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DEPARTMENT OF THE ARMY

Procurement Programs

Committee Staff Procurement Backup Book
FY 2003 Budget Estimate

AIRCRAFT PROCUREMENT, ARMY

APPROPRIATION

February 2002

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APPROPRIATION SUMMARY

DOLLARS IN THOUSANDS

APPROPRIATION	FY 2001	FY 2002	FY 2003	PAGE
Aircraft Procurement, Army	1,541,391	1,970,599	2,061,027	**3**
TOTAL PROCUREMENT PROGRAM	**1,541,391**	**1,970,599**	**2,061,027**	

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APPROPRIATION Aircraft Procurement, Army

DOLLARS IN THOUSANDS

	ACTIVITY	**FY 2001**	**FY 2002**	**FY 2003**	**PAGE**
01	Aircraft	242,581	269,534	180,220	**4**
02	Modification of aircraft	1,161,628	1,487,730	1,692,308	**5**
03	Spares and repair parts	5,028	7,282	7,697	**7**
04	Support equipment and facilities	132,154	206,053	180,802	**8**
	APPROPRIATION TOTALS	**1,541,391**	**1,970,599**	**2,061,027**	

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2001 QTY	FY 2001 COST	FY 2002 QTY	FY 2002 COST	FY 2003 QTY	FY 2003 COST
	FIXED WING							
1	UTILITY F/W (MR) AIRCRAFT (A11300)		1	7,530	1	45,000		
	SUB-ACTIVITY TOTAL			*7,530*		*45,000*		
	ROTARY							
2	UH-60 BLACKHAWK (MYP) (AA0005)		18	(195,953)	12	(204,500)	12	(176,408)
	Less: Advance Procurement (PY)			(-16,554)		(-31,872)		(-23,047)
				179,399		172,628		153,361
3	UH-60 BLACKHAWK (MYP) (AA0005)							
	Advance Procurement (CY)			31,872		26,906		26,859
4	HELICOPTER NEW TRAINING (A06500)		17	23,780	15	25,000		
	SUB-ACTIVITY TOTAL			*235,051*		*224,534*		*180,220*
	ACTIVITY TOTAL			**242,581**		**269,534**		**180,220**

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2001 QTY	FY 2001 COST	FY 2002 QTY	FY 2002 COST	FY 2003 QTY	FY 2003 COST
	MODIFICATIONS OF AIRCRAFT							
5	GUARDRAIL MODS (TIARA) (AZ2000)			22,419		13,766		9,229
6	ARL MODS (TIARA) (AZ2050)	A		6,493		12,238		20,873
7	AH1F MODS (AA0150)			1				
8	AH-64 MODS (AA6605)	A		45,414		38,209		93,622
9	CH-47 CARGO HELICOPTER MODS (AA0252)			(99,991)		(251,453)		(399,783)
	Less: Advance Procurement (PY)					(-17)		(-17,722)
				99,991		251,436		382,061
10	CH-47 CARGO HELICOPTER MODS (AA0252)							
	Advance Procurement (CY)			17		17,722		21,185
11	CH-47 ICH (AA0254)			82,261				
12	UTILITY/CARGO AIRPLANE MODS (AA0270)			10,798		15,984		16,954
13	OH-58 MODS (AA0400)			876		460		460
14	AIRCRAFT LONG RANGE MODS (AA0560)			851		748		744
15	LONGBOW (AA6670)			(748,028)		(929,317)		(892,007)
	Less: Advance Procurement (PY)			(-37,547)		(-44,754)		(-26,226)
				710,481		884,563		865,781
16	LONGBOW (AA6670)							
	Advance Procurement (CY)			44,754		26,226		29,713
17	UH-1 MODS (AB0602)			258				
18	UH-60 MODS (AA0480)			25,405		68,010		41,863
19	KIOWA WARRIOR (AZ2200)			41,531		42,308		42,406
20	AIRBORNE AVIONICS (AA0700)			52,362		77,883		97,003

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2001 QTY	FY 2001 COST	FY 2002 QTY	FY 2002 COST	FY 2003 QTY	FY 2003 COST
21	ASE MODS (SIRFC) (AA0720)			5,046				
22	GATM (AA0701)			12,670				
23	GATM Rollup (AA0711)				411	38,177	525	70,414
	SUB-ACTIVITY TOTAL			*1,161,628*		*1,487,730*		*1,692,308*
	ACTIVITY TOTAL			**1,161,628**		**1,487,730**		**1,692,308**

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FY 2003 PROCUREMENT PROGRAM (WORKSETS INCLUDED)

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2001 QTY	FY 2001 COST	FY 2002 QTY	FY 2002 COST	FY 2003 QTY	FY 2003 COST
	SPARES AND REPAIR PARTS							
24	SPARE PARTS (AIR) (AA0950)			5,028		7,282		7,697
	SUB-ACTIVITY TOTAL			*5,028*		*7,282*		*7,697*
	ACTIVITY TOTAL			**5,028**		**7,282**		**7,697**

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

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2001 QTY	FY 2001 COST	FY 2002 QTY	FY 2002 COST	FY 2003 QTY	FY 2003 COST
	GROUND SUPPORT AVIONICS							
25	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)			9,908		37,545		
26	ASE INFRARED CM (AZ3507)					43,389		
	SUB-ACTIVITY TOTAL			*9,908*		*80,934*		
	OTHER SUPPORT							
27	AIRBORNE COMMAND & CONTROL (AA0710)						7	27,738
28	AVIONICS SUPPORT EQUIPMENT (AZ3000)			9,908		12,790		7,494
29	COMMON GROUND EQUIPMENT (AZ3100)			11,817		18,975		18,091
30	AIRCREW INTEGRATED SYSTEMS (AZ3110)			10,494		10,179		15,215
31	AIR TRAFFIC CONTROL (AA0050)			73,464		57,892		64,410
32	INDUSTRIAL FACILITIES (AZ3300)			1,406		702		704
33	LAUNCHER, 2.75 ROCKET (A50100)					4,924		2,677
34	AIRBORNE COMMUNICATIONS (AA0705)			14,742		19,657		44,473
35	CLOSED ACCOUNT ADJUSTMENT (AZ9999)			415				
	SUB-ACTIVITY TOTAL			*122,246*		*125,119*		*180,802*
	ACTIVITY TOTAL			**132,154**		**206,053**		**180,802**
	APPROPRIATION TOTAL			**1,541,391**		**1,970,599**		**2,061,027**

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Exhibit P-1M, Procurement Programs - Modification Summary

System/Modification	2000 & Prior	2001	2002	2003	2004	2005	2006	2007	To Complete	Total Program
GUARDRAIL MODS (TIARA) (AZ2000)										
System 2 Block Upgrade	263.1									263.1
GUARDRAIL Information Node (GRIFN)		17.6	5.0		5.0	5.0				33.6
System 4 Remote Relay		4.8								4.8
SIGINT Transition Program (STP)			5.1	1.4	9.1	8.8				24.5
Interference Cancellation Sys/Radio Relay Sys			3.7	0.3						4.0
JTT Upgrades				4.3	0.7					5.0
Airborne Tactical Common Data Link				3.2	3.2	2.2				8.6
DMS Upgrade					4.4					4.4
Total	**263.1**	**22.4**	**13.8**	**9.2**	**22.4**	**16.0**	**1.1**			**348.0**
ARL MODS (TIARA) (AZ2050)										
Superhawk Software Integ Trouble Rpts	2.0	1.3								3.3
Upgrade to IMINT Suite	3.8	0.5								4.3
COMINT/ESM Installation on ARL-M4		2.2								2.2
Upgrade to DAMA Compliant Radio		2.5	3.4	1.8						7.7
Airspace 2000			3.2							3.2
Upgrade ARL-M4 & M5 IMINT Suites			3.3							3.3
COMINT Upgrades			2.3	4.1	3.9					10.3
Radar Replacement				7.1	5.1					12.2
Aircraft Standardization				1.1	1.1					2.2
Aircraft Survivability Equipment (ASE)				6.1	5.7					11.8
Joint Tactical Terminal (JTT) Integration				0.7						0.7
Total	**5.8**	**6.5**	**12.2**	**20.9**	**15.8**					**61.2**
AH-64 MODS (AA6605)										
Backup Control System (BUCS)	19.7			5.4	6.3	6.2	3.7	3.4	3.6	48.3
Airframe Modifications	25.2	8.6	2.0	1.8						37.6

System/Modification	2000 & Prior	2001	2002	2003	2004	2005	2006	2007	To Complete	Total Program
TADS/PNVS Upgrades	34.9	15.7	14.5	11.9	15.0	13.6	13.4	10.1	22.0	151.1
MISC Mods and R&S Mods $5M or less (No P3a set)	532.6	21.1	21.7	24.7	19.1	21.8			65.2	
Combat Mission Simulator (CMS)	10.0			30.0						40.0
National Guard Fielding				15.8	24.5	24.8				65.1
Modernized TADS/PNVS (M-TADS)				4.0	51.2	17.1	46.7	87.1	86.0	292.0
Total	**622.4**	**45.4**	**38.2**	**93.6**	**116.1**	**83.5**	**170.4**	**100.6**	**176.8**	**634.2**
CH-47 CARGO HELICOPTER MODS (AA0252)										
Total Ownership Cost Reduction		1.7	1.2	1.7						
Improved Battery		2.5	0.3	0.4						
Engine Filtration System		0.2	4.1	8.0	7.1	6.5	6.8	1.3	1.6	35.7
Extended Range Fuel System	19.9	8.2	19.4	17.6	15.8					81.0
Engine Upgrade to T55-GA-714A Configuration	263.9	99.3	124.1	140.8	140.5	171.3	153.8	64.7	5.7	1164.1
APU Upgrade	6.0	3.5	1.1							
Installation of Modifications Kits Various	30.2	0.8	0.9	0.9						
CH-47D Flight Simulator Upgrade			5.4	5.0	10.2					20.6
CH-47F		66.0	95.0	178.4	284.2	303.9	345.2	344.9	3812.3	5429.9
Component Recapitalization				25.6	51.9	43.8	68.5	49.7	775.4	1014.8
Low Maintenance Rotor Hub				3.7	12.3	9.6	13.0	11.4	12.6	
Engine Fire Extinguisher (Halon Replacement)							8.2	8.4	26.9	
Total	**320.0**	**182.3**	**251.4**	**382.1**	**522.1**	**535.1**	**595.4**	**480.5**	**4634.5**	**7746.2**
CH-47 ICH (AA0254)										
Improved Cargo Helicopter		53.4	126.4	152.2	213.6	237.6			1541.2	527.6
Total		**53.4**	**126.4**	**152.2**	**213.6**	**237.6**	**33.7**		**1541.2**	**527.6**
UTILITY/CARGO AIRPLANE MODS (AA0270)										
Avionics System Cockpit Upgrade	47.2	11.7	16.1	17.0	10.7	10.7	14.3	10.4		138.2

Missile Procurement, Army **Exhibit P-1M, Procurement Programs - Modification Summary**

System/Modification	2000 & Prior	2001	2002	2003	2004	2005	2006	2007	To Complete	Total Program
Total	**47.2**	**11.7**	**16.1**	**17.0**	**10.7**	**10.7**	**14.3**	**10.4**		**138.2**
LONGBOW APACHE MODS (AA6607)										
Longbow Apache Mods	2064.3	593.1	773.6	840.7	724.7	460.9	438.8	347.9	1943.2	8187.3
Total	**2064.3**	**593.1**	**773.6**	**840.7**	**724.7**	**460.9**	**438.8**	**347.9**	**1943.2**	**8187.3**
UH-60 BLACK HAWK MODS (AA0492)										
Crashworthy External Fuel System (CEFS)		3.0	21.3	10.3	12.5	14.2	19.6	18.9	41.5	141.2
Fire Hawk Kits	2.0	3.0								
Sealed Lead Acid Battery (SLAB)	7.9	2.3	5.0	1.1						16.3
UH-60Q Medical Equipment Package (MEP)	1.0		30.0	29.0	30.1	57.9				148.0
Advanced Helicopter Transmission Lubricant				1.5	0.8	1.2				3.5
NVG Lighting Lower Console	10.2	0.5								
Kapton Wiring Replacement		2.1								
De-Icing System Upgrade Program			1.3							
UH-60M Selected Upgrade					136.6	166.3	388.8	364.6	11520.2	
UH-60M Medical Equipment Package (MEP)							52.8	53.2	1483.6	
Search and Rescue (SAR) MOD	9.9	14.5	10.4							
Total	**31.0**	**25.4**	**68.0**	**41.9**	**180.0**	**239.6**	**461.2**	**436.7**	**13045.3**	**309.0**
KIOWA WARRIOR (AZ2200)										
Safety Enhancement Program (SEP)	180.2	40.4	42.4	42.4	42.0	34.6	23.1	24.8	4.5	434.3
Safety Enhancement Program - Weight Reduction							0.0	31.7	84.9	41.3
Crew Station Mission Equipment Trainer (CSMET)	17.2	1.3								
Total	**197.4**	**41.6**	**42.4**	**42.4**	**42.0**	**34.6**	**23.1**	**56.4**	**89.5**	**475.6**
AIRBORNE AVIONICS (AA0700)										
Doppler GPS Navigation System (DGNS) (AN/ASN-128B)	91.8	0.8								

Missile Procurement, Army **Exhibit P-1M, Procurement Programs - Modification Summary**

System/Modification	2000 & Prior	2001	2002	2003	2004	2005	2006	2007	To Complete	Total Program
Improved Data Modem (IDM)	80.6	32.8	42.6	59.4	35.8	30.0	29.9	33.2	528.6	872.9
Aviation Mission Planning System (AMPS)	48.7	13.5	10.4	19.8	28.1	16.4			159.2	310.6
Embedded GPS Inertial Navigation System (EGI) P3I	4.2	3.7	14.7	14.7	11.4	8.5	8.1	5.8	105.4	176.4
DGNS (AN/ASN-128B) P3I		1.7	10.3	3.1	5.3	8.6	7.5	4.0	89.8	130.4
Advanced Avionics Technology Insertion									372.2	
Joint Precision Approach & Landing System (JPALS)									373.1	
Total	**225.3**	**52.4**	**77.9**	**97.0**	**80.5**	**63.5**	**60.1**	**43.1**	**1628.3**	**1490.3**
ASE MODS (SIRFC) (AA0720)										
AN/ALQ-211 Suite of Integrated Radio Frequency CMS	141.0	5.0								146.0
Laser Detecting Set AN/AVR-2A(V)	30.6									30.6
Advanced Threat Infrared Countermeasures (ATIRCM)	20.2									20.2
Total	**191.9**	**5.0**								**196.9**
GATM (AA0701)										
Global Air Traffic Management - RW	2.9	3.2								6.0
Global Air Traffic Management - FW	7.0	6.8								13.8
Total	**9.9**	**10.0**								**19.9**
GATM - Fixed Wing Aircraft (AA0703)										
Global Air Traffic Management - FW			19.2	43.3	33.5	43.1				148.2
Total			**19.2**	**43.3**	**33.5**	**43.1**	**9.1**			**148.2**
ASE MODS (ATIRCM) (AA0722)										
Advanced Threat Infrared Countermeasures	4.9									4.9
Total	**4.9**									**4.9**
Grand Total	**3983.1**	**1049.2**	**1439.3**	**1740.2**	**1961.4**	**1724.6**	**1807.2**	**1475.6**	**23058.8**	**20287.4**

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty	17	5	3	1	1		1				40	68
Gross Cost	73.4	26.8	17.2	7.5	45.0		7.4				390.0	567.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	73.4	26.8	17.2	7.5	45.0		7.4				390.0	567.3
Initial Spares												
Total Proc Cost	73.4	26.8	17.2	7.5	45.0		7.4				390.0	567.3
Flyaway U/C												
Wpn Sys Proc U/C		5.4	5.7	7.5			7.4				9.8	

Description:
The Cessna UC-35 (Medium Range) aircraft is a fully integrated, two-pilot crew, 6-8 passenger capability, multi-engine system with worldwide self-deployability. It has advanced technology, while being a non-developmental, fixed wing aircraft system. The UC-35 aircraft is being fielded using the concept of Life Cycle Contractor Support.

Justification:
There is no FY 2003 budget request for this item.

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 (MR) AIRCRAFT (A11300)	Weapon System Type:	Date: February 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		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					7000	1		43500	1				
Avionics					334			1498					
Subtotal Flyaway Costs					**7334**			**44998**					
Total Flyaway					**7334**			**44998**					
Support Cost													
Peculiar Training Equipment													
Publications Tech/Data					1			2					
Other (specify) Net/ICS/Mfxsupt					195								
Subtotal Support Costs					**196**			**2**					
Gross P-1 End Cost													
Net P-1 Full Funding Cost													
Initial Spares													
Total					**7530**			**45000**					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty		29	19	18	12	12	10	8	28	22		158
Gross Cost	7962.2	294.7	199.3	196.0	204.5	176.4	145.2	128.2	322.7	395.5	34.5	10059.2
Less PY Adv Proc	2348.4	23.2		16.6	31.9	23.0	23.1	19.9	29.9	52.2	34.5	2602.5
Plus CY Adv Proc	2371.6		16.6	31.9	26.9	26.9	23.0	19.1	52.2	34.5		2602.5
Net Proc (P-1)	7985.5	271.5	215.8	211.3	199.5	180.2	145.1	127.5	345.0	377.8		10059.2
Initial Spares	417.8	3.5										421.3
Total Proc Cost	8403.3	275.0	215.8	211.3	199.5	180.2	145.1	127.5	345.0	377.8		10480.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
UH-60 BLACK HAWK and associated equipment.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty	1480	29	19	18	12	12	10	8	28	22		1638
Gross Cost	7922.8	294.7	199.3	196.0	204.5	176.4	145.2	128.2	322.7	395.5	34.5	10019.8
Less PY Adv Proc	2348.4	23.2	0.0	16.6	31.9	23.0	23.1	19.9	29.9	52.2	34.5	2602.5
Plus CY Adv Proc	2371.6	0.0	16.6	31.9	26.9	26.9	23.0	19.1	52.2	34.5		2602.5
Net Proc (P-1)	7946.0	271.5	215.8	211.3	199.5	180.2	145.1	127.5	345.0	377.8		10019.8
Initial Spares	417.8	3.5										421.3
Total Proc Cost	8363.8	275.0	215.8	211.3	199.5	180.2	145.1	127.5	345.0	377.8		10441.1
Flyaway U/C		8.6	7.8	8.0	10.5	10.7	11.3	12.3	10.4	15.8		
Wpn Sys Proc U/C		10.3	10.5	10.9	17.0	14.7	14.5	16.0	11.5	18.0		

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 effort supports the Legacy to Objective transition path of the Transformation Campaign Plan.

Justification:
FY03 funds are required for the procurement of aircraft, continuation of fielding, and to provide for Program Management Office operations. A new multiservice, multiyear contract begins in FY 2002.

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		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					118845	18	6603	96903	12	8076	100549	12	8380
Engines/Accessories					6562	10	657	15788	24	658	16153	24	674
Avionics (GFE)					11560			5097			5188		
Other GFE					58			2605			2642		
Armament													
ECO (All FLYAWAY Components)					6407			2423			2556		
Other Costs (Mission Equipment)					629			3611			896		
Subtotal Recurring FLYAWAY Costs					**144061**			**126427**			**127984**		
Non-Recurring Costs													
Tooling Equipment								9649					
Other Nonrecurring Cost					17256								
Total FLYAWAY					**161317**			**136076**			**127984**		
Support Cost													
Airframe PGSE													
Engine PGSE													
Peculiar Training Equipment								36967			16633		
Publications/Tech Data					5451			1730			3121		
Engineering Change Orders													
PM Administration					23952			24618			25051		
Fielding					5233			5109			3619		
Subtotal Support Cost					**34636**			**68424**			**48424**		
Gross P-1 End Item Cost					**195953**			**204500**			**176408**		
Less: Prior Year Adv Proc					16554			31872			23047		
Net P-1 Full Funding Cost					**179399**			**172628**			**153361**		
Plus: P-1 CY Adv Proc					31872			26906			26859		
Initial Spares													
Total					**211271**			**199534**			**180220**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

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

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Airframes/CFE										
FY 2000	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 99	Jun 00	9	6636	Yes		
FY 2000	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Mar 00	Jul 00	5	5730	Yes		
FY 2000	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Jul 00	Jan 01	5	10610	Yes		
FY 2001	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Nov 00	Dec 01	6	5863	Yes		
FY 2001	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	DEC 00	APR 02	7	6235	Yes		
FY 2001	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	APR 01	JUN 02	5	8005	Yes		
FY 2002	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Jun 02	Jul 02	12	8076	Yes		Sep 00
FY 2003	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 02	Jul 03	12	8380	Yes		Sep 00

REMARKS: December 1999 and November 2000 Airframe awards for FY00 and FY01 respectively include both UH-60L hardware as well as the associated System/Project Management; March 2000 and December 2000 airframe contract awards reflect the exercise of aircraft options and include no System/Project Management. July 2000 and April 2001 contract awards involve both the exercising of options as well as the procurement of contract in line production modifications to convert to Congressionally directed HH-60L MEDEVAC and Fire Fighting configurations.

FY 01 / 02 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 01												Fiscal Year 02										LATER
							Calendar Year 01												Calendar Year 02										
							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 97	A	34	31	3			1	1	1																			0
	1	FY 98	A	28	28	0																								0
	1	FY 99	A	29	29	0																								0
	1	FY 00	A	19	3	16				1	1	2	1	1		1	1	3				1	1			1	2				0
	1	FY 01	A	18	0	18			A										3	4	2		3	3				1	2		0
	1	FY 02	A	12	0	12																		A				1	1	1	9
	1	FY 02	A	10	0	10																		A					1	1	8
	1	FY 03	A	12	0	12																									12
	1	FY 97	AF	8	8	0																									0
	1	FY 97	FMS	15	15	0																									0
	1	FY 99	FMS	5	5	0																									0
	1	FY 00	FMS	2	0	2	2																								0
	1	FY 01	FMS	24	0	24				A															1	2	3	3	3	3	9
	1	FY 01	FMS	14	0	14			A	7			1		6																0
	1	FY 01	FMS	2	0	2				A																	2				0
	1	FY 98	NA	1	0	1				1																					0
	1	FY 99	NA	5	5	0																									0
	1	FY 00	NA	16	0	16			4			1	1	1	2	1	2	1		1	1	1									0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Sikorsky Aircraft, Stratford CT	18.00	60.00	96.00	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 01 / 02 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 01												Fiscal Year 02										LATER
							Calendar Year 01												Calendar Year 02										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
	1	FY 01	NA	15	0	15						A						1	2	1	1	1	1	2	2	1	1				2
	1	FY 02	NA	13	0	13															A							1	1	1	10
	1	FY 03	NA	15	0	15																									15
	1	FY 99	OTH	6	6	0																									0
	1	FY 01	OTH	16	0	16			A						3	3	3	3	3	1											0
Total				319	130	189	2		12	3	2	3	3	2	11	5	6	8	8	7	4	3	5	5	3	4	8	6	8	6	65

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Sikorsky Aircraft, Stratford CT	18.00	60.00	96.00	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 03 / 04 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

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	
Airframes/CFE																													
	1	FY 97	A	34	34	0																							0
	1	FY 98	A	28	28	0																							0
	1	FY 99	A	29	29	0																							0
	1	FY 00	A	19	19	0																							0
	1	FY 01	A	18	18	0																							0
	1	FY 02	A	12	3	9	1	1	1	1	1	1	1	1	1														0
	1	FY 02	A	10	2	8	1	1	1		1	1	1	1	1														0
	1	FY 03	A	12	0	12			A							1	1	1	1	1	1	1	1	1	1	1	1			0
	1	FY 97	AF	8	8	0																							0
	1	FY 97	FMS	15	15	0																							0
	1	FY 99	FMS	5	5	0																							0
	1	FY 00	FMS	2	2	0																							0
	1	FY 01	FMS	24	15	9	3	3	3																				0
	1	FY 01	FMS	14	14	0																							0
	1	FY 01	FMS	2	2	0																							0
	1	FY 98	NA	1	1	0																							0
	1	FY 99	NA	5	5	0																							0
	1	FY 00	NA	16	16	0																							0

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Sikorsky Aircraft, Stratford CT	18.00	60.00	96.00	0

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

FY 03 / 04 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	FY 03 OCT	FY 03 NOV	FY 03 DEC	CY 03 JAN	CY 03 FEB	CY 03 MAR	CY 03 APR	CY 03 MAY	CY 03 JUN	CY 03 JUL	CY 03 AUG	CY 03 SEP	FY 04 OCT	FY 04 NOV	FY 04 DEC	CY 04 JAN	CY 04 FEB	CY 04 MAR	CY 04 APR	CY 04 MAY	CY 04 JUN	CY 04 JUL	CY 04 AUG	CY 04 SEP	LATER
	1	FY 01	NA	15	13	2		1	1																						0
	1	FY 02	NA	13	3	10	1	1	1	2	1	1	1	1	1																0
	1	FY 03	NA	15	0	15			A							1	1	1	2	1	1	1	1	1	1	2	2				0
	1	FY 99	OTH	6	6	0																									0
	1	FY 01	OTH	16	16	0																									0
Total				319	254	65	6	7	7	3	3	3	3	3	3	2	2	2	3	2	2	2	2	2	2	3	3				

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
1	Sikorsky Aircraft, Stratford CT	18.00	60.00	96.00	0	1	INITIAL	8	3	6	9	
							REORDER	0	3	6	9	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	2371.6	0.0	16.6	31.9	26.9	26.9	23.0	19.1	52.2	34.5		2602.5
Net Proc (P-1)	2371.6		16.6	31.9	26.9	26.9	23.0	19.1	52.2	34.5		2602.5
Initial Spares												
Total Proc Cost	2371.6		16.6	31.9	26.9	26.9	23.0	19.1	52.2	34.5		2602.5
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 effort supports the Legacy to objective transition path of the Transformation Campaign Plan.

Justification:
Funding in FY03 is for both 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 2002

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 99	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	To Comp	Total
End Item Quantity			1480	29	19	18	12	12	10	8	28	22		1638
CFE Airframe	18	6	1459.2		16.3	17.0	14.0	15.5	13.1	6.4	27.5	21.8		1590.9
Engines	14	3	652.1			12.9	10.5	9.4	8.2	9.8	19.9	10.5		733.2
Avionics		3	124.3		0.3									124.6
Auxiliary Power Unit	15	3	42.9			0.8	1.0	0.8	0.7	1.2	1.9	0.9		50.1
Armored Crew Seat	12	3	21.1			0.5	0.6	0.5	0.4	0.7	1.2	0.6		25.7
Hover Infrared Suppressor	14	3	28.9			0.7	0.8	0.7	0.6	1.0	1.6	0.8		35.1
Elastomeric Bearings	10	3	1.5											1.5
Miscellaneous		3	41.6											41.6
Total Advance Procurement			2371.6	0.0	16.6	31.9	26.9	26.9	23.0	19.1	52.2	34.5	0.0	2602.5

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 are for numerous items with differing lead times.

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2002

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	2002 Qty	2002 Contract Forcast Date	2002 Total Cost Request	2003 Qty	2003 Contract Forcast Date	2003 Total Cost Request
CFE Airframe	18	1		12	Jun 02	14.0	10	Dec 02	15.5
Engines	14	2	0.7	16	Dec 01	10.5	14	Dec 02	9.4
Auxiliary Power Unit	15	1	0.1	12	Mar 02	1.0	10	Dec 02	0.8
Armored Crew Seat	12	2	0.0	24	Mar 02	0.6	20	Dec 02	0.5
Hover Infrared Suppressor	14	1	0.1	12	Mar 02	0.8	10	Dec 02	0.7
Total Advance Procurement						26.9			26.9

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 is being procured on an Indefinite Delivery, Indefinite Quantity (IDIQ) contract with option prices established by the calendar year of delivery. 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 shown is the anticipated price of the item on the FY02 contract. 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 2002

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 99	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	To Comp	Total
Proposal w/o AP												
Then Year Cost				8	64	142	176	143	195	201	143	1054
Constant Year Cost				8	64	141	170	136	183	185	128	1012
Present Value				8	61	132	157	124	165	164	111	919
AP Proposal												
Then Year Cost				8	62	138	170	138	188	193	137	1015
Constant Year Cost				8	62	136	165	132	176	177	122	974
Present Value				8	59	127	152	120	158	157	107	885
AP Savings (Difference)												
Then Year Cost					-2	-5	-6	-5	-8	-9	-6	-39
Constant Year Cost					-2	-5	-6	-5	-8	-8	-6	-38
Present Value					-2	-5	-6	-5	-7	-7	-5	-34

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 reprsents the estimated cost of single year contracting over the same time span. Constant dollars shown are FY02. A 3.2% 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)

		2000					2001					2002		2003	
	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															
CFE Airframe	18	6	Feb 00	Feb 00	16.3	16.3	10	Dec 00	Dec 00	17.0	17.0	12	Jun 02	10	Dec 02
Engines	14						20	Dec 00	Dec 00	12.9	12.9	16	Dec 01	14	Dec 02
Avionics		10		Feb 00	0.3	0.3									
Auxiliary Power Unit	15						10	Mar 01	Dec 00	0.8	0.8	12	Mar 02	10	Dec 02
Armored Crew Seat	12						22		Dec 00	0.5	0.5	24	Mar 02	20	Dec 02
Hover Infrared Suppressor	14						10	Mar 01	Dec 00	0.7	0.7	12	Mar 02	10	Dec 02
Elastomeric Bearings	10														
Miscellaneous															
Total Advance Procurement					16.6	16.6				31.9	31.9				

Airframe funding is for termination liability of long lead and Economic Order Quantity parts. The FY00 President's Budget requested $13.1M for airframe termination liability and $3.6M for the procurement of 6 engines with FY00 Advance procurement funds, and projected both contract awards in December, 1999. The FY01 President's Budget requested $10.8M in FY01 for termination liability funding in support of 9 aircraft to be procured in FY02, $7.4M to buy 12 T700-GE-701C engines, as well as funding to buy all known future program requirements for the Auxiliary Power Unit (25/$1.9M) and the Hover Infrared Suppressor System (31/$2.0M). Avionics, Elastomeric Bearings, and Miscellaneous GFE items are now requisitioned from the supply system using current year funds.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty	137			17	15							169
Gross Cost	118.2			23.8	25.0							167.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	118.2			23.8	25.0							167.0
Initial Spares												
Total Proc Cost	118.2			23.8	25.0							167.0
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 206B-3 commercial helicopter. The aircraft is used exclusively at the US Army Aviation Center (USAAVNC), Fort Rucker for Initial Entry Rotor Wing (IERW) training. It is designed to provide safe, effective, and economical in-flight training when used to demonstrate and practice basic helicopter pilot skills.

This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP), receiving visibility by HQDA, DOD and Congressional staffers.

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		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					22559	17	1327	24975	15	1665			
SUPPORT COSTS					1221			25					
Total					**23780**			**25000**					

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 1 / Aircraft		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 2001	Bell Helicopter Ft. Worth, TX	SS/FP	Redstone Arsenal, AL	Mar 01	Sep 01	17	1327	Yes		Oct 00
FY 2002	Bell Helicopter Ft. Worth, TX	SS/FP	Redstone Arsenal, AL	Mar 02	Sep 03	15	1665	Yes		Oct 00

REMARKS:

FY 01 / 02 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 01												Fiscal Year 02										LATER
										Calendar Year 01													Calendar Year 02								
							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 01	A	17	0	17						A						1	2	2	2	2	2	2	2	2				0
	1	FY 02	A	15	0	15																		A						15
Total				32		32												1	2	2	2	2	2	2	2	2				15

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

REMARKS

FY 03 / 04 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

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 01	A	17	17	0																							0
	1	FY 02	A	15	0	15												1	2	2	2	2	2	2	2					0
Total				32	17	15												1	2	2	2	2	2	2	2					

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

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	605.5	43.5	23.6	22.4	13.8	9.2	22.4	16.0	1.1			757.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	605.5	43.5	23.6	22.4	13.8	9.2	22.4	16.0	1.1			757.5
Initial Spares	9.3	2.6	5.2									17.1
Total Proc Cost	614.8	46.1	28.8	22.4	13.8	9.2	22.4	16.0	1.1			774.6
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. It provides intelligence data via CTT/JTT to other INTEL users, such as Common Ground Station (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 will provide a highly flexible architecture to allow rapid deployment to support contingency operations.
The GRCS integrates the Improved GUARDRAIL V for communications intelligence (COMINT), the Communications High Accuracy Airborne Location System (CHAALS/CHALS-X) for COMINT and precision emitter locations, the Advanced QUICKLOOK (AQL) for electronics intelligence (ELINT) and 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 miniaturized and deployable integrated processing facility (IPF), which is in compliance with OSD and the Army Distributed Common Ground Station (DCGS-A) planning. GRIFN will play a vital role in interim DCGS-A which is planned to be demonstrated at the 18th ABC in FY 03 and at III Corps in FY 04.
The Guardrail Common Sensor system supports the Legacy path of the Transformation Campaign Plan (TCP).

Justification:
The GUARDRAIL Mods upgrade program will allow GRCS to support field commanders until Aerial Common Sensor (ACS) is fully fielded to the Objective Force in FY17. FY03 funds provide for continuation of the SIGINT Transition Program (STP), which will integrate advanced signal intelligence upgrades into the fielded GUARDRAIL Systems. These upgrades will improve the GRCS ability to maintain currency by providing an ability to rapidly adapt to a changing threat environment characterized by emerging digital signals.

Exhibit P-40C, Budget Item Justification Sheet		Date: February 2002
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:

FY03 funds also provide for replacement of the Commander's Tactical Terminal (CTT-1) reporting terminals in the GRCS Reporting subsystem with the Joint Tactical Terminal (JTT), which is the standard among other Army users operating on the TIBS and TRIXS networks; and the replacement of the Interoperable Airborne Datalink with the Tactical Common Datalink, a Total Ownership Cost Reduction (TOCR) initiative which will significantly lower sustainment costs by fielding a more reliable and supportable commercial-based link.

Defense Emergency Response Fund (DERF-1): In addition to the budget request indicated above, DERF-1 includes $5.0 million in FY 2003 for GRCS #2 for hardware and software to process non-traditional signals. These capabilities involve low probability of intercept military communication emitters, and commercially available hand-held communication devices. The outyear requirement is FY 2004, $28.4 million; FY 2005, $32.5 million; FY 2006, $29.4 million; and FY 2007, $82.0 million.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
System 2 Block Upgrade											
1-96-666-6666		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GUARDRAIL Information Node (GRIFN)											
1-01-111-1111	Operational	0.0	17.6	5.0	0.0	5.0	5.0	1.1	0.0	0.0	33.7
System 4 Remote Relay											
1-01-222-2222		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIGINT Transition Program (STP)											
1-02-111-1111		0.0	0.0	5.1	1.4	9.1	8.8	0.0	0.0	0.0	24.4
Interference Cancellation Sys/Radio Relay Sys											
1-02-222-2222		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JTT Upgrades											
1-03-111-1111		0.0	0.0	0.0	4.3	0.7	0.0	0.0	0.0	0.0	5.0
Airborne Tactical Common Data Link											
1-03-222-2222		0.0	0.0	0.0	3.2	3.2	2.2	0.0	0.0	0.0	8.6
DMS Upgrade											
1-04-111-1111		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Totals		263.1	22.4	13.8	9.2	22.4	16.0	1.1	0.0	0.0	348.0

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: GUARDRAIL Information Node (GRIFN) [MOD 2] 1-01-111-1111

MODELS OF SYSTEM AFFECTED: GUARDRAIL/Common Sensor System

DESCRIPTION/JUSTIFICATION:

GRIFN, which miniaturizes the GRCS integrated processing facility (IPF), provides the framework for the Tactical Exploitation System and GUARDRAIL/Common Sensor to become interoperable and achieve selective commonality of processors and methods. GRIFN will provide Army tactical commanders with tailorable, scaleable, easily deployable intelligence preprocessing system of systems, capable of split-based operations and will be downsized into a tactical link vehicle (TLV) and/or a tactical detection vehicle (TDV) which are shelters on a HMWVV. GRIFN will be integrated in the field and tested with GRCS aircraft. GRIFN is the SIGINT component of the Interim Distributed Common Ground Station-Army (IDCGS-A) architecture. FY 01 and 02 Funds provide for IDCGS-A functionality in System 1 GRIFN to be fielded to the 18th ABC in FY 03.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract Awarded (Sys 1)	4QFY01	Contract Award (Sys 4 TLV) 1QFY04	Contract Award (Sys 4 TDV) 1QFY05
Complete Critical Design Review (Sys 1)	4QFY01		
Begin Integration/IDCGSA Upgrade(Sys 1)	2QFY02	Begin Integration(Sys TLV) 2QFY04	Begin Integration (Sys 4 TDV) 2QFY05
Acceptance Test (Sys 1)	2QFY03	Acceptance Test (Sys 4TLV) 3QFY05	Acceptance Test (Sys 4 TDV) 3QFY06
Final Acceptance (Sys1)	3QFY03	Final Acceptance (Sys 4 TLV) 4Q FY05	Final Acceptance (Sys 4TDV) 4Q FY06

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2006				FY 2007				FY 2008				FY 2009				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: 1 Months PRODUCTION LEADTIME: 27 Months

Contract Dates:	FY 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): GUARDRAIL Information Node (GRIFN) [MOD 2] 1-01-111-1111

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment			1	4.2					1	2.6	1	1.9							3	8.7
Contractor Engineering				2.5		4.6				0.6		0.5								8.2
Govt In-House/Program Mgmt				1.7		0.4				0.4		0.4		0.1						3.0
Accreditation				0.5						0.1		0.1								0.7
Logistics and Training				2.1						0.2		0.2		0.3						2.8
Acceptance Testing				0.6						0.1		0.2								0.9
Integration and Test				5.0						0.5		0.6								6.1
Spares												0.5		0.5						1.0
Fielding				1.0						0.5		0.6		0.2						2.3
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 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		17.6		5.0		0.0		5.0		5.0		1.1		0.0		0.0		33.7

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: SIGINT Transition Program (STP) [MOD 4] 1-02-111-1111

MODELS OF SYSTEM AFFECTED: GUARDRAIL/Common Sensor Systems 1, 2, & 4

DESCRIPTION/JUSTIFICATION:

This modification integrates advanced signal intelligence (SIGINT) upgrades into the fielded GUARDRAIL systems. The modification includes hardware and software upgrades to handle advanced digital communication signals including: wideband commercial communications, the expanded set of LPI signals and the communications systems expected to make up the Integrated Battle Area Communications System (IBACS). This effort will extend the useful life of GRCS systems through the fielding of the Objective Force system, Aerial Common Sensor (ACS) in FY17. STP products funded through this upgrade program are the result of leveraging technologies demonstrated through the use of Defense Cryptologic Program (DCP) funds. The demonstrated capabilities are then productized for future system integration in ACS R&D line (D028). Items selected for fielding will include hardware and software which will provide the biggest payback in increasing capabilities. STP upgrades will have application to other Army INTEL collection efforts, such as Airborne Reconnaissance - Low (ARL), Prophet and the future ISR platform Aerial Common Sensor (ACS). There is potential application for other DoD INTEL collection platforms, including Rivet Joint, EP-3 and Senior Scout. Funding in FY02 will provide Wideband Spectrum analysis tools for System2. Funding in FY03 will provide additional signal processing tools for System 2.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract Award Sys 2 CSP	2QFY02
Install CSP Sys 2	3-4QFY03
Contract Award CSP Sys 2	1QFY03
Install Sys 2 CSP	4QFY03
Contract Award CSP/PECS Sys 1&4	1QFY04
Contract Award PECS Sys 2	1QFY05
Install CSP & PECS Sys 1,4,2	3QFY03-4QFY05

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs									9								3	8		7	14
Outputs									9								3	8		7	14

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		41
Outputs																		41

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

Contract Dates:	FY 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): SIGINT Transition Program (STP) [MOD 4] 1-02-111-1111

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Installation Kits								1.2												1.2
Equipment -SW Tools					9	4.2													9	4.2
Equipment - PECS									15	5.6	9	3.4							24	9.0
Equipment - CSP									3	1.9	5	2.9							8	4.8
SW Integration																				
Ancillary Equipment PECS										0.3										0.3
Ancillary Equipment - CSP						0.0														
New Signals Transition																				
Gov't In House/Program Mgmt						0.3		0.1		0.7		0.8								1.9
Test and Accreditation						0.1		0.1												0.2
Training and Logistics										0.4		0.2								0.6
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip					9	0.5													9	0.5
FY 2003 Equip									3	0.2									3	0.2
FY 2004/2005 Equip											24	1.2							24	1.2
FY 2005 Equip -- Kits											5	0.3							5	0.3
Fielding																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0	9	0.5		0.0	3	0.2	29	1.5		0.0		0.0		0.0	41	2.2
Total Procurement Cost		0.0		0.0		5.1		1.4		9.1		8.8		0.0		0.0		0.0		24.4

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: JTT Upgrades [MOD 6] 1-03-111-1111

MODELS OF SYSTEM AFFECTED: GUARDRAIL/Common Sensor Systems 1, 2, 3, & 4

DESCRIPTION/JUSTIFICATION:

This modification provides for the replacement of Commander's Tactical Terminal (CTT) reporting terminals in GRCS with Joint Tactical Terminals (JTT). This upgrade will provide reporting hardware and software which is standard with the other Army users operating on the TIBS and TRIXS networks. FY03 funds provide for engineering and fabrication of installation A kits and software security upgrades to allow insertion of PM Common Ground Station-provided JTTs (SSN V29600) into the Guardrail/Common Sensor ground stations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract	1QFY03
Install & Test Systems 1,2	2QFY04
Install & Test System 3	3QFY04
Install & Test System 4	4QFY04

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs															2	1	1				
Outputs															2	1	1				

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		4
Outputs																		4

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

Contract Dates:	FY 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): JTT Upgrades [MOD 6] 1-03-111-1111

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kit Sets							4	0.4											4	0.4
Nonrecurring Engineering								0.9												0.9
Ancillary Equipment								0.5												0.5
Equipment, Nonrecurring																				
Engineering Change Orders								0.1												0.1
Software Upgrades								1.5												1.5
Logistics and Training								0.3												0.3
Testing								0.3		0.3										0.6
Gov't In House/Program Mgmt								0.3		0.1										0.4
--																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits									3	0.3									3	0.3
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0		0.0		0.0	3	0.3		0.0		0.0		0.0		0.0	3	0.3
Total Procurement Cost		0.0		0.0		0.0		4.3		0.7		0.0		0.0		0.0		0.0		5.0

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Airborne Tactical Common Data Link [MOD 7] 1-03-222-2222

MODELS OF SYSTEM AFFECTED: Guardrail System 1 & 4

DESCRIPTION/JUSTIFICATION:

This modification will effort will replace the GRCS critically obsolete Interoperable Airborne Data Link (IADL) with the reliable, avaialable and maintainable state-of-the-art Tactical Common Data Link (TCDL). 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 ACS R&D Line (D028). A portion of the upgrade funding was provided under OSD Total Ownership Cost Reduction (TOCR) initiative. Funding in FY03 purchases TCDLs for System 1.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																		8			7
Outputs																		8			7

	FY 2006				FY 2007				FY 2008				FY 2009				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: ADMINISTRATIVE LEADTIME: 0 Months PRODUCTION LEADTIME: 0 Months

Contract Dates:	FY 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Airborne Tactical Common Data Link [MOD 7] 1-03-222-2222

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits							8	0.4	7	0.4									15	0.8
Installation Kits, Nonrecurring																				
Equipment - TCDLs								2.4		2.1										4.5
Ancillary Equipment								0.3		0.3										0.6
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Gov't In-House/Program Mgt								0.1		0.4		0.2								0.7
Interim Contractor Support												0.5								0.5
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits											8	0.8							8	0.8
FY 2005 Equip -- Kits											7	0.7							7	0.7
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0		0.0		0.0		0.0	15	1.5		0.0		0.0		0.0	15	1.5
Total Procurement Cost		0.0		0.0		0.0		3.2		3.2		2.2		0.0		0.0		0.0		8.6

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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:

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost			5.8	6.5	12.2	20.9	15.8					61.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)			5.8	6.5	12.2	20.9	15.8					61.2
Initial Spares												
Total Proc Cost			5.8	6.5	12.2	20.9	15.8					61.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
DESCRIPTION: Airborne Reconnaissance Low (ARL)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 program integrates the capabilities of ARL-I and ARL-C into a single system to satisfy requirements identified by validated CINC Statements of Need (SON). The merger of these programs minimizes acquisition and operational costs, increases availability, and optimizes flexibility resulting from the integration of the electro-optic and Radio Frequency (RF) sensors. The primary sensors will be 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. A Nov 1995 Department of the Army (DA) Directed Requirement validated the USARPAC/PACOM SON for six ARL-Ms with Electronic Intelligence (ELINT) and Moving Target Indicator/Synthetic Aperture Radio (MTI/SAR). 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 Objective Force Aerial Common Sensor. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:
FY03 provides funding for six modifications to upgrade the ARL systems. These are: 1)Install Demand Assigned Multiple Access (DAMA) compliant radios mandated for Tactical Satellite communications. 2)COMINT upgrade to prosecute "P Band" Signals in response to an urgent threat relevant to ROK theaters of operation. 3)Radar upgrades to respond to ARL objective requirements and avoid a cessation of operations through obsolescence. 4)Upgrade Aircraft Survivability Equipment (ASE) suite to respond to modern threats emerging requirement essential to the survivability of entire fleet. 5)Aircraft Standardization to improve reliability, meet worldwide flight instrument requirements, and foster weight reduction. 6)Joint Tactical Terminal (JTT) Integration for worldwide interoperability with other Army units.

Exhibit P-40M, Budget Item Justification Sheet											Date: February 2002
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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Superhawk Software Integ Trouble Rpts											
0-00-00-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upgrade to IMINT Suite											
1-11-11-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COMINT/ESM Installation on ARL-M4											
2-22-22-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upgrade to DAMA Compliant Radio											
3-33-333-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Airspace 2000											
4-44-44-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upgrade ARL-M4 & M5 IMINT Suites											
5-55-55-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COMINT Upgrades											
6-66-66-0000	Operational	0.0	0.0	2.3	4.1	3.9	0.0	0.0	0.0	0.0	10.3
Radar Replacement											
7-77-00-0000	Operational	0.0	0.0	0.0	7.1	5.1	0.0	0.0	0.0	0.0	12.2
Aircraft Standardization											
8-88-88-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aircraft Survivability Equipment (ASE)											
9-99-99-0000	Operational	0.0	0.0	0.0	6.1	5.7	0.0	0.0	0.0	0.0	11.8

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Joint Tactical Terminal (JTT) Integration											
0-10-00-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Totals		5.8	6.5	12.3	20.9	15.8	0.0	0.0	0.0	0.0	61.3

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: COMINT Upgrades [MOD 7] 6-66-66-0000

MODELS OF SYSTEM AFFECTED: ARL-M

DESCRIPTION/JUSTIFICATION:

Funding provides for modifications to the communications intelligent (COMINT) subsystem in the ARL-M fleet to expand intercept and direction finding capabilities, e.g., Special Radio Equipment, in response to an urgent COMINT threat to prosecute "P Band " Signals. A set of exploitation tools along with a revised digital audio recorder will also be provided to units in Ft Bliss and ROK. This requirement is relevant to both SOUTHCOM and ROK theaters of operations. FY02 funds provide for COMINT subsystems for ARL-M4 & 5 at Ft Bliss. FY03 funds will procure COMINT subsystems for ARL-M1 & 2 in ROK will field ARL-M 4 & 5.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract Option	2QFY02 1QFY03 1QFY04
System Review	3QFY02 2QFY03 2QFY04
Integrated System Test	2QFY03 1QFY04 1QFY05
Complete Modification	3QFY03 2QFY04 2QFY05

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs										2				2				2			
Outputs												2				2				2	

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		6
Outputs																		6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 10 Months

Contract Dates:	FY 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): COMINT Upgrades [MOD 7] 6-66-66-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits					2	0.2	2	0.2	2	0.2									6	0.6
Installation Kits, Nonrecurring						0.8														0.8
Equipment						0.8		0.8		0.8										2.4
Exploitation Tools								1.5												1.5
Testing								0.2		0.4										0.6
Training								0.2		0.2										0.4
Gov't In-House/Program Mgt						0.2		0.2		0.2										0.6
ECOs						0.3		0.2		0.5										1.0
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits							2	0.8											2	0.8
FY 2003 Equip -- Kits									2	0.8									2	0.8
FY 2004 Equip -- Kits									2	0.8									2	0.8
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0		0.0	2	0.8	4	1.6		0.0		0.0		0.0		0.0	6	2.4
Total Procurement Cost		0.0		0.0		2.3		4.1		3.9		0.0		0.0		0.0		0.0		10.3

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Radar Replacement [MOD 8] 7-77-00-0000

MODELS OF SYSTEM AFFECTED: ARL-M1,2,3

DESCRIPTION/JUSTIFICATION:

This modification will replace the current Hughes Integrated Surveillance and Reconnaissance (HISAR) system with one which will meet the objectives cited in the USARPAC Statement of Needs (SON). The objective radar will have a wide area search Moving Target Indicator (MTI) mode (to 150Km range), Narrow Sector and Single Beam MTI, strip map Synthetic Aperture Radar (SAR), High Resolution spotlight SAR (1 ft or better resolution), and a simultaneous SAR/MTI capability. The radar will also be designed to interface with emerging technology (ie, coherent change detection) dynamic imaging, radar tags, etc). FY03 funds will procure the first two ARL-M radars for USFK.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract Option	1QFY03	1QFY04
System Status Review	2QFY03	2QFY04
System Acceptance Test	1QFY04	1QFY04
System Fielding	2QFY04	2QFY05

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs														1				2			
Outputs															1				2		

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		3
Outputs																		3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 10 Months

Contract Dates:	FY 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Radar Replacement [MOD 8] 7-77-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits							2	0.2	1	0.1									3	0.3
Installation Kits, Nonrecurring								0.4												0.4
Equipment								5.0		2.5										7.5
Equipment, Nonrecurring								0.9												0.9
Engineering Change Orders								0.1		0.4										0.5
Data								0.1												0.1
Training Equipment																				
Testing								0.1		0.1										0.2
Other (Fielding)										0.2										0.2
Govt In-House/Prog Mgt								0.3		0.3										0.6
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits									3	1.5									3	1.5
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0		0.0		0.0	3	1.5		0.0		0.0		0.0		0.0	3	1.5
Total Procurement Cost		0.0		0.0		0.0		7.1		5.1		0.0		0.0		0.0		0.0		12.2

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Aircraft Survivability Equipment (ASE) [MOD 10] 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 Nissile Warning System. FY03 funds four ASE suites for two ARL-Cs and two ARL-Ms.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																4					
Outputs																	4				

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		4
Outputs																		4

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

Contract Dates:	FY 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Aircraft Survivability Equipment (ASE) [MOD 10] 9-99-99-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits							4	1.2	4	1.2									8	2.4
Installation Kits, Nonrecurring								1.9												1.9
Equipment								0.6		0.6										1.2
Equipment, Nonrecurring								0.8												0.8
Engineering Change Orders/Data								0.7												0.7
Software Modifications								0.2												0.2
Training Equipment								0.2		0.2										0.4
Testing																				
Gov't In-House/Prog Mgt								0.2		0.2										0.4
Contractor Engineering								0.3		0.3										0.6
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits									8	3.2									8	3.2
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0		0.0		0.0	8	3.2		0.0		0.0		0.0		0.0	8	3.2
Total Procurement Cost		0.0		0.0		0.0		6.1		5.7		0.0		0.0		0.0		0.0		11.8

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 & 50A

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	506.7	50.1	65.5	45.4	38.2	93.6	116.1	83.5	170.4	100.6	176.8	1447.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	506.7	50.1	65.5	45.4	38.2	93.6	116.1	83.5	170.4	100.6	176.8	1447.1
Initial Spares												
Total Proc Cost	506.7	50.1	65.5	45.4	38.2	93.6	116.1	83.5	170.4	100.6	176.8	1447.1
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 Legacy ("L") 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.

Funding for FY03 is for the Backup Control System (BUCS), Airframe Modifications, TADS/PNVS Upgrades, Misc Mods $5 Million or Less (no P3a set), National Guard (NG) Fielding, Combat Mission Simulators (CMS), and Modernized TADS/PNVS (M-TADS).

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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 & 50A

Description		Fiscal Years									
OSIP NO.	Classification	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Backup Control System (BUCS)											
1-86-01-2025		19.7	0.0	0.0	5.4	6.3	6.2	3.7	3.4	3.6	48.3
Airframe Modifications											
1-95-01-2007		25.2	8.6	2.0	1.8	0.0	0.0	0.0	0.0	0.0	37.6
TADS/PNVS Upgrades											
1-94-01-2005		34.9	15.7	14.5	11.9	15.0	13.6	13.4	10.1	22.0	151.1
MISC Mods and R&S Mods $5M or less (No P3a set)											
NA		532.6	21.1	21.7	24.7	19.1	21.8	106.7	0.0	65.2	812.9
Combat Mission Simulator (CMS)											
1-01-01-0021		10.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	40.0
National Guard Fielding											
NA		0.0	0.0	0.0	15.8	24.5	24.8	0.0	0.0	0.0	65.1
Modernized TADS/PNVS (M-TADS)											
1-01-01-0022		0.0	0.0	0.0	4.0	51.2	17.1	46.7	87.1	86.0	292.1
Totals		622.4	45.4	38.2	93.6	116.1	83.5	170.5	100.6	176.8	1447.1

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Backup Control System (BUCS) [MOD 1] 1-86-01-2025

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION/JUSTIFICATION:

Operational requirement.
This modification is required to retrofit 231 AH-64 Apache aircraft to a BUCS active configuration. This quantity represents those A Model Apaches that will not be remanufactured to the Longbow configuration.

Already the BUCS redesign has been accomplished on Longbow aircraft, Lots 2-4 (134 a/c) as part of the D Model remanufacture effort. And, 24 Longbow Apache Lot 1 aircraft have been retrofitted (and Lots 5-10 are funded by the Longbow reman line).

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Initial contract award, 30 Sep 97, was for Lots 2-5 and retrofit of Lot 1 aircraft. First delivery of Lot 2 aircraft was Mar 98.

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	158												15	15	15	15	17	17	17	17	17
Outputs	158												15	15	15	15	17	17	17	17	17

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	17	17	16	6	6	7	7	0	3	2	3	2						389
Outputs	17	17	16	6	6	7	7	0	3	2	3	2						389

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 8 Months

Contract Dates:	FY 2002	Dec 01	FY 2003	Dec 02	FY 2004	Dec 03
Delivery Date:	FY 2002	Aug 02	FY 2003	Aug 03	FY 2004	Aug 04

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Backup Control System (BUCS) [MOD 1] 1-86-01-2025

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity	24						60		68		67		26		5		5		255	
Installation Kits		2.0						5.4		6.3		6.2		3.7		3.4		3.6		30.6
Installation Kits, Nonrecurring																				
Equipment	134	7.5																	134	7.5
Equipment, Nonrecurring		7.6																		7.6
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other		0.1																		0.1
Interim Contractor Support		2.5																		2.5
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits	158																		158	
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits							15		45										60	
FY 2004 Equip -- Kits									17		51								68	
FY 2005 Equip -- Kits											17		50						67	
FY 2006 Equip -- Kits													6		20				26	
FY 2007 Equip -- Kits																	5		5	
TC Equip- Kits																	5		5	
Total Installment	158	0.0		0.0		0.0	15	0.0	62	0.0	68	0.0	56	0.0	20	0.0	10	0.0	389	0.0
Total Procurement Cost		19.7		0.0		0.0		5.4		6.3		6.2		3.7		3.4		3.6		48.3

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Airframe Modifications [MOD 2] 1-95-01-2007

MODELS OF SYSTEM AFFECTED: AH- 64 Apache

DESCRIPTION/JUSTIFICATION:

Operational and logistical improvement.
These modifications provide for the strengthening of airframe components to withstand higher loading. Funding addresses three primary areas plus several additional areas susceptible to cracking. Specific modifications include slot closure, a single piece 530 and 547 frame, and elastomeric mounts. In total, there will be 373 AH-64A aircraft retrofitted under ECP 1315.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract was awarded Nov 96 for ECP 1315 for retrofitting 330 AH-64A Apaches. A total of 373 AH-64A Apache helicopters will have the ECP 1315 applied.

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	245	9	9	10	10	12	12	12	12	12	12	12	6								
Outputs	245	9	9	10	10	12	12	12	12	12	12	12	6								

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		373
Outputs																		373

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 9 Months

Contract Dates:	FY 2002	Dec 01	FY 2003		FY 2004
Delivery Date:	FY 2002	Sep 02	FY 2003		FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Airframe Modifications [MOD 2] 1-95-01-2007

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity	283		90																373	
Installation Kits		16.2		6.9																23.1
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- 283 Kits	245	9.0	38	1.7															283	10.7
FY 2001 -- 90 Kits					48	2.0	42	1.8											90	3.8
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment	245	9.0	38	1.7	48	2.0	42	1.8		0.0		0.0		0.0		0.0		0.0	373	14.5
Total Procurement Cost		25.2		8.6		2.0		1.8		0.0		0.0		0.0		0.0		0.0		37.6

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: TADS/PNVS Upgrades [MOD 3] 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. 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 upgrades/integration of hardware in the TADS/PNVS. Provides a single configuration TADS/PNVS to the Longbow. This is a critical AH-64D element in the Longbow remanufacturing effort.

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract award was Dec 95. Date of first delivery was Jun 96.

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	207	15	15	15	15	15	15	15	15	16	18	19	19	18	18	17	17	16	16	16	16
Outputs	143	15	15	15	15	16	16	16	16	16	15	15	15	15	16	17	17	19	19	19	19

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	16	16	16	15	11	12	12	12	20	20	20	20	19				0	742
Outputs	16	16	16	16	15	16	16	16	12	12	12	11	20	20	20	20	19	742

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 7 Months

Contract Dates:	FY 2002	Dec 01	FY 2003	Dec 02	FY 2004	Dec 03
Delivery Date:	FY 2002	Jul 02	FY 2003	Jul 03	FY 2004	Jul 04

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): TADS/PNVS Upgrades [MOD 3] 1-94-01-2005

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity	207		68		68		56		70		64		63		47		99		742	
FFP/T&M/CFE/O&A		22.7		9.5		10.0		7.6		11.0		9.7		9.4		8.4		17.0		105.3
Installation Kits, Nonrecurring																				
Equipment (GFE)		12.2		6.2		4.5		4.3		4.0		3.9		4.0		1.7		5.0		45.8
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits	143		60		4														207	
FY 2001 -- Kits					60		8												68	
FY 2002 Equip -- Kits							53		15										68	
FY 2003 Equip -- Kits									50		6								56	
FY 2004 Equip -- Kits											70								70	
FY 2005 Equip -- Kits													64						64	
FY 2006 Equip -- Kits															63				63	
FY 2007 Equip -- Kits																	47		47	
TC Equip- Kits																	99		99	
Total Installment	143	0.0	60	0.0	64	0.0	61	0.0	65	0.0	76	0.0	64	0.0	63	0.0	146	0.0	742	0.0
Total Procurement Cost		34.9		15.7		14.5		11.9		15.0		13.6		13.4		10.1		22.0		151.1

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Combat Mission Simulator (CMS) [MOD 5] 1-01-01-0021

MODELS OF SYSTEM AFFECTED: AH-64A Apache Helicopter

DESCRIPTION/JUSTIFICATION:

The FY 03 budget funds upgrade of 5 Combat Mission Simulators (CMS) to the current A Model configuration. The CMS modification includes: an upgrade of the computational system necessary for the incorporation of aircraft Engineering Change Proposals (ECPs), including BUCS, EGI, and Area Weapon System accuracy improvement; replacement of the Image Generator (IG) with a state-of-the-art IG system; modernization of the Instructor Operator system; and, incorporation of a new tactial gaming environment with increased visual fidelity.

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract was awarded in May 01 by STRICOM for the upgrade of 1 CMS with yearly options thru FY 03 for the upgrade of up to an additional 6 systems. Development milestones established as a basis for performance based payments for the first CMS upgrade include a Preliminary Design Review (PDR), host computer upgrade demo, Detailed Design Review (DDR), completion of in-house testing, and completion of on-site retrofit and Gov't acceptance as Ready for Training in Dec 02.
Upgrade of these 5 CMS's will begin in FY 03 and will occur by exercising options on the existing STRICOM contract.

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs				1						5											
Outputs												1			5						

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		6
Outputs																		6

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 15 Months

Contract Dates:	FY 2002	FY 2003	Nov 02	FY 2004
Delivery Date:	FY 2002	FY 2003	Jan 03	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Combat Mission Simulator (CMS) [MOD 5] 1-01-01-0021

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment	1	6.0					5	30.0											6	36.0
Equipment, Nonrecurring		4.0																		4.0
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits							1												1	
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits									5										5	
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0		0.0	1	0.0	5	0.0		0.0		0.0		0.0		0.0	6	0.0
Total Procurement Cost		10.0		0.0		0.0		30.0		0.0		0.0		0.0		0.0		0.0		40.0

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: National Guard Fielding [MOD 6] NA

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION/JUSTIFICATION:

Funding supports the fielding of 3 new AH-64A battalions to the US Army National Guard (NG) as mandated by the Army's Aviation Transformation Plan. Two battalions of 18 aircraft each, and 1 squadron of 16 aircraft, will be converted for the A Model Apache (to replace retiring AH-1 aircraft).

Fielding costs are associated with providing Peculiar Ground Support Equipment (PGSE), Ground Support Equipment (GSE), Tools, Authorized Stockage List (ASL), Prescribed Load List (PLL -- i.e., Aviation Unit Maintenance Stockage), Aicraft Survivability Equipment (ASE), Electronic Equipment Test Facility (EETF) refurbishment, and Aviation Mission Planning Station (AMPS) impacts.

Equipment costs are total Battalion package shipsets.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Provision of Battalion/Squadron Package Shipsets and Western Area Aviation Training Site (WAATS) and Aviation Classification Repair Activity Depot(AVCRAD) transition: Start: FY03 End: FY05

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2006				FY 2007				FY 2008				FY 2009				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 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): National Guard Fielding [MOD 6] NA

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
NG Battalion Package Shipsets							18	15.8	16	15.9	18	18.5							52	50.2
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other										8.6		6.3								14.9
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 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		15.8		24.5		24.8		0.0		0.0		0.0		65.1

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Modernized TADS/PNVS (M-TADS) [MOD 7] 1-01-01-0022

MODELS OF SYSTEM AFFECTED: AH-64A Apache Helicopter

DESCRIPTION/JUSTIFICATION:

Funding will procure M-TADS/PNVS modification for 241 AH-64A Apache helicopters.
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. 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. 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.
This system supports the Legacy ("L") transition path of the Transformation Campaign Plan (TCP).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Oct 00 -- MTADS/PNVS EMD contract award
Jan 01 -- Preliminary Design Review (PDR)
Aug 01 -- Critical Design Review (CDR)
May 02 -- Qualification testing
Jan 03 -- Operational test (OT)
Mar 03 -- EMD Contract completed
Apr 03 -- MTADS/PNVS Production contract award

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																		2	8	9	9
Outputs																		2	8	9	9

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	9	9	6		7	7	7	8	19	19	19	19	21	21	21	21		241
Outputs	9	9	6		7	7	7	8	19	19	19	19	21	21	21	21		241

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 18 Months

Contract Dates:	FY 2002	FY 2003	FY 2004 Apr 03
Delivery Date:	FY 2002	FY 2003	FY 2004 Oct 04

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Modernized TADS/PNVS (M-TADS) [MOD 7] 1-01-01-0022

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment							2	4.0	35	51.2	15	17.1	29	46.7	76	87.1	84	86.0	241	292.1
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits											2								2	
FY 2004 Equip -- Kits											26		9						35	
FY 2005 Equip -- Kits													15						15	
FY 2006 Equip -- Kits															29				29	
FY 2007 Equip -- Kits																	76		76	
TC Equip- Kits																	84		84	
Total Installment		0.0		0.0		0.0		0.0		0.0	28	0.0	24	0.0	29	0.0	160	0.0	241	0.0
Total Procurement Cost		0.0		0.0		0.0		4.0		51.2		17.1		46.7		87.1		86.0		292.1

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	3757.6	80.4	114.7	182.3	251.5	399.8	543.3	558.0	626.6	509.3	4949.3	11972.6
Less PY Adv Proc	940.0				0.0	17.7	21.2	22.9	31.2	28.9	314.7	1376.6
Plus CY Adv Proc	940.0			0.0	17.7	21.2	22.9	31.2	28.9	31.3	283.4	1376.6
Net Proc (P-1)	3757.6	80.4	114.7	182.3	269.2	403.2	545.0	566.3	624.3	511.8	4918.0	11972.6
Initial Spares	260.4											260.4
Total Proc Cost	4017.9	80.4	114.7	182.3	269.2	403.2	545.0	566.3	624.3	511.8	4918.0	12233.0
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. The budget line for SSN AA0254 has been consolidated with AA0252 starting in FY 02. The FY01 total includes the FY01 amount of $82.261M from SSN AA0254. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 03 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 occurring during FY 02-07 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, component recapitalization and conversion to CH-47F.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Total Ownership Cost Reduction											
0-00-00-0000	Operational	0.0	1.7	1.2	1.7	0.0	0.0	0.0	0.0	0.0	4.6
Improved Battery											
1-95-01-0822	Operational	0.0	2.5	0.3	0.4	0.0	0.0	0.0	0.0	0.0	3.2
Engine Filtration System											
1-93-01-0807	Operational	0.0	0.2	4.1	8.0	7.2	6.7	6.9	1.4	1.6	36.1
Extended Range Fuel System											
1-97-01-822	Operational	19.9	8.1	19.3	17.6	15.8	0.0	0.0	0.0	0.0	80.7
Engine Upgrade to T55-GA-714A Configuration											
1-96-01-0828	Operational	263.9	99.5	124.2	140.9	140.4	171.4	153.9	64.7	5.6	1164.5
APU Upgrade											
	Safety	6.0	3.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	10.6
Installation of Modifications Kits Various											
Various	Operational/Safety	30.2	0.8	0.9	0.9	0.0	0.0	0.0	0.0	0.0	32.8
CH-47D Flight Simulator Upgrade											
	Safety	0.0	0.0	5.4	5.0	10.2	0.0	0.0	0.0	0.0	20.6
CH-47F											
0-00-00-0000	Operational	0.0	66.1	94.9	178.4	284.3	303.8	345.2	344.9	3812.2	5429.8
Component Recapitalization											
0-00-00-0000	Reliability	0.0	0.0	0.0	25.6	51.9	43.8	68.5	49.7	775.4	1014.9

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Low Maintenance Rotor Hub											
0-00-00-0000	Operational	0.0	0.0	0.0	3.7	12.3	9.6	13.0	11.4	12.6	62.6
Engine Fire Extinguisher (Halon Replacement)											
0-00-00-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	8.2	8.4	26.9	43.5
Totals		320.0	182.4	251.4	382.2	522.1	535.3	595.7	480.5	4634.3	7903.9

INDIVIDUAL MODIFICATION Date: February 2002

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 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs											3	3	3	4	4	4	5	4	5	5	5
Outputs											3	3	3	4	4	4	5	4	5	5	5

	FY 2006				FY 2007				FY 2008				FY 2009				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	6	6	6	6	6	7	7	6	7	7	7	152	300
Outputs	6	6	7	7	6	6	6	6	6	6	7	7	6	7	7	7	152	300

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

Contract Dates:	FY 2002	Oct 01	FY 2003	Jan 03	FY 2004	Jan 04
Delivery Date:	FY 2002	Oct 02	FY 2003	Jan 04	FY 2004	Jan 05

INDIVIDUAL MODIFICATION Date: February 2002

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
B-Kit Quantity					15	3.8	16	5.2	16	5.4	16	5.5	16	5.6					79	25.5
A-Kits			20	0.2	15	0.2	180	2.0	85	1.0									300	3.4
Logistics								0.3		0.4		0.7		0.8		0.9				3.1
PM Support						0.1		0.4		0.3		0.3		0.3		0.3				1.7
--																				
--																				
--																				
--																				
--																				
--																				
--																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits							9	0.1	11	0.1									20	0.2
FY 2002 Equip -- Kits									6	0.0	9	0.1							15	0.1
FY 2003 Equip -- Kits											10	0.1	26	0.2	24	0.2	120	0.9	180	1.4
FY 2004 Equip -- Kits																	85	0.7	85	0.7
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0		0.0	9	0.1	17	0.1	19	0.2	26	0.2	24	0.2	205	1.6	300	2.4
Total Procurement Cost		0.0		0.2		4.1		8.0		7.2		6.7		6.9		1.4		1.6		36.1

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Extended Range Fuel System [MOD 4] 1-97-01-822

MODELS OF SYSTEM AFFECTED: CH-47D CHINOOK

DESCRIPTION/JUSTIFICATION:

Type of Improvement - Improved Operational Capability. The Extended Range Fuel System (ERFS) provides the CH-47D with up to 2400 gallons of auxiliary fuel for worldwide self-deployment or tactical forward area refueling. The typical ERFS installation includes three 800-gallon auxiliary fuel tanks fitted with crashworthy self-sealing bladders, pressure refueling capability, and fuel quantity probes. For mission flexibility, one, two, or three auxiliary fuel tanks can be installed. The B - Kit system components include tank assemblies, a fuel control panel, individual tank restraint systems, interconnecting self-sealing fuel hoses, fuel vent hoses, electrical cables, and a Forward Area Refueling Equipment (FARE) kit. The FARE kit provides the necessary components to permit tactical forward area refueling of combat weapons systems at two refueling points 200 feet from the helicopter. The A - Kit is the airframe modification kit. The ERFS can be installed or removed by a crew of four in less than 30 minutes by hand without the use of tools. National Guard Dedicated Procurement has funded procurement of 129 A-Kits, and 14 B-kits.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Production Contract Award - Aug 98
Hardware Delivery - Jan 99
Testing Completed - Jun 99
Field Installation - Jun 99
First Unit Equipped - Sep 99

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	148	30	30	30	30	25	25	25	23	18	16	16	16								
Outputs	148	30	30	30	30	25	25	25	23	18	16	16	16								

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		432
Outputs																		432

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

Contract Dates:	FY 2002	Jan 02	FY 2003	Jan 03	FY 2004	Jan 04
Delivery Date:	FY 2002	Jul 02	FY 2003	Jul 03	FY 2004	Jul 04

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Extended Range Fuel System [MOD 4] 1-97-01-822

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
ERFS II B-Kit	26	14.2	8	5.4	25	16.7	25	16.5	23	15.5									107	68.3
ERFS II A-Kit	177	2.1	60	0.8	66	0.9													303	3.8
Logistics		1.5		0.4		0.3		0.2												2.4
PM Support		0.6		0.3		0.4		0.4		0.3										2.0
--																				
--																				
--																				
--																				
--																				
--																				
--																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits	148	1.5	120	1.2	38	0.4													306	3.1
FY 2001 -- Kits					60	0.6													60	0.6
FY 2002 Equip -- Kits							66	0.5											66	0.5
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment	148	1.5	120	1.2	98	1.0	66	0.5		0.0		0.0		0.0		0.0		0.0	432	4.2
Total Procurement Cost		19.9		8.1		19.3		17.6		15.8		0.0		0.0		0.0		0.0		80.7

INDIVIDUAL MODIFICATION Date: February 2002

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 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	67	16	16	16	17	9	9	8	8	13	14	14	14	10	10	10	11	12	12	13	13
Outputs	67	16	16	16	17	9	9	8	8	13	14	14	14	10	10	10	11	12	12	13	13

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	17	17	17	18	7	7	7	8	17	15								442
Outputs	17	17	17	18	7	7	7	8	17	15								442

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

Contract Dates:	FY 2002	Jan 02	FY 2003	Jan 03	FY 2004	Jan 04
Delivery Date:	FY 2002	Jun 03	FY 2003	Jun 04	FY 2004	Jun 05

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
New Engines	287	187.3	91	76.7	104	98.0	141	108.6	136	107.4	168	135.7	154	126.7	69	57.9			1150	898.3
Engine Fielding Kits	257	33.2	93	8.8	84	10.2	108	11.9	121	13.3	142	15.8	79	9.1					884	102.3
Airframe Kits	131	15.3	102	4.3	42	5.3	48	5.5	48	5.6	48	5.7	23	2.8					442	44.5
PM Admin Support		7.6		4.3		5.4		5.9		5.9		5.6		5.1		3.9		1.7		45.4
Logistics		18.2		2.7		3.8		5.5		5.5		5.2		5.5		0.9		1.7		49.0
--																				
--																				
--																				
--																				
--																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits	67	2.3	58	2.4	6	0.3													131	5.0
FY 2001 -- Kits			7	0.3	28	1.2	55	3.5	12	0.8									102	5.8
FY 2002 Equip -- Kits									29	1.9	13	0.9							42	2.8
FY 2003 Equip -- Kits											37	2.5	11	0.7					48	3.2
FY 2004 Equip -- Kits													48	3.3					48	3.3
FY 2005 Equip -- Kits													10	0.7	29	2.0	9	0.6	48	3.3
FY 2006 Equip -- Kits																	23	1.6	23	1.6
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment	67	2.3	65	2.7	34	1.5	55	3.5	41	2.7	50	3.4	69	4.7	29	2.0	32	2.2	442	25.0
Total Procurement Cost		263.9		99.5		124.2		140.9		140.4		171.4		153.9		64.7		5.6		1164.5

INDIVIDUAL MODIFICATION Date: February 2002

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 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2006				FY 2007				FY 2008				FY 2009				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 2002	Jan 02	FY 2003	Jan 03	FY 2004	Jan 04
Delivery Date:	FY 2002	Dec 02	FY 2003	Dec 03	FY 2004	Dec 04

INDIVIDUAL MODIFICATION Date: February 2002

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Upgrade					1	5.0	1	5.0	2	10.2									4	20.2
Verification						0.4														0.4
--																				
--																				
--																				
--																				
--																				
--																				
--																				
--																				
--																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 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		5.4		5.0		10.2		0.0		0.0		0.0		0.0		20.6

INDIVIDUAL MODIFICATION Date: February 2002

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. 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 301 of the 431 CH-47D fleet and 36 Special Operations Aircraft.

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 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2006				FY 2007				FY 2008				FY 2009				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 2002		FY 2003	Dec 02	FY 2004	Dec 03
Delivery Date:	FY 2002		FY 2003		FY 2004	Sep 04

INDIVIDUAL MODIFICATION Date: February 2002

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
--																				
Recurring Production							7	71.3	17	232.2	19	227.1	26	300.2	24	270.8	244	2993.6	337	4095.2
Other Flyaway				42.0		82.3		82.9		25.2		26.7		27.0		25.3		250.2		561.6
Training Devices				11.0		4.0		14.4		14.3		37.2		8.5		6.0		167.1		262.5
Other Support				13.1		8.6		9.8		12.6		12.8		9.5		42.8		401.3		510.5
-																				
--																				
--																				
--																				
--																				
--																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 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		66.1		94.9		178.4		284.3		303.8		345.2		344.9		3812.2		5429.8

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Component Recapitalization [MOD 10] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: CH-47F

DESCRIPTION/JUSTIFICATION:

The concept of RECAP has been directed by DA as the new definitive measurement for analysis to correct past deficiencies within Army Aircraft Weapon Systems. Recap will carry forward the present concept of Inspect Repair Only As Necessary to remove and replace internal components to meet a zero time, zero mile like new metrics.
Recap 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 meet the DA prescribed 10 year half life, increase Safety and reduce Operation and Sustainability Costs.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2006				FY 2007				FY 2008				FY 2009				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: 0 Months PRODUCTION LEADTIME: 0 Months

Contract Dates:	FY 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Component Recapitalization [MOD 10] 0-00-00-0000

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Recapitalization							7	25.6	17	51.9	19	43.8	26	68.5	24	49.7	244	775.4	337	1014.9
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 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		25.6		51.9		43.8		68.5		49.7		775.4		1014.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	940.0	0.0	0.0	0.0	17.7	21.2	22.9	31.2	28.9	31.3	283.4	1376.6
Net Proc (P-1)	940.0			0.0	17.7	21.2	22.9	31.2	28.9	31.3	283.4	1376.6
Initial Spares												
Total Proc Cost	940.0			0.0	17.7	21.2	22.9	31.2	28.9	31.3	283.4	1376.6
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 ad 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 277 of the CH-47D fleet. The budget line for SSN AA0254 has been consolidated with AA 0252 starting in FY02. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 03 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 2002

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 99	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	To Comp	Total
Avionics	13	14				0.0	11.7	13.6	14.7	20.0	18.6	20.2	182.8	281.6
Airframe	15	16					6.0	7.6	8.2	11.1	10.3	11.1	100.6	155.0
Total Advance Procurement			0.0	0.0	0.0	0.0	17.7	21.2	22.9	31.2	28.8	31.3	283.4	436.6

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2002

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	2002 Qty	2002 Contract Forcast Date	2002 Total Cost Request	2003 Qty	2003 Contract Forcast Date	2003 Total Cost Request
End Item Quantity:									
Avionics	13	1	1.4	17	Jan	11.7	17	Jan	13.6
Airframe	15	1	1.0	17	Jan	6.0	17	Jan	7.6
Total Advance Procurement						17.7			21.2

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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

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

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	26.0	9.2	12.0	10.8	16.0	17.0	10.6	10.6	14.2	10.2		136.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	26.0	9.2	12.0	10.8	16.0	17.0	10.6	10.6	14.2	10.2		136.6
Initial Spares												
Total Proc Cost	26.0	9.2	12.0	10.8	16.0	17.0	10.6	10.6	14.2	10.2		136.6
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 aircraft communication, navigation, surveillance and safety equipment to current and evolving international standards. In addition it provides for the procurement and installation of military unique equipment such as Joint Precision Aircraft Landing System (JPALS) and Joint Tactical Radio System (JTRS) components. These modifications ensure continued worldwide deployment capability, and safe operations into the 21st Century.

Justification:
The FY 03 funds will be used for communications, navigation, and surveillance equipment that is supportive of 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 C-12 availability for mission requirements. These aircraft support Legacy and Legacy-to-Objective Systems which relate to the Transformation Campaign Plan.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Avionics System Cockpit Upgrade											
1-96-01-0612	U	47.2	11.7	16.1	17.0	10.7	10.7	14.3	10.4	0.0	138.1
Totals		47.2	11.7	16.1	17.0	10.7	10.7	14.3	10.4	0.0	138.1

INDIVIDUAL MODIFICATION Date: February 2002

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

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

DESCRIPTION/JUSTIFICATION:

This effort will modernize 6 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 100 Mode S upgrade, Satellite Communications (SATCOM), Traffic Alert Collision Avoidance System II, Flight data recorder, 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 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	279		14	14	14			12	12	14	18	18	22		16	17	17	12	14	16	16
Outputs	279				14	14	14		12	12	14	18	18	22		16	17	17	12	14	16

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	11	12	13	13	6	7	8	8										603
Outputs	16	11	12	13	13	6	7	8	8									603

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 5 Months

Contract Dates:	FY 2002	Feb 02	FY 2003	Dec 02	FY 2004	Dec 03
Delivery Date:	FY 2002	July 02	FY 2003	May 03	FY 2004	May 04

INDIVIDUAL MODIFICATION Date: February 2002

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits	279	38.8	42	8.3	38	12.7	58	14.8	50	7.9	58	7.5	49	11.5	29	8.1			603	109.6
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																				
FY 2000 & Prior Equip -- Kits	279	8.4																	279	8.4
FY 2001 -- Kits			42	3.3															42	3.3
FY 2002 Equip -- Kits					24	3.3													24	3.3
FY 2003 Equip -- Kits							72	2.1											72	2.1
FY 2004 Equip -- Kits									50	2.7									50	2.7
FY 2005 Equip -- Kits											58	3.1							58	3.1
FY 2006 Equip -- Kits													49	2.7					49	2.7
FY 2007 Equip -- Kits															29	2.2			29	2.2
TC Equip- Kits																				
Total Installment	279	8.4	42	3.3	24	3.3	72	2.1	50	2.7	58	3.1	49	2.7	29	2.2		0.0	603	27.8
Total Procurement Cost		47.2		11.7		16.1		17.0		10.7		10.7		14.3		10.4		0.0		138.1

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	323.2	0.1	0.5	0.9	0.5	0.5	0.5					326.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	323.2	0.1	0.5	0.9	0.5	0.5	0.5					326.1
Initial Spares	1.2											1.2
Total Proc Cost	324.4	0.1	0.5	0.9	0.5	0.5	0.5					327.3
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. The program provides for integration of the Single Channel Ground & Airborne Radio System (SINCGARS)-VHF-FM Radio, Combat Lighting for Night Vision, an External Three-Micron Engine Oil Filter, Global Positioning Systems. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:
Programmed funds are for safety enhancements and/or operational improvements required to meet mission requirements until phase out. Failure to provide funding will result in the degradation of the aircraft and mission package, impacting safety, readiness and combat support capability.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	9.8	1.1	0.7	0.9	0.7	0.7	0.8	0.8	0.8	0.8		17.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	9.8	1.1	0.7	0.9	0.7	0.7	0.8	0.8	0.8	0.8		17.0
Initial Spares												
Total Proc Cost	9.8	1.1	0.7	0.9	0.7	0.7	0.8	0.8	0.8	0.8		17.0
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
This modification updates and modernizes the C-20F, C-20E and C-37 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.

Justification:
FY 03 funds will be used for upgrading C-20 Global Positioning Systems (GPS) and installation of navigation 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. The C-20 is a legacy system and the C-37 is a Legacy-to- Objective aircraft in the Transformation Campaign Plan.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 23744 D508

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	1400.6	610.6	779.8	748.0	929.3	892.0	769.5	480.1	443.8	352.9	1948.2	9354.9
Less PY Adv Proc	164.2	36.9	42.8	37.5	44.8	26.2	29.7	14.2				396.3
Plus CY Adv Proc	201.1	42.8	37.5	44.8	26.2	29.7	14.2					396.3
Net Proc (P-1)	1437.5	616.5	774.6	755.2	910.8	895.5	754.0	465.9	443.8	352.9	1948.2	9354.9
Initial Spares	15.5	16.6	7.1	3.0	1.4	3.8	11.2	12.8	13.0	2.8	1.9	89.0
Total Proc Cost	1453.0	633.1	781.7	758.3	912.2	899.3	765.1	478.7	456.8	355.7	1950.1	9443.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The Longbow Weapon System (AH-64D) consists of a modified AH-64 airframe, a Fire Control Radar (FCR) mission kit and a 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 mission kits. 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 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). Provides funding for the Modernized Target Acquisition Designation System/Pilot Night Vision System (M-TADS/PNVS), formally known as Second Generation FLIR, on 501 Longbow aircraft. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 03 funds buys 74 aircraft, including associated support equipment, tooling, government furnished equipment (GFE), training devices, reman/retrofit of reliability/safety fixes, focused component recap on Longbow aircraft. Funds continued FCR intergration, logistical support requirements, and obsolescence issue resolution. 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 kits and 701C engines.

Initial spares includes Airframe, FCR, and M-TADS components.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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, PE23744 D508

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty	92	66	74	52	60	74	64	19				501
Gross Cost	1073.5	503.3	652.4	619.6	809.8	866.9	754.5	475.1	438.8	347.9	1943.2	8484.9
Less PY Adv Proc	106.7	26.4	31.8	26.5	36.1	26.2	29.7	14.2				297.6
Plus CY Adv Proc	133.1	31.8	26.5	36.1	26.2	29.7	14.2					297.6
Net Proc (P-1)	1099.8	508.7	647.1	629.3	799.8	870.4	738.9	460.9	438.8	347.9	1943.2	8484.9
Initial Spares	15.5	16.6	7.1	3.0	1.4	3.8	11.2	12.8	13.0	2.8	1.9	89.0
Total Proc Cost	1115.3	525.3	654.2	632.3	801.2	874.2	750.1	473.7	451.8	350.7	1945.1	8573.8
Flyaway U/C												
Wpn Sys Proc U/C		7.7	8.7	12.1	13.3	11.8	11.5	24.3				

Description:
DESCRIPTION:
The Longbow Weapon System (AH-64D) consists of a modified AH-64 airframe, a Fire Control Radar (FCR) mission kit and a Longbow HELLFIRE missile. Two hundred twenty seven (227) 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 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. Provides funding for Modernized Target Acquisition Designation System/Pilot Night Vision System (M-TADS/PNVS), formally known as Second Generation FLIR, on 501 Longbow aircraft. This system supports the Legacy transition path of the Transformation Campaign Plan.

Justification:
FY 03 procures 74 aircraft, including associated support equipment, tooling, government furnished equipment (GFE), training devices, reman/retrofit reliability and safety fixes, and focused component recap on Longbow aircraft. 501 AH-64A Apaches will be remanufactured to the AH-64D configuration with 227 Longbow aircraft being equipped with the FCR kits and 701C engines.

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 00												Fiscal Year 01										LATER
										Calendar Year 00														Calendar Year 01									
							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 00	A	74	0	74			A													5	5	5	5	5	5	5	5	5	29
	1	FY 01	A	52	0	52															A									52
	1	FY 02	A	60	0	60																								60
	1	FY 03	A	74	0	74																								74
Fire Control Radar (FCR)																														
	2	FY 00	A	45	0	45		A																4	4	4	4	4	4	4	17
	2	FY 01	A	44	0	44														A										44
	2	FY 02	A	57	0	57																								57
	2	FY 03	A		0	0																								0
Total				406		406																5	5	9	9	9	9	9	9	9	333
							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	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	13	16
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

FY 02 / 03 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03										LATER
							Calendar Year 02												Calendar Year 03										
							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 00	A	74	45	29	5	6	6	6	6																		0
	1	FY 01	A	52	0	52						4	4	4	4	4	4	4	4	5	5	5	5							0
	1	FY 02	A	60	0	60			A															5	5	5	5	5	5	5	25
	1	FY 03	A	74	0	74															A										74
Fire Control Radar (FCR)																													
	2	FY 00	A	45	28	17	4	4	3	3	3																			0
	2	FY 01	A	44	0	44						4	3	4	4	4	4	4	4	4	3	3	3							0
	2	FY 02	A	57	0	57			A													1	1	5	5	5	5	6	6	6	17
	2	FY 03	A		0	0																									0
Total				406	73	333	9	10	9	9	9	8	7	8	8	8	8	8	8	9	8	9	9	10	10	10	10	11	11	11	116

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	13	16
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

REMARKS

FY 04 / 05 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

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 00	A	74	74	0																							0
	1	FY 01	A	52	52	0																							0
	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
Fire Control Radar (FCR)																													
	2	FY 00	A	45	45	0																							0
	2	FY 01	A	44	44	0																							0
	2	FY 02	A	57	40	17	6	6	5																				0
	2	FY 03	A		0	0																							0
Total				406	290	116	11	11	10	5	5	5	5	6	6	6	6	6	6	6	6	6	6	4						
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+	MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	Boeing, Mesa, AZ	48.00	72.00	120.00	36	1	INITIAL	10	3	28	31	
							REORDER	2	3	15	18	
2	Longbow Limited Liability, Orlando, FL	48.00	72.00	120.00	36	2	INITIAL	10	2	28	30	
							REORDER	2	3	13	16	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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, PE23744 D508

Description		Fiscal Years									
OSIP NO.	Classification	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Longbow Apache Mods											
NA	NA	2064.1	593.1	773.6	840.8	724.7	461.0	438.7	347.9	1943.2	8187.1
Totals		2064.1	593.1	773.6	840.8	724.7	461.0	438.7	347.9	1943.2	8187.1

INDIVIDUAL MODIFICATION Date: February 2002

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) mission kit and a Longbow Hellfire missile. The AH-64 aircraft will be modified with those changes necessary to effectively and efficiently integrate the Fire Control Radar. 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 TADS/PNVS (M-TADS/PNVS), formally known as Second Generation FLIR, on 501 aircraft starting in FY03. Procures reman/retrofit reliability and safety fixes, and focused component recap on Longbow aircraft. Procures 22 Longbow Crew Trainers (LCTs), one Longbow Collective Training System (LCTS), maintenance trainers, and Tactical Engagement Simulation System (TESS).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone 1B (DAB) Jul 89, Milestone II (DAB) Dec 90, Milestone III (DAB) Oct 95,
Multiyear Lot 1 contract award Aug 96,
First Production Delivery Mar 97,
First Unit Equipped Jul 98
IOC Accomplished Nov 98.
MYII Contract Award, 29 September 00
Funding Action for Lot VII, 31 Dec 01

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2006				FY 2007				FY 2008				FY 2009				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 2002	Dec 01	FY 2003	Dec 02	FY 2004	Dec 03
Delivery Date:	FY 2002	Mar 03	FY 2003	Mar 04	FY 2004	Mar 05

INDIVIDUAL MODIFICATION Date: February 2002

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity	232		52		60		74		64		19								501	
Recurring		1301.2		333.6		383.4		461.2		397.3		146.5								3023.2
Other Flyaway		314.2		122.1		231.0		213.9		144.2		60.7		137.7		82.3		122.4		1428.5
Training Devices		261.6		81.0		95.1		88.9		73.9		49.2		21.3						671.0
Other Support		187.1		56.4		64.1		53.3		43.9		52.6		37.9		52.6		1820.8		2368.7
Modernized TADS/PNVS								23.5		65.4		152.0		241.8		213.0				695.7
--																				
--																				
--																				
--																				
--																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 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		2064.1		593.1		773.6		840.8		724.7		461.0		438.7		347.9		1943.2		8187.1

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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, PE23744 D508	

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty	41	40	45	44	57							227
Gross Cost	327.1	107.4	127.4	128.4	119.6	25.1	15.0	5.0	5.0	5.0	5.0	870.0
Less PY Adv Proc	57.5	10.6	11.0	11.1	8.6							98.7
Plus CY Adv Proc	68.1	11.0	11.1	8.6								98.7
Net Proc (P-1)	337.7	107.7	127.5	126.0	111.0	25.1	15.0	5.0	5.0	5.0	5.0	870.0
Initial Spares												
Total Proc Cost	337.7	107.7	127.5	126.0	111.0	25.1	15.0	5.0	5.0	5.0	5.0	870.0
Flyaway U/C												
Wpn Sys Proc U/C		2.7	2.8	2.9	1.9							

Description:
The Longbow Weapon System (AH-64D) consists of a modified AH-64 airframe, a Fire Control Radar (FCR) mission kit and a 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 mission kits. Those AH-64D aircraft fielded without the FCR mission kits will have the T700-GE-701 engines installed, 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 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). This system supports the Legacy transition path of the Transformation Campaign Plan (TCP)

Justification:
FY 03 funds continued FCR integration onto the Longbow aircraft, and address resolution of logistical support requirements and obsolescence issues. FCR 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 mission kits and 701C engines.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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, PE23744 D508

Description		Fiscal Years									
OSIP NO.	Classification	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Apache Longbow FCR											
NA	NA	482.9	117.4	111.0	25.1	15.0	5.0	5.0	5.0	5.0	771.4
Totals		482.9	117.4	111.0	25.1	15.0	5.0	5.0	5.0	5.0	771.4

INDIVIDUAL MODIFICATION Date: February 2002

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 FCRs

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone 1B (DAB) Jul 89
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 V contract award 28 Dec 01

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2006				FY 2007				FY 2008				FY 2009				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: 13 Months

Contract Dates:	FY 2002	Dec01	FY 2003		FY 2004
Delivery Date:	FY 2002	Jan 03	FY 2003		FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Quantity	126		44		57														227	
Recurring		482.9		117.4		111.0														711.3
Other Flyaway																				
Other								25.1		15.0		5.0		5.0		5.0		5.0		60.1
--																				
--																				
--																				
--																				
--																				
--																				
--																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 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		482.9		117.4		111.0		25.1		15.0		5.0		5.0		5.0		5.0		771.4

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /2/Modification of aircraft	LONGBOW(Adv Proc) (AA6670)

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

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	201.1	42.8	37.5	44.8	26.2	29.7	14.2					396.3
Net Proc (P-1)	201.1	42.8	37.5	44.8	26.2	29.7	14.2					396.3
Initial Spares												
Total Proc Cost	201.1	42.8	37.5	44.8	26.2	29.7	14.2					396.3
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) and the radar frequency (RF) 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 Legacy transition path of the Transformation Campaign Plan (TCP)

Justification:
FY 03 funds long lead items for AH-64D aircraft. Five hundred one (501) AH-64A Apaches will be remanufactured to the AH-64D configuration with 227 Longbow aircraft being equipped with the FCR and 701C engines. Long lead funding is required to provide funding for those parts, tooling, test, equipment, and materials which are lead time critical to the end item. 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 2002

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

P-1 Line Item Nomenclature / Weapon System
LONGBOW

($ in Millions)

	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	To Comp	Total
End item Quantity			92	66	74	52	60	74	64	19				501
Airframe	12	12	133.1	31.8	26.5	36.1	26.2	29.7	14.2					297.6
GFE-FCR Kit	12	12	68.1	11.0	11.1	8.6								98.7
Total Advance Procurement			201.1	42.8	37.5	44.8	26.2	29.7	14.2	0.0	0.0	0.0	0.0	396.3

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2002

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	2002 Qty	2002 Contract Forcast Date	2002 Total Cost Request	2003 Qty	2003 Contract Forcast Date	2003 Total Cost Request
End Item Quantity:									
Airframe	12			74	31 Dec 01	26.2	64	Dec 02	29.7
Total Advance Procurement						26.3			29.8

FY02/03 advanced procurement funding represents longlead requirements for FY03/04 procurement quantities.
Contract award 12/31/01

Advance Procurement Requirements Analysis-Execution (P10D)

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

P-1 Line Item Nomenclature / Weapon System
LONGBOW

($ in Millions)

	PTL (mos)	2000 Qty	2000 Contract Forecast Date	2000 Actual Contract Date	2000 Total Cost Request	2000 Actual Contract Cost	2001 Qty	2001 Contract Forecast Date	2001 Actual Contract Date	2001 Total Cost Request	2001 Actual Contract Cost	2002 Qty	2002 Contract Forecast Date	2003 Qty	2003 Contract Forecast Date
End item Quantity															
Airframe	12	52	Dec 99	Dec 99	26.5	26.5	60	Dec 00	Dec 00	36.1	36.1	74	31 Dec 01	64	Dec 02
GFE-FCR Kit	12	44	Nov 99	Nov 99	11.1	11.1	57	Nov 00	Dec 00	8.6	8.6				
Total Advance Procurement					37.5	37.5				44.8	44.8				

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	487.5	21.2	12.7	25.4	68.0	41.9	180.0	239.6	461.3	436.7		1974.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	487.5	21.2	12.7	25.4	68.0	41.9	180.0	239.6	461.3	436.7		1974.1
Initial Spares												
Total Proc Cost	487.5	21.2	12.7	25.4	68.0	41.9	180.0	239.6	461.3	436.7		1974.1
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Black Hawk System

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002	
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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	478.4	21.2	12.7	25.4	68.0	41.9	180.0	239.6	461.3	436.7		
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	478.4	21.2	12.7	25.4	68.0	41.9	180.0	239.6	461.3	436.7		
Initial Spares												
Total Proc Cost	478.4	21.2	12.7	25.4	68.0	41.9	180.0	239.6	461.3	436.7		
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The UH-60 BLACKHAWK will serve as the Army's utility helicopter in the objective 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 23 years old, and the average age of the UH-60A fleet is 18 years. This effort supports the Legacy-to-Objective (LO) transition path of the Transformation Campaign Plan (TCP).

Justification:
FY03 funding procures and installs the Crashworthy External Fuel System (CEFS), the Sealed Lead Acid Battery (SLAB) modification, the UH-60Q MEDEVAC kits on the fielded UH-60 fleet and initiates qualification of the Advanced Helicopter Transmission Lubricant (AHTL) which will lower Operations & Support (O&S) costs by reducing unscheduled maintenance. CEFS is a safety modification that reduces the risk of a post-crash fire. The SLAB battery modification replaces the existing maintenance intensive nickel cadmium battery with a new low cost, low maintenance, longer life battery that meets EPA environmental restrictions. The UH-60Q MEDEVAC kit upgrades a fielded UH-60A/L to an air ambulance configuration providing en-route patient treatment which is critical to patient survival. The UH-60M provides a common platform with the modernized air ambulance HH-60M MEDEVAC Mission Equipment Package (MEP). This 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 MEDEVAC fleet of the future. Other efforts under this budget line include special mission Search and Rescure (SAR) and firefighting (FIREHAWK) modifications targeted for Army National Guard units; replacement of Kapton wiring in four of the older 134 UH-60A aircraft; and completing installation of the Night Vision Goggle (NVG) modification.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Crashworthy External Fuel System (CEFS)											
TBD	Safety	0.0	3.0	21.3	10.3	12.5	14.2	19.7	18.9	41.5	141.4
Fire Hawk Kits											
TBD	Operational	2.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
Sealed Lead Acid Battery (SLAB)											
1-94-01-1953	RAM	7.9	2.3	5.0	1.1	0.0	0.0	0.0	0.0	0.0	16.3
UH-60Q Medical Equipment Package (MEP)											
TBD	Operational	1.0	0.0	30.0	29.0	30.1	57.9	0.0	0.0	0.0	148.0
Advanced Helicopter Transmission Lubricant											
TBD	RAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NVG Lighting Lower Console											
1-90-01-1933	Operational/Safety	10.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7
Kapton Wiring Replacement											
TBD	Safety	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
De-Icing System Upgrade Program											
TBD	Safety	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3
UH-60M Selected Upgrade											
TBD	Selected Upgrade	0.0	0.0	0.0	0.0	136.6	166.3	388.8	364.6	11520.2	12576.5
UH-60M Medical Equipment Package (MEP)											
TBD	Operational/Upgrade	0.0	0.0	0.0	0.0	0.0	0.0	52.8	53.2	1483.6	1589.6

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Search and Rescue (SAR) MOD											
TBD	Operational	9.9	14.5	10.4	0.0	0.0	0.0	0.0	0.0	0.0	34.8
Totals		31.0	25.4	68.0	41.9	180.0	239.6	461.3	436.7	13045.3	14529.2

INDIVIDUAL MODIFICATION Date: February 2002

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

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 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs								5	5	10	20	36	36	11	11	11	11	9	12	16	16
Outputs									5	5	10	20	36	36	11	11	11	11	9	12	16

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	15	15	15	14	20	20	21	22	20	20	20	21	20	20	20	20	1107	1619
Outputs	16	15	15	15	14	20	20	21	22	20	20	20	21	20	20	20	1127	1619

METHOD OF IMPLEMENTATION: Contract Teams ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 9 Months

Contract Dates:	FY 2002	Apr 02	FY 2003	Mar 03	FY 2004	Mar 04
Delivery Date:	FY 2002	Dec 02	FY 2003	Oct 03	FY 2004	Oct 04

INDIVIDUAL MODIFICATION Date: February 2002

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity			10	3.0	102	21.2	44	9.7	53	12.1	59	13.8	83	19.2	81	18.3	1184	30.6	1616	127.9
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- 10 Kits					10	0.1													10	0.1
FY 2002 Equip -- 102 Kits							102	0.6											102	0.6
FY 2003 Equip -- 44 Kits									44	0.4									44	0.4
FY 2004 Equip -- 53 Kits											53	0.4							53	0.4
FY 2005 Equip -- 59 Kits													59	0.5					59	0.5
FY 2006 Equip -- 83 Kits															83	0.6			83	0.6
FY 2007 Equip -- 81 Kits																	81	0.6	81	0.6
TC Equip- Kits																	1184	10.3	1184	10.3
Total Installment		0.0		0.0	10	0.1	102	0.6	44	0.4	53	0.4	59	0.5	83	0.6	1265	10.9	1616	13.5
Total Procurement Cost		0.0		3.0		21.3		10.3		12.5		14.2		19.7		18.9		41.5		141.4

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Sealed Lead Acid Battery (SLAB) [MOD 3] 1-94-01-1953

MODELS OF SYSTEM AFFECTED: UH-60A/L and EH-60A/L

DESCRIPTION/JUSTIFICATION:

Provides the fleet with a low cost, low maintenance, and longer life Sealed Lead Acid Battery (SLAB), which replaces the existing maintenance intensive Nickel Cadmium battery. The new battery will meet EPA environmental health hazard restrictions, is recyclable, reduces operating and support costs, and reduces the maintenance burden in the field. This modification was first installed in production aircraft starting with the Multi-year V contract leaving 1453 aircraft to be modified in the field.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Development is complete.

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	150	75	75	75	75	175	200	200	200	60	60	60	48								
Outputs				50	325	75	175	200	200	200	60	60	60	48							

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		1453
Outputs																		1453

METHOD OF IMPLEMENTATION: Contract Teams ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 6 Months

Contract Dates:	FY 2002	Jan 02	FY 2003		FY 2004
Delivery Date:	FY 2002	Jun 02	FY 2003		FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Sealed Lead Acid Battery (SLAB) [MOD 3] 1-94-01-1953

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity	1125	7.2	100	0.7	228	1.5													1453	9.4
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- 1125 Kits	150	0.7	300	1.6	675	3.0													1125	5.3
FY 2001 -- 100 Kits					100	0.5													100	0.5
FY 2002 Equip -- 228 Kits							228	1.1											228	1.1
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment	150	0.7	300	1.6	775	3.5	228	1.1		0.0		0.0		0.0		0.0		0.0	1453	6.9
Total Procurement Cost		7.9		2.3		5.0		1.1		0.0		0.0		0.0		0.0		0.0		16.3

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: UH-60Q Medical Equipment Package (MEP) [MOD 4] TBD

MODELS OF SYSTEM AFFECTED: UH-60A/L

DESCRIPTION/JUSTIFICATION:

Upgrades UH-60A/L helicopters to UH-60Q/HH-60L air ambulances by adding a Mission Equipment Package (MEP) that provides the capability for en-route patient treatment which is critical to patient survivability. New capabilities of the UH-60Q/HH-60L include a medical oxygen generation system (eliminating the need for compressed oxygen cylinders), suction, integrated power, storage for medical equipment, modern medical interior, external electric hoist, and enhanced communication capabilities. These critical life saving capabilities are not available with the UH-60A helicopters currently being used. The UH-60Q/HH-60L supports the U.S. Army Surgeon General's number 1 priority of "clearing the battlefield" and supports the Army's objective force enabling a smaller footprint on the battlefield with rapid casualty evacuation over extended distances. It also supports joint operations with "shore to ship" medical evacuation and is the only dedicated tactical medical air evacuation platform in DOD. The Army will modify UH-60 helicopters to this MEDEVAC configuration until the UH-60M Selected Upgrade Program outputs helicopters. MEDEVAC requirements will then be shown under the UH-60M MEP P-3a exhibit.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Development is complete.

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs								2	3	1	1	1	2	1	1	1	2	2	2	3	3
Outputs									1	1	2	2	2	2	2	2	2	2	2	2	2

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		25
Outputs	1																	25

METHOD OF IMPLEMENTATION: Prime Contractor ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 10 Months

Contract Dates:	FY 2002	Apr 02	FY 2003	Dec 02	FY 2004	Dec 03
Delivery Date:	FY 2002	Dec 02	FY 2003	Sep 03	FY 2004	Sep 04

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): UH-60Q Medical Equipment Package (MEP) [MOD 4] TBD

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
--																				
Non-Recurring Procurement																				
Recurring Procurement					5	26.5	5	26.9	5	27.2	10	53.7							25	134.3
MEP Fielding/MEP TPF						3.5		2.1		2.9		4.2								12.7
Training Devices	1	1.0																	1	1.0
Other Support																				
--																				
--																				
--																				
--																				
--																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 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		1.0		0.0		30.0		29.0		30.1		57.9		0.0		0.0		0.0		148.0

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	2880.6	49.2	41.9	41.5	42.3	42.4	41.9	34.6	23.0	56.5	89.4	3343.4
Less PY Adv Proc	223.3											223.3
Plus CY Adv Proc	223.3											223.3
Net Proc (P-1)	2880.6	49.2	41.9	41.5	42.3	42.4	41.9	34.6	23.0	56.5	89.4	3343.4
Initial Spares	181.3											181.3
Total Proc Cost	3061.9	49.2	41.9	41.5	42.3	42.4	41.9	34.6	23.0	56.5	89.4	3524.7
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 laser rangefinder/designator in a mast-mounted sight situated above the main-rotor system. Weapons provide air-to-air (Stinger) and air-to-ground capability. 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. Kiowa Warriors also perform National Guard missions and have vital Horizontal Technology Insertion (HTI) roles, having participated in Task Force XXI and the Division Capstone Exercise (DCX). An ongoing Safety Enhancement Program (SEP) incorporates upgraded engines and filters, crashworthy crew seats, cockpit airbags, digitization, and improved weapons interface. The SEP improves recognition and identification of time-sensitive, combat, emergency situations; reduces pilot workload during emergency maneuvers; significantly improves the crashworthiness of the aircraft thus improving crew survivability; improves engine reliability, reducing the probability of engine failure and exposure to emergency autorotations; protects engines from corrosion from sand/dust; and adds digitization capabilities. Partial SEP improvements had been incorporated into the later lots of Bell Helicopter's Kiowa Warrior remanufacture/retrofit modification lines; those aircraft will complete 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. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:
FY03 procures additional 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 2015.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Safety Enhancement Program (SEP)											
0-00-00-0003	Safety	180.2	40.2	42.3	42.4	41.9	34.6	23.0	24.8	4.5	433.9
Safety Enhancement Program - Weight Reduction											
0-00-00-0005	Safety	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.7	84.9	116.6
Crew Station Mission Equipment Trainer (CSMET)											
0-00-00-0004	Training	17.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.5
Totals		197.4	41.5	42.3	42.4	41.9	34.6	23.0	56.5	89.4	569.0

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Safety Enhancement Program (SEP) [MOD 1] 0-00-00-0003

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 interfacing with the tactical internet. R3 Engines 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. A Joint Variable Message Format (JVMF) capability is added to support fielding to First Digitized Division/Corps. Energy attenuating seats provide crew safety in case of vertical and horizontal impacts. Cockpit airbags increase crew protection. Of the fleet of 380 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. Four of those 77 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. A total of 380 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. 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 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2006				FY 2007				FY 2008				FY 2009				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 2002	Mar 02	FY 2003	Mar 03	FY 2004	Mar 04
Delivery Date:	FY 2002	Mar 03	FY 2003	Mar 04	FY 2004	Mar 05

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Safety Enhancement Program (SEP) [MOD 1] 0-00-00-0003

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Aircraft Modified - Bell Helicopter	78		22		24		24		22		20		18		19				227	
Nonrecurring		16.2		3.7		2.7		2.7		2.7		2.6		2.5		2.6				35.7
Recurring - Bell Helicopter		50.9		11.6		14.8		14.9		14.2		13.6		12.7		13.9				146.6
Government-Furnished Equipment		99.6		19.7		19.4		17.4		16.2		10.9		2.1		1.9		0.3		187.5
Engineering Change Orders				0.4		0.4		0.4		0.4		0.3		0.1		0.2				2.2
Aircraft Preparation		6.4		2.5		2.4		2.7		2.7		2.7		2.8		2.8		0.9		25.9
Fielding		0.7		0.6		0.8		0.9		0.9		1.9		0.7		0.7		0.7		7.9
Training/Training Devices		1.4						0.9		2.0						0.9		0.4		5.6
Other		3.7		1.1		0.8		0.9		0.9		0.8		0.9		0.9		1.3		11.3
Technical Support		1.1		0.6		0.7		0.9		1.0		0.8		0.6		0.6		0.7		7.0
Installation of Hardware - Field																				
FY 2000 & Prior Equip -- Kits		0.2																		0.2
FY 2001 -- Kits						0.3														0.3
FY 2002 Equip -- Kits								0.7												0.7
FY 2003 Equip -- Kits										0.9										0.9
FY 2004 Equip -- Kits												1.0								1.0
FY 2005 Equip -- Kits														0.6						0.6
FY 2006 Equip -- Kits																0.3				0.3
FY 2007 Equip -- Kits																		0.2		0.2
TC Equip- Kits																				
Total Installment		0.2		0.0		0.3		0.7		0.9		1.0		0.6		0.3		0.2		4.2
Total Procurement Cost		180.2		40.2		42.3		42.4		41.9		34.6		23.0		24.8		4.5		433.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	261.1	56.3	43.8	52.4	77.9	97.0	80.6	63.4	60.0	43.1	1628.4	2464.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	261.1	56.3	43.8	52.4	77.9	97.0	80.6	63.4	60.0	43.1	1628.4	2464.1
Initial Spares	48.7	4.1	1.8	2.0	3.9	3.9	4.9	4.8	4.7	4.6	40.3	123.7
Total Proc Cost	309.8	60.4	45.6	54.4	81.8	100.9	85.4	68.3	64.7	47.7	1668.7	2587.8
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 Advanced Avionics Technology Insertion (AATI), the Aviation Mission Planning System (AMPS), and the Joint Precision Approach and Landing System (JPALS). The GPS, IDM, AATI, and AMPS are four of the aviation systems required to support the digitization of the battlefield. All of these systems support the Legacy-to-Objective transition path of the Transformation Campaign Plan.

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 Scout/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), a GPS Anti-Jam (AJ) device 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, Aviation Tactical Operations Center (AVTOC), and Tactical Airspace Integration Systems (TAIS).

The AATI is an integrated, multi-function avionics device that encapsulates real-time information exchange and information processing capabilities in a common chassis. AATI will provide the Aviation fleet (AH-64D, OH-58D, UH-60M, and CH-47F) with a cost effective, automated, flexible, electronic system which gives the user access to any required/directed information exchange and processing in support of battlespace command and control, navigation, identification, airspace traffic control, mission management, and aviation speicific requirements.

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.

Exhibit P-40C, Budget Item Justification Sheet		Date: February 2002
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

This system generates mission data in either hard copy or electronic formats which is loaded onto the aircraft platforms, initializing the communication, navigation, and situational awareness systems on the modernized fleet aircraft. AMPS provides critical Command and Control (C2) connectivity for Army Aviation and automated extraction of critical C2 information from MCS for use in mission planning at Aviation brigade and below. AMPS is also the common data loader for initializing the avionics of all modernized platforms, 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 Blackhawk.

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.

Justification:
FY03 funding for GPS pre-planned product improvement (P3I) provides for the initial procurement of modification kits for field retrofit on the UH-60A/L, CH-47D, AH-64D and Special Operations Aircraft. P3I is required to meet the anit-jam requirements of Navigation Warfare (NAVWAR), the Chairman of the Joint Chiefs of Staff (CJCS)-directed security requirement (Selective Availability Anti-Spoofing Module (SAASM)) dated 2 January 2001. GPS P3I, GATM and JPALS programs are closely linked and have joint perspective/participation.

FY03 funding for IDM provides for the procurement of 214 B-Kits, 66 A-Kits, and 67 installs of IDM-304 boxes for AH-64D, OH-58D, CH-47F, SOA, TAIS, AVTOC, 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.

FY03 funding for AMPS provides for re-procurement of system hardware which is currently at end-of-life, as well as for updgrading the system software to support aviation fleet modernization programs and migration to the Joint Mission Planning System (JMPS).

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Doppler GPS Navigation System (DGNS) (AN/ASN-128B)											
	Legislative	91.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.6
Improved Data Modem (IDM)											
	Oper/Log	80.6	32.8	42.6	59.3	35.8	30.0	29.9	33.2	528.6	872.8
Aviation Mission Planning System (AMPS)											
1-95-01-2185	Oper/Log	48.7	13.5	10.5	19.8	28.1	16.4	14.6	0.0	159.3	310.9
Embedded GPS Inertial Navigation System (EGI) P3I											
	Legislative	4.2	3.6	14.6	14.7	11.5	8.5	8.1	5.7	105.3	176.2
DGNS (AN/ASN-128B) P3I											
	Legislative	0.0	1.6	10.2	3.2	5.3	8.6	7.6	4.0	89.9	130.4
Advanced Avionics Technology Insertion											
	Oper/Log	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	372.2	372.2
Joint Precision Approach & Landing System (JPALS)											
	Oper/Log	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	373.1	373.1
Totals		225.3	52.3	77.9	97.0	80.7	63.5	60.2	42.9	1628.4	2328.2

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Improved Data Modem (IDM) [MOD 2]

MODELS OF SYSTEM AFFECTED: IDM MD-1295/A;Aircraft: Longbow,Kiowa Warrior,Special Operations Aircraft,Chinook, Blackhawk

DESCRIPTION/JUSTIFICATION:

The IDM is Army Aviation's direct response to the need for Digitization of the Battlefield. With the IDM, Field Commanders gain the capability for enhanced command and control (C2), situational awareness (SA) through digital mapping of friendly and enemy positions, and modernized operations in joint service digitized environments. The IDM enhancement to incorporate Embedded Battle Command (EBC) minimizes changes to platform architecture, capitalizes on software reuse, and reduces platform software lifecycle costs. IDMs for CH-47F and UH/HH-60M will be incorporated in production. IDMs for AH-64D, OH-58D, TAIS and SOA will be installed as production cut-ins and field retrofits.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Total Ownership Cost Reduction (TOCR) Initiative - Planned Jul 00 thru May 02
Division Capstone Exercise (Limited C2) - Accomplished Apr 01
NRE Contract Awarded - Jul 01
Limited Production Contract - Awarded Dec 01
Full Rate Production Contract - Planned Feb 03
Second Digitized Division - Planned FY03
First Digitized Corps - Planned FY04

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs									4	16	17	17	17	8	8	8	7	18	19	19	19
Outputs										15	17	17	17	11	8	8	7	14	19	19	19

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	20	20	20	21	7	7	7	5	11	11	11	11	6	5				339
Outputs	20	20	20	21	6	6	6	6	14	14	12	11	6	6				339

METHOD OF IMPLEMENTATION: Contractor Teams ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 15 Months

Contract Dates:	FY 2002	Dec 01	FY 2003	Feb 03	FY 2004	Dec 03
Delivery Date:	FY 2002	Feb 03	FY 2003	Apr 04	FY 2004	Feb 05

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Improved Data Modem (IDM) [MOD 2]

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity - B Kits	260	8.9	74	2.0	152	2.4	214	10.0	254	12.1	161	7.8			59	3.0	873	74.4	2047	120.6
Mods - B Kit	120	1.8	86	2.7	67	1.4												101.6	273	107.5
Installation Kits-A-Kits		4.1	52	0.6	188	7.4	66	1.2	134	2.7	94	1.3	12	0.1					546	17.4
Aircraft Integration		27.8		18.2		23.0		35.7		8.9		10.2		24.0		20.1		216.5		384.4
H/W S/W, Nonrecurring		21.5		8.6		5.0		6.3		2.2		6.2		2.3		6.6		51.5		110.2
Engineering Change Orders		3.9						0.5		0.6		0.4				0.1		8.4		13.9
Data		0.8						0.4		0.5		0.3				0.1		7.0		9.1
System Test and Evaluation		0.4				0.1		0.8		4.8		0.1		0.6		0.1		17.3		24.2
Support Equipment		0.4				0.1		0.2		0.3		0.2				0.1		4.2		5.5
Other - PM Adm		10.3		0.5		2.0		2.6		1.6		1.4		1.1		1.4		23.9		44.8
Training Equipment								0.3		0.4		0.3				0.1		5.6		6.7
Fielding		0.7		0.2		0.9		1.0		1.5		1.4		1.4		1.5		18.0		26.6
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits					4	0.3	30	0.1											34	0.4
FY 2002 Equip -- Kits							37	0.2	3										40	0.2
FY 2003 Equip -- Kits									28	0.2	20	0.1							48	0.3
FY 2004 Equip -- Kits											55	0.3	55	0.3					110	0.6
FY 2005 Equip -- Kits													26	0.1	26	0.1			52	0.2
FY 2006 Equip -- Kits																	55	0.2	55	0.2
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0	4	0.3	67	0.3	31	0.2	75	0.4	81	0.4	26	0.1	55	0.2	339	1.9
Total Procurement Cost		80.6		32.8		42.6		59.3		35.8		30.0		29.9		33.2		528.6		872.8

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Aviation Mission Planning System (AMPS) [MOD 3] 1-95-01-2185

MODELS OF SYSTEM AFFECTED: Apache (AH-64A Modernization/AH-64D), Blackhawk (UH-60A/L/Q), Chinook, Cobra, Comanche, Huey

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.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Accomplished IOTE - Mar/Apr 01
JMPS OT - Feb 06
Milestone C - Jul 06

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2006				FY 2007				FY 2008				FY 2009				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 2002	FY 2003	FY 2004
Delivery Date:	FY 2002	FY 2003	FY 2004

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Aviation Mission Planning System (AMPS) [MOD 3] 1-95-01-2185

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity	705	19.7																	705	19.7
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment		7.7		4.0			329	8.4	380	13.4	246	9.0	194	7.2			2298	77.9	3447	127.6
Equipment, Nonrecurring				7.7		1.1		5.8		9.5		2.7		2.1				22.0		50.9
Engineering Change Orders		17.1				7.3		2.4		1.5		1.5		2.2				27.5		59.5
System Test & Eval				0.1		0.2		0.6		0.6		0.6		0.6				6.4		9.1
Training Equipment						0.1		0.1		0.1		0.1		0.1				0.6		1.1
Support Equipment																				
Other - PM Admin		3.4		0.3		0.4		0.7		1.0		0.7		0.6				6.3		13.4
Fielding		0.8		1.4		1.4		1.8		2.0		1.8		1.8				18.6		29.6
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits																				
FY 2006 Equip -- Kits																				
FY 2007 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		48.7		13.5		10.5		19.8		28.1		16.4		14.6		0.0		159.3		310.9

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: Embedded GPS Inertial Navigation System (EGI) P3I [MOD 4]

MODELS OF SYSTEM AFFECTED: Kiowa Warrior (OH-58D), Apache A (AH-64A), Longbow (AH-64D), SOA

DESCRIPTION/JUSTIFICATION:

GPS (EGI) is one of the aviation systems required for Digitization of the Battlefield. FY03 starts the procurement of the GPS EGI Pre-Planned Product Improvement (P3I). This modification will provide enhanced security with the CJCS directed Selective Availability Anti-Spoofing Module (SAASM), GPS Instrument Flight Rule (IFR) navigation capability, and enhanced GPS Anti-Jam (AJ) capabilities, in accordance with NAVWAR and civil airspace regulatory requirements for the AH-64A/D, OH-58D and Special Operations Aircraft (SOA). The kit cost will vary depending on aircraft configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Planned Contract Award - EGI Box (Nonrecurring) - May 02
Planned Contract Award - Aircraft Integration (Nonrecurring) - Jun 02
Planned Production Contract Award - May 04

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																				14	14
Outputs																					14

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	33	33	33	34	39	39	39	40	20	20	20	20	39	39	39	40	1423	1978
Outputs	14	33	33	33	34	39	39	39	40	20	20	20	20	39	39	39	1463	1978

METHOD OF IMPLEMENTATION: Contractor Teams ADMINISTRATIVE LEADTIME: 7 Months PRODUCTION LEADTIME: 12 Months

Contract Dates:	FY 2002	FY 2003	May 04	FY 2004	Mar 05
Delivery Date:	FY 2002	FY 2003	Apr 05	FY 2004	Feb 06

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): Embedded GPS Inertial Navigation System (EGI) P3I [MOD 4]

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity - B Kit									71	4.3	150	6.7	120	5.7	80	3.7	1580	63.3	2001	83.7
Installation Kits - A Kit				0.5					48	0.2	150	0.6	120	0.5	80	0.3	1580	5.3	1978	7.4
Installation Kits, Nonrecurring						3.0		14.0		5.9								7.4		30.3
Equipment				0.0																
Equipment, Nonrecurring				1.9		10.9												7.3		20.1
Engineering Change Orders		4.0		1.0						0.3		0.3		0.1						5.7
Data										0.1		0.2		0.2		0.1		1.1		1.7
Training Equipment										0.1		0.1		0.1		0.0		0.4		0.7
Support Equipment																				
Other - PM Admin		0.2		0.2		0.7		0.7		0.6		0.4		0.4		0.3		5.3		8.8
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits																				
FY 2004 Equip -- Kits											28	0.2	20	0.2					48	0.4
FY 2005 Equip -- Kits													113	0.9	37	0.3			150	1.2
FY 2006 Equip -- Kits															120	1.0			120	1.0
FY 2007 Equip -- Kits																	80	0.7	80	0.7
TC Equip- Kits																	1580	14.5	1580	14.5
Total Installment		0.0		0.0		0.0		0.0		0.0	28	0.2	133	1.1	157	1.3	1660	15.2	1978	17.8
Total Procurement Cost		4.2		3.6		14.6		14.7		11.5		8.5		8.1		5.7		105.3		176.2

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE: DGNS (AN/ASN-128B) P3I [MOD 5]

MODELS OF SYSTEM AFFECTED: Blackhawk (UH-60 A/L), Chinook (CH-47D)

DESCRIPTION/JUSTIFICATION:

GPS (DGNS) is one of the aviation systems required for Digitization of the Battlefield. FY03 starts the procurement 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), GPS Instrument Flight Rule (IFR) navigation capability, and enhanced Anti-Jam (AJ) capabilities. The AN/ASN-128B/DGNS P3I will meet the requirements of NAVWAR and civil airspace regulatory requirements for the UH-60A/L and CH-47D aircraft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Accomplished Contract Award - DGNS Box (Nonrecurring)- Aug 01
Planned Contract Award - Aircraft Integration (Nonrecurring) - Jun 02
Planned Production Contract Award - May 03

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																9	10	22	22	23	23
Outputs																	9	10	22	22	23

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	39	39	39	40	40	40	40	43	11	11	11	12	75	76	76	76	914	1691
Outputs	23	39	39	39	40	40	40	40	43	11	11	11	12	75	76	76	990	1691

METHOD OF IMPLEMENTATION: Contractor Team ADMINISTRATIVE LEADTIME: 7 Months PRODUCTION LEADTIME: 12 Months

Contract Dates:	FY 2002		FY 2003	May 03	FY 2004	Mar 04
Delivery Date:	FY 2002		FY 2003	Apr 04	FY 2004	Feb 05

INDIVIDUAL MODIFICATION Date: February 2002

MODIFICATION TITLE (Cont): DGNS (AN/ASN-128B) P3I [MOD 5]

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity - B Kit							68	2.5	112	4.2	160	6.4	123	5.1	45	2.2	1217	54.5	1725	74.9
Installation Kits - A Kit							57	0.2	89	0.3	160	0.6	123	0.5	45	0.2	1217	5.2	1691	7.0
Installation Kits, Nonrecurring						5.4												7.5		12.9
Equipment																				
Equipment, Nonrecurring				1.5		4.3												4.0		9.8
Engineering Change Orders								0.2		0.2		0.2								0.6
Data								0.1		0.1		0.2		0.2		0.1		1.9		2.6
Training Equipment								0.0		0.1		0.1		0.1		0.0		0.7		1.0
Support Equipment																				
Other - PM Admin				0.1		0.5		0.2		0.3		0.4		0.4		0.2		4.3		6.4
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits																				
FY 2003 Equip -- Kits									19	0.1	38	0.3							57	0.4
FY 2004 Equip -- Kits											52	0.4	37	0.3					89	0.7
FY 2005 Equip -- Kits													120	1.0	40	0.3			160	1.3
FY 2006 Equip -- Kits															123	1.0			123	1.0
FY 2007 Equip -- Kits																	45	0.4	45	0.4
TC Equip- Kits																	1217	11.4	1217	11.4
Total Installment		0.0		0.0		0.0		0.0	19	0.1	90	0.7	157	1.3	163	1.3	1262	11.8	1691	15.2
Total Procurement Cost		0.0		1.6		10.2		3.2		5.3		8.6		7.6		4.0		89.9		130.4

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /2/Modification of aircraft	ASE MODS (SIRFC) (AA0720)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		SSN AZ3508; PE/Project 0604270A/665

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	177.9	4.8	8.8	5.0								196.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	177.9	4.8	8.8	5.0								196.5
Initial Spares												
Total Proc Cost	177.9	4.8	8.8	5.0								196.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
AA0720 is a summary for the AN/ALQ-211, Suite of Integrated Radio Frequency Countermeasures (SIRFC), Aircraft Survivability Equipment Trainer IV (ASET IV), and the Advanced Threat Infrared Countermeasures (ATIRCM). ASE modifications provide funding for Aircraft Survivability Equipment (ASE) upgrades by incorporation of the latest state-of-the-art technology needed to meet current and emerging threats to Army Aviation platforms. Modular upgrades are applied in lieu of new developments to obtain the most cost effective improved systems. Modifications to current systems will sustain and protect the forces, conduct precision strikes, and dominate the maneuver battle. Installing ASE items on aircraft systems achieves RF threat defeating capabilities. This budget item rolls up four modification efforts that test, procure, and install A-Kits on Army airframes and modifications to ASET IV. These systems support the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:
FY01 funding was required for the AN/ALQ-211, Suite of Integrated Radio Frequency Countermeasures (SIRFC) nonrecurring engineering integration program for the Special Operations Aircraft (SOA.) The SOA requires additional capabilities to detect and defeat air and ground radar frequency (RF) missiles and to provide situational awareness to the pilot. The improvements needed will be satisfied by SIRFC.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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

P-1 Item Nomenclature
GATM (AA0701)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
SSN AA0711, SSN AA0704

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost			10.0	12.7								22.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)			10.0	12.7								22.6
Initial Spares												
Total Proc Cost			10.0	12.7								22.6
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 control 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. 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 rotary wing fleets. GATM supports the Legacy-to-Objective transition path of the Transformation Campaign Plan.

Justification:
Beginning in FY 2002, program transferred to AA0711.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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:
SSN AA0701, SSN AA0704

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost					38.2	70.4	60.2	60.1	24.7	22.7	353.8	630.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)					38.2	70.4	60.2	60.1	24.7	22.7	353.8	630.1
Initial Spares												
Total Proc Cost					38.2	70.4	60.2	60.1	24.7	22.7	353.8	630.1
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 control 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. 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 rotary wing fleets. GATM supports the Legacy-to-Objective transition path of the Transformation Campaign Plan.

Justification:
FY03 funding 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) flights after Mar 03 and for all flights after Mar 05. 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 beyond the POM. 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.

FY03 GATM Fixed Wing funding will procure GATM equipment for C-12, C-23, and RC-12 aircraft. Fixed Wing aircraft were purchased with current avionics and navigation equipment at the time of production. New communication, navigation and surveillance equipment will be needed to support GATM for the Army's Fixed Wing aircraft to remain current and have unrestricted access to the rapidly changing Air Traffic Management airspace. 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-40, Budget Item Justification Sheet

Date: February 2002

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

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

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost					19.2	43.1	33.3	42.7	9.0			147.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)					19.2	43.1	33.3	42.7	9.0			147.3
Initial Spares												
Total Proc Cost					19.2	43.1	33.3	42.7	9.0			147.3
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. This SSN supports Legacy and Legacy-to-Objective Systems which relate to the Transformation Campaign Plan.

Justification:
FY03 funding will procure GATM equipment for C-12, C-23, and RC-12 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 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Global Air Traffic Management - FW											
GATM-FW	U	0.0	0.0	19.3	43.3	33.5	43.1	9.1	0.0	0.0	148.3
Totals		0.0	0.0	19.3	43.3	33.5	43.1	9.1	0.0	0.0	148.3

INDIVIDUAL MODIFICATION Date: February 2002

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, 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 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs								10	11	18	18	18	22		16	17	17	14	15	16	16
Outputs									10	11	18	18	18	22		16	17	17	14	15	16

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	11	12	13	13														257
Outputs	16	11	12	13	13													257

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 5 Months

Contract Dates:	FY 2002	Feb 02	FY 2003	Dec 02	FY 2004	Dec 03
Delivery Date:	FY 2002	Jul 02	FY 2003	May 03	FY 2004	May 04

INDIVIDUAL MODIFICATION Date: February 2002

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits					39	14.6	58	31.4	50	26.0	61	34.5	49	6.9					257	113.4
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data						0.1		0.1		0.1		0.1		0.1						0.5
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits					21	4.6													21	4.6
FY 2003 Equip -- Kits							76	11.8											76	11.8
FY 2004 Equip -- Kits									50	7.4									50	7.4
FY 2005 Equip -- Kits											61	8.5							61	8.5
FY 2006 Equip -- Kits													49	2.1					49	2.1
FY 2007 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0	21	4.6	76	11.8	50	7.4	61	8.5	49	2.1		0.0		0.0	257	34.4
Total Procurement Cost		0.0		0.0		19.3		43.3		33.5		43.1		9.1		0.0		0.0		148.3

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /2/Modification of aircraft	GATM - Rotary Wing Aircraft (AA0704)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		SSN AA0701, SSN AA0711

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost					18.9	27.3	26.9	17.4	15.7	22.7	353.8	482.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)					18.9	27.3	26.9	17.4	15.7	22.7	353.8	482.8
Initial Spares												
Total Proc Cost					18.9	27.3	26.9	17.4	15.7	22.7	353.8	482.8
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. GATM is a DoD term that describes the equipment, training, and procedures mandated by Civilian air control 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. 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 rotary wing fleets. GATM supports the Legacy-to-Objective transition path of the Transformation Campaign Plan.

Justification:
FY03 funding 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 03 and for all flights after Mar 05. 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 beyond the POM. Benefits of GATM include direct routing through civil airspace resulting in significant savings in both time and money. It allows unrestricted operations in worldwide civil controlled airspace and improves safety and operational efficiency while meeting the new worldwide frequency spectrum requirements. GATM provides Army aircraft improved deployment capabilities and allows them to operate in civil airspace without the threat of exclusion.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2002

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	2000 & PR	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TC	Total
Global Air Traffic Management - RW											
GATM-RW	Unclassified	0.0	0.0	18.9	27.4	26.9	17.3	15.7	22.7	353.8	482.7
Totals		0.0	0.0	18.9	27.4	26.9	17.3	15.7	22.7	353.8	482.7

INDIVIDUAL MODIFICATION Date: February 2002

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

MODELS OF SYSTEM AFFECTED: CH-47D, UH-60A/L, EH-60, 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 communications and surveillance equipment necessary for airspace access for rotary wing aircraft operations (peacetime and wartime missions) in Europe. The Mode-S transponders will be required for all Instrument Flight Rules (IFR) flights in Europe after 31 Mar 03. Funding will procure and install Mode-S transponders for all European based aircraft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Planned OH-58D Integration Award (Mode-S) - Mar 02
Planned UH-60A/L/CH-47D Production Award (Mode S) Mar 02
Begin UH-60A/L and CH-47D Installations - Sep 02
Planned AH-64 A/D Integration Award (Mode-S) - Jun 03

Installation Schedule:

	Pr Yr	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs									185	86	87	87	87	108	107	107	107	101	101	101	101
Outputs										185	86	87	87	87	108	107	107	107	101	101	101

	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	77	77	77	76	101	101	101	100	59	59	59	58	93	93	93	92	1472	4153
Outputs	101	77	77	77	76	101	101	101	100	59	59	59	58	93	93	93	1564	4153

METHOD OF IMPLEMENTATION: OLR Team ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 6 Months

Contract Dates:	FY 2002	Mar 02	FY 2003	Dec 02	FY 2004	Dec 03
Delivery Date:	FY 2002	Aug 02	FY 2003	May 03	FY 2004	May 03

INDIVIDUAL MODIFICATION Date: February 2002

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

FINANCIAL PLAN: ($ in Millions)

	FY 2000 and Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
Procurement																				
Kit Quantity					367	11.0	330	9.3	526	15.0	281	8.8	333	9.0	473	13.3	1843	195.5	4153	261.9
Installation Kits					367	3.9	330	3.3	526	5.1	281	2.9	333	2.8	473	4.5	1843	43.6	4153	66.1
Installation Kits, Nonrecurring						0.6		8.5				0.2						6.8		16.1
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders								0.7		0.9		0.2		0.1		0.0		9.9		11.8
Data																		8.1		8.1
Training Equipment						0.6		0.5										3.9		5.0
Support Equipment																				
Other - PM Admin						0.9		1.4		1.3		0.9		0.8		1.1		11.6		18.0
Fielding								0.1		0.1		0.1		0.1		0.1				0.5
Installation of Hardware																				
FY 2000 & Prior Equip -- Kits																				
FY 2001 -- Kits																				
FY 2002 Equip -- Kits					185	1.9	182	1.9											367	3.8
FY 2003 Equip -- Kits							165	1.7	165	1.7									330	3.4
FY 2004 Equip -- Kits									264	2.8	262	2.7							526	5.5
FY 2005 Equip -- Kits											142	1.5	139	1.3					281	2.8
FY 2006 Equip -- Kits													168	1.6	165	1.5			333	3.1
FY 2007 Equip -- Kits															238	2.2	235	2.3	473	4.5
TC Equip- Kits																	1843	72.1	1843	72.1
Total Installment		0.0		0.0	185	1.9	347	3.6	429	4.5	404	4.2	307	2.9	403	3.7	2078	74.4	4153	95.2
Total Procurement Cost		0.0		0.0		18.9		27.4		26.9		17.3		15.7		22.7		353.8		482.7

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	927.8	27.3	14.1	5.0	7.3	7.7	16.0	17.6	17.7	7.3	109.3	1157.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	927.8	27.3	14.1	5.0	7.3	7.7	16.0	17.6	17.7	7.3	109.3	1157.2
Initial Spares												
Total Proc Cost	927.8	27.3	14.1	5.0	7.3	7.7	16.0	17.6	17.7	7.3	109.3	1157.2
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. To provide initial support, funds are normally required in the same year that end items are fielded.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty					2							2
Gross Cost	874.1	10.4	15.3	9.9	37.5							947.3
Less PY Adv Proc	11.6											11.6
Plus CY Adv Proc	11.6											11.6
Net Proc (P-1)	874.1	10.4	15.3	9.9	37.5							947.3
Initial Spares	51.9	0.6			2.0							54.5
Total Proc Cost	926.0	11.0	15.3	9.9	39.5							1001.8
Flyaway U/C												
Wpn Sys Proc U/C					18.8							

Description:
AZ3504 is a summary rollup of SSN AZ3506, which includes the Aircraft Survivability Equipment Trainer IV (ASET IV), and SSN AZ3508, which includes the AN/ALQ-211, Suite of Integrated Radio Frequency Countermeasures (SIRFC) and the AN/AVR-2A, Laser Detecting Set.
The ASET IV is a ground based, mobile aviation threat emitter simulation and training system, which enables aircrews of Army Aviation Platforms a full capability to recognize 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 SIRFC consists of the Advanced Threat Warning Receiver and the Advanced Threat Radar Jammer. The SIRFC will replace the current Aircraft Survivability Equipment (ASE) AN/APR-39, AN/APR-44, AN/ALQ-136 and AN/ALQ-162. SIRFC is an ASE project with OSD oversight and high joint interest. The Air Force Special Operations Command has selected SIRFC to be its bus controller and sensor fusion processor for the CV-22, and SIRFC has application to Army Special Operations Aircraft, as well as Air Force and Navy aircraft. The AN/AVR-2A 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 maneuvers to break the targeting. These systems support the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:
SIRFC procurement for FY03-07 is funded by the Special Operations Command.

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		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					3963			4969					
ASE Radar CM					5945			32576	2	16288			
Total					**9908**			**37545**					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty					2							2
Gross Cost	94.3	3.0	3.0	5.9	37.5							143.9
Less PY Adv Proc	11.6											11.6
Plus CY Adv Proc	11.6											11.6
Net Proc (P-1)	94.3	3.0	3.0	5.9	37.5							143.9
Initial Spares	51.9	0.6			2.0							54.5
Total Proc Cost	146.2	3.6	3.0	5.9	39.5							198.4
Flyaway U/C												
Wpn Sys Proc U/C					18.8							

Description:
Aircraft Survivability Equipment Radar Countermeasure, LIN AZ3508, is a summary rollup for the AN/ALQ-211, Suite of Integrated Radio Frequency Countermeasures (SIRFC) and the Laser Detecting Set, AN/AVR-2A. The SIRFC consists of the Advanced Threat Warning Receiver and the Advanced Threat Radar Jammer. The SIRFC will replace the current Aircraft Survivability Equipment (ASE) AN/APR-39, AN/APR-44, AN/ALQ-136 and AN/ALQ-162. SIRFC is an ASE project with OSD oversight and high joint interest. The Air Force Special Operations Command has selected SIRFC to be its bus controller and sensor fusion processor for the CV-22, and SIRFC has application to Army Special Operations Aircraft, as well as Air Force and Navy aircraft. The AN/AVR-2A 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. These systems support the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:
SIRFC procurement for MH-47 and MH-60 SOA for FY03-07 is funded by the Special Operations Command.

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
AZ3508 - ASE RADAR COUNTERMEASURES													
Suite of Integrated Radio Freq CMS (SIRFC)													
Nonrecurring Engineering								3000					
Platform Integration (MH-47 and MH-60)								23281					
Project Management								295					
SIRFC Recurring Hardware (A Kit/B Kit)								6000	2	3000			
SUBTOTAL - SIRFC								**32576**					
AN/AVR-2A Laser Warning													
System Acquisition and Fielding					5645			4739					
Project Management					300			230					
SUBTOTAL - AN/AVR-2A					**5945**			**4969**					
Total					**5945**			**37545**					

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 4 / Support equipment and facilities		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
SIRFC Recurring Hardware (A Kit/B Kit)										
FY 2002	ITT Corporation (B Kit) Clifton, NJ	C/FFP	CECOM, Ft. Monmouth, NJ	May 02	May 04	2	2600	Yes		
FY 2002	Boeing (A Kit) Philadelphia, PA	C/FFP	TAPO, Ft. Eustis, VA	May 02	May 03	2	400	No		

REMARKS:

FY 03 / 04 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

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	
AN/ALQ-211, SIRFC																													
	1	FY 02	A	2	0	2																				2					0
	2	FY 02	A	2	0	2								2																	0
Total				4		4								2												2					

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	ITT Corporation (B Kit), Clifton, NJ	1.00	144.00	200.00	0
2	Boeing (A Kit), Philadelphia, PA	1.00	144.00	200.00	0

MFR Number			ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	INITIAL		0	1	24	25	
	REORDER		0	1	24	25	
2	INITIAL		0	1	12	13	
	REORDER		0	1	12	13	
	INITIAL						
	REORDER						
	INITIAL						
	REORDER						
	INITIAL						
	REORDER						

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002	
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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty					26							26
Gross Cost	22.7				43.4							66.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	22.7				43.4							66.1
Initial Spares												
Total Proc Cost	22.7				43.4							66.1
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The US Army (USA) operational requirements concept for infrared (IR) countermeasure systems is known as the Suite of Integrated IR Countermeasures (SIIRCM). It is an integrated warning and countermeasure system to enhance aircraft survivability against IR guided threat missile systems. The core element of the SIIRCM concept is the Advanced Threat Infrared Countermeasures (ATIRCM)/Common Missile Warning System (CMWS) program. The ATIRCM/CMWS, a subsystem to a host aircraft, is an integrated ultra violet (UV) missile plume detecting warning system and an IR lamp/laser/expendable countermeasures system. The ATIRCM/CMWS includes an Improved Countermeasure Dispenser (ICMD) capable of loading and employing three or more types of expendables, such as flares, chaff and smoke/aerosol. 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 the required degree of protection. SIIRCM(-) is a fielded subset that has been established to meet near term requirements. SIIRCM(-) consists of CMWS, munitions and dispensers. An urgent requirement has been validated to install the SIIRCM(-) on the MH-47 and MH-60 Special Operations Aircraft (SOA). Lack of an updated SIIRCM(-) capability on SOA limit the ability and effectiveness of the aircraft in meeting advanced threats in current and future operational environments. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:
ATIRCM/CMWS procurement for the MH-47 and MH-60 for FY03-07 is funded by the Special Operations Command.

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		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 Hardware (SIIRCM(-))	B							20165	26	776			
AIRCMM Flares								2200					
Nonrecurring Engineering								6884					
System Engineering								7603					
Training								81					
Engineering Changes								44					
In-house/Matrix Support								4579					
Project Management								1833					
Total								**43389**					

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 4 / Support equipment and facilities		ASE INFRARED CM (AZ3507)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Recurring Hardware (SIIRCM(-))										
FY 2002	BAE Systems Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Feb 02	Nov 02	26	776	Yes		

REMARKS:

FY 02 / 03 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03										LATER
							Calendar Year 02												Calendar Year 03										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Recurring Hardware (SIIRCM(-))																													
	1	FY 02	A	26	0	26					A									6	6	6	6	2						0
Total				26		26														6	6	6	6	2						

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
1	BAE Systems, Nashua, NH	48.00	96.00	144.00	0	1	INITIAL	0	4	10	14	
							REORDER	0	0	0	0	

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty						7	12	15	16			50
Gross Cost	42.2					27.7	42.3	51.8	55.7			219.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	42.2					27.7	42.3	51.8	55.7			219.7
Initial Spares												
Total Proc Cost	42.2					27.7	42.3	51.8	55.7			219.7
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The Airborne Command & Control budget line includes the Army Airborne Command and Control System (A2C2S) that supports the Legacy-to-Objective transition path of the Transformation Campaign Plan.

The Army Airborne Command and Control System (A2C2S) is the Army's only airborne C2 system supporting corps, division and brigade commanders. 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 Army XXI. 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 & control by hosting the Army Battle Command System (ABCS) such as Maneuver Control Systems (MCS), All Source Analysis System (ASAS), Advanced Field Artillery Tactical Data System (AFATDS) and Force XXI Battle Command Brigade and Below (FBCB2). In addition to line-of-sight Combat Net Radios (including Single Channel Ground Airborne Radio System (SINCGARS), Advanced System Improvement Program (ASIP) and HAVEQUICK II, the A2C2S capabilities 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 using weapons of mass destruction.

Justification:
A2C2S - FY03 funding will be used to procure 7 LRIP systems and field 4 A2C2S. These systems will be used to help meet the Army's plan for digitization. These first systems will be fielded to the 4th Infantry Division, 1st Cavalry Division and III Corps to support the first digitized division and the first digitized corps concept. Thus, a modernized system will be deployed which allows for integration of information technologies to acquire, exchange and employ timely information needed for 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 COMMAND & CONTROL (AA0710)	Weapon System Type:	Date: February 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		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											21334	7	3048
Project Management Administration											1125		
Engineering Support											1386		
System Test & Evaluation											407		
Fielding (NET,Tran,Spt Equip)											1328		
Interim Contract Logistics Support											716		
Engineering Support											1442		
.													
.													
Total											**27738**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 4 / Support equipment and facilities		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										
FY 2003	Raytheon (A2C2S) Huntsville, AL	CPFF/FPI	AMCOM, AL	Aug 03	Sep 03	7	3048	No		Nov-01

REMARKS: A2C2S-The competitively awarded system demonstration contract, awarded with RDTE funding in FY02, included an FY03 LRIP option. Quantities are based on B-Kits (Mission equipment packages including communication suite and ADP equipment).

FY 03 / 04 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

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																													
	1	FY 03	A	7	0	7											A	1	1	2	2	1								0
Total				7		7												1	1	2	2	1								

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	Raytheon (A2C2S), 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	REMARKS
1	INITIAL	0	0	1	1	
	REORDER	0	0	0	0	

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty			963	980	988	694	1690	492	235			6042
Gross Cost	507.8	2.5	8.9	9.9	12.8	7.5	15.0	5.8	3.9	3.0		577.2
Less PY Adv Proc	5.0											5.0
Plus CY Adv Proc	5.0											5.0
Net Proc (P-1)	507.8	2.5	8.9	9.9	12.8	7.5	15.0	5.8	3.9	3.0		577.2
Initial Spares	22.7											22.7
Total Proc Cost	530.5	2.5	8.9	9.9	12.8	7.5	15.0	5.8	3.9	3.0		599.9
Flyaway U/C												
Wpn Sys Proc U/C			9.2	9.9	10.1	14.8	10.4	17.3	16.1			

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 Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty	1962		963	980	988	694	1690	492	235			8004
Gross Cost	396.2	2.5	8.9	9.9	12.8	7.5	15.0	5.8	3.9	3.0		465.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	396.2	2.5	8.9	9.9	12.8	7.5	15.0	5.8	3.9	3.0		465.5
Initial Spares	22.0											22.0
Total Proc Cost	418.2	2.5	8.9	9.9	12.8	7.5	15.0	5.8	3.9	3.0		487.5
Flyaway U/C												
Wpn Sys Proc U/C			9.2	10.1	12.9	10.8	8.9	11.9	16.5			

Description:
The AN/AVS-6, Aviator's Night Vision Imaging System (ANVIS), supports the Army Transformation objectives by permitting superior tactical mobility of legacy 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 sensitivity and dynamic range to support operations in conditions that vary from "overcast starlight" through strong urban lighting. The increased capability yields enhanced mission performance and improved safety of flight compared to what is now possible using current AN/AVS-6 systems. The ANVIS AN/AVS-6(V)3 supports the legacy force.

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 that is overlaid on the imagery viewed through the night vision goggles. This system allows continuous heads-up flight by the pilot without needing to look inward 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 legacy and interim force.

The AN/AVS-6(V)3 enhances survivability, lethality, and tactical mobility for aviation assets of the Legacy and Interim Forces. This system support the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 2003 procures AN/AVS-6(V)3 systems for fielding 2nd Infantry Division (2ID) and 101st Air Assault (AA).

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		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					7193	980	8	7435	995	8	5608	736	8
Engineering Support					1138			1121			1157		
Project Management Admin					379			374			386		
Engineering Change Orders					364			225			168		
Testing					834								
Fielding								135			175		
Helmets (HGU-56P)								3500					
Total					**9908**			**12790**			**7494**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 4 / Support equipment and facilities		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 $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
K35601 ANVIS/HUD										
FY 2001	LITTON TEMPE, AZ	OPTION	CECOM	Jan 02	Oct 02	565	7	Yes		
FY 2001	ITT ROANOKE, VA	OPTION	CECOM	Jan 02	Oct 02	415	7	Yes		
FY 2002	TBS TBD	C/FFP	CECOM	Apr 02	Apr 03	995	7	Yes		1QFY02
FY 2003	TBS TBD	OPTION	CECOM	Dec 02	Oct 03	736	8	Yes		1QFY02

REMARKS:

FY 01 / 02 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 01												Fiscal Year 02										LATER
							Calendar Year 01												Calendar Year 02										
							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																													
	4	FY 00 &Pr	A	963	0	963															50	50	50	50	65	80	108	160	175	175	0
	1	FY 01	A	565	0	565																A									565
	2	FY 01	A	415	0	415																A									415
	3	FY 02	A	995	0	995																			A						995
	3	FY 03	A	736	0	736																									736
Total				3674		3674															50	50	50	50	65	80	108	160	175	175	2711

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	LITTON, TEMPE, AZ	25.00	50.00	200.00	120
2	ITT, ROANOKE, VA	25.00	50.00	200.00	120
3	TBS, TBD	25.00	50.00	200.00	120
4	Multiple, Multiple	50.00	100.00	400.00	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
3	INITIAL	4	4	12	16
	REORDER	1	1	9	10
4	INITIAL	0	0	0	0
	REORDER	0	0	0	0
	INITIAL				
	REORDER				

REMARKS

FY00 deliveries delayed due to additional testing for air worthiness.

FY 03 / 04 BUDGET PRODUCTION SCHEDULE

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

Date: February 2002

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	
K35601 ANVIS/HUD																													
	4	FY 00 &Pr	A	963	963	0																							0
	1	FY 01	A	565	0	565	100	100	100	100	100	65																	0
	2	FY 01	A	415	0	415	75	75	75	75	75	40																	0
	3	FY 02	A	995	0	995							69	174	156	149	149	149	149										0
	3	FY 03	A	736	0	736			A										31	99	99	99	74	74	69	69	69	53			0
Total				3674	963	2711	175	175	175	175	175	105	69	174	156	149	149	149	180	99	99	99	74	74	69	69	69	53			
							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	LITTON, TEMPE, AZ	25.00	50.00	200.00	120
2	ITT, ROANOKE, VA	25.00	50.00	200.00	120
3	TBS, TBD	25.00	50.00	200.00	120
4	Multiple, Multiple	50.00	100.00	400.00	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
3	INITIAL	4	4	12	16
	REORDER	1	1	9	10
4	INITIAL	0	0	0	0
	REORDER	0	0	0	0
	INITIAL				
	REORDER				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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:

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	739.6	22.4	14.4	11.8	19.0	18.1	19.5	17.2	17.9	18.4		898.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	739.6	22.4	14.4	11.8	19.0	18.1	19.5	17.2	17.9	18.4		898.2
Initial Spares	4.9											4.9
Total Proc Cost	744.5	22.4	14.4	11.8	19.0	18.1	19.5	17.2	17.9	18.4		903.1
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Program provides for Aviation Ground Support Equipment including Sets, Kits and Outfits.

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: COMMON GROUND EQUIPMENT (AZ3100)	Weapon System Type:	Date: February 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Aviation Ground Support Equipment					11817			18975			18091		
Total					**11817**			**18975**			**18091**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002	
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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	370.1	12.9	9.6	11.8	19.0	18.1	19.5	17.2	17.9	18.4		514.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	370.1	12.9	9.6	11.8	19.0	18.1	19.5	17.2	17.9	18.4		514.5
Initial Spares	4.9											4.9
Total Proc Cost	375.0	12.9	9.6	11.8	19.0	18.1	19.5	17.2	17.9	18.4		519.4
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Aviation Ground Support Equipment (AGSE) is necessary to make an aircraft, or one of its associated systems or subsystems, operational in its intended environments. This includes all equipment required to guide, control, inspect, test, adjust, calibrate, assess, gauge, assemble, disassemble, handle, transport, store, actuate, service, repair and/or overhaul the aircraft system or subsystems. Included are such items as aviation ground power units, hydraulic test stands, tool shop sets, etc.

Justification:
FY 03 funding will achieve 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. More aircraft being added to the Army inventory, modernization of aircraft, fielding of new aviation units, and the diversification of aviation missions creates an ever-increasing requirement for AGSE. The Unit Maintenance Aerial Recovery Kit (UMARK) will provide Aviation Intermediate Maintenance (AVIM) and Aviation Unit Maintenance (AVUM) organizations the capability to quickly rig for aerial recovery, aircraft on the battlefield that cannot be repaired, nonflyable aircraft undergoing maintenance, heavily damaged aircraft and crash damaged aircraft. AVIM Shop Set Complexes provide a transportable aviation intermediate and limited depot level maintenance capability in force projection or contingency operations. The AVIM Containerization and Modernization Program (CAMP) provides deployability of AVIM Shop Set complexes using organic vehicles operated by aircraft mechanics thus meeting the requirement to conduct split operations in a developing theater. International Standardized Organization (ISO) one-sided expandable shelters house AVIM Shop Set complexes and provide the capability of maritime shipboard movement through commercial ports and are compatible with military/commercial roll-on/roll-off ships and military/commercial ground transportation. Battle Damage Assessment Repair (BDAR) kits will provide an expeditious means for combat damage assessment (deferment or repairs) to allow a quick return of helicopters to combat usage. The Aircraft Cleaning and Deicing System (ACDS) will provide for dispensing of premixed cleaners, deicers and water through a nozzle and wand assembly at the temperature and pressure appropriate for the task. Aviation Ground Power Units (AGPU) will provide the capability to meet Army helicopter servicing requirements into the next decade. Helicopter 400 hertz/270 volt DC electrical servicing needs have been significantly increased by the introduction of the Apache Longbow/Comanche. An Aviation Vibration Analyzer (AVA) enhancement will increase capabilities and incorporate industry standard Personal Computer (PC) features that will enhance aviation safety, increase readiness, and reduce operational and maintenance (O&M) costs. The Digital Aircraft Weight Scales (DAWS), with roll-on, roll-off capability, will provide increased accuracy with digital read-out, thereby reducing operational and maintenance costs. This equipment supports Legacy and Legacy-to-Objective Systems which relate to the Transformation Campaign Plan.

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		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)								1440	120	12	1440	120	12
Program Management Support								190			224		
NET								20			50		
Fielding								10			20		
Subtotal								**1660**			**1734**		
Flexible Engine Diagnostic System (FEDS)													
CCAD Support					699			2100					
Program Management Support					130			378					
Software Upgrade								600					
Prototype Updates								300					
Fielding					14								
Subtotal					**843**			**3378**					
Shop Equipment Contact Maintenance (SECM)													
Light Weight Power System								485			1067		
Program Management Support					28			62			157		
Fielding					143			10			20		
Subtotal					**171**			**557**			**1244**		
Aircraft Vibration Analyzer (AVA) MOD													
Hardware (AVA MOD)								2580	129	20	3000	150	20
Program Management Support								335			445		
Fielding					100			50			50		
Subtotal					**100**			**2965**			**3495**		
Generic Aircraft Nitrogen Generator (GANG)													
Fielding					49			60					
Subtotal					**49**			**60**					
New Aviation Tool Set (NATS) Retrofit													
Retrofit					1301								

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Program Management Support					217								
Fielding								10					
Subtotal					**1518**			**10**					
Aviation Ground Power Unit (AGPU) MOD													
Hardware (AGPU MOD)								1000	13	77	1000	13	77
Program Management Support					28			130			157		
Fielding					180								
Subtotal					**208**			**1130**			**1157**		
AVIM Shop Sets													
Hardware (AVIM Shop Sets)					3567	4	892	3567	4	892			
Hardware (AVIM ISO Shelters)					2485	42	60	1620	27	60			
Program Management Support					1045			713					
Shelter Refurbishment					228			456					
Fielding					10			12			5		
Subtotal					**7335**			**6368**			**5**		
Containerization and Modernization Program (CAMP) Shop Sets													
Hardware (CAMP Shop Sets)											2370	3	790
Hardware (CAMP ISO Shelters)											1020	17	60
Program Management Support											560		
Shelter Refurbishment											456		
Subtotal											**4406**		
Unit Maintenance Aerial Recovery Kit (UMARK)													
Hardware w/crossbar (UMARK)								1980	44	45	2295	51	45
Hardware w/o crossbar (UMARK)								300	20	15	555	37	15
Program Management Support								291			405		
Fielding								16			11		
Subtotal								**2587**			**3266**		

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Battle Damage Assessment Repair Kit (BDAR)													
Hardware (BDAR Composite)											280	20	14
Hardware (BDAR Fiber Optic)											100	20	5
Hardware (BDAR Electrical)											100	20	5
Hardware (BDAR Fluid Line)											100	20	5
Program Management Support											90		
NET											30		
Fielding											25		
Subtotal											**725**		
Aircraft Cleaning and Deicing System (ACDS)													
Hardware (ACDS)											1300	26	50
Program Management Support											202		
Fielding											12		
Subtotal											**1514**		
Digital Aircraft Weight Scales (DAWS)													
Hardware (DAWS)								240	12	20	520	26	20
Fielding								20			25		
Subtotal								**260**			**545**		
AWCF Quarterly Adjustment (CCAD)					1593								
Subtotal					**1593**								
Total					**11817**			**18975**			**18091**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

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 2002	TBS	C/FP	AMCOM	MAY 02	MAY 03	120	12	YES		
FY 2003	TBS	C/FP-O	AMCOM	MAY 03	MAY 04	120	12	YES		
Aircraft Vibration Analyzer (AVA) MOD										
Hardware (AVA MOD)										
FY 2002	TBS	C/FP	AMCOM	MAY 02	MAY 03	129	20	YES		
FY 2003	TBS	C/FP-O	AMCOM	MAY 03	MAY 04	150	20	YES		
Hardware (AGPU MOD)										
FY 2002	OLR Savannah, GA	MIPR	AMCOM	MAR 02	MAY 02	13	77	YES		
FY 2003	OLR Savannah, GA	MIPR	AMCOM	MAR 03	MAY 03	13	77	YES		
AVIM Shop Sets										
Hardware (AVIM Shop Sets)										
FY 2001	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	DEC 00	MAY 01	4	892	YES		
FY 2002	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	JAN 02	MAY 02	4	892	YES		

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 4 / Support equipment and facilities		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
Hardware (AVIM ISO Shelters)										
FY 2001	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	DEC 00	MAY 01	42	60	YES		
FY 2002	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	JAN 02	MAY 02	27	60	YES		
Containerization and Modernization										
Program (CAMP) Shop Sets										
Hardware (CAMP Shop Sets)										
FY 2003	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	JUN 03	OCT 03	3	790	YES		
Hardware (CAMP ISO Shelters)										
FY 2003	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	JUN 03	OCT 03	17	60	YES		
Unit Maintenance Aerial Recovery Kit										
(UMARK)										
Hardware w/crossbar (UMARK)										
FY 2002	KAMAN Aerospace Corp Bloomfield, CT	SS/FP	AMCOM	MAR 02	DEC 02	44	45	YES		
FY 2003	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	MAR 03	DEC 03	51	45	YES		
Hardware w/o crossbar (UMARK)										

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

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	KAMAN Aerospace Corp Bloomfield, CT	SS/FP	AMCOM	MAR 02	DEC 02	20	15	YES		
FY 2003	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	MAR 03	DEC 03	37	15	YES		
Battle Damage Assessment Repair Kit (BDAR)										
Hardware (BDAR Composite)										
FY 2003	TBS	C/FP	AMCOM	JUN 03	DEC 03	20	14	YES		
Hardware (BDAR Fiber Optic)										
FY 2003	TBS	C/FP	AMCOM	JUN 03	DEC 03	20	5	YES		
Hardware (BDAR Electrical)										
FY 2003	TBS	C/FP	AMCOM	JUN 03	DEC 03	20	5	YES		
Hardware (BDAR Fluid Line)										
FY 2003	TBS	C/FP	AMCOM	JUN 03	DEC 03	20	5	YES		
Aircraft Cleaning and Deicing System (ACDS)										
Hardware (ACDS)										

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 4 / Support equipment and facilities		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 2003	TBS	C/FP	AMCOM	JUN 03	JUN 04	26	50	YES		
Digital Aircraft Weight Scales (DAWS)										
Hardware (DAWS)										
FY 2002	TBS	C/FP	AMCOM	APR 02	APR 03	12	20	YES		
FY 2003	TBS	C/FP	AMCOM	FEB 03	FEB 04	26	20	YES		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /4/Support equipment and facilities	AIRCREW INTEGRATED SYSTEMS (AZ3110)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		RDTE 643801 (DB45) and 654801 (DC45)

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	61.5	8.7	17.2	10.5	10.2	15.2	34.7	34.5	35.6	36.7		264.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	61.5	8.7	17.2	10.5	10.2	15.2	34.7	34.5	35.6	36.7		264.8
Initial Spares												
Total Proc Cost	61.5	8.7	17.2	10.5	10.2	15.2	34.7	34.5	35.6	36.7		264.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
The programs in Aircrew Integrated Systems (ACIS) 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. This Standard Study Number includes programs that improve the performance and safety of Army and Joint service aircrews and passengers 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. ACIS programs include the HGU-56/P Helmet, the Air Warrior system, Laser Eye Protective devices and the Cockpit Air Bag System (CABS). Specifically, the Air Warrior program is a vital soldier system, is linked to the Land Warrior program through the Soldier Systems Capstone Requirements Document and is one of the Army's 7 core programs for the objective force. 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, 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 exceed 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 ensemble production line. 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 Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:
FY03 procures the Air Warrior basic ensemble and aircraft platform integration and production. Aircraft Procurement, Army (APA) funding for all ACIS programs and projects is included in this budget line item.

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Hardware													
Cockpit Air Bag System (CABS) Production					1414	40	35.4						
Helmets - HGU-56/P: National Guard					4261	4133	1.0						
Laser Eye Protective Devices					2378	5236	0.5						
Air Warrior Basic Ensembles											4900	497	9.9
Subtotal Hardware Costs					**8053**						**4900**		
Air Warrior ECP								7154			7253		
Systems Integration Engineering					1441			1740			1740		
Project Management Admin					534			1185			1222		
Subtotal ECP, Sys Int, & Admin Costs					**1975**			**10079**			**10215**		
Support Costs													
Fielding					466			100			100		
Total					**10494**			**10179**			**15215**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 4 / Support equipment and facilities		AIRCREW INTEGRATED SYSTEMS (AZ3110)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Cockpit Air Bag System (CABS) Production										
FY 2001	Simula, Inc. Phoenix, AZ	SS/FP	AATD, Ft. Eustis, VA	Jun 01	Nov 01	40	35.4	Yes		
Helmets - HGU-56/P: National Guard										
FY 2001	DLA Ft Belvoir, VA	Reqn	DLA	Mar 01	Aug 01	4133	1.0	Yes		
Laser Eye Protective Devices										
FY 2001	Thales Denbighshire, U.K.	SS/FP	Brooks AFB, TX or RSA, AL	Apr 01	Oct 01	5236	0.5	Yes		
Air Warrior Basic Ensembles										
FY 2003	TBS	C/FP	TBS	May 03	Jan 04	497	9.9	No	Aug-02	

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

Appropriation/Budget Activity/Serial No:	P-1 Item Nomenclature
Aircraft Procurement, Army /4/Support equipment and facilities	AIR TRAFFIC CONTROL (AA0050)

Program Elements for Code B Items:	Code:	Other Related Program Elements:
		0604633A/586 Air Traffic Control

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	80.6	15.1	18.4	73.5	57.9	64.4	58.0	57.9	17.8	52.2		495.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	80.6	15.1	18.4	73.5	57.9	64.4	58.0	57.9	17.8	52.2		495.8
Initial Spares												
Total Proc Cost	80.6	15.1	18.4	73.5	57.9	64.4	58.0	57.9	17.8	52.2		495.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:
Fixed Base Air Traffic Control requirements will be met through a vast array of high technology solutions resulting in highly reliable and safe Air Traffic Control 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, communications switching system) and installing state of the art digital technology. These include the Voice Communication Switching System (VCSS), the DoD Advanced Automation System (DAAS), and the Digital Airport Surveillance Radar (DASR). The Fixed Base Precision Approach Radar (FBPAR) provides the Army's primary ground controlled precision approach capability to recover aircraft to fixed base facilities, ensuring safe landing in adverse weather conditions.
Tactical Air Traffic Control equipment includes Air Traffic Navigation Integration and Coordination System (ATNAVICS), the Tactical Airspace Integration System (TAIS), the Mobile Tower System (MOTS), and Cold Cathode Landing Lights as part of the Portable Airfield Lighting System (PALS). 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 to the First Digitized Division/Corps/Echelon Above Corps (EAC) and the ground maneuver commander on the future digitized battlefield. It will interface with the Army Battle Command System (ABCS) while providing ground commanders with automated A2C2 capability to support all Corp/Division/EAC digitization initiatives into the next century. The MOTS provides positive air traffic control and aircraft separation for both air and ground operations at all landing sites. Its capabilities include, weather information, secure and anti-jam communications across all required frequency bands and ranges, and precision location. The PALS, including Cold Cathode Lighting, provides positive visual cues for runway alignment and rate of descent, allows for lower descent altitudes during precision approaches, operates in the aided, un-aided, and Infared (IR) mode, and expedites Forward Area Rearming/Refueling Point (FARP) operations by providing positive directions to specified points. Both MOTS and PALS serve as effective risk management tools for aviation safety, especially during night and inclement weather operations.

Justification:
FY 03 funds for fixed base ATC systems will provide the Army a joint service capability to procure specific fixed base Air Traffic Control (ATC) systems required for the joint DoD Federal Aviation Administration (FAA) modernization and upgrade of the National Airspace System. These systems will save significant Operational and Support (O&S) costs through the replacement of old, obsolete, antiquated analog radars, switches, and automation systems with new, state of the art, highly reliable ATC systems in towers and approach control facilities.

Exhibit P-40C, Budget Item Justification Sheet		Date: February 2002
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

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. Funds for tactical ATC systems will provide for the production of the TAIS, ATNAVICS, and MOTS, and provide for the low rate production and initial testing of the PALS system utilizing Cold Cathode Lighting. This new family of tactical Air Traffic Control systems will replace previous generation equipment that is obsolete and not economically supportable.

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		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					3872	2	1936	11453	6	1909	11930	7	1705
Production Start Up Cost													
Interim Contractor Support (ICS)					124			325			497		
Engineer, Furnish & Install (EF&I)					2154			3591			4540		
Testing					314								
Fielding					413			150			255		
Data					103			135			200		
Subtotal Costs					**6980**			**15654**			**17422**		
Voice Communication Switching Syst(VCSS)													
Hardware (VCSS)					3729	13	287	1259	6	210	2102	7	301
Interim Contractor Support (FAA)					30			56			102		
Engineer, Furnish & Install (EF&I)					1084			848			1056		
Fielding					250			255			225		
Subtotal Cost					**5093**			**2418**			**3485**		
DoD Advanced Automation System (DAAS)													
Hardware (DAAS)					2800	1	2800	3519	2	1760	3773	2	1887
Hardware (DAAS) Remote Tower Only					2587	4	647	446	1	446	531	2	266
Engineering Support								150			250		
Engineer, Furnish & Install (EF&I)					922			1134			1134		
Operational Support Facility (OSF)								800			900		
Training								276			373		
Subtotal Costs					**6309**			**6325**			**6961**		
Digital Airport Surveliance Radar(DASR)													
Hardware (DASR)											3118	1	3118
Other Associated Hardware													
Engineer, Furnish, & Install (EF&I)					1368			273					
Subtotal Costs					**1368**			**273**			**3118**		
Tactical Airspace Integration Sys (TAIS)													
Hardware (TAIS)					15790	6	2632	8823	4	2206	8650	4	2163
Production Software Support					8812			4973			5910		
GFE					4981			3500			3540		

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 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Interim Contractor Support (ICS)								721			980		
Logistics					2355								
Provisioning Data					885								
Testing								200			150		
Fielding/NET					583			900			830		
Subtotal Costs					**33406**			**19117**			**20060**		
Air Traffic Navigation and Integration													
Hardware (ATNAVICS)					16595	7	2371	5799	2	2900	5799	2	2900
Production Start Up Costs					1458			3598					
GFE					1315			305			305		
Interim Contract Support (ICS)					125			310			256		
Testing					473								
Fielding					342			393			325		
P3I								2200			1503		
Subtotal Costs					**20308**			**12605**			**8188**		
Mobile Tower System (MOTS)													
Hardware (MOTS)											3800	4	950
GFE											904		
Fielding											176		
Training											171		
Initial Spares											125		
Subtotal Costs											**5176**		
Cold Cathode Portable Landing Lights													
Hardware (Cold Cathode Lighting)								850	2	425			
Test								650					
Subtotal Costs								**1500**					
Total					**73464**			**57892**			**64410**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

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 $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware-Precision Approach Radar										
FY 2001	Raytheon Cambridge, MA	C/FP-O	CECOM	Dec 00	Mar 02	2	1936	Yes		
FY 2002	Raytheon Cambridge, MA	C/FP-O	CECOM	Feb 02	May 03	6	1909	Yes		
FY 2003	Raytheon Cambridge, MA	C/FP-O	CECOM	Jan 03	Apr 04	7	1705	Yes		
Hardware (VCSS)										
FY 2001	Litton/Denro Gaithersburg MD	C/FP-O	FAA	Nov 00	May 01	13	287	Yes		
FY 2002	Litton/Denro Gaithersburg MD	C/FP-O	FAA	Jan 02	Jul 02	6	210	Yes		
FY 2003	Litton/Denro Gaithersburg MD	C/FP-O	FAA	Jan 03	Jul 03	7	301	Yes		
Hardware (DAAS)										
FY 2001	Raytheon Malborough MA	C/FP-O	FAA	Aug 01	Aug 02	1	2800	Yes		
FY 2002	Raytheon Malborough MA	C/FP-O	FAA	Apr 02	April 03	2	1760	Yes		
FY 2003	Raytheon Malborough MA	C/FP-O	FAA	Jan 03	Jan 04	2	1887	Yes		
Hardware (DAAS) Remote Tower Only										
FY 2001	Raytheon Cambridge, MA	C/FP-O	FAA	Aug 01	Aug 02	4	647	Yes		
FY 2002	Raytheon Cambridge, MA	C/FP-O	FAA	Apr 02	Apr 03	1	446	Yes		

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

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 $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2003	Raytheon Cambridge, MA	C/FP-O	FAA	Jan 03	Jan 04	2	266	Yes		
Hardware (DASR)										
FY 2003	Raytheon Cambridge, MA	C/FP-O	USAF	Jan 03	Jul 04	1	3118	Yes		
Hardware (TAIS)										
FY 2001	Motorola Huntsville, AL	C/FP-O	AMCOM	Dec 00	Mar 02	6	2632	Yes		
FY 2002	General Dynamics Falls Church Virginia	C/FP-O	AMCOM	Jan 02	Jan 03	4	2206	Yes		
FY 2003	General Dynamics Falls Church Virginia	C/FP-O	AMCOM	Jan 03	Jan 04	4	2163	Yes		
Hardware (ATNAVICS)										
FY 2001	Raytheon Cambridge, MA	C/FP-O	CECOM	Dec 00	Dec 01	7	2371	Yes		
FY 2002	Raytheon Cambridge, MA	C/FP-O	CECOM	May 02	Mar 03	2	2900	Yes		
FY 2003	Raytheon Cambridge, MA	C/FP-O	CECOM	Jan 03	Jan 04	2	2900	Yes		
Hardware (MOTS)										
FY 2003	TBD TBD	TBD	TBD	Feb 03	Feb 04	4	950	No	Mar 02	
Hardware (Cold Cathode Lighting)										
FY 2002	TBD TBD	TBD	TBD	May 02	May 03	2	425	No	Mar 02	

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	174.0	1.5	1.4	1.4	0.7	0.7	1.2	1.2	1.3	1.4		185.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	174.0	1.5	1.4	1.4	0.7	0.7	1.2	1.2	1.3	1.4		185.0
Initial Spares												
Total Proc Cost	174.0	1.5	1.4	1.4	0.7	0.7	1.2	1.2	1.3	1.4		185.0
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. This project supports all transition paths of the Army Transformation Campaign Plan (TCP).

Justification:
FY03 procures: a mobile telemetry data reception and processing system to monitor airworthiness flight testing profiles and maintain communication with the test aircraft; Personal Computer (PC) based workstations and tools for data analysis and processing by test engineers; signal conditioners, sensors and transducers for on-board collection of aircraft performance data by common instrumentation; and a PC based telemetry data acquisition system to provide data management, processing, display, archival, playback and analysis of multi-stream telemetry 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 2002

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 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	51.6				4.9	2.7	5.0	5.0	5.0	4.9		79.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	51.6				4.9	2.7	5.0	5.0	5.0	4.9		79.0
Initial Spares												
Total Proc Cost	51.6				4.9	2.7	5.0	5.0	5.0	4.9		79.0
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 aluminum launchers are inexpensive enough to be disposable yet durable enough to be reused after as many as 32 firings. The weight savings, as compared to previous launchers, allow the Army to add other features to the aircraft and rocket system for improved performance. The launcher permits fuze-timing selection from the cockpit and will launch rockets using either the MK 40 or the MK 66 motors. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:
FY 2003 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-5, Weapon ACFT Cost Analysis	Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities	P-1 Line Item Nomenclature: LAUNCHER, 2.75 ROCKET (A50100)	Weapon System Type:	Date: February 2002

ACFT Cost Elements	ID CD	FY 00			FY 01			FY 02			FY 03		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
M260 (7-Tube Lightweight Launcher (LWL))													
Hardware								4526	696	6.503	2460	371	6.631
Support Total								398			217		
Total M260								**4924**			**2677**		
Total								**4924**		**7.075**	**2677**		**7.216**

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 4 / Support equipment and facilities		LAUNCHER, 2.75 ROCKET (A50100)

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										
FY 2002	TBS	C/FFP	TACOM-RI	Jun-02	Jun-03	696	6.503	Y		Feb-02
FY 2003	TBS	C/FFP	TACOM-RI	Feb-03	Feb-04	371	6.631	Y		Feb-02

REMARKS: Planned award of long-term (three year) competitive firm fixed price requirements contract in June 2002.

FY 02 / 03 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: LAUNCHER, 2.75 ROCKET (A50100)

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03										LATER
										Calendar Year 02														Calendar Year 03									
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Hardware																														
	1	FY 02	A	696	0	696									A											87	87	87	87	348
	1	FY 03	A	371	0	371																	A							371
Total				1067		1067																				87	87	87	87	719

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	TBS	8.00	100.00	180.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	INITIAL	6	9	12	21	
	REORDER	6	5	12	17	

FY 04 / 05 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: LAUNCHER, 2.75 ROCKET (A50100)

Date: February 2002

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	
Hardware																													
	1	FY 02	A	696	348	348	87	87	87	87																			0
	1	FY 03	A	371	0	371					31	31	31	31	31	31	31	31	31	31	31	30									0
Total				1067	348	719	87	87	87	87	31	31	31	31	31	31	31	31	31	31	31	30									

MFR	NAME/LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D+
1	TBS	8.00	100.00	180.00	0

MFR Number		ADMINLEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	INITIAL	6	9	12	21
	REORDER	6	5	12	17
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2002

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

P-1 Item Nomenclature
AIRBORNE COMMUNICATIONS (AA0705)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Prog
Proc Qty												
Gross Cost	129.8	41.9	43.2	14.7	19.7	44.5	25.1	10.0				328.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	129.8	41.9	43.2	14.7	19.7	44.5	25.1	10.0				328.9
Initial Spares												
Total Proc Cost	129.8	41.9	43.2	14.7	19.7	44.5	25.1	10.0				328.9
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. AN/ARC-220/VRC-100 supports the Legacy-to-Objective transition path of the Transformation Campaign Plan.

Justification:
FY03 procures 199 AH-64A/D A-Kits and 63 Air Traffic Systems. 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 2002		
ACFT Cost Elements	ID CD	**FY 00**			**FY 01**			**FY 02**			**FY 03**		
		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					4343	185	24	5399	230	24	423	10	43
B. AN/VRC-100 Ground Radio													
C. A-Kits					1574	135	12	6694	165	41	33483	262	128
D. A-Kit Installation					6657	396	17	63	123	1	4504	258	18
SUBTOTAL					**12574**			**12156**			**38410**		
NON-RECURRING COSTS													
A. A-Kit Intergration								4356					
B. Other System Test													
SUBTOTAL								**4356**					
SUPPORT COST													
A. Fielding Support					1368			2162			3839		
B. Program Management					800			983			2224		
SUBTOTAL					**2168**			**3145**			**6063**		
Total					**14742**			**19657**			**44473**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2002

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Aircraft Procurement, Army / 4 / Support equipment and facilities		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 $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A. AN/ARC-220 NOE HF Airborne Radio										
FY 2001	Rockwell International Cedar Rapids, IA	FFP	CECOM	Mar 01	Mar 02	185	24	Yes		
FY 2002	Rockwell International Cedar Rapids, IA	FFP	CECOM	Jan 02	Jul 02	230	24	Yes		
FY 2003	Rockwell International Cedar Rapids, IA	FFP	CECOM	Jan 03	Jul 02	10	43	Yes		

REMARKS:

FY 02 / 03 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AIRBORNE COMMUNICATIONS (AA0705)

Date: February 2002

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03										LATER
							Calendar Year 02												Calendar Year 03										
							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 01	A	185	0	185						50	50	50	35															0
	1	FY 02	A	230	0	230				A						50	50	50	50	30										0
	1	FY 03	A	10	0	10																A					10			0
Total				425		425						50	50	50	35	50	50	50	50	30							10			

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

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	6	9
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS