin		1.4		1.1		0.9		1.0		1.1		0.1		2.1		2.7		8.6		19.0
Interim Contractor Support				0.1		0.1		0.0		0.1		0.1		0.1		0.1		0.0		0.6
Installation of Hardware	**0**																			
FY2002 & Prior Equip -- Kits					470	2.3													470	2.3
FY2003 Equip -- Kits																				
FY2004 Equip -- Kits							541	3.2											541	3.2
FY2005 Equip -- Kits									130	2.3									130	2.3
FY2006 Equip -- Kits											263	3.9							263	3.9
FY2007 Equip -- Kits													288	4.8					288	4.8
FY2008 Equip -- Kits															460	7.4			460	7.4
FY2009 Equip -- Kits																				
TC Equip- Kits																	2103	37.1	2103	37.1
Total Installment	0	0.0		0.0	470	2.3	541	3.2	130	2.3	263	3.9	288	4.8	460	7.4	2103	37.1	4255	61.0
Total Procurement Cost		20.2		25.6		23.9		19.5		22.8		22.7		42.0		68.6		252.1		497.4

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /2/Modification of aircraft	AIRBORNE DIGITIZATION (AA0702)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		SSN BU1400, PE 654201, PE 654805

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost					1.9							1.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)					1.9							1.9
Initial Spares												
Total Proc Cost					1.9							1.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The Joint Tactical Radio System (JTRS) Kit program was moved to the Airborne Avionics Budget Line (Standard Study Number AA0700) beginning in FY 2005.

This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /3/Spares and repair parts

P-1 Item Nomenclature
SPARE PARTS (AIR) (AA0950)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	969.2	5.0	3.9	3.9	11.2	10.9	24.5	23.6	11.8	2.8		1066.8
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	969.2	5.0	3.9	3.9	11.2	10.9	24.5	23.6	11.8	2.8		1066.8
Initial Spares												
Total Proc Cost	969.2	5.0	3.9	3.9	11.2	10.9	24.5	23.6	11.8	2.8		1066.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Provides for the procurement of spares to support initial fielding of new or modified end items.

Justification:
The funds in this account procure depot level reparables (DLR) secondary items from the Supply Management, Army activity of the Army Working Capital Fund.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /4/Support equipment and facilities	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		SSN AA0720; PE/Project 0604270A/665

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	440.9	9.9	37.4	3.1	17.3	7.3	10.3	29.2	45.2	31.6	607.7	1239.8
Less PY Adv Proc	11.6											11.6
Plus CY Adv Proc	11.6											11.6
Net Proc (P-1)	440.9	9.9	37.4	3.1	17.3	7.3	10.3	29.2	45.2	31.6	607.7	1239.8
Initial Spares	52.5		1.4									53.9
Total Proc Cost	493.3	9.9	38.7	3.1	17.3	7.3	10.3	29.2	45.2	31.6	607.7	1293.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
This budget line includes Aircraft Survivability Equipment (ASE) Warning Receivers and ASE Radar Countermeasures. These system supports the Current to Future Force transition path of the Transformation Campaign Plan (TCP).

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
ASE Warning Receivers								7798			2434		
ASE Radar CM					3078	13	237	9452	77	123	4885	35	140
Total					**3078**			**17250**			**7319**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
ASE WARNING RECEIVERS (AZ3506)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	340.4	4.0			7.8	2.4	2.1	2.4	2.6	2.9	30.6	395.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	340.4	4.0			7.8	2.4	2.1	2.4	2.6	2.9	30.6	395.3
Initial Spares												
Total Proc Cost	340.4	4.0			7.8	2.4	2.1	2.4	2.6	2.9	30.6	395.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The Aircraft Survivability Equipment Trainer IV (ASET IV) is mounted on six HMMWVs and is an aviation threat emitter simulation and training system, which enables aircrews of Army Aviation Platforms a full capability to train in recognizing surface-to-air-missiles (SAM) and anti-aircraft artillery (AAA) threats in order to employ the correct aircraft threat avoidance tactics. Eight systems have been produced and are being upgraded to simulate the most current SAM and AAA threats, as well as to locate, identify, and track aircraft at night through the use of night vision cameras. The aircraft training against the ASET IV include the Apache, Chinook, Kiowa Warrior, and Blackhawk platforms, and will include the Comanche when it is fielded. This system supports the Current to Future Force transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures fielding of the redesigned Radio Frequency Surface To Air Missile (RFSAM(2)) upgrade modification kit, first article testing of the production version of the Infrared Surface To Air Missile (IRSAM(2)) upgrade modification kit, and addressing of obsolescence and redesign issues as they arise. The RFSAM(2) upgrade modification kits will be fielded to ASET IV suites at the National Training Center, the Combat Maneuver Training Center, and the Joint Readiness Training Center, as well as at Ft. Hood, Ft. Campbell, and Ft. Bragg. The ASET IV provides Army aviators with the aircraft survivability equipment training capability necessary to maintain the highest operator skill level and to maximize readiness.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: ASE WARNING RECEIVERS (AZ3506)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Units	$000	$000	Units	$000	$000	Units	$000	$000	Units	$000
ASE WARNING RECEIVERS													
AN/TPQ-45 ASE Trainer IV (ASET IV)													
ASET IV NRE, Upgrades, and Fielding								7436			2319		
Project Management Support								362			115		
Total								**7798**			**2434**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
ASE RADAR CM (AZ3508)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
SSN AA0720; PE/Project 0604270A/665

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	100.4	5.9	37.4	3.1	9.5	4.9	8.2	26.8	42.6	28.7	577.1	844.5
Less PY Adv Proc	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		11.6
Plus CY Adv Proc	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		11.6
Net Proc (P-1)	100.4	5.9	37.4	3.1	9.5	4.9	8.2	26.8	42.6	28.7	577.1	844.5
Initial Spares	52.5		1.4									53.9
Total Proc Cost	152.9	5.9	38.7	3.1	9.5	4.9	8.2	26.8	42.6	28.7	577.1	898.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Aircraft Survivability Equipment Radar Countermeasures is a summary rollup for the AN/AVR-2B, Laser Detecting Set and the AN/ALQ-211, Suite of Integrated Radio Frequency Countermeasures (SIRFC). However, all funding between FY03 and FY05 is for the AN/AVR-2A and AN/AVR-2B, Laser Detecting Sets. The nomenclature for the AN/AVR-2A with Engineering Change Proposal referred to in previous P-Form submissions has officially been changed to the AN/AVR-2B(V), Laser Detecting Set, effective 11 July 2003.

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. SIRFC identifies and protects U.S. Army and Special Operations Aircraft against multiple radio frequency weapon systems. These systems support the Current to Future Force transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures 35 AN/AVR-2B systems to complete installation on AH-64A/D aircraft in support of the Operational Requirements Document and the aircraft missions. These systems must be procured to increase the survivability of U.S. Army aircrews by detecting and alerting them of impending threats from laser aided weapon systems. SIRFC's FY05 procurement is funded through the Special Operations Command (SOCOM).

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: ASE RADAR CM (AZ3508)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
AN/AVR-2B Laser Warning													
AN/AVR-2A System Acquisition								2500	17	147			
AN/AVR-2B System Acquisition					1801	13	139	4283	60	71	2499	35	71
Engineering Change Proposals					278								
Systems Engineering Non-Recurring					845			2549			2141		
Project Management					154			120			245		
SUBTOTAL - AN/AVR-2B					**3078**			**9452**			**4885**		
Total					**3078**			**9452**			**4885**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
ASE RADAR CM (AZ3508)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
AN/AVR-2A System Acquisition										
FY 2004	TBD	C/FFP	CECOM, Ft. Monmouth, NJ	May 04	Feb 05	17	147	Yes		
AN/AVR-2B System Acquisition										
FY 2003	Goodrich Danbury, CT	C/FFP	CECOM, Ft. Monmouth, NJ	Apr 03	Jul 04	13	139	Yes		
FY 2004	TBD	C/FFP	CECOM, Ft. Monmouth, NJ	May 04	Feb 05	60	71	No		
FY 2005	TBD	C/FFP	CECOM, Ft. Monmouth, NJ	Jan 05	Oct 05	35	71	No		

REMARKS:

FY 04 / 05 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ASE RADAR CM (AZ3508)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05										LATER
										Calendar Year 04													Calendar Year 05								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AN/AVR-2A System Acquisition																													
	2	FY 04	A	17	0	17								A									5	5	5	2					0
AN/AVR-2B System Acquisition																													
	1	FY 03	A	13	0	13										5	5	3												0
	2	FY 04	A	60	0	60								A									5	5	5	5	5	5	5	20
	2	FY 05	A	35	0	35																A								35
Total				125		125										5	5	3					10	10	10	7	5	5	5	5	55

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Goodrich , Danbury, CT	60.00	240.00	360.00	0
2	TBD ,	60.00	240.00	360.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	0	1	15	16
	REORDER	0	1	15	16
2	INITIAL	0	7	9	16
	REORDER	0	1	9	10

REMARKS

FY 06 / 07 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ASE RADAR CM (AZ3508)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06												Fiscal Year 07										LATER
							Calendar Year 06												Calendar Year 07										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AN/AVR-2A System Acquisition																													
	2	FY 04	A	17	17	0																							0
AN/AVR-2B System Acquisition																													
	1	FY 03	A	13	13	0																							0
	2	FY 04	A	60	40	20	5	5	5	5																			0
	2	FY 05	A	35	0	35	5	5	5	5	5	5	5																0
Total				125	70	55	10	10	10	10	5	5	5																

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Goodrich , Danbury, CT	60.00	240.00	360.00	0
2	TBD ,	60.00	240.00	360.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	0	1	15	16
	REORDER	0	1	15	16
2	INITIAL	0	7	9	16
	REORDER	0	1	9	10

REMARKS

Production Rates are yearly rates.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
ASE INFRARED CM (AZ3507)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	22.7		0.6		75.2	79.2	100.8	107.9	148.8	139.7	2551.1	3225.8
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	22.7		0.6		75.2	79.2	100.8	107.9	148.8	139.7	2551.1	3225.8
Initial Spares												
Total Proc Cost	22.7		0.6		75.2	79.2	100.8	107.9	148.8	139.7	2551.1	3225.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
ATIRCM is a program to develop, test, and integrate defensive infrared (IR) countermeasures capabilities into existing, current generation host platforms, which includes the MH-60/MH-47, AH-64D, UH-60 and CH-47F, for more effective protection against a greater number of IR guided missile threats than afforded by currently fielded IR countermeasures. The operational requirements concept for IR countermeasure systems is known as the Suite of Integrated Infrared Countermeasures (SIIRCM). The core element of the SIIRCM concept is the Advanced Threat Infrared Countermeasure (ATIRCM), Common Missile Warning System (CMWS) program. The ATIRCM, a subsystem to a host aircraft, is an integrated ultra-violet (UV) missile warning system and an IR Lamp/Laser Jamming and Improved Countermeasure Dispenser (ICMD). The Special Operations Command (SOCOM) is procurring ATIRCM for the MH-47 and MH-60. The Advanced Infrared Countermeasures Munitions (AIRCMM) is designed to provide more effective protection against IR-guided missile weapon systems than current decoys by better emulating the aircraft's IR signature. The AIRCMM solution consists of three expendable flares: the current M-206, the M-211 and M-212. 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, activating expendables to provide a degree of protection. CMWS/ICMD will be procured and installed on the AH-64, UH-60 and CH-47 platforms. An Army Systems Acquisition Review Council (ASARC) resulted in a Milestone C Low Rate Initial Production (LRIP) decision in November 2003, approving entry into LRIP. This system supports the Current-to-Future Force transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 funding procures ATIRCM/CMWS for the Army as well as nonrecurring engineering in support of the ATIRCM/CMWS A-Kit.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: ASE INFRARED CM (AZ3507)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Units	$000	$000	Units	$000	$000	Units	$000	$000	Units	$000
A-Kit Recurring Cost	B							3763	35	108	4972	48	104
A-Kit Installation Cost								5868			7583		
CMWS Recurring Hardware	B							4772	17	281	7873	28	281
ATIRCM Recurring Hardware	B							13657	13	1051	19493	19	1026
Nonrecurring Engineering								23588			9249		
System Engineering (B-Kit)								5282			7632		
Training/Data								709			4393		
Engineering Changes								92			135		
In-house/Matrix Support								1253			1499		
Project Management								639			677		
CLS								3860			1417		
Fielding Support (ISE, Transportation)								245			326		
Initial Spares								2349			2421		
Contractor System Support								9074			11556		
SOCOM Specific Nonrecurring Cost													
Total								**75151**			**79226**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
ASE INFRARED CM (AZ3507)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A-Kit Recurring Cost										
FY 2004	TBD (A-Kit) TBD	TBD	TBD	Mar 04	Mar 05	35	108	Yes		
FY 2005	TBD (A-Kit) TBD	TBD	TBD	Dec 04	Dec 05	48	104			
CMWS Recurring Hardware										
FY 2004	BAE Systems (CMWS) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Jan 04	Jan 05	17	281	Yes		
FY 2005	BAE Systems (CMWS) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Jan 05	Jan 06	28	281			
ATIRCM Recurring Hardware										
FY 2004	BAE Systems (ATIRCM) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Jan 04	Jan 05	13	1051	Yes		
FY 2005	TBD (ATIRCM) TBD	C/FFP	CECOM, Ft. Monmouth, NJ	Jan 05	Jan 06	19	1026			

REMARKS: FY04/FY05 funding supports procurement of A-kits in support of SOA as well as aircraft integration efforts for the UH-60, CH-47 and AH-64D aircrafts. These funds supports both development and testing of A-kits for all three platforms. The A-kit contractor is yet to be determined at this point. The A-kit or B-kit manufactor will be awarded the effort.

Training/Data - includes training as well as IETM updates, copying of manuals, and other miscellaneous minor data costs.

Fielding Support includes 1) Initial Support Equipment (ISE) which includes tools handling, storage containers,and 2) transportion and other miscellaneous handling costs.

ATIRCM FY03 LRIP funded with SOCOM MFP 11 funding (May 03).

FY 04 / 05 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ASE INFRARED CM (AZ3507)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05										LATER
							Calendar Year 04												Calendar Year 05										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
A-Kit Recurring Cost																													
	1	FY 04	A	35	0	35						A												2	2	2	2	2	2	3	20
	1	FY 05	A	48	0	48															A										48
CMWS Recurring Hardware																															
	2	FY 04	A	17	0	17				A												1	1	1	1	1	1	1	2	2	6
	2	FY 05	A	28	0	28																A									28
ATIRCM Recurring Hardware																															
	3	FY 04	A	13	0	13				A												1	1	1	1	1	1	1	1	1	4
	4	FY 05	A	19	0	19																A									19
Total				160		160																2	2	4	4	4	4	4	5	6	125

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	TBD (A-Kit) , TBD	18.00	153.00	153.00	0
2	BAE Systems (CMWS) , Nashua, NH	48.00	48.00	60.00	0
3	BAE Systems (ATIRCM) , Nashua, NH	12.00	48.00	48.00	0
4	TBD (ATIRCM) , TBD	12.00	48.00	48.00	0

MFR Number			ADMINLEAD TIME Prior 1 Oct	ADMINLEAD TIME After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL		0	6	12	18
	REORDER		0	3	12	15
2	INITIAL		0	4	12	16
	REORDER		0	1	12	13
3	INITIAL		0	4	12	16
	REORDER		0	4	12	16
4	INITIAL		0	4	12	16
	REORDER		0	4	12	16
	INITIAL					
	REORDER					

REMARKS

FY 06 / 07 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ASE INFRARED CM (AZ3507)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06												Fiscal Year 07										LATER
							Calendar Year 06												Calendar Year 07										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
A-Kit Recurring Cost																													
	1	FY 04	A	35	15	20	4	4	4	4	4																		0
	1	FY 05	A	48	0	48			3	3	3	3	4	4	4	4	5	5	5	5										0
CMWS Recurring Hardware																													
	2	FY 04	A	17	11	6	2	2	2																				0
	2	FY 05	A	28	0	28				2	2	2	2	2	2	2	2	3	3	3	3									0
ATIRCM Recurring Hardware																													
	3	FY 04	A	13	9	4	1	1	2																				0
	4	FY 05	A	19	0	19				1	1	1	1	1	2	2	2	2	2	2	2									0
Total				160	35	125	7	7	11	10	10	6	7	7	8	8	9	10	10	10	5									
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	TBD (A-Kit) , TBD	18.00	153.00	153.00	0
2	BAE Systems (CMWS) , Nashua, NH	48.00	48.00	60.00	0
3	BAE Systems (ATIRCM) , Nashua, NH	12.00	48.00	48.00	0
4	TBD (ATIRCM) , TBD	12.00	48.00	48.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	0	6	12	18
	REORDER	0	3	12	15
2	INITIAL	0	4	12	16
	REORDER	0	1	12	13
3	INITIAL	0	4	12	16
	REORDER	0	4	12	16
4	INITIAL	0	4	12	16
	REORDER	0	4	12	16
	INITIAL				
	REORDER				

REMARKS

Production rates are yearly rates.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
AIRBORNE COMMAND & CONTROL (AA0710)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	42.2			11.3	28.9	26.6	28.1	3.9	4.3	4.0		149.3
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	42.2			11.3	28.9	26.6	28.1	3.9	4.3	4.0		149.3
Initial Spares												
Total Proc Cost	42.2			11.3	28.9	26.6	28.1	3.9	4.3	4.0		149.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
This project funds the development of an avionics system required to horizontally and vertically integrate the battlefield. Tasks in this project support research efforts in the engineering and manufacturing development phase of this system. The Army Airborne Command and Control System (A2C2S) is the Army's only airborne C2 acquisition program for a system supporting corps, division and brigade Commanders. The A2C2S enables Commanders from brigade to theatre levels, and their staffs, to traverse the battle space rapidly - maintaining situational awareness of all battlefield systems - and maintaining communications, tactical to CONUS reach back, throughout the decision continuum. The A2C2S routinely operates in linear and non-linear areas of operations, all the time providing information superiority with the common operational picture necessary for an accurate, near real-time perspective and knowledge of the situation to avoid enemy strengths while concentrating friendly assets for decisive and rapid victory. Another objective of the A2C2S program is to be the airborne first-responder for Homeland Security and disaster relief by providing a robust communications platform for emergency response coordinators of air and ground operations. It will support initial and remote scene operations center capabilities, convoy operations, and disaster coordination between state, federal, civilian and military assets. This system is critical to enhance the Battle Command Group's ability to effectively perform combat unit operations and serve as a force multiplier in the Future Force. It provides the capability to access the tactical internet to manipulate, store, manage, and analyze situational awareness information, intelligence data, mission plans, and mission progress data to support the command and control decision making process. The A2C2S will provide situational awareness and command and control by hosting Battle Command applications. In addition to line-of-sight Combat Net Radios, including Single Channel Ground Airborne Radio System (SINGARS), Advanced System Improvement Program (ASIP) and HAVEQUICK II, the A2C2S supports deep operations with non-line-of-sight radios such as High Frequency (HF) and Demand Assigned Multiple Access (DAMA) and Satellite Communications System Satellite Command (SATCOM). In addition, the system has the potential to improve the ability of state, local, and federal agencies to communicate and coordinate in a crisis environment such as hurricanes, forest fires, or terrorist incidents. This system supports the Current Force transition path of the Transformation Campaign Plan (TCP)

Justification:
FY05 procures five (5) A2C2S systems to provide a Joint Airborne Battle Command on the Move capability for the 1st CAV, 3rd ACR, SOAR, and 160th.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIRBORNE COMMAND & CONTROL (AA0710)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
A2C2S System Integration/Hardware					9104	2	4552	16747	5	3349	17074	5	3415
Project Management Administration					311			3329			2728		
Engineering Support					1509			3169			2367		
Fielding (NET,Spares)					247			959			1687		
Interim Contract Logistics Support								519			662		
Other Engineering Support								2550					
GFE, SIS Materials					113			1655			2085		
Total					**11284**			**28928**			**26603**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
AIRBORNE COMMAND & CONTROL (AA0710)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A2C2S System Integration/Hardware										
FY 2003	Raytheon Huntsville, AL	CPIF	AMCOM, AL	Nov 02	Mar 03	2	4552			N/A
FY 2004	Raytheon Huntsville, AL	FPI	AMCOM, AL	Apr 04	Aug 04	5	3349			N/A
FY 2005	Raytheon Huntsville, AL	FPI	AMCOM, AL	Mar 05	May 05	5	3415			N/A

REMARKS: A2C2S-The competitively awarded system demonstration contract, awarded with RDTE funding in FY01, included CPIF for SDD, and FPI options for LRIP and FRP with Raytheon, Huntsville, AL, awarded Aug 01. Quantities are based on B-Kits (Mission equipment packages including communication suite and Automatic Data Processing (ADP) equipment). Cost includes integration of Blue Force Tracking (BFT) on A2C2S systems. Milestone C is planned for Mar 04.

FY 03 / 04 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AIRBORNE COMMAND & CONTROL (AA0710)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03												Fiscal Year 04										LATER
							Calendar Year 03												Calendar Year 04										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
A2C2S System Integration/Hardware																													
	2	FY 03	A	2	0	2							2																	0
	2	FY 04	A	5	0	5																			A					4
	2	FY 05	A	5	0	5																								5
Total				12		12							2																1	9

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+	MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
2	Raytheon , Huntsville, AL	6.00	16.00	16.00	0	2	INITIAL	0	0	2	2	
							REORDER	0	0	0	0	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

FY 05 / 06 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AIRBORNE COMMAND & CONTROL (AA0710)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 05												Fiscal Year 06										LATER
							Calendar Year 05												Calendar Year 06										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
A2C2S System Integration/Hardware																													
	2	FY 03	A	2	2	0																							0
	2	FY 04	A	5	1	4	1	1		1	1																		0
	2	FY 05	A	5	0	5						A	1		1	1		1	1										0
Total				12	3	9	1	1		1	1		1		1	1		1	1										

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
2	Raytheon , Huntsville, AL	6.00	16.00	16.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
2	INITIAL	0	0	2	2
	REORDER	0	0	0	0

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
AVIONICS SUPPORT EQUIPMENT (AZ3000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty		980	988	694	1507	583	300	169				5221
Gross Cost	407.6	9.9	9.2	11.3	24.4	5.1	3.4	2.6	0.1			473.6
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	407.6	9.9	9.2	11.3	24.4	5.1	3.4	2.6	0.1			473.6
Initial Spares												
Total Proc Cost	407.6	9.9	9.2	11.3	24.4	5.1	3.4	2.6	0.1			473.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Consists of a family of avionics support equipment. Current program consists of the Aviators' Night Vision Imaging System (ANVIS) and the Heads Up Display (HUD). This system supports the Current to Future transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
ANVIS/HUD (K35601)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	2925											2925
Gross Cost	407.6	9.9	9.2	11.3	24.4	5.1	3.4	2.6	0.1			473.6
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	407.6	9.9	9.2	11.3	24.4	5.1	3.4	2.6	0.1			473.6
Initial Spares												
Total Proc Cost	407.6	9.9	9.2	11.3	24.4	5.1	3.4	2.6	0.1			473.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The AN/AVS-6, Aviator's Night Vision Imaging System (ANVIS), supports the Army Transformation objectives by permitting superior tactical mobility of rotary wing aircraft during darkness and low light conditions. 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. The increased capability 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 survivability, lethality, and tactical mobility for aviation assets of the Current Forces. This system supports the Current to Future path of the Transformation Campaign Plan (TCP).

The AN/AVS-7, Heads-Up Display (HUD) is a system which works in conjunction with the Aviator's Night Vision Imaging System (ANVIS). The HUD collects critical flight information from aircraft sensors/cockpit displays and converts this information into visual imagery overlaid on the scene viewed through the night vision goggles. This system allows continuous heads-up flight by the pilot without looking at the instrument panel. This provides significant operational and safety enhancements to night vision goggle flight. The HUD is being installed on the CH-47D and UH-60 helicopters and supports the Current and Stryker forces. The AN/AVS-7 enhances survivability, lethality, and tactical mobility for aviation assets of the Current Forces. This system supports the Current to Stryker path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures AN/AVS-6(V)3 systems for fielding to USAEUR, 2ACR, 3ACR, Army Reserves and National Guard Units.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: ANVIS/HUD (K35601)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
K35601 ANVIS/HUD													
ANVIS					8463	1489	6	21711	3817	6	3541	565	6
Engineering Support					1717			955			978		
Project Management Admin					841			811			300		
Engineering Change Orders					117			583			101		
Fielding					162			297			220		
Total					**11300**			**24357**			**5140**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
ANVIS/HUD (K35601)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
K35601 ANVIS/HUD										
FY 2002	ITT ROANOKE, VA	C/FFP	CECOM	May 02	May 03	1322	6	Yes		
FY 2003	ITT ROANOKE, VA	C/FFP	CECOM	Feb 03	Nov 03	1489	6	Yes		
FY 2004	ITT ROANOKE, VA	C/FFP	CECOM	Dec 03	Sep 04	3817	6	Yes		
FY 2005	ITT ROANOKE, VA	C/FFP	CECOM	Dec 04	Sep 05	565	6	Yes		

REMARKS:

FY 04 / 05 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ANVIS/HUD (K35601)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05										LATER
							Calendar Year 04												Calendar Year 05										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
K35601 ANVIS/HUD																													
	2	FY 02 &Pr	A	3475	2443	1032	185	210	150	150	150	150	37																0
	1	FY 03	A	1489	0	1489		25	85	85	85	85	103	250	250	250	250	21												0
	1	FY 04	A	655	0	655			A												54	54	54	54	54	55	55	55	55	55	110
	1	FY 04	A	3162	0	3162			A									265	265	265	265	265	265	265	265	265	265	265	247		0
	1	FY 05	A	565	0	565															A								48	517
Total				9346	2443	6903	185	235	235	235	235	235	140	250	250	250	250	286	265	265	319	319	319	319	319	320	320	320	302	103	627

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	ITT , ROANOKE, VA	25.00	210.00	325.00	120
2	Multiple , Multiple	50.00	310.00	510.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	INITIAL	4	4	12	16	
	REORDER	1	1	9	10	
2	INITIAL	4	4	12	16	
	REORDER	1	1	9	10	

FY 06 / 07 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ANVIS/HUD (K35601)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06												Fiscal Year 07										LATER
							Calendar Year 06												Calendar Year 07										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
K35601 ANVIS/HUD																													
	2	FY 02 &Pr	A	3475	3475	0																							0
	1	FY 03	A	1489	1489	0																							0
	1	FY 04	A	655	545	110	55	55																					0
	1	FY 04	A	3162	3162	0																							0
	1	FY 05	A	565	48	517	47	47	47	47	47	47	47	47	47	47	47												0
Total				9346	8719	627	102	102	47	47	47	47	47	47	47	47	47												

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	ITT , ROANOKE, VA	25.00	210.00	325.00	120
2	Multiple , Multiple	50.00	310.00	510.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	4	4	12	16
	REORDER	1	1	9	10
2	INITIAL	4	4	12	16
	REORDER	1	1	9	10
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
COMMON GROUND EQUIPMENT (AZ3100)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
63801/B32 63801/B33

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	580.2	11.8	18.9	19.3	16.5	21.9	35.4	47.2	51.2	47.5		849.8
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	580.2	11.8	18.9	19.3	16.5	21.9	35.4	47.2	51.2	47.5		849.8
Initial Spares												
Total Proc Cost	580.2	11.8	18.9	19.3	16.5	21.9	35.4	47.2	51.2	47.5		849.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Program provides for Aviation Ground Support Equipment such as test sets, calibration kits, ground power units, hydraulic test stands, and tool shop sets. These systems support the Current to Future transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
63801/B32 63801/B33

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	233.5	11.8	18.9	19.3	16.5	21.9	35.4	47.2	51.2	47.5		503.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	233.5	11.8	18.9	19.3	16.5	21.9	35.4	47.2	51.2	47.5		503.1
Initial Spares												
Total Proc Cost	233.5	11.8	18.9	19.3	16.5	21.9	35.4	47.2	51.2	47.5		503.1
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Aviation Ground Support Equipment (AGSE) is transitioning away from the role of Sustainment to one of Total Life Cycle Management. AGSE will develop, acquire, field, and sustain 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 Logistic Automation Program (ALAP), Aviation Vibration Analyzer (AVA), AVA II, Aviation Intermediate Maintenance (AVIM) Shop Sets, Battle Damage Assessment and Repair (BDAR) System, Aircraft Cleaning and Deicing System (ACDS), Aviation Ground Power Unit (AGPU), Shop Equipment Contact Maintenance (SECM), Unit Maintenance Aerial Recovery Kit (UMARK), Digital Aircraft Weight Scales (DAWS), and Generic Aircraft Nitrogen Generator (GANG). These products provide the finest materiel and support solutions to Army Aviation. These systems support the Current to Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures ground support equipment which will support and sustain the operational readiness of all Army aviation field units which are operating AH-64, UH-60, CH-47, OH-58D and other Army aircraft. Aviation Ground Support Equipment (AGSE) also provides a means to correct safety-of-flight discrepancies which endanger both life and property. The Battle Damage Assessment Repair (BDAR) system will provide aviation maintenance organizations an expeditious means for combat damage assessment, deferment, and/or rapid repair for all Army helicopters. AVIM Shop Set complexes provide a transportable aviation intermediate and limited depot level maintenance capability in force projection or contingency operations. International Standardized Organization (ISO), one-sided expandable shelters, contain AVIM Shop Set tool loads and provide the capability of maritime shipboard movement through commercial ports. These ISO containers are compatible with military/commercial roll-on/roll-off ships and military/commercial ground transportation. The Aviation Vibration Analyzer (AVA) system will provide off-aircraft capability to track and smooth rotor systems thereby reducing the associated damage to airframe and components caused by excessive vibration. AVA enhancement will increase capabilities and incorporate industry standard automation features which impact aviation safety, increase readiness, and reduce operations and maintenance (O&M) costs. The Aircraft Cleaning and Deicing System (ACDS) will dispense and reclaim premixed cleaners, deicers and water through a nozzle and wand assembly at appropriate temperatures and pressures. Aviation Ground Power Units (AGPUs) will be capable of meeting Army helicopter servicing requirements into the next decade. The AGPU Modification kits being procured will meet the significantly increased requirement for 400 hertz (Hz) electrical servicing of the Apache Longbow (AH-64D).

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Nondestructive Test Equipment (NDTE)													
Hardware (NDTE)					1575	70	23	1400	50	28			
Subtotal					**1575**			**1400**					
Flexible Engine Diagnostic System (FEDS)													
Provisioning					270								
Subtotal					**270**								
Shop Equipment Contact Maintenance (SECM)													
Block I Safety Upgrade					653								
Hardware (SECM) Block II											3540	60	59
Subtotal					**653**						**3540**		
Aircraft Vibration Analyzer (AVA)													
Hardware (AVA)											2160	120	18
Installation(AVA MOD)					12								
ATEC Support											338		
Subtotal					**12**						**2498**		
Aviation Ground Power Unit (AGPU)													
Hardware AGPU MOD					3242	65	50				1300	10	130
Subtotal					**3242**						**1300**		
AVIM Shop Sets													
Hardware (AVIM Shop Sets)					1329	1	1329	2736	2	1368	2818	2	1409
Shelter Refurbishment					1521			381			293		
Termination Costs -Rock Island Arsenal					799								
Facilitization - PIF					252								
Technical Support					208								
Subtotal					**4109**			**3117**			**3111**		
Unit Maintenance Aerial Recovery Kit													

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities			P-1 Line Item Nomenclature: AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)			Weapon System Type:			Date: February 2004		
ACFT Cost Elements	ID CD				**FY 03**			**FY 04**			**FY 05**		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
(UMARK)													
Hardware w/crossbar (UMARK)					2234	51	44	2342	51	46			
Hardware w/o crossbar (UMARK)					1494	37	40	1567	37	42			
Fielding					68								
Subtotal					**3796**			**3909**					
Battle Damage Assessment Repair Kit (BDAR)													
BDAR Hardware Pre-Production (OEF/OIF)					1202	13	92						
BDAR Hardware Block I								1430	13	110	2373	21	113
Subtotal					**1202**			**1430**			**2373**		
Aircraft Cleaning and Deicing System (ACDS)													
Hardware (ACDS)								3380	26	130	6500	50	130
Nonrecurring Engineering								293					
Technical Manuals/Services								121					
ATEC Support								202					
Subtotal								**3996**			**6500**		
HELO Maintenance Work Platform System													
Hardware (HELO-MWPS)					1500	1	1500						
Subtotal					**1500**								
Program Management Support					2898			2622			2611		
Subtotal					**2898**			**2622**			**2611**		
Total					**19257**			**16474**			**21933**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)

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
Nondestructive Test Equipment (NDTE)										
Hardware (NDTE)										
FY 2003	Prototype Integration Facility Redstone Arsenal, AL	C/FP	AMCOM	APR03	AUG03	70	23	YES		
FY 2004	TBS	C/FP	AMCOM	APR04	OCT04	50	28	YES		
Hardware (SECM) Block II										
FY 2005	TBS	C/FP	AMCOM	APR05	JAN06	60	59	NO	APR04	
Aircraft Vibration Analyzer (AVA)										
Hardware (AVA)										
FY 2005	TBS	C/FP	AMCOM	FEB05	FEB06	120	18	YES		
Aviation Ground Power Unit (AGPU)										
Hardware AGPU MOD										
FY 2003	OLR Savannah, GA	MIPR	AMCOM	JAN03	MAY03	65	50	YES		
FY 2005	OLR Savannah, GA	MIPR	AMCOM	DEC04	MAY05	10	130	N0	AUG04	
AVIM Shop Sets										
Hardware (AVIM Shop Sets)										

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2002	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	MAR02	MAR03	4	1108	YES		
FY 2003	Prototype Integration Facility Redstone Arsenal, AL	C/FP	AMCOM	JAN04	MAY04	1	1329	YES		
FY 2004	Prototype Integration Facility Redstone Arsenal, AL	C/FP	AMCOM	JAN04	MAY04	2	1368	YES		
FY 2005	Prototype Integration Facility Redstone Arsenal, AL	C/FP	AMCOM	JAN05	MAY05	2	1409	YES		
Unit Maintenance Aerial Recovery Kit (UMARK)										
Hardware w/crossbar (UMARK)										
FY 2002	KAMAN Aerospace Corp Bloomfield, CT	SS/FP	AMCOM	MAY02	MAY03	44	42	YES		
FY 2003	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	JAN03	JAN04	51	44	YES		
FY 2004	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	JAN04	JAN05	51	46	YES		
Hardware w/o crossbar (UMARK)										
FY 2002	KAMAN Aerospace Corp Bloomfield, CT	SS/FP	AMCOM	MAY02	MAY03	20	29	YES		
FY 2003	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	JAN03	JAN04	37	40	YES		
FY 2004	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	JAN04	JAN05	37	42	YES		
Battle Damage Assessment Repair Kit										

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)

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
(BDAR)										
BDAR Hardware Pre-Production (OEF/OIF)										
FY 2003	Prototype Integration Facility Redstone Arsenal, AL	MIPR	AMCOM	MAR03	APR03	13	92	YES		
BDAR Hardware Block I										
FY 2004	Prototype Integration Facility Redstone Arsenal, AL	MIPR	AMCOM	APR04	OCT04	13	110	YES		
FY 2005	Prototype Integration Facility Redstone Arsenal, AL	MIPR	AMCOM	DEC04	MAR05	21	113	YES		
Aircraft Cleaning and Deicing System										
(ACDS)										
Hardware (ACDS)										
FY 2004	TBS	C/FP	AMCOM	MAY04	NOV04	26	130	YES		
FY 2005	TBS	C/FP-O	AMCOM	JAN05	AUG05	50	130	YES		
HELO Maintenance Work Platform System										
Hardware (HELO-MWPS)										
FY 2003	TBS	C/FP	AMCOM	JUL04	JUL05	1	1500	NO	JUN04	

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
RDTE 643801 (DB45) and 654801 (DC45)

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	87.4	10.5	16.7	15.0	32.8	28.6	29.5	34.1	41.3	38.2		334.0
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	87.4	10.5	16.7	15.0	32.8	28.6	29.5	34.1	41.3	38.2		334.0
Initial Spares												
Total Proc Cost	87.4	10.5	16.7	15.0	32.8	28.6	29.5	34.1	41.3	38.2		334.0
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The programs in Air Warrior provide improved aircrew safety, survivability and human performance that amplify the warfighting effectiveness of the Army Transformation aircraft, including the RAH-66 Comanche, AH-64A/D Apache, UH/HH-60L/M Blackhawk, OH-58D Kiowa Warrior, and CH-47D/F Chinook helicopters and Special Operations Aircraft. These include programs that improve the performance and safety of Army and Joint service aircrews in-flight on wartime and training missions throughout the flight profile, during an aircraft crash sequence and during the post-crash survival period prior to rescue. Air Warrior programs include the HGU-56/P Helmet, the Air Warrior system, Laser Eye Protective devices, and the Cockpit Air Bag System (CABS). Air Warrior provides a system level approach to Aviation Life Support Equipment including the flight helmet, laser eye protection, and survival gear to be used in an escape and evade scenario. The Air Warrior system level approach to Aviation Life Support Equipment also includes microclimate cooling, sound attenuation devices, overwater equipment, night vision devices, extraction capability, chemical and biological protection, and the flight duty uniform. Air Warrior also includes the integration efforts on the RAH-66 Comanche, AH-64A/D Apache, UH/HH-60L/M Blackhawk, OH-58D Kiowa Warrior, and CH-47D/F Chinook helicopters and Special Operations Aircraft. Block 1 Air Warrior ensembles will be procured to integrate aircrew equipment for maximum aircrew effectiveness by providing increased mission performance and safety, reduction of equipment weight and bulk, and increased tailorability to specific missions, threats, and the various aircraft platforms operated. Air Warrior will enable the Army Aviation Warfighter to meet the approved Operational Requirements Document Key Performance Parameter mission length of 5.3 hours, as opposed to the 1.6 hours of mission capability that exists today with aviators in full chemical/biological protective gear. The results of future development efforts will be applied as Block Improvements to the Block 1 Air Warrior system. The CABS is a supplemental restraint system that reduces aviator deaths and injuries caused by body and head flailing against cockpit structures. These systems support the Future Force transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures the Air Warrior basic ensemble, aircraft platform installation and A and B kit production.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIRCREW INTEGRATED SYSTEMS (AZ3110)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Units	$000	$000	Units	$000	$000	Units	$000	$000	Units	$000
Hardware													
Aircrew Integrated Helmet System-ARNG													
---HGU-56/P Helmets													
---HGU-56/P Communication Ear Plugs													
---HGU-56/P Maxillofacial Shields													
---IHADSS Helmets													
-													
Air Warrior Block 1 Ensembles					1163	139	8.4	5089	1590	3.2	7129	1560	4.6
Air Warrior A Kits & Install					2113	122	17.3	4935	235	21.0	5605	295	19.0
Air Warrior MCS (B Kits)					2864	231	12.4	8900	1141	7.8	6851	816	8.4
-													
Cockpit Air Bags (CABS) System & Install													
---CABS A Kits					342	100	3.4	304	95	3.2			
---CABS B Kits					764	27	28.3	566	20	28.3			
---CABS Installs					520			530					
-													
Total Hardware Costs					**7766**			**20324**			**19585**		
Other Costs													
Retinal Scanning Display FBCB2 Demo													
Manuals					130			250			117		
New Equipment Training					122			735			1082		
Initial Spares & Repair Parts					95			463			378		
Support Equipment					634			353			276		
Systems Test and Evaluation					259			488			150		
Total Other Costs					**1240**			**2289**			**2003**		
Nonrecurring Costs													
Nonrecurring Engineering					304								
Total Nonrecurring Costs					**304**								
Air Warrior ECP					604			615			200		
Systems Integration Engineering					3200			3254			3300		
Project Management Admin					1842			2619			2574		
Total ECP, Sys Int, & Admin Costs					**5646**			**6488**			**6074**		

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIRCREW INTEGRATED SYSTEMS (AZ3110)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Units	$000	$000	Units	$000	$000	Units	$000	$000	Units	$000
Support Costs													
Fielding													
Contract Logistics Support								947			947		
Other													
Helibasket Technology								2800					
Total					**14956**			**32848**			**28609**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
AIRCREW INTEGRATED SYSTEMS (AZ3110)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
---HGU-56/P Helmets										
FY 2002	DLA Fort Belvoir, VA	Reqn	DLA, Fort Belvoir, VA	Apr 02	May 03	977	0.9	Yes		
---HGU-56/P Communication Ear Plugs										
FY 2002	DLA Fort Belvoir, VA	Reqn	DLA, Fort Belvoir, VA	Sep 02	Jan 03	984	0.2	Yes		
---HGU-56/P Maxillofacial Shields										
FY 2002	Gentex Carbondale, PA	SS/FP	Redstone Arsenal, AL	Sep 02	Jan 03	2203	0.1	Yes		Jun 02
---IHADSS Helmets										
FY 2002	EFW Incorporated Fort Worth, TX	SS/FFP	Rock Island, IL	Oct 02	Nov 03	108	19.9	Yes		
Air Warrior Block 1 Ensembles										
FY 2003	Simula, Inc. Phoenix, AZ	C/FFP	Redstone Arsenal, AL	Aug 03	Apr 04	139	8.4	Yes		Feb 03
FY 2004	Simula, Inc. Phoenix, AZ	C/FFP	Redstone Arsenal, AL	Jan 04	Apr 04	1590	3.2	Yes		Feb 03
FY 2005	Simula, Inc. Phoenix, AZ	C/FFP	Redstone Arsenal, AL	Jan 05	Apr 05	1560	4.6	Yes		Feb 03
Air Warrior A Kits & Install										
FY 2003	Westwind Corporation Huntsville, AL	C/FFP	Rock Island, IL	Feb 03	Oct 03	122	17.3	Yes		Dec 02
FY 2004	Westwind Corporation Huntsville, AL	C/FFP	Rock Island, IL	Dec 03	May 04	235	21.0	Yes		Dec 02

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
AIRCREW INTEGRATED SYSTEMS (AZ3110)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2005	Westwind Corporation Huntsville, AL	C/FFP	Rock Island, IL	Dec 04	Apr 05	295	19.0	Yes		Dec 02
Air Warrior MCS (B Kits)										
FY 2003	Carleton Technologies, Inc. Orchard Park, NY	C/FFP	Redstone Arsenal, AL	Feb 03	Oct 03	231	12.4	Yes		Aug 02
FY 2004	Carleton Technologies, Inc. Orchard Park, NY	C/FFP	Redstone Arsenal, AL	Dec 03	Apr 04	1141	7.8	Yes		Aug 02
FY 2005	Carleton Technologies, Inc. Orchard Park, NY	C/FFP	Redstone Arsenal, AL	Dec 04	Apr 05	816	8.4	Yes		Aug 02
---CABS A Kits										
FY 2003	Westwind Corporation Huntsville, AL	C/FFP	Rock Island, IL	Mar 03	Nov 03	100	3.4	Yes		
FY 2004	Westwind Corporation Huntsville, AL	C/FFP	Rock Island, IL	Dec 03	Aug 04	95	3.2	Yes		
---CABS B Kits										
FY 2003	Simula, Inc. Phoenix, AZ	SS/FFP	Redstone Arsenal, AL	Apr 03	Mar 04	27	28.3	Yes		
FY 2004	Simula, Inc. Phoenix, AZ	SS/FFP	Redstone Arsenal, AL	Jan 04	Jan 05	20	28.3	Yes		

REMARKS:

FY 03 / 04 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03												Fiscal Year 04										LATER
							Calendar Year 03												Calendar Year 04										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Air Warrior Block 1 Ensembles																													
	6	FY 03	A	139	0	139											A							139						0
	6	FY 04	A	1590	0	1590																A			224	300	300	300	300	166	0
	6	FY 05	A	1560	0	1560																									1560
Air Warrior A Kits & Install																															
	11	FY 03	A	122	0	122					A								12	12	18	20	20	16	13	11					0
	11	FY 04	A	235	0	235															A					16	20	20	20	20	139
	11	FY 05	A	295	0	295																									295
Air Warrior MCS (B Kits)																															
	12	FY 03	A	231	0	231					A								55	80	96										0
	12	FY 04	A	1141	0	1141															A				95	95	95	95	95	95	571
	12	FY 05	A	816	0	816																									816
---CABS A Kits																															
	11	FY 03	A	100	0	100						A								100											0
	11	FY 04	A	95	0	95															A								95		0
---CABS B Kits																															
	6	FY 03	A	27	0	27							A											27							0
	6	FY 04	A	20	0	20																A									20
Total				6371		6371													67	192	114	20	20	43	471	422	415	415	510	281	3401

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
6	Simula, Inc. , Phoenix, AZ	1000.00	4000.00	8000.00	0
11	Westwind Corporation , Huntsville, AL	200.00	600.00	1000.00	0
12	Carleton Technologies, Inc. , Orchard Park, NY	350.00	2000.00	4000.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
6	INITIAL	6	0	8	8
	REORDER	0	1	5	6
11	INITIAL	5	0	8	8
	REORDER	0	1	5	6
12	INITIAL	7	0	9	9
	REORDER	0	1	4	5
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

FY 05 / 06 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AIRCREW INTEGRATED SYSTEMS (AZ3110)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 05												Fiscal Year 06										LATER
							Calendar Year 05												Calendar Year 06										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Air Warrior Block 1 Ensembles																													
	6	FY 03	A	139	139	0																							0
	6	FY 04	A	1590	1590	0																							0
	6	FY 05	A	1560	0	1560				A			224	295	295	295	295	156												0
Air Warrior A Kits & Install																													
	11	FY 03	A	122	122	0																							0
	11	FY 04	A	235	96	139	20	20	20	25	25	29																	0
	11	FY 05	A	295	0	295			A				26	26	26	26	26	25	25	25	25	25	20	20						0
Air Warrior MCS (B Kits)																													
	12	FY 03	A	231	231	0																							0
	12	FY 04	A	1141	570	571	95	95	95	95	95	96																	0
	12	FY 05	A	816	0	816			A				96	90	90	90	90	90	90	90	90									0
---CABS A Kits																													
	11	FY 03	A	100	100	0																							0
	11	FY 04	A	95	95	0																							0
---CABS B Kits																													
	6	FY 03	A	27	27	0																							0
	6	FY 04	A	20	0	20				20																			0
Total				6371	2970	3401	115	115	115	140	120	125	346	411	411	411	411	271	115	115	115	25	20	20						
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
6	Simula, Inc. , Phoenix, AZ	1000.00	4000.00	8000.00	0
11	Westwind Corporation , Huntsville, AL	200.00	600.00	1000.00	0
12	Carleton Technologies, Inc. , Orchard Park, NY	350.00	2000.00	4000.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
6	INITIAL	6	0	8	8
	REORDER	0	1	5	6
11	INITIAL	5	0	8	8
	REORDER	0	1	5	6
12	INITIAL	7	0	9	9
	REORDER	0	1	4	5
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
AIR TRAFFIC CONTROL (AA0050)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
0604633A/586 Air Traffic Control

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	114.1	73.5	58.6	63.3	59.5	59.4	52.3	62.8	71.6	62.4		677.6
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	114.1	73.5	58.6	63.3	59.5	59.4	52.3	62.8	71.6	62.4		677.6
Initial Spares												
Total Proc Cost	114.1	73.5	58.6	63.3	59.5	59.4	52.3	62.8	71.6	62.4		677.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Tactical Air Traffic Control (ATC) equipment includes the Air Traffic Navigation Integration and Coordination System (ATNAVICS), and the Tactical Airspace Integration System (TAIS). The ATNAVICS will provide all weather instrument flight capabilities to include enroute, terminal, and radar precision approach and landing services to all Army, Joint, and allied aircraft. The TAIS is a highly mobile, airspace synchronization and deconfliction system providing Army Airspace Command and Control(A2C2) and air traffic services capabilities at Division/Corps/Echelon Above Corps(EAC). TAIS provides ground commanders with automated A2C2 capability to support all Corp/Division/ EAC digitization initiatives into the next century. The ATNAVICS and TAIS serve as effective risk management tools for aviation safety during night, inclement weather, and combat operations. Fixed Base ATC requirements will be met through a vast array of high technology solutions resulting in highly reliable and safe ATC systems. The Joint DoD/Federal Aviation Administration (FAA) program will modernize the National Airspace System (NAS) to include upgrading and automating the complete infrastructure, systematically replacing antiquated analog systems (radars and communications switching system) with the installation of state of the art digital technology. These new systems include the Voice Communication Switching System (VCSS), the Department of Defense (DoD) Advanced Automation System (DAAS), and the Digital Airport Surveillance Radar (DASR). The Fixed Base Precision Approach Radar (FBPAR) which will be the Army's primary ground controlled precision approach capability to recover aircraft to fixed base facilities, ensuring safe landing in adverse weather conditions. These systems support the Current to Future transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 05 procures tactical and fixed base ATC systems and provides funding for flight planning/mission rehearsal and common aviation maintenance management system. Funds for tactical ATC systems will provide for the production of the TAIS and ATNAVICS. This new family of tactical ATC systems will replace previous generation equipment that is obsolete and not economically supportable and ensures Army ATC and airspace management and command and control systems will be capable of supporting the path ahead to the Future Force. Fixed base ATC systems will provide the Army a joint service capability to procure specific fixed base ATC systems required for the joint DoD FAA modernization and upgrade of the NAS. These systems will save significant Operational and Support costs through the replacement of 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 will be tailored to meet specific site requirements, which will result in varying unit costs. Funding will also ensure interoperability between the Army and FAA systems. These new fixed base systems will be relatively easy to maintain and will provide commonality for both operational and maintenance training. Commonality and interoperability will ensure jointness among the Services and participating host nations.

Exhibit P-40C, Budget Item Justification Sheet		Date: February 2004
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army /4/Support equipment and facilities		P-1 Item Nomenclature: AIR TRAFFIC CONTROL (AA0050)
Program Elements for Code B Items:	Code:	Other Related Program Elements: 0604633A/586 Air Traffic Control

Flight planning/mission rehearsal and common aviation maintenance management system allows migration of selected Special Operation Forces into the conventional Army Aviation force by providing flight planning and mission rehearsal tools and software solutions.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIR TRAFFIC CONTROL (AA0050)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Fixed Base Precision Approach Radar													
Hardware-Precision Approach Radar					9252	6	1542				2700	1	2700
Interim Contractor Support (ICS)					150								
Engineer, Furnish & Install (EF&I)					3899						665		
Fielding					1266			510			689		
Data					72						50		
Subtotal Costs					**14639**			**510**			**4104**		
Voice Communication Switching Syst(VCSS)													
Hardware (VCSS)					2147	10	215	1625	5	325			
2nd Level Eng Spt (FAA)					152						80		
Engineer, Furnish & Install (EF&I)					1014			705			700		
Fielding					716			418			438		
Subtotal Cost					**4029**			**2748**			**1218**		
DoD Advanced Automation System (DAAS)													
Hardware (DAAS)					1088	1	1088	501	1	501	1334	2	667
Hardware (DAAS) Remote Tower Only								175	1	175	1348	6	225
Engineer, Furnish & Install (EF&I)					1241			1414			3183		
Operational Support Facility (OSF)					1400			1102			978		
Training					275			250			500		
Subtotal Costs					**4004**			**3442**			**7343**		
Digital Airport Surveliance Radar(DASR)													
Hardware (DASR)					2652	1	2652	2369	1	2369	4858	2	2429
Other Associated Hardware					71			448			847		
Engineer, Furnish, & Install (EF&I)					1640			2445			2401		
Subtotal Costs					**4363**			**5262**			**8106**		
Tactical Airspace Integration Sys (TAIS)													
Hardware (TAIS)					8650	4	2163	11138	4	2785	10920	4	2730
Production Software Support					3914			5063			2949		
GFE					4279			4776			5177		
Interim Contractor Support (ICS)					400			346					
Testing					71			200			208		
Fielding/NET					3555			2214			1962		

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIR TRAFFIC CONTROL (AA0050)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Subtotal Costs					**20869**			**23737**			**21216**		
Air Traffic Navigation and Integration													
Hardware (ATNAVICS)					7548	3	2516	15636	6	2606	9022	3	3007
GFE					426			1307			1265		
Interim Contract Support (ICS)								150			155		
Fielding					3972			2445			1631		
Engineering Services					3442			4281			1489		
Subtotal Costs					**15388**			**23819**			**13562**		
Flight Planning/Mission Rehearsal													
FPMR											1950		
Common Aviation Maintenance Mgmt System													
CAMMS											1950		
Total					**63292**			**59518**			**59449**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
AIR TRAFFIC CONTROL (AA0050)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware-Precision Approach Radar										
FY 2003	Raytheon Cambridge, MA	C/FP-O	CECOM	Mar 03	Jun 04	6	1542	Yes		
FY 2005	Raytheon Cambridge, MA	C/FP-O	CECOM	Mar 05	Jun 06	1	2700	Yes		
Hardware (VCSS)										
FY 2003	Litton/Denro Gaithersburg MD	C/FP-O	FAA	Jan 03	Jul 03	10	215	Yes		
FY 2004	Litton/Denro Gaithersburg MD	C/FP-O	FAA	Jan 04	Jul 04	5	325	Yes		
Hardware (DAAS)										
FY 2003	Raytheon Malborough MA	C/FP-O	FAA	May 03	May 04	1	1088	Yes		
FY 2004	Raytheon Malborough MA	C/FP-O	FAA	Mar 04	Mar 05	1	501	Yes		
FY 2005	Raytheon Malborough MA	C/FP-O	FAA	Jan 05	Jan 06	2	667	Yes		
Hardware (DAAS) Remote Tower Only										
FY 2004	Raytheon Cambridge, MA	C/FP-O	FAA	Mar 04	Mar 05	1	175	Yes		
FY 2005	Raytheon Cambridge, MA	C/FP-O	FAA	Jan 05	Jan 06	6	225	Yes		
Hardware (DASR)										
FY 2003	Raytheon Cambridge, MA	C/FP-O	USAF	Jun 03	Jun 05	1	2652	Yes		

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
AIR TRAFFIC CONTROL (AA0050)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2004	Raytheon Cambridge, MA	C/FP-O	USAF	Jan 04	Jan 06	1	2369	Yes		
FY 2005	Raytheon Cambridge, MA	C/FP-O	USAF	Mar 05	Mar 07	2	2429	Yes		
Hardware (TAIS)										
FY 2003	General Dynamics Falls Church Virginia	C/FP-O	AMCOM	Dec 02	Dec 03	4	2163	Yes		
FY 2004	General Dynamics Falls Church Virginia	C/FP-O	AMCOM	Dec 03	Dec 04	4	2785	Yes		
FY 2005	General Dynamics Falls Church Virginia	C/FP-O	AMCOM	Dec 04	Dec 05	4	2730	Yes		
Hardware (ATNAVICS)										
FY 2003	Raytheon Cambridge, MA	C/FP-O	CECOM	Mar 03	Mar 04	3	2516	Yes		
FY 2004	Raytheon Cambridge, MA	C/FP-O	CECOM	Jan 04	Jan 05	6	2606	Yes		
FY 2005	Raytheon Cambridge, MA	C/FP-O	CECOM	Mar 05	Mar 06	3	3007	Yes		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army /4/Support equipment and facilities

P-1 Item Nomenclature
INDUSTRIAL FACILITIES (AZ3300)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	177.0	1.4	0.7	0.7	1.2	1.2	1.3	2.0	2.3	2.4		190.2
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	177.0	1.4	0.7	0.7	1.2	1.2	1.3	2.0	2.3	2.4		190.2
Initial Spares												
Total Proc Cost	177.0	1.4	0.7	0.7	1.2	1.2	1.3	2.0	2.3	2.4		190.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
This program provides funding to the Army Test and Evaluation Command (ATEC), Developmental Test Command (DTC) to establish, modernize, expand or replace Army-owned industrial 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 generally provides increased automation and efficiencies, improved data quality and quantity and cost avoidances to Army Program Managers. This project procures airborne instrumentation and support equipment to collect in-flight compatibility, reliability, and safety measurements of Army aircraft. Programmed funding will be used to upgrade or replace production test instrumentation and equipment at the Aviation Technical Test Center, Fort Rucker, AL and, beginning in FY07, Yuma Proving Ground, Yuma, AZ. This project supports all transition paths of the Army Transformation from the Current to the Future Force.

Justification:
FY05 procures: Upgraded Local Area Network components and interfaces used in handling large volumes of test data (replacement of obsolete servers, storage systems and other LAN equipment used for helicopter test data processing. LAN upgrades will provide increased reliability and decrease downtime due to equipment failure. Software upgrades will enhance security and provide stable, vendor supported platforms for development activities.); state-of-the-art engineering PC based workstations and tools for engineers to use in test data analysis, presentation, and reporting (workstation systems and engineering analysis software provide access to aviation performance and system test data); on-board instrumentation recorder for monitoring high speed digital avionics busses; various types of airborne instrumentation including analog and inertial sensors, Global Positioning System receivers, signal conditioning units, various types of data acquisition equipment and cockpit display components used to obtain aircraft performance data; and upgrades to computer and network capabilities used to reduce and process aircraft test data. This instrumentation is required to ensure complete and accurate test data is collected and safety and environmental hazards are minimized. The majority of the instrumentation being upgraded or replaced is obsolete and has met or exceeded it's economic life. Benefits of this project include increased test efficiencies and decreased costs and risks to Army Program Managers.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

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:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	51.6		4.9	2.6	2.5	2.4	2.5	2.5	2.5	2.5		74.0
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	51.6		4.9	2.6	2.5	2.4	2.5	2.5	2.5	2.5		74.0
Initial Spares												
Total Proc Cost	51.6		4.9	2.6	2.5	2.4	2.5	2.5	2.5	2.5		74.0
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The M261 19-tube and M260 7-tube rocket launchers are used to fire 2.75 Inch HYDRA 70 rockets from the following platforms: AH-64 Apache, OH-58D Kiowa Warrior, MH-60L Blackhawk, and AH-6J helicopters. The launchers are non-repairable yet durable enough to withstand 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. The 2.75 Launcher supports the Current Force transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures M260 7-tube rocket launchers for AH-64 Apache, OH-58D Kiowa Warrior, 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 2004

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /4/Support equipment and facilities	AIRBORNE COMMUNICATIONS (AA0705)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	214.9	14.7	20.0	43.7	24.4	9.8						327.6
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	214.9	14.7	20.0	43.7	24.4	9.8						327.6
Initial Spares												
Total Proc Cost	214.9	14.7	20.0	43.7	24.4	9.8						327.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The AN/ARC-220/VRC-100 High Frequency (HF) Radio Program answers Army Aviation's critical long-standing requirement for a Non-Line of Sight (NLOS) communications capability. The HF radio system allows continuous and reliable secure/non-secure communication between Army aircraft flying Nap-of-the-Earth (NOE) maneuvers and at NLOS distances with Aviation Tactical Operations Centers (TOC) and other Army aircraft. The radio incorporates Automatic Link Establishment (ALE) to eliminate manual searches for workable frequencies reducing pilot workload and enhancing communication connectivity. The AN/ARC-220/VRC-100 also provides a frequency hopping capability and is night vision compatible. The AN/ARC-220/VRC-100 provides a position reporting and data capability enhancing situational awareness and command and control. This system supports the Current transition path of the Transformation Campaign Plan (TCP).

Justification:
FY05 procures 5 AH-64D A-Kits. Supports Required Operation Capability (ROC) for NOE Communications dated 7 May 1980 and updated in approved Operational Requirement Document for the NOE Communications system dated 26 February 1994. The AN/ARC-220/VRC-100 answers Non-Line-of-Sight communication deficiency for the AH-64A/D aircraft as identified by Task Force Hawk. The AN/ARC-220 supports digitization of the battlefield and enhances Joint Services communications. The AN/ARC-220/VRC-100 communications system supports the five (5) Army modernization objectives: protect and sustain the force, protect the force, win the battlefield information war, conduct precision strikes throughout the battlefield and dominate the maneuver battle.

Exhibit P-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: AIRBORNE COMMUNICATIONS (AA0705)	Weapon System Type:	Date: February 2004

ACFT Cost Elements	ID CD				FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
RECURRING COSTS													
A. AN/ARC-220 NOE HF Airborne Radio					9059	301	30						
B. AN/VRC-100 Ground Radio					1400	32	44						
C. A-Kits					19800	174	114	18690	116	161	2681	15	179
D. A-Kit Installation					4923	258	20	2177	85	26	4631	174	27
SUBTOTAL					**35182**			**20867**			**7312**		
NON-RECURRING COSTS													
A. A-Kit Intergration					4330								
B. Other System Test					33								
SUBTOTAL					**4363**								
SUPPORT COST													
A. Fielding Support					1984			1898			1967		
B. Program Management					2186			1668			490		
SUBTOTAL					**4170**			**3566**			**2457**		
Total					**43715**			**24433**			**9769**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2004

Appropriation/Budget Activity/Serial No:
Aircraft Procurement, Army / 4 / Support equipment and facilities

Weapon System Type:

P-1 Line Item Nomenclature:
AIRBORNE COMMUNICATIONS (AA0705)

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. AN/ARC-220 NOE HF Airborne Radio										
FY 2003	Rockwell International Cedar Rapids, IA	FFP	CECOM	Nov 03	Sep 04	301	30	Yes		
B. AN/VRC-100 Ground Radio										
FY 2003	Rockwell International Cedar Rapids, IA	FFP	CECOM	Nov 03	Sep 04	32	44	Yes		

REMARKS:

FY 03 / 04 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AIRBORNE COMMUNICATIONS (AA0705)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03												Fiscal Year 04										LATER
							Calendar Year 03												Calendar Year 04										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
A. AN/ARC-220 NOE HF Airborne Radio																													
	1	FY 03	A	301	0	301														A									60	241
B. AN/VRC-100 Ground Radio																													
	2	FY 03	A	32	0	32														A									15	17
Total				333		333																							75	258

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Rockwell International , Cedar Rapids, IA	300.00	600.00	900.00	0
2	Rockwell International , Cedars Rapids, IA	120.00	180.00	240.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	1	5	12	17
	REORDER	0	3	8	11
2	INITIAL	1	5	12	17
	REORDER	0	3	8	11
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

ARC 220 procurement is only a portion of the production base.

FY 05 / 06 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AIRBORNE COMMUNICATIONS (AA0705)

Date: February 2004

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 05												Fiscal Year 06										LATER
							Calendar Year 05												Calendar Year 06										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
A. AN/ARC-220 NOE HF Airborne Radio																													
	1	FY 03	A	301	60	241	60	60	60	61																			0
B. AN/VRC-100 Ground Radio																													
	2	FY 03	A	32	15	17	15	2																					0
Total				333	75	258	75	62	60	61																			

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Rockwell International , Cedar Rapids, IA	300.00	600.00	900.00	0
2	Rockwell International , Cedars Rapids, IA	120.00	180.00	240.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	1	5	12	17
	REORDER	0	3	8	11
2	INITIAL	1	5	12	17
	REORDER	0	3	8	11
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS