

DEPARTMENT OF THE ARMY

Procurement Programs



Committee Staff Procurement Backup Book
FY 2004 / FY 2005 Budget Request

AIRCRAFT PROCUREMENT, ARMY

APPROPRIATION

February 2003

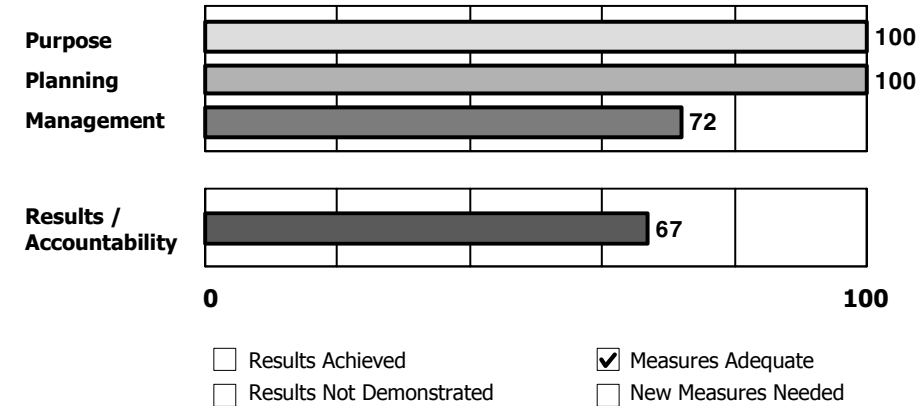
Air Combat

As part of a government-wide initiative to systematically assess Federal programs, the Department of Defense reviewed the performance of air combat investment programs of the Army, Navy and Air Force. For the Army, these include the Kiowa, Apache and Comanche programs. This review found that these programs were moderately effective and were delivering aircraft at targeted rates albeit with some cost increases. For more specific information, please see the attached exhibit.

Program: Air Combat Program

Agency: Department of Defense--Military

Bureau: Procurement



Key Performance Measures

	Year	Target	Actual
Long-term Measure: Number of performance objectives for individual weapons systems unmet	1999	0	0
	2000	0	0
	2002	0	0
	2003	0	
Annual Measure: Percent change in acquisition costs for individual aircraft programs from estimated cost of program. For example, actuals show deviation for the F/A-18E/F fighter program. Data from DoD's annual Selected Acquisition Reports. The Dec 2001 report represents a 2-year reporting period (1999-2001) due to the absence of a Dec 2000 report.	1999	<10%	4.7%
	2000	<10%	5.3%
	2002	<10%	4.1%
	2003	<10%	

Rating: Moderately Effective

Program Type: Capital Assets

Program Summary:

The air combat program consists of a number of individual aircraft and helicopter research, development and procurement programs that, taken together, comprise DoD's investment in air combat capabilities. Individual programs reviewed include fighter aircraft such as the Air Force F/A-22 fighter, the Navy F/A-18E/F attack fighter and the multiservice Joint Strike Fighter, as well as Army helicopters such as the Apache Longbow and Comanche. Findings reflect the performance of individual programs since DoD does not manage air combat as a single program.

Findings include:

1. The PART analysis showed that the program purpose is clear, owing to the unique military requirement of these systems.
2. The Air Combat program scored well in planning because of DoD's extensive planning, programming and budgeting system, which matches program plans with budgets and ensures that analyses of capabilities are done before individual programs begin.
3. DoD's management of the overall air combat program is currently based on the extensive system of regulations governing how individual acquisition programs are managed. Through these regulations DoD tracks the progress of individual programs and can hold managers accountable for their programs -- as has recently been shown by changes in management personnel in the F/A-22 program.
4. DoD's individual programs within the overall air combat program are delivering aircraft at targeted rates, but in several cases, such as the F/A-22, with cost increases.
5. DoD is moving towards a "capabilities based" assessment of its programs, rather than the traditional assessment of individual acquisition programs. Until the air combat program is managed as a single program (consisting of several systems) with clear long-term goals, it will be difficult to assess in this way. For example, DoD has not yet defined several annual goals or other performance measures for the air combat program as a whole.

In response to these findings, the Administration:

1. Proposes that DoD refine methods for assessing the efficiency and effectiveness (or otherwise) of the overall air combat program in light of the needs of the 2001 QDR defense strategy and the global war on terrorism.

Program Funding Level (in millions of dollars)

<u>2002 Actual</u>	<u>2003 Estimate</u>	<u>2004 Estimate</u>
11,454	15,573	16,360

Table of Contents - Aircraft Procurement, Army

BLIN	SSN	Nomenclature	Page
1	A11300	UTILITY F/W AIRCRAFT	1
2	AA0005	UH-60 BLACKHAWK (MYP)	3
3	AA0005	UH-60 BLACKHAWK (MYP) (Adv Proc)	10
4	A06500	HELICOPTER NEW TRAINING	15
5	AZ2000	GUARDRAIL MODS (TIARA)	19
6	AZ2050	ARL MODS (TIARA)	23
7	AA6605	AH-64 MODS	27
8	AA0252	CH-47 CARGO HELICOPTER MODS	35
9	AA0252	CH-47 CARGO HELICOPTER MODS (Adv Proc)	48
10	AA0270	UTILITY/CARGO AIRPLANE MODS	51
11	AA0400	OH-58 MODS	55
12	AA0560	AIRCRAFT LONG RANGE MODS	56
13	AA6670	LONGBOW	57
14	AA6670	LONGBOW (Adv Proc)	69
15	AA0480	UH-60 MODS	73
16	AZ2200	KIOWA WARRIOR	82
17	AA0700	AIRBORNE AVIONICS	86
18	AA0711	GATM Rollup	97
19	AA0702	AIRBORNE DIGITIZATION	107
20	AA0950	SPARE PARTS (AIR)	111
21	AZ3504	AIRCRAFT SURVIVABILITY EQUIPMENT	112

Table of Contents - Aircraft Procurement, Army

BLIN	SSN	Nomenclature	Page
22	AZ3507	ASE INFRARED CM	122
23	AA0710	AIRBORNE COMMAND & CONTROL	127
24	AZ3000	AVIONICS SUPPORT EQUIPMENT	132
25	AZ3100	COMMON GROUND EQUIPMENT	139
26	AZ3110	AIRCREW INTEGRATED SYSTEMS	148
27	AA0050	AIR TRAFFIC CONTROL	152
28	AZ3300	INDUSTRIAL FACILITIES	159
29	A50100	LAUNCHER, 2.75 ROCKET	160
30	AA0705	AIRBORNE COMMUNICATIONS	166

*** UNCLASSIFIED ***

DEPARTMENT OF THE ARMY
FY 2004 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2004/2005

EXHIBIT P-1
DATE: 23-Jan-2003 15:23

TABLE OF CONTENTS

	PAGE
SUMMARY BY APPROPRIATION	2
SUMMARY BY ACTIVITY:	
Aircraft Procurement, Army	3
ACTIVITY: 01 Aircraft	4
ACTIVITY: 02 Modification of aircraft	5
ACTIVITY: 03 Spares and repair parts	7
ACTIVITY: 04 Support equipment and facilities	8
NOMENCLATURE INDEX	9
SSN INDEX	10

*** UNCLASSIFIED ***

EXHIBIT P-1
Page 1 of 10

*** UNCLASSIFIED ***

DEPARTMENT OF THE ARMY
FY 2004 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2004/2005

EXHIBIT P-1
DATE: 23-Jan-2003 15:24

APPROPRIATION SUMMARY

APPROPRIATION

Aircraft Procurement, Army

TOTAL PROCUREMENT PROGRAM

DOLLARS IN THOUSANDS

<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
1,921,409	2,246,874	2,128,485	1,870,145
1,921,409	2,246,874	2,128,485	1,870,145

PAGE

3

*** UNCLASSIFIED ***

*** UNCLASSIFIED ***

DEPARTMENT OF THE ARMY
FY 2004 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2004/2005

EXHIBIT P-1
DATE: 23-Jan-2003 15:24

APPROPRIATION Aircraft Procurement, Army ACTIVITY		DOLLARS IN THOUSANDS				PAGE
		FY 2002	FY 2003	FY 2004	FY 2005	
01	Aircraft	276,278	309,493	167,000	124,878	4
02	Modification of aircraft	1,471,580	1,768,709	1,685,920	1,485,382	5
03	Spares and repair parts	5,632	7,566	11,299	11,177	7
04	Support equipment and facilities	167,919	161,106	264,266	248,708	8
APPROPRIATION TOTALS		1,921,409	2,246,874	2,128,485	1,870,145	

*** UNCLASSIFIED ***

*** UNCLASSIFIED ***

DEPARTMENT OF THE ARMY
 FY 2004 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
 President's Budget 2004/2005

EXHIBIT P-1
 DATE: 23-Jan-2003 15:24

APPROPRIATION Aircraft Procurement, Army

ACTIVITY 01 Aircraft

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
<i>FIXED WING</i>										
1	UTILITY F/W AIRCRAFT (A11300)		1	44,783		8,240				
	<i>SUB-ACTIVITY TOTAL</i>			<u>44,783</u>		<u>8,240</u>				
<i>ROTARY</i>										
2	UH-60 BLACKHAWK (MYP) (AA0005) Less: Advance Procurement (PY)		12	(211,712) (-31,872)	19	(287,781) (-22,917)	10	(161,943) (-23,084)	8	(115,625) (-19,928)
				<u>179,840</u>		<u>264,864</u>		<u>138,859</u>		<u>95,697</u>
3	UH-60 BLACKHAWK (MYP) (AA0005) Advance Procurement (CY)			26,776		26,859		28,141		29,181
4	HELICOPTER NEW TRAINING (A06500)		15	24,879	6	9,530				
	<i>SUB-ACTIVITY TOTAL</i>			<u>231,495</u>		<u>301,253</u>		<u>167,000</u>		<u>124,878</u>
	ACTIVITY TOTAL			<u>276,278</u>		<u>309,493</u>		<u>167,000</u>		<u>124,878</u>

*** UNCLASSIFIED ***

*** UNCLASSIFIED ***

DEPARTMENT OF THE ARMY
 FY 2004 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
 President's Budget 2004/2005

EXHIBIT P-1
 DATE: 23-Jan-2003 15:24

APPROPRIATION Aircraft Procurement, Army

ACTIVITY 02 Modification of aircraft

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
<i>MODIFICATIONS OF AIRCRAFT</i>										
5	GUARDRAIL MODS (TIARA) (AZ2000)			13,699		13,987		3,176		2,201
6	ARL MODS (TIARA) (AZ2050)	A		12,178		20,518		5,707		
7	AH-64 MODS (AA6605)	A		45,823		134,571		58,879		37,303
8	CH-47 CARGO HELICOPTER MODS (AA0252)			(253,931)		(435,364)		(516,710)		(537,583)
	Less: Advance Procurement (PY)					(-13,917)		(-21,185)		(-20,515)
				<u>253,931</u>		<u>421,447</u>		<u>495,525</u>		<u>517,068</u>
9	CH-47 CARGO HELICOPTER MODS (AA0252)									
	Advance Procurement (CY)			13,917		21,185		20,515		28,801
10	UTILITY/CARGO AIRPLANE MODS (AA0270)			15,667		16,666		10,448		10,380
11	OH-58 MODS (AA0400)			458		452		477		
12	AIRCRAFT LONG RANGE MODS (AA0560)			645		732		762		756
13	LONGBOW (AA6670)			(906,802)		(882,674)		(792,177)		(510,027)
	Less: Advance Procurement (PY)			(-43,176)		(-32,138)		(-29,713)		(-14,204)
				<u>863,626</u>		<u>850,536</u>		<u>762,464</u>		<u>495,823</u>
14	LONGBOW (AA6670)									
	Advance Procurement (CY)			32,138		29,713		14,204		
15	UH-60 MODS (AA0480)			59,945		51,570		136,496		230,756
16	KIOWA WARRIOR (AZ2200)			42,103		41,684		45,051		33,868
17	AIRBORNE AVIONICS (AA0700)			79,120		95,352		71,206		49,326
18	GATM Rollup (AA0711)	A		38,330		70,296		59,104		56,426
19	AIRBORNE DIGITIZATION (AA0702)							1,906		22,674
	<i>SUB-ACTIVITY TOTAL</i>			<u>1,471,580</u>		<u>1,768,709</u>		<u>1,685,920</u>		<u>1,485,382</u>

*** UNCLASSIFIED ***

*** UNCLASSIFIED ***

DEPARTMENT OF THE ARMY
FY 2004 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2004/2005

EXHIBIT P-1
DATE: 23-Jan-2003 15:24

APPROPRIATION Aircraft Procurement, Army

ACTIVITY 02 Modification of aircraft

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
	ACTIVITY TOTAL			1,471,580		1,768,709		1,685,920		1,485,382

*** UNCLASSIFIED ***

*** UNCLASSIFIED ***

DEPARTMENT OF THE ARMY
FY 2004 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2004/2005

EXHIBIT P-1
DATE: 23-Jan-2003 15:24

APPROPRIATION Aircraft Procurement, Army

ACTIVITY 03 Spares and repair parts

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005		
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	
	<i>SPARES AND REPAIR PARTS</i>										
20	SPARE PARTS (AIR) (AA0950)			5,632		7,566		11,299		11,177	
	<i>SUB-ACTIVITY TOTAL</i>			<u>5,632</u>		<u>7,566</u>		<u>11,299</u>		<u>11,177</u>	
	ACTIVITY TOTAL			5,632		7,566		11,299		11,177	

*** UNCLASSIFIED ***

*** UNCLASSIFIED ***

DEPARTMENT OF THE ARMY
FY 2004 PROCUREMENT PROGRAM (WORKSETS INCLUDED)
President's Budget 2004/2005

EXHIBIT P-1
DATE: 23-Jan-2003 15:24

APPROPRIATION Aircraft Procurement, Army

ACTIVITY 04 Support equipment and facilities

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005		
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	
	<i>GROUND SUPPORT AVIONICS</i>										
21	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)			37,363		3,078		14,879		7,339	
22	ASE INFRARED CM (AZ3507)			3,565				75,713		86,691	
	<i>SUB-ACTIVITY TOTAL</i>			<u>40,928</u>		<u>3,078</u>		<u>90,592</u>		<u>94,030</u>	
	<i>OTHER SUPPORT</i>										
23	AIRBORNE COMMAND & CONTROL (AA0710)					2,184		26,594		30,676	
24	AVIONICS SUPPORT EQUIPMENT (AZ3000)			9,245		11,300		13,295		5,154	
25	COMMON GROUND EQUIPMENT (AZ3100)			18,882		19,257		16,597		16,993	
26	AIRCREW INTEGRATED SYSTEMS (AZ3110)			15,092		14,956		28,894		28,719	
27	AIR TRAFFIC CONTROL (AA0050)			58,611		63,292		59,963		59,614	
28	INDUSTRIAL FACILITIES (AZ3300)			699		692		1,203		1,219	
29	LAUNCHER, 2.75 ROCKET (A50100)			4,900		2,632		2,512		2,507	
30	AIRBORNE COMMUNICATIONS (AA0705)			19,562		43,715		24,616		9,796	
	<i>SUB-ACTIVITY TOTAL</i>			<u>126,991</u>		<u>158,028</u>		<u>173,674</u>		<u>154,678</u>	
	ACTIVITY TOTAL			<u>167,919</u>		<u>161,106</u>		<u>264,266</u>		<u>248,708</u>	
	APPROPRIATION TOTAL			<u>1,921,409</u>		<u>2,246,874</u>		<u>2,128,485</u>		<u>1,870,145</u>	

*** UNCLASSIFIED ***

EXHIBIT P-1
Page 8 of 10

*** UNCLASSIFIED ***

NOMENCLATURE INDEX

SSN	LINE	PAGE	NOMENCLATURE
AA6605	7	5	AH-64 MODS (AA6605)
AA0050	27	8	AIR TRAFFIC CONTROL (AA0050)
AA0700	17	5	AIRBORNE AVIONICS (AA0700)
AA0710	23	8	AIRBORNE COMMAND & CONTROL (AA0710)
AA0705	30	8	AIRBORNE COMMUNICATIONS (AA0705)
AA0702	19	5	AIRBORNE DIGITIZATION (AA0702)
AA0560	12	5	AIRCRAFT LONG RANGE MODS (AA0560)
AZ3504	21	8	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)
AZ3110	26	8	AIRCREW INTEGRATED SYSTEMS (AZ3110)
AZ2050	6	5	ARL MODS (TIARA) (AZ2050)
AZ3507	22	8	ASE INFRARED CM (AZ3507)
AZ3000	24	8	AVIONICS SUPPORT EQUIPMENT (AZ3000)
AA0252	8	5	CH-47 CARGO HELICOPTER MODS (AA0252)
AA0252	9	5	CH-47 CARGO HELICOPTER MODS (AA0252)
AZ3100	25	8	COMMON GROUND EQUIPMENT (AZ3100)
AA0711	18	5	GATM Rollup (AA0711)
AZ2000	5	5	GUARDRAIL MODS (TIARA) (AZ2000)
A06500	4	4	HELICOPTER NEW TRAINING (A06500)
AZ3300	28	8	INDUSTRIAL FACILITIES (AZ3300)
AZ2200	16	5	KIOWA WARRIOR (AZ2200)
A50100	29	8	LAUNCHER, 2.75 ROCKET (A50100)
AA0005	2	4	Less: Advance Procurement (PY)
AA0252	8	5	Less: Advance Procurement (PY)
AA6670	13	5	Less: Advance Procurement (PY)
AA6670	13	5	Longbow (AA6670)
AA6670	14	5	Longbow (AA6670)
AA0400	11	5	OH-58 MODS (AA0400)
AA0950	20	7	SPARE PARTS (AIR) (AA0950)
AA0005	2	4	UH-60 BLACKHAWK (MYP) (AA0005)
AA0005	3	4	UH-60 BLACKHAWK (MYP) (AA0005)
AA0480	15	5	UH-60 MODS (AA0480)
A11300	1	4	UTILITY F/W AIRCRAFT (A11300)
AA0270	10	5	UTILITY/CARGO AIRPLANE MODS (AA0270)

*** UNCLASSIFIED ***

*** UNCLASSIFIED ***

SSN INDEX

SSN	LINE	PAGE	NOMENCLATURE
A06500	4	4	HELICOPTER NEW TRAINING (A06500)
A11300	1	4	UTILITY F/W AIRCRAFT (A11300)
A50100	29	8	LAUNCHER, 2.75 ROCKET (A50100)
AA0005	2	4	UH-60 BLACKHAWK (MYP) (AA0005)
AA0005	2	4	Less: Advance Procurement (PY)
AA0005	3	4	UH-60 BLACKHAWK (MYP) (AA0005)
AA0050	27	8	AIR TRAFFIC CONTROL (AA0050)
AA0252	8	5	CH-47 CARGO HELICOPTER MODS (AA0252)
AA0252	8	5	Less: Advance Procurement (PY)
AA0252	9	5	CH-47 CARGO HELICOPTER MODS (AA0252)
AA0270	10	5	UTILITY/CARGO AIRPLANE MODS (AA0270)
AA0400	11	5	OH-58 MODS (AA0400)
AA0480	15	5	UH-60 MODS (AA0480)
AA0560	12	5	AIRCRAFT LONG RANGE MODS (AA0560)
AA0700	17	5	AIRBORNE AVIONICS (AA0700)
AA0702	19	5	AIRBORNE DIGITIZATION (AA0702)
AA0705	30	8	AIRBORNE COMMUNICATIONS (AA0705)
AA0710	23	8	AIRBORNE COMMAND & CONTROL (AA0710)
AA0711	18	5	GATM Rollup (AA0711)
AA0950	20	7	SPARE PARTS (AIR) (AA0950)
AA6605	7	5	AH-64 MODS (AA6605)
AA6670	13	5	LONGBOW (AA6670)
AA6670	13	5	Less: Advance Procurement (PY)
AA6670	14	5	LONGBOW (AA6670)
AZ2000	5	5	GUARDRAIL MODS (TIARA) (AZ2000)
AZ2050	6	5	ARL MODS (TIARA) (AZ2050)
AZ2200	16	5	KIOWA WARRIOR (AZ2200)
AZ3000	24	8	AVIONICS SUPPORT EQUIPMENT (AZ3000)
AZ3100	25	8	COMMON GROUND EQUIPMENT (AZ3100)
AZ3110	26	8	AIRCREW INTEGRATED SYSTEMS (AZ3110)
AZ3300	28	8	INDUSTRIAL FACILITIES (AZ3300)
AZ3504	21	8	AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)
AZ3507	22	8	ASE INFRARED CM (AZ3507)

*** UNCLASSIFIED ***

Exhibit P-1M, Procurement Programs - Modification Summary

<u>System/Modification</u>	<u>2002 & Prior</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>To Complete</u>	<u>Total Program</u>
GUARDRAIL MODS (TIARA) (AZ2000)										
SIGINT Transition Program (STP)	5.1	1.4								6.4
Interference Cancellation Sys/Radio Relay Sys	3.7	0.3								4.0
JTT Upgrades		4.2								4.2
Airborne Tactical Common Data Link		3.2	3.2	2.2						8.7
Guardian Eagle System 4 Upgrades		4.9								4.9
Total	8.8	14.0	3.2	2.2						28.2
ARL MODS (TIARA) (AZ2050)										
Aircraft Survivability Equipment (ASE)		5.7	5.7							11.4
Upgrade to DAMA Compliant Radio	5.9	1.8								7.7
Comint Upgrades	2.3	8.0								10.3
Aircraft Standardization		1.1								1.1
IMINT Digital Framing		3.2								3.2
Joint Tactical Terminal (JTT) Integration		0.7								0.7
Total	8.2	20.5	5.7							34.5
AH-64 MODS (AA6605)										
TADS/PNVs Upgrades	65.9	13.9	15.0	13.6	9.9					118.3
MISC Mods and R&S Mods \$5M or less (no P3a set)	589.8	42.3	12.3	8.9	109.9	24.5	7.5	8.4		
National Guard Fielding/Transformation	4.1	5.8	9.1							19.0
Modernized TADS/PNVs (M-TADS)	9.0	31.9	21.4	14.2	29.7	101.4				266.1
Airframe Modifications (no P3a set)	69.6	1.4	1.1	0.6						35.5
TADS/PNVs Block Modifications (no P3a set)					3.5	7.9	9.6	11.0		
Combat Mission Simulator (CMS) (no P3a set)	20.0	30.0								40.0
701C Engines (no P3a set)		40.0								
Total	758.4	165.3	58.9	37.3	153.0	133.8	75.7	19.4		478.9
CH-47 CARGO HELICOPTER MODS (AA0252)										
Total Ownership Cost Reduction	2.9	1.7								

Exhibit P-1M, Procurement Programs - Modification Summary

<u>System/Modification</u>	<u>2002 & Prior</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>To Complete</u>	<u>Total Program</u>
Improved Battery	2.8	0.4								
Engine Filtration System	4.4	8.0	7.6	6.5	6.8	1.3	0.2	0.2	1.6	36.6
Extended Range Fuel System	47.5	17.6	3.9							69.0
Engine Upgrade to T55-GA-714A Configuration	487.3	140.8	132.7	168.2	152.8	64.7				1152.2
APU Upgrade	10.5									
Installation of Modifications Kits Various	29.9	0.9	1.6							
CH-47D Flight Simulator Upgrade	5.4	5.0	10.2							20.6
CH-47F	148.5	239.3	327.2	326.1	393.4	395.1	474.0	505.3	3896.4	6705.4
Low Maintenance Rotor Hub		3.7	12.3	9.6	13.0	11.4	10.8	11.3		72.2
Engine Fire Extinguisher (Halon Replacement)				2.6	8.2	8.4	8.4	8.6	9.5	
Aviation Combined Arms Tactical Trainer (AVCATT)				8.0	9.0	6.0				11.5
Crashworthy Crew Chief Seat	2.0	4.0	0.1	0.1						6.2
Total	741.2	421.4	495.5	521.1	583.2	486.9	499.2	525.5	3907.5	8073.7
UTILITY/CARGO AIRPLANE MODS (AA0270)										
Avionics System Cockpit Upgrade	56.4	16.7	10.4	10.4	13.9	10.0	7.3	6.7		131.6
Total	56.4	16.7	10.4	10.4	13.9	10.0	7.3	6.7		131.6
CH-47 ICH (AA0254)										
Improved Cargo Helicopter	179.8	152.2	213.6	237.6	33.7				1541.2	527.6
Total	179.8	152.2	213.6	237.6	33.7				1541.2	527.6
LONGBOW APACHE MODS (AA6607)										
Longbow Apache Mods	3412.2	825.9	747.7	490.9	491.4	649.5	298.9	300.1	1185.2	8402.0
Total	3412.2	825.9	747.7	490.9	491.4	649.5	298.9	300.1	1185.2	8402.0
UH-60 BLACK HAWK MODS (AA0492)										
Crashworthy External Fuel System (CEFS)	25.0	12.8	12.0	14.2	19.7	18.9				102.6

Exhibit P-1M, Procurement Programs - Modification Summary

<u>System/Modification</u>	<u>2002 & Prior</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>To Complete</u>	<u>Total Program</u>
HH-60L Medical Equip Package (MEP)	22.4	28.5	5.4	56.9						113.2
Adv Hel Transmission Lubricant (AHTL)		3.0	1.6	2.4						3.5
De-Icing System Upgrade Program	1.3									
UH-60M RECAP/UPGRADE			113.6	158.5	372.7	372.2	585.2	588.9	9695.6	11886.7
Military District of Washington (MDW) MODs			4.8							4.8
HH-60M Medical Equip Package (MEP)					69.6	71.7	136.9	149.0	958.3	1700.3
Search and Rescue (SAR) MOD	69.6	4.6								34.8
DSC-HUMS		4.2								
Total	118.3	53.1	137.4	232.0	462.1	462.8	722.1	737.9	10653.9	13845.9
KIOWA WARRIOR (AZ2200)										
Safety Enhancement Program (SEP)	182.4	41.8	45.1	34.0	22.6	22.0	7.0	3.7	0.2	358.6
Safety Enhancement Program - Weight Reduction						20.1	13.6	11.5	24.7	41.3
Total	182.4	41.8	45.1	34.0	22.6	42.1	20.7	15.1	24.9	399.9
AIRBORNE AVIONICS (AA0700)										
Improved Data Modem (IDM)	157.1	58.4	31.6	23.3	20.1	36.8	57.3	32.4	869.1	1286.2
Aviation Mission Planning System (AMPS)	74.7	22.7	24.8	12.7	9.9	11.8	12.5	12.7	218.9	400.7
Embedded GPS Inertial Navigation System (EGI) P3I	22.5	11.4	7.3	7.5	6.4	9.7	12.8	15.2	146.5	239.4
DGNS (AN/ASN-128B) P3I	12.0	2.9	7.4	5.6	3.9	4.9	7.6	9.5	11.0	64.6
Total	266.3	95.4	71.2	49.1	40.4	63.1	90.2	69.8	1245.5	1991.0
GATM - Fixed Wing Aircraft (AA0703)										
Global Air Traffic Management - FW	19.4	38.9	32.7	41.8	8.8	7.8	9.2	8.3		166.9
Blue Force Tracking		4.1								
Total	19.4	43.0	32.7	41.8	8.8	7.8	9.2	8.3		166.9
AIRBORNE DIGITIZATION (AA0702)										
Joint Tactical Radio Systems (JTRS)			1.9	22.5	46.5	62.0	60.5	65.9	700.0	959.4

Exhibit P-1M, Procurement Programs - Modification Summary

<u>System/Modification</u>	<u>2002 & Prior</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>To Complete</u>	<u>Total Program</u>
Total			1.9	22.5	46.5	62.0	60.5	65.9	700.0	959.4
ASE MODS (SIRFC) (AA0720)										
AN/ALQ-211 Suite of Integrated Radio Frequency CMS	146.0									146.0
Laser Detecting Set AN/AVR-2A(V)	30.6									25.3
Advanced Threat Infrared Countermeasures (ATIRCM)	20.2									20.2
Total	196.9									191.6
GATM (AA0701)										
Global Air Traffic Management - RW	6.0									6.0
Global Air Traffic Management - FW	13.8									7.4
Total	19.9									13.4
ASE MODS (ATIRCM) (AA0722)										
Advanced Threat Infrared Countermeasures	4.9									4.9
Total	4.9									4.9
Grand Total	5973.0	1849.2	1823.2	1679.1	1855.5	1918.2	1783.7	1748.7	19258.2	35249.4

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	23		1						5	10	38	77
Gross Cost	117.4	7.5	44.8	8.2					46.8	93.6	259.0	577.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	117.4	7.5	44.8	8.2					46.8	93.6	259.0	577.3
Initial Spares												
Total Proc Cost	117.4	7.5	44.8	8.2					46.8	93.6	259.0	577.3
Flyaway U/C												
Wpn Sys Proc U/C			44.8						9.4	9.4	6.8	

Description:

The medium range utility 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 aircraft is being fielded using the concept of Life Cycle Contractor Support. The medium range utility aircraft is a Legacy-to-Objective platform in the Transformation Campaign Plan.

Justification:

The FY04 and FY05 budgets provide no funding for medium range aircraft procurement.

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 1 / Aircraft			P-1 Line Item Nomenclature: UTILITY F/W AIRCRAFT (A11300)			Weapon System Type:			Date: February 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Aircraft Flyaway Costs													
Airframes/CFE		43302	1	43302	7300	1	7300						
Avionics		1281			840								
Subtotal Flyaway Costs		44583			8140								
Total Flyaway		44583			8140								
Support Cost													
Peculiar Training Equipment													
Publications Tech/Data		200			100								
Other (specify) Net/ICS/Mfxsupt													
Subtotal Support Costs		200			100								
Gross P-1 End Cost													
Net P-1 Full Funding Cost													
Initial Spares													
Total		44783			8240								

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty		18	12	19	10	8	28	23	5	4	9	136
Gross Cost	8416.8	196.0	211.7	287.8	161.9	115.6	311.4	399.4	121.6	100.5	181.6	10504.3
Less PY Adv Proc	2371.6	16.6	31.9	22.9	23.1	19.9	45.0	36.3	14.7	12.6	23.0	2617.6
Plus CY Adv Proc	2388.1	31.9	26.8	26.9	28.1	29.2	36.3	14.7	12.6	23.0		2617.6
Net Proc (P-1)	8433.3	211.3	206.6	291.7	167.0	124.9	302.6	377.8	119.6	110.9	158.6	10504.3
Initial Spares	421.3											421.3
Total Proc Cost	8854.6	211.3	206.6	291.7	167.0	124.9	302.6	377.8	119.6	110.9	158.6	10925.6
Flyaway U/C		8.0	10.2	11.3	10.7	10.8	10.1	15.5	18.1	19.1		
Wpn Sys Proc U/C		10.9	17.6	15.1	16.2	14.5	11.1	17.4	24.3	12.1	21.5	

Description:

UH-60 BLACK HAWK and associated equipment.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	1528	18	12	19	10	8	28	23	5	4	9	1664
Gross Cost	8416.8	196.0	211.7	287.8	161.9	115.6	311.4	399.4	121.6	100.5	193.2	10515.9
Less PY Adv Proc	2371.6	16.6	31.9	22.9	23.1	19.9	45.0	36.3	14.7	12.6	23.0	2617.6
Plus CY Adv Proc	2388.1	31.9	26.8	26.9	28.1	29.2	36.3	14.7	12.6	23.0		2617.6
Net Proc (P-1)	8433.3	211.3	206.6	291.7	167.0	124.9	302.6	377.8	119.6	110.9	170.2	10515.9
Initial Spares	421.3											421.3
Total Proc Cost	8854.6	211.3	206.6	291.7	167.0	124.9	302.6	377.8	119.6	110.9	170.2	10937.2
Flyaway U/C		8.0	10.2	11.3	10.7	10.8	10.1	15.5	18.1	19.1		
Wpn Sys Proc U/C		10.9	17.6	15.1	16.2	14.5	11.1	17.4	24.3	12.1	21.5	

Description:

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

Justification:

FY 04/FY 05 funds are required for the procurement of aircraft, continuation of fielding, and to provide for Program Management Office operations. A new multiservice, multiyear contract began in FY 2002.

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

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

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 1 / Aircraft			P-1 Line Item Nomenclature: UH-60 BLACK HAWK (MYP) (A05002)			Weapon System Type:			Date: February 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Aircraft Flyaway Costs													
Airframes/CFE		89156	12	7430	165055	19	8687	84066	10	8407	67791	8	8474
Engines/Accessories		20913	32	654	25687	38	676	13870	20	694	11251	16	703
Avionics (GFE)		5943			9569			5127			4179		
Other GFE		1991			4799			2129			1910		
Armament													
ECO (All FLYAWAY Components)		4072			6602			2261			1581		
Other Costs (Mission Equipment)		759			2306								
Subtotal Recurring FLYAWAY Costs		122834			214018			107453			86712		
Non-Recurring Costs													
Tooling Equipment		4149											
Other Nonrecurring Cost		11208			3731								
Total FLYAWAY		138191			217749			107453			86712		
Support Cost													
Airframe PGSE													
Engine PGSE													
Peculiar Training Equipment		36690			36633			25000					
Publications/Tech Data		855			1367			1921			1962		
Engineering Change Orders													
PM Administration		28033			28526			24229			23385		
Fielding		7943			3506			3340			3566		
Subtotal Support Cost		73521			70032			54490			28913		
Gross P-1 End Item Cost		211712			287781			161943			115625		
Less: Prior Year Adv Proc		31872			22917			23084			19928		
Net P-1 Full Funding Cost		179840			264864			138859			95697		
Plus: P-1 CY Adv Proc		26776			26859			28141			29181		
Initial Spares													
Total		206616			291723			167000			124878		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 1 / Aircraft		Weapon System Type:			P-1 Line Item Nomenclature: UH-60 BLACK HAWK (MYP) (A05002)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Airframes/CFE										
FY 2002	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Sep 02	Sep 02	12	7430	Yes		Sep 00
FY 2003	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 02	Jan 04	12	7965	Yes		Sep 00
FY 2003	Sikorsky Aircraft Stratford CT	SSP/FP	AMCOM	Mar 03	May 04	7	9925	Yes		Sep 00
FY 2004	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 03	Jan 05	10	8407	Yes		Sep 00
FY 2005	Sikorsky Aircraft Stratford CT	SSM/FP	AMCOM	Dec 04	Nov 05	8	8474	Yes		Sep 00

REMARKS: Provision of termination liability funds in FY01 allowed contractor to initiate work early, and enabled delivery of aircraft in the same month as the award of the FY02-06 multiyear contract. March, 2003 award for seven aircraft is for the Congressional plus up of four UH-60Ls and three HH-60Ls.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	2388.1	31.9	26.8	26.9	28.1	29.2	36.3	14.7	12.6	23.0		2617.6
Net Proc (P-1)	2388.1	31.9	26.8	26.9	28.1	29.2	36.3	14.7	12.6	23.0		2617.6
Initial Spares												
Total Proc Cost	2388.1	31.9	26.8	26.9	28.1	29.2	36.3	14.7	12.6	23.0		2617.6
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 FY 04/FY 05 is for both Economic Order Quantity (EOQ) and long lead items on the proposed FY02-06 multiyear contract. Advance procurement is also required for the procurement of GFE items, including the T700-GE-700 engine, APU, Crew Seats, and HIRSS, since their leadtime exceeds the leadtime of the aircraft (with long lead funding).

Advance Procurement Requirements Analysis-Funding (P10A)	First System Award Date:	First System Completion Date:	Date: February 2003
---	--------------------------	-------------------------------	---------------------

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

(\$ in Millions)														
	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
End Item Quantity			1528	18	12	19	10	8	28	23	5	4	9	1664
CFE Airframe	18	6	1475.5	17.0	13.8	16.9	18.3	10.7	17.1	9.2	8.1	12.0		1598.6
Engines	14	3	652.1	12.9	10.5	8.1	8.2	12.5	14.1	4.3	3.7	9.0		735.3
Avionics		3	124.6											124.6
Auxiliary Power Unit	15	3	42.9	0.8	0.8	0.5	0.6	2.0	1.7	0.4	0.3	0.7		50.5
Armored Crew Seat	12	3	21.1	0.5	0.8	0.7	0.5	1.9	1.6	0.4	0.3	0.7		28.5
Hover Infrared Suppressor	14	3	28.9	0.7	0.9	0.7	0.6	2.1	1.8	0.4	0.3	0.7		37.1
Elastomeric Bearings	10	3	1.5											1.5
Miscellaneous		3	41.6		0.0									41.6
Total Advance Procurement			2388.1	31.9	26.8	26.9	28.1	29.2	36.3	14.7	12.6	23.0	0.0	2617.6

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 Economic Order Quantity (EOQ) items. Engines are fully funded. Due to low production rates, avionics items are now being requisitioned from stock. Avionics and miscellaneous items include numerous items with differing lead times.

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2003

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

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

(\$ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004			2005		
				Qty	Contract Forecast Date	Total Cost Request	Qty	Contract Forecast Date	Total Cost Request
CFE Airframe	18	1		8	Dec 03	18.293	28	Dec 04	10.691
Engines	14	2	0.680	12	Dec 03	8.158	18	Dec 04	12.467
Auxiliary Power Unit	15	1	0.069	8	Mar 04	0.554	28	Mar 05	1.975
Armored Crew Seat	12	2	0.033	16	Mar 04	0.541	56	Mar 05	1.928
Hover Infrared Suppressor	14	1	0.074	8	Mar 04	0.595	28	Mar 05	2.120
Total Advance Procurement						28.141			29.181

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 not included for airframe (price is on P5), since funding requested is for termination liability.

Advance Procurement Requirements Analysis-Funding (P10C)

Date: February 2003

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

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

(\$ in Millions)

	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
Proposal w/o AP												
Then Year Cost		8	66	173	230	177	195	190	88	24	19	1162
Constant Year Cost		8	66	171	223	168	182	174	79	22	16	1106
Present Value		8	63	160	207	154	165	156	70	19	14	1013
AP Proposal												
Then Year Cost		8	64	168	224	172	187	182	84	23	18	1123
Constant Year Cost		8	64	166	218	164	175	167	76	21	15	1069
Present Value		8	61	156	202	150	159	149	67	18	13	979
AP Savings (Difference)												
Then Year Cost			-2	-5	-6	-5	-8	-9	-5	-2	-1	-40
Constant Year Cost			-2	-5	-6	-5	-8	-8	-4	-1	-1	-38
Present Value			-2	-5	-6	-5	-7	-7	-4	-1	-1	-35

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

Advance Procurement Requirements Analysis-Execution (P10D)

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

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

(\$ in Millions)

	PTL (mos)	2002					2003					2004		2005	
		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	12	Jun 02		13.8	13.8	10	Dec 02	Dec 02	16.9	16.9	8	Dec 03	28	Dec 04
Engines	14	16	Dec 01	Dec 01	10.5	10.5	14	Dec 02	Dec 02	8.1	8.1	12	Dec 03	18	Dec 04
Avionics															
Auxiliary Power Unit	15	12	Mar 02	Jun 02	0.8	0.8	10	Mar 03	Dec 02	0.5	0.5	8	Mar 04	28	Mar 05
Armored Crew Seat	12	24	Mar 02	May 02	0.8	0.8	20	Mar 03		0.7		16	Mar 04	56	Mar 05
Hover Infrared Suppressor	14	12	Mar 02	May 02	0.9	0.9	10	Mar 03	Dec 02	0.7	0.7	8	Mar 04	28	Mar 05
Elastomeric Bearings	10														
Miscellaneous					0.0	0.0									
Total Advance Procurement					26.8	26.8				26.9	26.2				

FY03 buy for Armored Crew Seats currently projected for award in February, 2003. Forecast award dates for FY04 and beyond are the current PM estimate. No actual award data is yet available for FY 2003.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
HELICOPTER NEW TRAINING (A06500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	137	17	15	6								175
Gross Cost	118.2	23.8	24.9	9.5								176.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	118.2	23.8	24.9	9.5								176.4
Initial Spares												
Total Proc Cost	118.2	23.8	24.9	9.5								176.4
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. The latest production models include enhancements to permit training in combat 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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
AIRCRAFT		23914	15	1594	9530	6	1588						
SUPPORT COSTS		965											
Total		24879			9530								

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

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

Weapon System Type:

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

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
AIRCRAFT										
FY 2001	Bell Helicopter Ft. Worth, TX	ID/IQ	Redstone Arsenal, AL	Mar 01	Sep 01	17	1327	Yes		Oct 00
FY 2002	Bell Helicopter Ft. Worth, TX	ID/IQ	Redstone Arsenal, AL	May 02	Mar 03	15	1594	Yes		Oct 00
FY 2003	Bell Helicopter Ft. Worth, TX	ID/IQ	Redstone Arsenal, AL	Dec 02	Oct 03	6	1588	Yes		Oct 00

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

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	672.6	22.4	13.7	14.0	3.2	2.2						728.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	672.6	22.4	13.7	14.0	3.2	2.2						728.0
Initial Spares	17.1											17.1
Total Proc Cost	689.7	22.4	13.7	14.0	3.2	2.2						745.2
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 currently provides intelligence data via Commanders Tactical Terminal (CTT) to other INTEL users, such as Common Ground System (CGS) and All Source Analysis System (ASAS) via the Tactical Information Broadcast Service (TIBS) and Tactical Reconnaissance Intelligence Exchange System (TRIXS), etc networks. The Army's GUARDRAIL/Common Sensor (GRCS) System provides a highly flexible architecture to allow rapid deployment to support contingency operations.

The GRCS has integrated the Improved GUARDRAIL V capability for communications intelligence (COMINT), the Communications High Accuracy Airborne Location System (CHAALS/CHALS-X) for COMINT precision emitter locations, the Advanced QUICKLOOK (AQL) for electronics intelligence (ELINT) precision emitter location into a single signal intelligence (SIGINT) system. The airborne elements are integrated into the RC-12H/K/N/P/Q aircraft. Ground processing is conducted in the Integrated Processing Facility (IPF). Key performance requirements include a real-time COMINT and ELINT collection and high accuracy target location capability in communications and radar frequencies. The Interoperable Data Link (IDL)/Multi-Role Data Link (MRDL) connects the airborne elements and the ground processing element. A satellite remote relay provides rapid deployment capability.

The GUARDRAIL Information Node (GRIFN) is the GRCS downsized and deployable integrated processing facility (IPF), which is in compliance with OSD and a building block towards the Army Distributed Common Ground Station (DCGS-A). GRIFN will play a vital role in interim DCGS-A which is planned to be demonstrated at the 18th ABC in FY 03.

The Guardrail Common Sensor system supports the Legacy path of the Transformation Campaign Plan (TCP).

Justification:

The GUARDRAIL Mods upgrade program was designed to allow GRCS to support field commanders until Aerial Common Sensor (ACS) is fully fielded to the Objective Force in FY17. FY 04/05 funds provide for the replacement of the GRCS Systems 1 and 4 Interoperable Airborne Datalink with the Tactical Common Datalink. This is a Total Ownership Cost Reduction (TOCR) initiative which will significantly lower sustainment costs by fielding a more reliable and supportable commercial-based link.

Defense Emergency Response Fund (DERF): An additional \$5.0 million in DERF funds have been transferred to the FY 03 GRCS program for GRCS #4 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.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
SIGINT Transition Program (STP)											
1-02-111-1111		5.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4
Interference Cancellation Sys/Radio Relay Sys											
1-02-222-2222		3.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
JTT Upgrades											
1-03-111-1111		0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
Airborne Tactical Common Data Link											
1-03-222-2222		0.0	3.2	3.2	2.2	0.0	0.0	0.0	0.0	0.0	8.6
Guardian Eagle System 4 Upgrades											
1-03-333-3333		0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9
Totals		8.7	14.0	3.2	2.2	0.0	0.0	0.0	0.0	0.0	28.1

INDIVIDUAL MODIFICATION

Date: February 2003

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

MODELS OF SYSTEM AFFECTED: Guardrail System 1 & 4

DESCRIPTION/JUSTIFICATION:

This modification will replace the GRCS critically obsolete Interoperable Airborne Data Link (IADL) with the reliable, available and maintainable state-of-the-art Tactical Common Data Link (TCDL). This initiative will keep the Army platform interoperable with the Air Force and able to meet the power, space and weight capabilities of the RC-12. Hardware and Software is being developed under the Aerial Common Sensor (ACS) RDT&E,A PE/Project 273744/D028. A portion of the upgrade funding was provided under OSD Total Ownership Cost Reduction (TOCR) initiative. Funding in FY03 purchases TC DLs for System 1. FY04 procures Airborne TC DLs for System 4, and FY05 funds the installation into both systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

- Award Contract System 1 2QFY03
- Award Contract System 4 1QFY04
- Install TC DLs System 1 1QFY05
- Install TC DLs System 4 4QFY05

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:	Contractor	ADMINISTRATIVE LEADTIME:	5 Months	PRODUCTION LEADTIME:	18 Months
Contract Dates:	FY 2004		FY 2005		FY 2006
Delivery Date:	FY 2004		FY 2005		FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	0																			
Installation Kits	0		8	0.3	7	0.4													15	0.7
Installation Kits, Nonrecurring	0					0.0														
Equipment - TC DLs	0			2.5		2.1														4.6
Spares	0			0.2		0.3														0.5
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Gov't In-House/Program Mgt	0			0.2		0.4		0.2												0.8
Interim Contractor Support	0							0.5												0.5
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0						8	0.8											8	0.8
FY2004 Equip -- Kits	0						7	0.7											7	0.7
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0	15	1.5		0.0		0.0		0.0		0.0		0.0	15	1.5
Total Procurement Cost		0.0		3.2		3.2		2.2		0.0		0.0		0.0		0.0		0.0		8.6

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	5.8	6.5	12.2	20.5	5.7							50.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	5.8	6.5	12.2	20.5	5.7							50.7
Initial Spares												
Total Proc Cost	5.8	6.5	12.2	20.5	5.7							50.7
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 electro-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 Combat Commanders' 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:

FY04 procures upgrades to the Aircraft Survivability Equipment (ASE) suite in order to respond to modern threats and ensure platform and crew safety in SOUTHCOM and USFK areas of operation.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Aircraft Survivability Equipment (ASE)											
9-99-99-0000	Operational	0.0	5.7	5.7	0.0	0.0	0.0	0.0	0.0	0.0	11.4
Upgrade to DAMA Compliant Radio											
3-33-333-0000	Operational	5.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
Comint Upgrades											
6-66-66-0000	Operational	2.3	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3
Aircraft Standardization											
8-88-88-0000	Operational	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
IMINT Digital Framing											
0-10-00-0000	Operational	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Joint Tactical Terminal (JTT) Integration											
0-11-00-0000	Operational	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Totals		8.2	20.5	5.7	0.0	0.0	0.0	0.0	0.0	0.0	34.4

INDIVIDUAL MODIFICATION

Date: February 2003

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

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

DESCRIPTION/JUSTIFICATION:

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:	ADMINISTRATIVE LEADTIME:	1 Months	PRODUCTION LEADTIME:	12 Months
Contract Dates: FY 2004	FY 2005		FY 2006	
Delivery Date: FY 2004	FY 2005		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E	0																			
Procurement	0																				
Kit Quantity	0																				
Installation Kits	0		4	1.2	4	1.2													8	2.4	
Installation Kits, Nonrecurring	0			1.9																	1.9
Equipment	0			0.6		0.7															1.3
Equipment, Nonrecurring	0			0.8																	0.8
Engineering Change Orders/Data	0			0.3																	0.3
Software Modifications	0			0.2																	0.2
Training Equipment	0			0.2		0.2															0.4
Testing	0																				
Gov't In-House/Prog Mgt	0			0.2		0.3															0.5
Contractor Engineering	0			0.3		0.3															0.6
Installation of Hardware	0																				
FY2002 & Prior Equip -- Kits	0																				
FY2003 Equip -- Kits	0				4	1.5														4	1.5
FY2004 Equip -- Kits	0				4	1.5														4	1.5
FY2005 Equip -- Kits	0																				
FY2006 Equip -- Kits	0																				
FY2007 Equip -- Kits	0																				
FY2008 Equip -- Kits	0																				
FY2009 Equip -- Kits	0																				
TC Equip- Kits	0																				
Total Installment	0	0.0		0.0	8	3.0		0.0		0.0		0.0		0.0		0.0		0.0	8	3.0	
Total Procurement Cost		0.0		5.7		5.7		0.0		0.0		0.0		0.0		0.0		0.0			11.4

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	622.4	45.4	45.8	134.6	58.9	37.3	153.0	133.8	75.7	19.4		1326.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	622.4	45.4	45.8	134.6	58.9	37.3	153.0	133.8	75.7	19.4		1326.2
Initial Spares												
Total Proc Cost	622.4	45.4	45.8	134.6	58.9	37.3	153.0	133.8	75.7	19.4		1326.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The AH-64 is a single main rotor, twin engine, tandem seat attack helicopter armed with HELLFIRE antitank missiles, 2.75 inch rockets, and 30MM gun. The AH-64 is capable of defeating armor in day, night, and adverse weather. The Target Acquisition Designation Sight (TADS) is housed in a turret on the nose of the AH-64 and consists of a TV, Forward Looking Infrared (FLIR), Direct View Optics, Laser Designator/ Rangefinder and Spot Tracker. The Pilot Night Vision Sensor (PNVS) is a FLIR which allows Nap-of-Earth operations at night by the pilot independent of the co-pilot/gunner's FLIR.

This system supports the 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 in FY04/FY05 is for TADS/PNVS Upgrades, Modernized TADS/PNVS (M-TADS), Airframe Modifications, National Guard Fielding/Transformation, and miscellaneous mods \$5 million or less.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2003

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							

OSIP NO.	Classification	Fiscal Years									TC	Total
		2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009			
TADS/PNVs Upgrades												
1-94-01-2005		65.9	13.9	15.0	13.6	9.9	0.0	0.0	0.0	0.0	0.0	118.3
MISC Mods and R&S Mods \$5M or less (no P3a set)												
NA		589.8	42.3	12.3	8.9	109.9	24.5	7.5	8.4	0.0	0.0	803.6
National Guard Fielding/Transformation												
NA		4.1	5.8	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0
Modernized TADS/PNVs (M-TADS)												
1-01-01-0022		9.0	31.9	21.4	14.2	29.7	101.4	58.6	0.0	0.0	0.0	266.2
Airframe Modifications (no P3a set)												
1-95-01-2007		34.8	0.7	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	37.2
TADS/PNVs Block Modifications (no P3a set)												
0-00-00-0000		0.0	0.0	0.0	0.0	3.5	7.9	9.6	11.0	0.0	0.0	32.0
Combat Mission Simulator (CMS) (no P3a set)												
1-01-01-0021		10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
701C Engines (no P3a set)												
0-00-00-0000		0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0
Totals		713.6	134.6	58.9	37.3	153.0	133.8	75.7	19.4	0.0	0.0	1326.3

INDIVIDUAL MODIFICATION

Date: February 2003

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

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION/JUSTIFICATION:

Operational, and logistical improvement.

Provides for system upgrade through new/updated hardware integration into Lots III thru XII TADS/PNVS systems. This is a critical stage in the Longbow remanufacturing effort as it produces a single configuration TADS/PNVS to the AH-64D through the end of MY II (501 aircraft). This mod facilitates maintainers' access to TADS/PNVS systems thereby allowing for accelerated application of outstanding ECPs. Additionally, satisfies program growth and life extension requirements and provides for offsite contractor support for upgrade/integration of hardware in the TADS/PNVS.

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:	Contract	ADMINISTRATIVE LEADTIME:	2 Months	PRODUCTION LEADTIME:	1 Months
Contract Dates:	FY 2004 Dec 03	FY 2005 Dec 04		FY 2006 Dec 05	
Delivery Date:	FY 2004 Jan 04	FY 2005 Jan 05		FY 2006 Jan 06	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	274		60		68		64		35										501	
T/P FFP/T&M/CFE/O&A	0	43.0		11.4		11.6		10.7		7.0										83.7
Installation Kits, Nonrecurring	0																			
Equipment (GFE)	0	22.9		2.5		2.6		2.2		2.0										32.2
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
M-TADS/RECAP/HF/DSA	0																			
Support Equipment	0																			
Other	0				0.8		0.7		0.9											2.4
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip -- 274 Kits	274																			274
FY2003 Equip -- 60 Kits	0		52		8															60
FY2004 Equip -- 68 Kits	0				60		8													68
FY2005 Equip -- 64 Kits	0						56		8											64
FY2006 Equip -- 35 Kits	0								35											35
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	274	0.0	52	0.0	68	0.0	64	0.0	43	0.0		0.0		0.0		0.0		0.0	501	0.0
Total Procurement Cost		65.9		13.9		15.0		13.6		9.9		0.0		0.0		0.0		0.0		118.3

INDIVIDUAL MODIFICATION

Date: February 2003

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

MODELS OF SYSTEM AFFECTED: AH-64 Apache

DESCRIPTION/JUSTIFICATION:

FY 04 funding supports the Transformation driven fielding of the A Model Peculiar Ground Support Equipment (PGSE)-- sets, kits, tools, and outfits -- that the National Guard units need to operate and maintain the aircraft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:

Contract Dates: FY 2004

Delivery Date: FY 2004

ADMINISTRATIVE LEADTIME:

FY 2005

FY 2005

0 Months

PRODUCTION LEADTIME:

FY 2006

FY 2006

0 Months

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	0																			
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment, Nonrecurring		4.1		5.8		9.1														19.0
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		4.1		5.8		9.1		0.0		0.0		0.0		0.0		0.0		0.0		19.0

INDIVIDUAL MODIFICATION

Date: February 2003

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

MODELS OF SYSTEM AFFECTED: AH-64A Apache Helicopter

DESCRIPTION/JUSTIFICATION:

Funding will procure M-TADS/PNVs modifications for 203 AH-64A Apache helicopters thru FY 08. M-TADS/PNVs is a U.S. Army program to develop, test, integrate, and produce a Second Generation FLIR (SGF) for the Army's entire fleet of AH-64A and AH-64D aircraft. Modification includes M-TADS/PNVs LRU upgrades, TADS Electronic Display and Control (TEDAC) assemblies, and the Improved Helmet Display Sight System (IHDSS) assemblies. The FLIR system enables pilotage of the aircraft and the engagement of targets during night operations and adverse weather conditions. M-TADS/PNVs will leverage technology already invested in electronics, sensors and optics to provide the best sensor available at the lowest cost. Enhancements, over the present Apache FLIR, include increased range for detection, recognition and identification of targets; higher resolution and improved sensitivity for improved safety and pilotage performance, especially in adverse weather; increased capability to identify friend versus foe during hostilities; and increased reliability with a corresponding reduction in O&S costs. TEDAC and IHDSS improve displays in the cockpit to enable pilots to realize the benefits of the FLIR sensor upgrade. These enhancements will improve the overall warfighting capability of the Apache aircraft by: 1) significantly enhancing the pilot's visibility and safety while improving target designation and acquisition; 2) providing improved clarity and ability to fly and navigate using advanced FLIR imagery; 3) improving aircraft survivability with increased standoff ranges; and 4) reducing the risk of fratricide. Installation is included in the contract costs and are not separated out. System supports the 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 -- Limited User Test (LUT)
- Mar 03 -- EMD Contract completed
- Jul 03 -- MTADS/PNVs Production contract award (Non Recurring Engineering & Initial Materials)

Installation Schedule:

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

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs	21	21	20	20	20	20	20	20													203
Outputs	21	21	20	20	20	20	20	20													203

METHOD OF IMPLEMENTATION: Contract ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 21 Months
 Contract Dates: FY 2004 Dec 03 FY 2005 Dec 04 FY 2006 Dec 05
 Delivery Date: FY 2004 Jun 05 FY 2005 Jun 06 FY 2006 Jun 07

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	0																			
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0		19.5	9	21.4	10	14.2	22	29.7	82	101.4	80	58.6						203	244.8
Equipment, Nonrecurring	0	9.0	12.4																	21.4
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip -- 0 Kits	0																			
FY2003 Equip -- 0 Kits	0																			
FY2004 Equip -- 9 Kits	0					9														9
FY2005 Equip -- 10 Kits	0						10													10
FY2006 Equip -- 22 Kits	0									22										22
FY2007 Equip -- 82 Kits	0											82								82
FY2008 Equip -- 80 Kits	0													80						80
FY2009 Equip -- 0 Kits	0																			
TC Equip- 0 Kits	0																			
Total Installment	0	0.0		0.0		9	0.0	10	0.0	22	0.0	82	0.0	80	0.0		0.0		203	0.0
Total Procurement Cost		9.0		31.9		21.4	14.2		29.7		101.4		58.6		0.0		0.0			266.2

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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

Program Elements for Code B Items:	Code:	Other Related Program Elements: RDTE PE 0203744A
------------------------------------	-------	---

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	3952.7	123.0	253.9	435.4	516.7	537.6	607.5	511.6	530.5	558.1	4950.0	12976.9
Less PY Adv Proc	940.0	0.0	0.0	13.9	21.2	20.5	28.8	27.7	31.3	32.6	251.8	1367.8
Plus CY Adv Proc	940.0	0.0	13.9	21.2	20.5	28.8	27.7	31.3	32.6	32.0	219.8	1367.8
Net Proc (P-1)	3952.7	123.0	267.8	442.6	516.0	545.9	606.4	515.2	531.7	557.4	4918.0	12976.9
Initial Spares												
Total Proc Cost	3952.7	123.0	267.8	442.6	516.0	545.9	606.4	515.2	531.7	557.4	4918.0	12976.9
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 04/05 funding procures safety and operational modifications to the CH-47D fleet and trainers to maintain the latest configuration. Safety and operational modifications, to include component recapitalization, are planned for all fielded aircraft. These changes contribute to the effectiveness of heavy lift capability, maintainability, reliability, and aircraft/crew safety. The major modifications occurring during FY 02-09 are procurement of kits for Improved Battery, Conversion of the T55-L-712 to T55-GA-714A Engines, Auxiliary Power Unit Upgrade, Extended Range Fuel System, Engine Fire Extinguisher, Engine Filtration System, Low Maintenance Rotor Head, Aviation Combined Arms Tactical Trainer and conversion of 301 CH-47Ds to CH-47Fs and 36 Special Operations Aircraft.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:
RDTE PE 0203744A

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Total Ownership Cost Reduction											
0-00-00-0000	Operational	2.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
Improved Battery											
1-95-01-0822	Operational	2.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Engine Filtration System											
1-93-01-0807	Operational	4.3	8.0	7.6	6.7	6.9	1.4	0.2	0.2	1.6	36.9
Extended Range Fuel System											
1-97-01-822	Operational	47.5	17.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	69.0
Engine Upgrade to T55-GA-714A Configuration											
1-96-01-0828	Operational	487.4	140.9	132.7	168.3	152.8	64.7	5.6	0.0	0.0	1152.4
APU Upgrade											
	Safety	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5
Installation of Modifications Kits Various											
Various	Operational/Safety	29.9	0.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	32.4
CH-47D Flight Simulator Upgrade											
	Safety	5.4	5.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0	20.6
CH-47F											
0-00-00-0000	Operational	148.5	239.4	327.1	326.0	393.4	395.2	473.9	505.4	3896.4	6705.3
Low Maintenance Rotor Hub											
0-00-00-0000	Operational	0.0	3.7	12.4	9.7	13.1	11.4	10.8	11.4	0.0	72.5

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2003

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

Program Elements for Code B Items: Code: Other Related Program Elements: RDTE PE 0203744A

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Engine Fire Extinguisher (Halon Replacement)											
0-00-00-0000	Operational	0.0	0.0	0.0	2.6	8.2	8.4	8.4	8.6	9.5	45.7
Aviation Combined Arms Tactical Trainer (AVCATT)											
0-00-00-0000		0.0	0.0	0.0	4.0	4.5	3.0	0.0	0.0	0.0	11.5
Crashworthy Crew Chief Seat											
0-00-00-0000	Safety	2.0	4.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	6.2
Totals		741.2	421.6	495.6	517.4	578.9	484.1	498.9	525.6	3907.5	8170.8

INDIVIDUAL MODIFICATION

Date: February 2003

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

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

DESCRIPTION/JUSTIFICATION:

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:	Contract	ADMINISTRATIVE LEADTIME:	4 Months	PRODUCTION LEADTIME:	12 Months
Contract Dates:	FY 2004 Jan 04	FY 2005 Jan 05		FY 2006 Jan 06	
Delivery Date:	FY 2004 Jan 05	FY 2005 Jan 06		FY 2006 Jan 07	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

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

INDIVIDUAL MODIFICATION

Date: February 2003

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

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

DESCRIPTION/JUSTIFICATION:

Type of Improvement - Improved Operational Capability. This modification will upgrade the T55-L-712 engine to T55-GA-714A configuration increasing power to allow the aircraft to carry its primary payloads under high altitude/temperatures. The CH-47D as configured does not meet its existing 1975 Required Operational Capability (ROC), i.e. 15,000 lbs. payload for 30 Nautical Miles radius at 4,000 feet/95 degrees Fahrenheit. The addition of numerous engineering changes to provide safety, the latest in operational technology, and improved communications has increased the empty weight of the aircraft. Upgrade of the T55-L-712 engine to T55-GA-714A configuration will meet the required operational capability. The program consists of: New Engines - two per aircraft plus spares, Engine Fielding Kits - two per aircraft, Airframe Mod Kits - one per aircraft, the installation of the Airframe Kit and Converted Engines on the aircraft, and Logistic Support (training, fielding support).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:	Contract	ADMINISTRATIVE LEADTIME:	4 Months	PRODUCTION LEADTIME:	18 Months
Contract Dates:	FY 2004 Jan 04	FY 2005 Jan 05		FY 2006 Jan 06	
Delivery Date:	FY 2004 Jun 05	FY 2005 Jun 06		FY 2006 Jun 07	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E	0																			
Procurement	0																			
New Engines	482	361.9	141	108.6	126	100.1	164	132.7	152	125.1	69	57.9							1134	886.3
Engine Fielding Kits	434	52.2	108	11.9	121	13.3	142	15.8	79	9.1									884	102.3
Airframe Kits	275	24.9	48	5.5	48	5.6	48	5.7	23	2.8									442	44.5
PM Admin Support	0	17.3		5.9		5.5		5.5		5.6		3.9		1.7						45.4
Logistics	0	24.6		5.5		5.5		5.2		5.5		0.9		1.7						48.9
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	166	6.5	55	3.5	41	2.7	13	0.9											275	13.6
FY2003 Equip -- Kits	0						37	2.5	11	0.7									48	3.2
FY2004 Equip -- Kits	0								48	3.3									48	3.3
FY2005 Equip -- Kits	0								10	0.7	29	2.0	9	0.6					48	3.3
FY2006 Equip -- Kits	0												23	1.6					23	1.6
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	166	6.5	55	3.5	41	2.7	50	3.4	69	4.7	29	2.0	32	2.2		0.0		0.0	442	25.0
Total Procurement Cost		487.4		140.9		132.7		168.3		152.8		64.7		5.6		0.0		0.0		1152.4

INDIVIDUAL MODIFICATION

Date: February 2003

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

MODELS OF SYSTEM AFFECTED: CH-47D and Trainers

DESCRIPTION/JUSTIFICATION:

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:	Contract	ADMINISTRATIVE LEADTIME:	4 Months	PRODUCTION LEADTIME:	12 Months
Contract Dates:	FY 2004 Jan 04	FY 2005 Jan 05		FY 2006 Jan 06	
Delivery Date:	FY 2004 Dec 04	FY 2005 Dec 05		FY 2006 Dec 06	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

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

INDIVIDUAL MODIFICATION

Date: February 2003

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

MODELS OF SYSTEM AFFECTED: CH-47D/F

DESCRIPTION/JUSTIFICATION:

The CH-47F is a rebuild program with selected upgrades. This program extends airframe service life, introduces an open electronic architecture that is compatible with the Army XXI digitized battlefield, and reduces Operating and Support (O&S) cost. This heavy lift helicopter program will be based on a recapitalization approach with a common cockpit configuration. The airframe will be rebuilt, mission capability improved, and vibrations reduced through airframe stiffening to provide for long term O&S cost reductions. The CH-47F will sustain the aging CH-47D fleet and bridge the gap until the development of a follow-on aircraft. It will be fielded as a direct replacement for 301 of the 431 CH-47D fleet and 36 Special Operations Aircraft. Recap will replace the present concept of Inspect and Repair Only As Necessary to a systematic recapitalization of key components to a zero time, zero mile condition. Recapped components will include Power Train, Auxiliary systems, Electrical / Electronic, Hydraulic, Pneumatic, Structural, and Power plant systems. Aircraft in totality will be Recapped based on the functional analysis completed on all the discrete subsystems. The analysis will be used to insure that the components or structure replaced will enhance reliability, increase safety and/or reduce O&S costs.

The Army is working with the Special Operations Command (SOCOM) to resolve their requirements shortfall. Currently, all 16 aircraft funded in FY 04, and 12 of the aircraft funded in FY 05 have been designated for SOCOM.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:	contract	ADMINISTRATIVE LEADTIME:	6 Months	PRODUCTION LEADTIME:	18 Months
Contract Dates:	FY 2004 Dec 03	FY 2005 Dec 04		FY 2006 Dec 05	
Delivery Date:	FY 2004 Jun 04	FY 2005 Mar 05		FY 2006 Dec 05	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E	0																			
Procurement	0																			
--	0																			
Recurring Production	0		7	71.3	16	220.9	16	192.4	23	263.4	22	251.3	25	288.6	26	305.4	202	2399.6	337	3992.9
Other Flyaway	0	109.1		118.3		30.4		40.4		45.5		43.6		47.7		47.1		372.6		854.7
Training Devices	0	15.0		14.4		14.1		39.0		8.4		6.0		13.9		16.9		132.2		259.9
Other Support	0	24.4		9.8		12.4		17.0		11.3		42.6		51.4		53.1		405.8		627.8
-Recap Components	0			25.6		49.3		37.2		64.8		51.7		72.3		82.9		586.2		970.0
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		148.5		239.4		327.1		326.0		393.4		395.2		473.9		505.4		3896.4		6705.3

INDIVIDUAL MODIFICATION

Date: February 2003

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

MODELS OF SYSTEM AFFECTED: CH-47D&F

DESCRIPTION/JUSTIFICATION:

The Low Maintenance Rotor (LMR) hub will replace the current hubs that are the number two and number three Operation and Support cost drivers in the CH-47 fleet. Utilizing elastomeric and self-lubricating bearing design features, the LMR will eliminate an average of ten days of unscheduled maintenance per year/per aircraft. The new hub will have about 60 percent fewer parts and a projected 4500-hour life for all machined part components. All components will be field replaceable and will not require scheduled overhaul by Depot. The LMR will be inter-changeable with the existing hub and retain the same flight dynamics. The validated economic analysis has shown that fielding the LMR will save the Army approximately \$187.6M over twenty years.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:	Contract	ADMINISTRATIVE LEADTIME:	6 Months	PRODUCTION LEADTIME:	15 Months
Contract Dates:	FY 2004 Mar 04	FY 2005 Mar 05		FY 2006 Mar 06	
Delivery Date:	FY 2004 Jun 05	FY 2005 Jun 06		FY 2006 Jun 07	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

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

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	940.0		13.9	21.2	20.5	28.8	27.7	31.3	32.6	32.0	219.8	1367.8
Net Proc (P-1)	940.0		13.9	21.2	20.5	28.8	27.7	31.3	32.6	32.0	219.8	1367.8
Initial Spares												
Total Proc Cost	940.0		13.9	21.2	20.5	28.8	27.7	31.3	32.6	32.0	219.8	1367.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The CH-47F will be a modification to the current CH-47D helicopter to extend airframe service life, introduce an open electronic architecture that is compatible with the Army XXI digitized battlefield, and reduce Operating and Support (O&S) cost. This heavy lift helicopter program will be based on a remanufacture approach. The airframe will be rebuilt, mission capability improved, and vibrations reduced through airframe stiffening to provide for long term O&S cost reductions. Continued support, coverage, and sustainment of Maneuver, Fire Support, Air Defense, and Survivability mission areas will be provided by the CH-47F. Its mission is transportation of ground forces, class III/class V supplies, and battle critical cargo in support of all future contingencies.

A service life extension program, the CH-47F will sustain the aging CH-47D fleet and bridge the gap until the development of a follow-on aircraft. It will be fielded as a direct replacement for 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 04/05 funding procures Advanced Procurement to support deliveries of avionics and airframe components. Long Lead is required to provide funding for those parts, tooling, test equipment, and materials 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 2003				
Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army /2/Modification of aircraft				P-1 Line Item Nomenclature / Weapon System CH-47 CARGO HELICOPTER MODS										
(\$ in Millions)														
	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
Avionics	13	14		0.0	9.0	13.6	13.2	18.5	18.3	20.7	21.2	20.8	142.9	278.0
Airframe	15	16			4.9	7.6	7.4	10.3	9.4	10.7	11.4	11.2	76.9	149.8
Total Advance Procurement			0.0	0.0	13.9	21.2	20.5	28.8	27.7	31.3	32.6	32.0	219.8	427.8

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2003

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

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

(\$ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004			2005		
				Qty	Contract Forecast Date	Total Cost Request	Qty	Contract Forecast Date	Total Cost Request
End Item Quantity:									
Avionics	13	1	0.822	16	Mar 2004	13.157	16	Mar 2005	18.500
Airframe	15	1	0.459	16	Mar 2004	7.358	16	Mar 2005	10.301
Total Advance Procurement						20.515			28.801

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	29.8	11.0	15.7	16.7	10.4	10.4	13.9	10.0	7.3	6.7		131.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	29.8	11.0	15.7	16.7	10.4	10.4	13.9	10.0	7.3	6.7		131.7
Initial Spares												
Total Proc Cost	29.8	11.0	15.7	16.7	10.4	10.4	13.9	10.0	7.3	6.7		131.7
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 DoD mandated safety equipment to current and evolving international standards. Furthermore, any spares and test equipment necessary to support the modification will be procured. In addition, it provides for the procurement and installation of military unique equipment such as Joint Precision Aircraft Landing System (JPALS) and Joint Tactical Radio System (JTRS) components. These modifications ensure continued worldwide deployment capability, and safe operations into the 21st Century. These aircraft support Legacy and Legacy-to-Objective Systems which relate to the Transformation Campaign Plan.

Justification:

The FY 04/05 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.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2003

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

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

Description Fiscal Years

OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
----------	----------------	-----------	---------	---------	---------	---------	---------	---------	---------	----	-------

Avionics System Cockpit Upgrade											
1-96-01-0612	UNCLASSIFIED	56.4	16.7	10.4	10.4	13.9	10.0	7.3	6.7	0.0	131.8

Totals		56.4	16.7	10.4	10.4	13.9	10.0	7.3	6.7	0.0	131.8
--------	--	------	------	------	------	------	------	-----	-----	-----	-------

INDIVIDUAL MODIFICATION

Date: February 2003

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

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

DESCRIPTION/JUSTIFICATION:

This effort will modernize 5 types of Fixed Wing aircraft communications, navigation, surveillance, and safety equipment to current international requirements, enhance fleet standardization, allow worldwide deployments and continued safe operations into the 21st Century. As currently equipped, the aircraft will not be suitable for worldwide deployment nor capable of using modern navigation and air traffic control facilities. The following equipment is included in this upgrade: Flight Management System, Displays, Terrain Awareness Warning System, 8.33kHz radios, APX 100 Mode S upgrade, Satellite Communications (SATCOM), Traffic Alert Collision Avoidance System II, Flight Data Recorder, Cockpit Voice Recorder, High Frequency Radios, Weather Radars, Data Link Capability, and Communications Management Unit. The preceding components reflect critically needed items. However, Air Traffic Management and DOD Navigation Warfare requirements are evolving and will require additional systems in the near future. The kit quantities reflected on the next page represent a wide variety of avionics kits with different mixes each fiscal year. Additionally, kit configurations vary based on the aircraft that they will be installed on. Consequently, kit and installation unit cost will vary significantly from year to year.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Development is not required for Avionics System Cockpit Upgrade.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007									
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
Totals																										
Inputs	66			7	8				4	5				5	6				5	5				8	8	
Outputs	66				7	8				4	5				5	6				5	5					8

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
Inputs	5	5	5	5		5	5	8																	165
Outputs	8	5	5	5	5	5	5	5	5	3															165

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	Feb 04	ADMINISTRATIVE LEADTIME:	4 Months	PRODUCTION LEADTIME:	6 Months	
Delivery Date:	FY 2004	Jul 04		FY 2005	Feb 05	FY 2006	Feb 06
				FY 2005	July 05	FY 2006	July 06

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
Procurement																				
Kit Quantity																				
Installation Kits	66	41.2	15	11.4	9	6.8	11	7.0	10	9.3	16	6.6	20	4.9	18	4.4			165	91.6
Installation Kits, Nonrecurring Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data		0.2		0.1		0.1		0.1		0.1		0.1		0.1		0.1				0.9
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	66	15.0																	66	15.0
FY2003 Equip -- Kits			15	5.2															15	5.2
FY2004 Equip -- Kits					9	3.5													9	3.5
FY2005 Equip -- Kits							11	3.3											11	3.3
FY2006 Equip -- Kits									10	4.5									10	4.5
FY2007 Equip -- Kits											16	3.3							16	3.3
FY2008 Equip -- Kits													20	2.3					20	2.3
FY2009 Equip -- Kits															18	2.2			18	2.2
TC Equip- Kits																				
Total Installment	66	15.0	15	5.2	9	3.5	11	3.3	10	4.5	16	3.3	20	2.3	18	2.2		0.0	165	39.3
Total Procurement Cost		56.4		16.7		10.4		10.4		13.9		10.0		7.3		6.7		0.0		131.8

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	323.8	0.9	0.5	0.5	0.5							326.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	323.8	0.9	0.5	0.5	0.5							326.1
Initial Spares	1.2											1.2
Total Proc Cost	325.0	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. This aircraft serves as the bridge for aviator training and pilot proficiency until modernized aircraft are fielded. The program provides for integration of the Single Channel Ground & Airborne Radio System (SINCGARS)-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:

FY 04 programmed funds are for safety enhancements and/or operational improvements required to meet mission requirements until phase out. Funding will prevent the degradation of the aircraft and mission package, safety, readiness and combat support capability.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	11.5	0.9	0.6	0.7	0.8	0.8	0.8	0.8	0.6	0.6		18.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	11.5	0.9	0.6	0.7	0.8	0.8	0.8	0.8	0.6	0.6		18.0
Initial Spares												
Total Proc Cost	11.5	0.9	0.6	0.7	0.8	0.8	0.8	0.8	0.6	0.6		18.0
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. The C-20 is a legacy system and the C-37 is a Legacy-to- Objective aircraft in the Transformation Campaign Plan.

Justification:

FY 04/05 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.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	2791.0	749.6	906.8	882.7	792.2	510.0	496.3	654.4	302.8	300.1	1185.2	9571.1
Less PY Adv Proc	243.9	37.5	43.2	32.1	29.7	14.2						400.7
Plus CY Adv Proc	281.4	43.2	32.1	29.7	14.2							400.7
Net Proc (P-1)	2828.6	755.2	895.8	880.2	776.7	495.8	496.3	654.4	302.8	300.1	1185.2	9571.1
Initial Spares	39.2	3.0	1.4	3.7	6.5	7.4	20.5	19.8	2.2		2.8	106.6
Total Proc Cost	2867.8	758.3	897.1	883.9	783.2	503.2	516.8	674.2	305.0	300.1	1188.0	9677.7
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) on 501 Longbow aircraft. Also includes funding, starting in FY06, for Longbow Block III Improvements. This system supports the Objective transition path of the Transformation Campaign Plan (TCP). 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.

Justification:

FY 04/05 funds procures 64/19 aircraft, including associated support equipment, tooling, government furnished equipment (GFE), training devices, reman/retrofit of reliability/safety fixes, focused component recap on Longbow aircraft, M-TADS/PNVS (including TADS Electronic Display and Control (TEDAC) assemblies, and Improved Helmet Display Sight System (IHDSS)). Funds continued FCR production integration, fielding sustainment, obsolescence resolution, and Radio Frequency Interferometer (RFI) User Data Module (UDM) Programming capability cooperative development agreement with UK.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	232	52	60	74	64	19						501
Gross Cost	2229.1	621.2	787.8	858.0	777.4	505.1	491.4	649.5	298.9	300.1	1942.1	9460.8
Less PY Adv Proc	164.9	26.5	34.6	32.1	29.7	14.2						302.0
Plus CY Adv Proc	191.3	34.6	32.1	29.7	14.2							302.0
Net Proc (P-1)	2255.6	629.3	785.4	855.6	761.9	490.9	491.4	649.5	298.9	300.1	1942.1	9460.8
Initial Spares	39.2	3.0	1.4	3.7	6.5	7.4	20.5	19.8	2.2		2.8	106.6
Total Proc Cost	2294.8	632.3	786.8	859.3	768.5	498.3	512.0	669.3	301.2	300.1	1944.9	9567.4
Flyaway U/C												
Wpn Sys Proc U/C		12.1	13.1	11.6	11.9	25.8						

Description:

DESCRIPTION:

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

Justification:

FY 04/05 procures 64/19 aircraft, including associated support equipment, tooling, government furnished equipment (GFE), training devices, reman/retrofit reliability and safety fixes, focused component recap on Longbow aircraft, M-TADS/PNVS (including TADS Electronic Display and Control (TEDAC) assemblies, and Improved Helmet Display Sight System (IHDSS)). 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.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2003

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	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Longbow Apache Mods											
NA	NA	3412.2	825.8	747.7	491.0	491.5	649.5	298.9	300.1	1185.2	8401.9
Totals		3412.2	825.8	747.7	491.0	491.5	649.5	298.9	300.1	1185.2	8401.9

INDIVIDUAL MODIFICATION

Date: February 2003

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 capability. Provides funding for Modernized Target Acquisition Designation System(M-TADS/PNVS) on 501 aircraft starting in FY03. Procures reman/retrofit reliability and safety fixes, and focused component recap on Longbow aircraft. Procures 23 Longbow Crew Trainers (LCTs), one Longbow Collective Training System (LCTS), maintenance trainers, and Tactical Engagement Simulation System (TESS). Also provides funding for Longbow Block III Improvements starting in FY06.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone 1B (DAB) Jul 89, MYII Contract Award 29 Sep 00
 Milestone II (DAB) Dec 90, Funding Action Lot VII 31 Dec 01
 Milestone III(DAB) Oct 95 Last Production Delivery Jul 06
 MY Lot 1 contract award Aug 96,
 First Production Delivery Mar 97,
 First Unit Equipped Jul 98
 IOC Accomplished Nov 98.

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 15 Months
 Contract Dates: FY 2004 Dec 03 FY 2005 Dec 04 FY 2006
 Delivery Date: FY 2004 Mar 05 FY 2005 Apr 06 FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	344		74		64		19												501	
Recurring	0	2018.2		461.2		397.3		146.5												3023.2
Other Flyaway	0	681.4		213.7		145.1		83.3		121.2		77.7		39.8		40.9		41.7		1444.8
Training Devices	0	420.2		102.5		84.9		64.5		44.2										716.3
Other Support	0	292.4		28.8		55.4		54.1		33.4		61.8		40.0		40.0		160.0		765.9
Modernized TADS/PNVS	0			19.6		65.0		142.6		242.2		183.2		41.7						694.3
Block III Improvements	0								50.5		326.8		177.4		219.2		983.5			1757.4
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		3412.2		825.8		747.7		491.0		491.5		649.5		298.9		300.1		1185.2		8401.9

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	126	44	57									227
Gross Cost	561.9	128.4	119.0	24.6	14.8	4.9	4.9	4.9	3.8			867.2
Less PY Adv Proc	79.0	11.1	8.6									98.7
Plus CY Adv Proc	90.1	8.6										98.7
Net Proc (P-1)	573.0	126.0	110.4	24.6	14.8	4.9	4.9	4.9	3.8			867.2
Initial Spares												
Total Proc Cost	573.0	126.0	110.4	24.6	14.8	4.9	4.9	4.9	3.8			867.2
Flyaway U/C												
Wpn Sys Proc U/C		2.9	1.9									

Description:

The Longbow Weapon System (AH-64D) consists of a modified AH-64 airframe, 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 Objective transition path of the Transformation Campaign Plan (TCP)

Justification:

FY 04/05 funds continued FCR production integration, fielding sustainment, obsolescence resolution, and Radio Frequency Interferometer (RFI) User Data Module (UDM) Programming capability cooperative development agreement with UK. 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 2003

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	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
----------	----------------	-----------	---------	---------	---------	---------	---------	---------	---------	----	-------

Apache Longbow FCR											
NA	NA	711.2	24.6	14.8	4.9	4.9	4.9	3.8	0.0	0.0	769.1

Totals		711.2	24.6	14.8	4.9	4.9	4.9	3.8	0.0	0.0	769.1
--------	--	-------	------	------	-----	-----	-----	-----	-----	-----	-------

INDIVIDUAL MODIFICATION

Date: February 2003

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

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION: Modification ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 16 Months
 Contract Dates: FY 2004 FY 2005 FY 2006
 Delivery Date: FY 2004 FY 2005 FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E	0																			
Procurement	0																			
Quantity	227																		227	
Recurring	0	711.2																		711.2
Other Flyaway	0																			
Other	0		24.6		14.8		4.9		4.9		4.9		3.8							57.9
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		711.2		24.6		14.8		4.9		4.9		4.9		3.8		0.0		0.0		769.1

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	281.4	43.2	32.1	29.7	14.2							400.7
Net Proc (P-1)	281.4	43.2	32.1	29.7	14.2							400.7
Initial Spares												
Total Proc Cost	281.4	43.2	32.1	29.7	14.2							400.7
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 Objective transition path of the Transformation Campaign Plan (TCP)

Justification:

FY 04 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 2003				
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 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
End Item Quantity			252	52	60	74	64	19						521
Airframe	12	12	191.3	34.6	32.1	29.7	14.2							301.9
GFE-FCR Kit	12	12	90.1	8.6										98.7
Total Advance Procurement			281.4	43.2	32.1	29.7	14.2	0.0	0.0	0.0	0.0	0.0	0.0	400.6

Advance Procurement Requirements Analysis-Funding (P10B)

Date: February 2003

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

P-1 Line Item Nomenclature / Weapon System
LONGBOW

(\$ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004			2005		
				Qty	Contract Forecast Date	Total Cost Request	Qty	Contract Forecast Date	Total Cost Request
End Item Quantity:									
Airframe	12			19	Dec 03	14.200			
GFE-FCR Kit	12								
Total Advance Procurement						14.200			0.000

FY 04 Advance Procurement Funding provides longlead items.

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)	2002					2003					2004		2005	
		Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Actual Contract Date	Total Cost Request	Actual Contract Cost	Qty	Contract Forecast Date	Qty	Contract Forecast Date
End Item Quantity															
Airframe	12	74	Dec 01	Dec 01	32.1	64	Dec 02	Nov 02	29.7		19	Dec 03			
GFE-FCR Kit	12														
Total Advance Procurement					32.1				29.7	0.0					

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

0203744A/Project 504

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	521.3	25.4	59.9	51.6	136.5	230.8	426.6	426.4	652.8	662.4	10653.9	13847.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	521.3	25.4	59.9	51.6	136.5	230.8	426.6	426.4	652.8	662.4	10653.9	13847.6
Initial Spares												
Total Proc Cost	521.3	25.4	59.9	51.6	136.5	230.8	426.6	426.4	652.8	662.4	10653.9	13847.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The UH-60 BLACKHAWK helicopter is the Army's utility helicopter in the objective force.

(NOTE: The UH-60M contractor recently submitted an Estimate at Completion (EAC) for the Integration and Qualification contract that indicates the program may not be executable as currently budgeted. The proposed solution would be to take appropriate actions to realign UH-60M funds from APA to RDT&E for FY04; and to make adjustments to FY05 through FY07 prior to the FY05 budget submission.)

Justification:

FY04/05 funding initiates the UH-60M RECAP/UPGRADE program and continues modification of the UH-60A/L fleet with safety, cost reduction, and operational improvements.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army /2/Modification of aircraft							P-1 Item Nomenclature UH-60 BLACK HAWK MODS (AA0492)					
Program Elements for Code B Items:				Code:	Other Related Program Elements: 0203744A/Project 504							
	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	521.3	25.4	59.9	51.6	136.5	230.8	426.6	426.4	652.8	662.4	10653.9	13847.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	521.3	25.4	59.9	51.6	136.5	230.8	426.6	426.4	652.8	662.4	10653.9	13847.6
Initial Spares												
Total Proc Cost	521.3	25.4	59.9	51.6	136.5	230.8	426.6	426.4	652.8	662.4	10653.9	13847.6
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 system supports the Legacy-to-Objective (LO) transition path of the Transformation Campaign Plan (TCP).

(NOTE: The UH-60M contractor recently submitted an Estimate at Completion (EAC) for the Integration and Qualification contract that indicates the program may not be executable as currently budgeted. The proposed solution would be to take appropriate actions to realign UH-60M funds from APA to RDT&E for FY04; and to make adjustments to FY05 through FY07 prior to the FY05 budget submission.)

Justification:

FY04/05 funding initiates the UH-60M RECAP/UPGRADE program, modification of the Military District of Washington (MDW) helicopters with command and control equipment, continues procurement and installation of the Crashworthy External Fuel System (CEFS), continues procurement of MEDEVAC mission kits for new production UH-60L aircraft and completes the qualification of the Advanced Helicopter Transmission Lubricant (AHTL) which will lower Operations & Support (O&S) costs by reducing unscheduled maintenance. The UH-60M RECAP/UPGRADE program addresses current UH-60 fleet aging problems such as decreasing Operational Readiness (OR) and increasing O&S costs, including all top-ten cost drivers, and provides a common, modernized platform for the UH-60 Utility and HH-60M MEDEVAC fleet of the future. The MEDEVAC kit upgrades UH-60L models to an air ambulance configuration providing en-route patient treatment which is critical to patient survival. CEFS is a safety modification that reduces the risk of a post-crash fire and the special mission Search and Rescue (SAR) modifications are targeted for the Alaska Army National Guard to aid in search and rescue of stranded civilians.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army /2/Modification of aircraft				P-1 Item Nomenclature UH-60 BLACK HAWK MODS (AA0492)							
Program Elements for Code B Items:			Code:	Other Related Program Elements: 0203744A/Project 504							

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Crashworthy External Fuel System (CEFS)											
	Safety	25.0	12.8	12.0	14.2	19.7	18.9	0.0	0.0	0.0	102.6
HH-60L Medical Equip Package (MEP)											
	Operational	22.4	28.5	5.4	56.9	0.0	0.0	0.0	0.0	0.0	113.2
Adv Hel Transmission Lubricant (AHTL)											
	RAM	0.0	1.5	0.8	1.2	0.0	0.0	0.0	0.0	0.0	3.5
De-Icing System Upgrade Program											
	Safety	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
UH-60M RECAP/UPGRADE											
	Selected Upgrade	0.0	0.0	113.5	158.5	372.7	372.3	585.2	588.9	9695.6	11886.7
Military District of Washington (MDW) MODs											
	Operational	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	4.8
HH-60M Medical Equip Package (MEP)											
	Operational/Upgrade	0.0	0.0	0.0	0.0	34.2	35.2	67.6	73.5	958.3	1168.8
Search and Rescue (SAR) MOD											
	Operational	34.8	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.4
DSC-HUMS											
	Operational	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
Totals		83.5	51.6	136.5	230.8	426.6	426.4	652.8	662.4	10653.9	13324.5

INDIVIDUAL MODIFICATION

Date: February 2003

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

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

DESCRIPTION/JUSTIFICATION:

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Development is complete.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Totals																					
Inputs	0	0	0	20	97	17	17	17	17	14	14	12	11	15	15	16	16	36	36	36	54
Outputs	0	0	0	0	20	97	17	17	17	17	14	14	12	11	15	15	16	16	36	36	36

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Inputs																				460
Outputs	54																			460

METHOD OF IMPLEMENTATION:	Contract Teams	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	9 Months
Contract Dates:	FY 2004 Jan 05	FY 2005 Jan 06		FY 2006 Jan 07	
Delivery Date:	FY 2004 Sep 05	FY 2005 Sep 06		FY 2006 Sep 07	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E	0																			
Procurement	0																				
Installation Kits, UH-60A/L/Q/M	117	9.6	68	5.3	51	4.1	62	5.2	85	7.6	77	6.7							460	38.5	
Special Purpose Kits, SAR Acft	10	3.0																	10	3.0	
Installation Kits, Nonrecurring	0																				
Installed Equipment (B-Kits)	91	11.7	44	6.2	51	7.4	62	8.6	85	11.6	77	10.9							410	56.4	
Equipment, Nonrecurring	0																				
Engineering Change Orders	0																				
Data	0																				
Training Equipment	0																				
Support Equipment	0	0.7		0.5																	1.2
Other	0																				
Interim Contractor Support	0																				
Installation of Hardware	0																				
FY2002 & Prior Equip -- 117 Kits	0		117	0.8																117	0.8
FY2003 Equip -- 68 Kits	0				68	0.5														68	0.5
FY2004 Equip -- 51 Kits	0						51	0.4												51	0.4
FY2005 Equip -- 62 Kits	0								62	0.5										62	0.5
FY2006 Equip -- 85 Kits	0										85	0.7								85	0.7
FY2007 Equip -- 77 Kits	0										77	0.6								77	0.6
FY2008 Equip -- Kits	0																				
FY2009 Equip -- Kits	0																				
TC Equip- Kits	0																				
Total Installment	0	0.0	117	0.8	68	0.5	51	0.4	62	0.5	162	1.3		0.0		0.0		0.0	460	3.5	
Total Procurement Cost		25.0		12.8		12.0		14.2		19.7		18.9		0.0		0.0		0.0			102.6

INDIVIDUAL MODIFICATION

Date: February 2003

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

MODELS OF SYSTEM AFFECTED: UH-60L

DESCRIPTION/JUSTIFICATION:

Modifies UH-60L helicopters with the Medical Equipment Package (MEP) consisting of FLIR II, external high performance rescue hoist (HPH), personal locating system (PLS), environmental control system (ECS), improved digital avionics package and advanced medical interior. The MEP will be installed on UH-60L production line aircraft as the aircraft goes through the production line, therefore installation costs are not shown separately on the following page.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Full qualification of the HH-60L Medical Equipment Package (MEP) will be completed in FY03.

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:	Contractor	ADMINISTRATIVE LEADTIME:	2 Months	PRODUCTION LEADTIME:	12 Months
Contract Dates:	FY 2004 Dec 04	FY 2005 Dec 05		FY 2006	
Delivery Date:	FY 2004 Dec 05	FY 2005 Dec 06		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
UH-60L MEP Production Kits	2	9.9	4	21.0	1	5.2	8	43.2											15	79.3
HH-60L MEP Upgrade Kits	1	2.5																	1	2.5
Installed Equipment	0	6.7		5.7				9.7												22.1
GFE/Total Package Fielding	0	2.3		1.8		0.2		4.0												8.3
Training Devices	1	1.0																	1	1.0
Non-Recurring Procurement	0																			
--																				
--																				
--																				
--																				
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		22.4		28.5		5.4		56.9		0.0		0.0		0.0		0.0		0.0		113.2

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: UH-60M RECAP/UPGRADE [MOD 5]

MODELS OF SYSTEM AFFECTED: UH-60A/L

DESCRIPTION/JUSTIFICATION:

The UH-60 Black Hawk will serve as the Army's utility helicopter in the Objective Force. The Army has established a recapitalization goal for its systems of maintaining the fleet's average age at the design half-life or less. The UH-60 was designed for a 20 year service life. The oldest UH-60A models are now over 23 years old, and the average age of the UH-60A fleet is 18 years old. The increased operational tempo, coupled with the technological age of the basic airframe, components, and systems, is having an adverse impact on the operational readiness (OR) and operational and support (O&S) costs of the over 1500 aircraft UH-60 fleet. In addition, the UH-60A/L helicopters lack the necessary digital avionics architecture to meet current and future Army and Joint Service interoperability communication requirements. The Army has determined that a recapitalization/upgrade program is required to address these issues. Transformation of the legacy UH-60 fleet will be accomplished using an evolutionary, block approach. The Block 1 program will selectively upgrade the UH-60A/L fleet to the UH-60M configuration. The upgrade includes service life extension, structural improvements, upgrade of the propulsion system (UH-60A T700-GE-700 engine and drivetrain to the UH-60L T700-GE-701D engine & drivetrain), and a digital cockpit. The upgrades will meet lift, range, survivability, and interoperability requirements while decreasing O&S costs and extending the useful life of these aircraft another 20 years, or through the FY25 time frame. The UH-60M provides a common platform for the modernized air ambulance MEDEVAC medical Mission Equipment Package (MEP). This program addresses current UH-60 fleet aging problems such as decreasing OR and increasing O&S costs, including all top-ten cost drivers. This system supports the Legacy-to-Objective path of the Transformation Campaign Plan.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone B Approval	3QFY01
Integration & Qualification Contract Award	3QFY01
Milestone C Approval	2QFY04
LRIP Lot 1 Contract Award	3QFY04
First Unit Equipped	4QFY06

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0						2	2	3	3	3	3	3	7	8	8	8	8	8	9
Outputs	0										2	2	3	3	3	3	3	7	8	8

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Inputs	9	13	14	14	14	14	14	14	14											195
Outputs	9	8	8	8	9	13	14	14	14	14	14	14	14							195

METHOD OF IMPLEMENTATION:	At Contractor Plant	ADMINISTRATIVE LEADTIME:	6 Months	PRODUCTION LEADTIME:	13 Months
Contract Dates:	FY 2004 Apr 04	FY 2005 Jan 05		FY 2006 Jan 06	
Delivery Date:	FY 2004 Apr 05	FY 2005 Jan 06		FY 2006 Jan 07	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): UH-60M RECAP/UPGRADE [MOD 5]

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E	0																			
Procurement	0																			
Non-Recurring Procurement	0					0.8		0.7		2.5		0.8		3.4		1.1				9.3
Recurring Procurement	0				7	78.5	12	123.8	31	298.8	33	320.9	55	525.4	56	533.8	810	9695.6	1004	11576.8
Other Flyaway	0					7.4		15.4		26.1		24.0		28.5		29.0				130.4
Training Devices	0					17.7		3.2		29.1		4.6		4.8		1.4				60.8
Other Support	0					9.1		15.4		16.2		22.0		23.1		23.6				109.4
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		0.0		0.0		113.5		158.5		372.7		372.3		585.2		588.9		9695.6		11886.7

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
KIOWA WARRIOR (AZ2200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	2971.8	41.5	42.1	41.7	45.1	33.9	22.5	42.1	20.7	15.2	24.9	3301.4
Less PY Adv Proc	223.3											223.3
Plus CY Adv Proc	223.3											223.3
Net Proc (P-1)	2971.8	41.5	42.1	41.7	45.1	33.9	22.5	42.1	20.7	15.2	24.9	3301.4
Initial Spares	181.3											181.3
Total Proc Cost	3153.1	41.5	42.1	41.7	45.1	33.9	22.5	42.1	20.7	15.2	24.9	3482.7
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, the Division Capstone Exercise (DCX), and the First Digitized Division. Future participation will occur in the Second Digitized Division and First Digitized Corps. An ongoing Safety Enhancement Program (SEP) incorporates upgraded engines and barrier 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 enhancing 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.

A weight reduction effort will begin in FY07 in order to mitigate safety incidents and accidents associated with the problematic autorotational characteristics at the aircraft's rated Gross Weight. Multiple, related initiatives have been identified to attain the weight reduction.

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

Justification:

FY04/05 procures additional/continuing modification efforts which allow the Kiowa Warrior to safely serve as the Army's night, armed-reconnaissance, aviation capability until Comanche fielding begins and to complement the Comanche aircraft until displaced in approximately 2016/17.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2003

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

P-1 Item Nomenclature
KIOWA WARRIOR (AZ2200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description Fiscal Years

OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
----------	----------------	-----------	---------	---------	---------	---------	---------	---------	---------	----	-------

Safety Enhancement Program (SEP)											
0-00-00-0003	Safety	182.4	41.7	45.1	33.9	22.5	22.0	7.1	3.7	0.2	358.6

Safety Enhancement Program - Weight Reduction											
0-00-00-0005	Safety	0.0	0.0	0.0	0.0	0.0	20.1	13.6	11.5	24.7	69.9

Totals		182.4	41.7	45.1	33.9	22.5	42.1	20.7	15.2	24.9	428.5
--------	--	-------	------	------	------	------	------	------	------	------	-------

INDIVIDUAL MODIFICATION

Date: February 2003

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 375 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. Seven 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 375 aircraft will be equipped with engine barrier filters, seats, and airbags.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Note: Installation Schedule data not provided below. Majority of aircraft will be block-modified at the Bell Helicopter Textron, Inc. facility via annual contractual orders to modify aircraft to be delivered over a 12-month period. Some but not all aircraft will receive the complete complement of modifications at that facility. Some aircraft will receive portions of the modification efforts via field retrofit and; similarly, not all field retrofit aircraft will receive all field retrofit modifications. Hardware installation dollars on page 2 of this form represent a compilation of the variety of field retrofit modifications. The block-modification installations on the contractor's modification line are not separately priced and therefore the dollars are embedded in the Recurring line for each year.

Installation Schedule:

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

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

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

Contract Dates: FY 2004 Mar 04 FY 2005 Mar 05 FY 2006 Mar 06

Delivery Date: FY 2004 Mar 05 FY 2005 Mar 06 FY 2006 Mar 07

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
Procurement																				
Aircraft Modified - Bell Helicopter	124		24		22		20		18		19								227	
Nonrecurring		22.7		2.7		2.8		2.8		2.8		2.8								36.6
Recurring - Bell Helicopter		65.6		14.5		13.9		13.3		10.7		10.3								128.3
Government-Furnished Equipment		70.3		16.3		14.8		8.5		2.2		1.3		1.2		0.5				115.1
Engineering Change Orders		1.7		0.9		0.9		1.0		0.4		0.7		0.0		0.0				5.6
Aircraft Preparation		9.6		1.9		1.8		1.8		1.8		2.0		0.9						19.8
Fielding		2.4		1.1		1.5		1.8		0.7		0.7		0.7		0.2				9.1
Training/Training Devices		3.4		0.9		4.9		0.9												10.1
Other		3.9		1.8		2.8		2.8		2.9		3.0		3.1		2.5				22.8
Technical Support		2.3		0.9		0.6		0.6		0.6		0.7		0.7						6.4
Installation of Hardware - Field	0																			
FY 2002 & Prior Equip -- Kits		0.5		0.7																1.2
FY 2003 -- Kits						1.1														1.1
FY 2004 Equip -- Kits								0.4												0.4
FY 2005 Equip -- Kits										0.4										0.4
FY 2006 Equip -- Kits												0.5								0.5
FY 2007 Equip -- Kits														0.5						0.5
FY 2008 Equip -- Kits															0.5					0.5
FY 2009 Equip -- Kits																				0.5
TC Equip- Kits																	0.2			0.2
Total Installment	0	0.5		0.7		1.1		0.4		0.4		0.5		0.5		0.5		0.2		4.8
Total Procurement Cost		182.4		41.7		45.1		33.9		22.5		22.0		7.1		3.7		0.2		358.6

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
AIRBORNE AVIONICS (AA0700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

PE 0604201A, PE 0305114A, SSN AA0704

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	361.3	52.4	79.1	95.4	71.2	49.3	40.5	63.1	90.2	70.0		972.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	361.3	52.4	79.1	95.4	71.2	49.3	40.5	63.1	90.2	70.0		972.4
Initial Spares												
Total Proc Cost	361.3	52.4	79.1	95.4	71.2	49.3	40.5	63.1	90.2	70.0		972.4
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The Airborne Avionics budget line includes the Global Positioning System (GPS), the Improved Data Modem (IDM), the Aviation Mission Planning System (AMPS), and the Joint Precision Approach and Landing System (JPALS). The GPS, IDM, and AMPS are three 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 Attack and Special Operations fleets of helicopters. A Pre-Planned Product Improvement to the DGNS and EGI began in FY01 to integrate a Selective Availability Anti-Spoofing Module (SAASM), and Instrument Flight Rule (IFR) navigation capability.

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

AMPS is a mission planning/battle-synchronization tool that automates aviation mission planning tasks that include tactical command and control, mission planning, and flight planning. It interfaces with the Maneuver Control System (MCS) and associated networks which will furnish the aviation commander with continuous situational awareness, allowing the commander to rapidly adjust mission plans. This system generates mission data in either hard copy or electronic formats which are loaded onto the aircraft platforms, initializing the communication, navigation, and situational awareness systems on the modernized fleet aircraft. 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 and HH-60L/M Blackhawk.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 2003

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

To support the required future capabilities of the Aviation fleet in the Objective Force, AMPS will migrate to the Joint Mission Planning System (JMPS) in FY05. JMPS is a Congressionally directed Multi-Service system that is on the OSD C4I Special Interest List and supports the top two SECDEF priorities (17 Sep 02 memo). Migration to JMPS is being accomplished in two phases: support of near term Army Aviation fleet requirements and risk reduction by developing platform-specific modules for the Army variant of Portable Flight Planning Software (PFPS), and modification of those modules and development of additional capabilities under the JMPS architecture. The architecture inherent in JMPS will accommodate modifications required to support the Future Combat System and associated family of Unmanned Aerial Vehicles that are to be deployed within Aviation Brigades.

The Joint Precision Approach Landing Systems (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:

FY04/FY05 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-64A/D and Special Operations Aircraft. P3I is required to meet the Chairman of the Joint Chiefs of Staff (CJCS)-directed security requirement (Selective Availability Anti-Spoofing Module (SAASM)) dated 2 January 2001 and to provide a box level IFO navigation capability. GPS P3I, GATM and JPALS programs are closely linked and have joint perspective/participation.

FY04/FY05 funding for IDM provides for the procurement of 291 B-Kits, 108 A-Kits, and 80 installs of IDM-304 boxes for AH-64D, OH-58D, CH-47F, SOA, TAIS, 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.

FY04/FY05 funding for AMPS provides for re-procurement of system hardware which is currently at end-of-life, as well as for upgrading the system software to support aviation fleet modernization programs and migration, and required enhancements, to the Joint Mission Planning System (JMPS).

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army /2/Modification of aircraft			P-1 Item Nomenclature AIRBORNE AVIONICS (AA0700)								
Program Elements for Code B Items:			Code:	Other Related Program Elements: PE 0604201A, PE 0305114A, SSN AA0704							

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Improved Data Modem (IDM)											
	Oper/Log	157.1	58.4	31.6	23.4	20.1	36.8	57.4	32.5	869.1	1286.4
Aviation Mission Planning System (AMPS)											
1-95-01-2185	Oper/Log	74.7	22.7	24.8	12.7	9.9	11.8	12.5	12.7	218.9	400.7
Embedded GPS Inertial Navigation System (EGI) P3I											
	Legislative	22.5	11.4	7.4	7.6	6.4	9.6	12.8	15.3	146.5	239.5
DGNS (AN/ASN-128B) P3I											
	Oper/Log	12.0	2.9	7.4	5.6	4.0	4.9	7.6	9.5	10.9	64.8
Totals		266.3	95.4	71.2	49.3	40.4	63.1	90.3	70.0	1245.4	1991.4

INDIVIDUAL MODIFICATION

Date: February 2003

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

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:

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	4	12	13	12	13	10	10	10	10	10	10	10	10	5	6	5	6	11	12	12	12
Outputs		12	12	13	12	11	10	10	10	10	10	10	10	7	6	6	6	9	12	11	12

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs	9	9	9	9																	239
Outputs	10	9	9	9	3																239

METHOD OF IMPLEMENTATION:	Contractor Teams	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	15 Months
Contract Dates:	FY 2004 Jan 04	FY 2005 Jan 05		FY 2006 Jan 06	
Delivery Date:	FY 2004 Apr 05	FY 2005 Apr 06		FY 2006 Apr 07	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E	0																			
Procurement	0																				
Kit Quantity - B Kits	509	16.8	217	9.0	204	9.8	87	4.9	236	11.6	59	3.7	89	10.1	112	7.3	943	86.1	2456	159.3	
Mods - B Kit	206	4.5												17.7				66.9	206	89.1	
Installation Kits-A-Kits	240	11.9	66	2.0	46	3.1	62	0.9	73	0.4	6	0.1		0.3				0.6	493	19.3	
Aircraft Integration	0	68.2		34.1		11.0		8.2		5.8		17.4		13.6		15.0		517.8		691.1	
H/W S/W, Nonrecurring	0	33.9		11.1		2.5		5.8		0.4		9.0		5.2		2.5		101.5		171.9	
Engineering Change Orders	0	3.9				0.5		0.3		0.1		0.2		1.4		0.4		7.3		14.1	
Data	0	1.1				0.4		0.2		0.1		0.2		1.1		0.3		6.1		9.5	
System Test and Evaluation	0	0.8				0.5		0.1		0.1		0.6		0.9		3.2		16.9		23.1	
Support Equipment	0	0.6				0.4		0.1		0.2		0.3		0.7		0.2		4.4		6.9	
Other - PM Adm	0	13.0		1.8		1.5		1.2		1.0		1.8		2.8		1.7		38.6		63.4	
Training Equipment	0					0.3		0.2		0.1		0.1		0.9		0.2		4.9		6.7	
Fielding	0	2.4		0.1		1.4		1.3		0.2		3.2		2.5		1.7		18.0		30.8	
Installation of Hardware	0																				
FY2002 & Prior Equip -- Kits	4		50	0.3	20	0.1														74	0.4
FY2003 Equip -- Kits	0				20	0.1	28	0.1												48	0.2
FY2004 Equip -- Kits	0						12	0.1	12	0.1										24	0.2
FY2005 Equip -- Kits	0								10	0.0	10	0.0								20	
FY2006 Equip -- Kits	0										37	0.2	36	0.2						73	0.4
FY2007 Equip -- Kits	0																				
FY2008 Equip -- Kits	0																				
FY2009 Equip -- Kits	0																				
TC Equip- Kits	0																				
Total Installment	4	0.0	50	0.3	40	0.2	40	0.2	22	0.1	47	0.2	36	0.2		0.0		0.0	239	1.2	
Total Procurement Cost		157.1		58.4		31.6		23.4		20.1		36.8		57.4		32.5		869.1		1286.4	

INDIVIDUAL MODIFICATION

Date: February 2003

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

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

DESCRIPTION/JUSTIFICATION:

The AMPS is a mission planning/battle-synchronization tool that automates aviation mission planning tasks. The AMPS includes tactical command and control, mission planning and management. It interfaces with the Maneuver Control System (MCS) and associated networks which will furnish the aviation commander with continuous situational awareness, allowing the commander to rapidly adjust mission plans. This system generates mission data in either hard copy or electronic formats which is loaded on the aircraft platforms, initializing the communication, navigation, and situational awareness systems on the modernized fleet aircraft. Since the airframes have the data receptacles/buses required to interface with AMPS, there is no installation cost/schedule.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:

Contract Dates: FY 2004

Delivery Date: FY 2004

ADMINISTRATIVE LEADTIME:

0 Months

FY 2005

PRODUCTION LEADTIME:

0 Months

FY 2006

FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	705	19.7																	705	19.7
Installation Kits	0																			
Equipment Upgrades	0						681	1.4	753	1.5					681	1.4	3619	7.2	5734	11.5
Equipment	0	11.7	681	7.4	753	7.2					681	4.8	753	5.4			2866	26.1	5734	62.6
Equipment, Nonrecurring	0	8.4		0.3				0.3								0.3		0.5		9.8
Engineering Change Orders	0	26.8		11.8		14.6		8.4		6.0		4.4		4.3		8.1		149.4		233.8
System Test & Eval	0	0.3		0.2		0.1		0.2		0.2		0.2		0.2		0.2		2.2		3.8
Training Equipment	0	0.1		0.2																0.3
Support Equipment	0																			
Other - PM Admin	0	4.1		1.1		1.2		0.6		0.4		0.5		0.6		0.6		10.9		20.0
Fielding	0	3.6		1.7		1.7		1.8		1.8		1.9		2.0		2.1		22.6		39.2
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0																			
FY2005 Equip -- Kits	0																			
FY2006 Equip -- Kits	0																			
FY2007 Equip -- Kits	0																			
FY2008 Equip -- Kits	0																			
FY2009 Equip -- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		74.7		22.7		24.8		12.7		9.9		11.8		12.5		12.7		218.9		400.7

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Embedded GPS Inertial Navigation System (EGI) P31 [MOD 3]

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

DESCRIPTION/JUSTIFICATION:

Embedded GPS/INS (Global Positioning System / Inertial Navigation Systems)(EGI) is one of the aviation systems required for Digitization of the Battlefield. FY05 starts the fielding 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), and GPS Instrument Flight Rule (IFR) navigation capability, in accordance with civil airspace regulatory requirements for the AH-64A/D, and Special Operations Aircraft (SOA). The kit cost will vary depending on aircraft configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0										22	27	27	22	25	27	23	27	27	28
Outputs	0										13	27	27	25	22	27	25	25	27	27

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	25	29	36	36	36	42	54	36	36	50	54	54	54	70	72	54	1339	2332
Outputs	26	27	35	36	36	36	54	42	36	44	54	54	54	64	72	60	1357	2332

METHOD OF IMPLEMENTATION:	Contractor Teams	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	9 Months
Contract Dates:	FY 2004 Jul 04	FY 2005 May 05		FY 2006 Apr 06	
Delivery Date:	FY 2004 Apr 05	FY 2005 Feb 06		FY 2006 Jan 07	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity - B Kit	0				106	5.6	100	5.4	84	4.1	126	7.0	168	9.6	194	11.5	1589	103.9	2367	147.1
Installation Kits - A Kit	0	0.5			84	0.3	87	0.3	84	0.3	126	0.4	168	0.6	194	0.7	1589		2332	3.1
Installation Kits, Nonrecurring	0	3.0	10.0																	13.0
Equipment	0	0.0																		
Equipment, Nonrecurring	0	12.8																		12.8
Engineering Change Orders	0	5.0				0.4		0.3		0.1								2.3		8.1
Data	0					0.2		0.2		0.2		0.3		0.4		0.4		4.2		5.9
Training Equipment	0					0.1		0.1		0.1		0.1		0.1		0.2		1.6		2.3
Support Equipment	0																			
Other - PM Admin	0	1.2	1.4		0.8		1.0		1.0		1.2		1.2		1.3		18.6			27.7
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0						49	0.3	35	0.2									84	0.5
FY2005 Equip -- Kits	0								66	0.4	21	0.1							87	0.5
FY2006 Equip -- Kits	0										84	0.5							84	0.5
FY2007 Equip -- Kits	0												126	0.9					126	0.9
FY2008 Equip -- Kits	0													168	1.2				168	1.2
FY2009 Equip -- Kits	0															194	1.7	194	1.7	1.7
TC Equip- Kits	0															1589	14.2	1589	14.2	14.2
Total Installment	0	0.0		0.0		0.0	49	0.3	101	0.6	105	0.6	126	0.9	168	1.2	1783	15.9	2332	19.5
Total Procurement Cost		22.5		11.4		7.4		7.6		6.4		9.6		12.8		15.3		146.5		239.5

INDIVIDUAL MODIFICATION

Date: February 2003

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

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0										42	60	54	41	36	27	28	27	27	18
Outputs	0										24	54	60	47	36	30	28	27	27	21

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	27	27	28	36	36	50	54	54	54	70	54	54	54	54	54	42		1108
Outputs	24	27	27	34	36	44	54	54	54	64	60	54	54	54	54	48	12	1108

METHOD OF IMPLEMENTATION:	Contractor Team	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	14 Months
Contract Dates:	FY 2004 Jul 04	FY 2005 May 05		FY 2006 Apr 06	
Delivery Date:	FY 2004 Apr 05	FY 2005 Feb 06		FY 2006 Jan 07	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): DGNS (AN/ASN-128B) P31 [MOD 4]

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	0				198	5.8	134	3.9	72	2.2	118	3.4	194	5.4	232	6.5	204	6.1	1152	33.3
Installation Kits	0				173	0.6	115	0.4	72	0.3	118	0.5	194	0.7	232	0.9	204	0.8	1108	4.2
Installation Kits, Nonrecurring	0	5.4		0.7																6.1
Equipment	0																			
Equipment, Nonrecurring	0	5.9		1.8																7.7
Engineering Change Orders	0					0.3		0.2		0.1										0.6
Data	0					0.2		0.1		0.1		0.1		0.2		0.2		0.2		1.1
Training Equipment	0					0.1		0.1		0.0		0.0		0.1		0.1		0.1		0.5
Support Equipment	0																			
Other-PM Admin & Matrix Spt	0	0.7		0.4		0.4		0.3		0.2		0.2		0.4		0.5		0.5		3.6
Fielding (NETT)	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	0																			
FY2003 Equip -- Kits	0																			
FY2004 Equip -- Kits	0						102	0.6	71	0.5										173
FY2005 Equip -- Kits	0								87	0.6	28	0.2								115
FY2006 Equip -- Kits	0										72	0.5								72
FY2007 Equip -- Kits	0												118	0.8						118
FY2008 Equip -- Kits	0														194	1.3				194
FY2009 Equip -- Kits	0																232	1.7	232	1.7
TC Equip- Kits	0																204	1.5	204	1.5
Total Installment	0	0.0		0.0		0.0	102	0.6	158	1.1	100	0.7	118	0.8	194	1.3	436	3.2	1108	7.7
Total Procurement Cost		12.0		2.9		7.4		5.6		4.0		4.9		7.6		9.5		10.9		64.8

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
GATM Rollup (AA0711)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost			38.3	70.3	59.1	56.4	20.2	30.6	51.2	76.7	194.5	597.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)			38.3	70.3	59.1	56.4	20.2	30.6	51.2	76.7	194.5	597.3
Initial Spares												
Total Proc Cost			38.3	70.3	59.1	56.4	20.2	30.6	51.2	76.7	194.5	597.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

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

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 2 / Modification of aircraft			P-1 Line Item Nomenclature: GATM Rollup (AA0711)			Weapon System Type:			Date: February 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Fixed Wing Aircraft (AA0703)		19386			43017			32671			41840		
Rotary Wing Aircraft (AA0704)		18944			27279			26433			14586		
Total		38330			70296			59104			56426		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost			19.4	43.0	32.7	41.8	8.8	7.8	9.2	8.3		171.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)			19.4	43.0	32.7	41.8	8.8	7.8	9.2	8.3		171.0
Initial Spares												
Total Proc Cost			19.4	43.0	32.7	41.8	8.8	7.8	9.2	8.3		171.0
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Global Air Traffic Management (GATM) is the military equivalent of the International Civil Aviation architecture known as Communications, Navigation Surveillance and Air Traffic Management (CNS/ATM) programs. Current ground based navigation aids will be phased out of service as the world transitions to digital, data (non-voice), and space based navigation systems. Military aircraft will face some level (altitude and location dependent) of flight restrictions if not GATM equipped. GATM requirements cannot be met with a single piece of equipment. Meeting worldwide GATM requirements will entail the upgrading of some existing avionics and the procurement of new systems for the fixed wing fleet. Test equipment and spares necessary to support the modifications will be procured. This SSN supports Legacy and Legacy-to-Objective Systems which relate to the Transformation Campaign Plan.

Justification:

FY04/05 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 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Global Air Traffic Management - FW											
GATM-FW	Operational	19.4	38.9	32.7	41.8	8.8	7.8	9.2	8.3	0.0	166.9
Blue Force Tracking											
		0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
Totals		19.4	43.0	32.7	41.8	8.8	7.8	9.2	8.3	0.0	171.0

INDIVIDUAL MODIFICATION

Date: February 2003

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

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

DESCRIPTION/JUSTIFICATION:

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

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Development is not required for avionics system cockpit upgrades.

Installation Schedule:

	Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Totals																						
Inputs	39			21	19			17	18			24	24			4	4	5	5	5	7	
Outputs	39			21	19			17	18			24	24	24		4	4	4	5	5	5	

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs			12	13			7	7													231
Outputs	7			12	13			7	7												231

METHOD OF IMPLEMENTATION:	ADMINISTRATIVE LEADTIME:				4 Months	PRODUCTION LEADTIME:				5 Months
Contract Dates:	FY 2004	Feb 04	FY 2005	Feb 05		FY 2006	Feb 06			
Delivery Date:	FY 2004	Jul 04	FY 2005	Jul 05		FY 2006	Jul 06			

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
Procurement																				
Kit Quantity																				
Installation Kits	39	14.7	40	26.5	35	22.9	48	28.9	8	6.6	22	5.4	25	6.2	14	5.2			231	116.4
Installation Kits, Nonrecurring Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1				0.8
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	0																			
FY2002 & Prior Equip -- Kits	39	4.6																	39	4.6
FY2003 Equip -- Kits			40	12.3															40	12.3
FY2004 Equip -- Kits					35	9.7													35	9.7
FY2005 Equip -- Kits							48	12.8											48	12.8
FY2006 Equip -- Kits									8	2.1									8	2.1
FY2007 Equip -- Kits											22	2.3							22	2.3
FY2008 Equip -- Kits													25	2.9					25	2.9
FY2009 Equip -- Kits															14	3.0			14	3.0
TC Equip- Kits																				
Total Installment	39	4.6	40	12.3	35	9.7	48	12.8	8	2.1	22	2.3	25	2.9	14	3.0		0.0	231	49.7
Total Procurement Cost		19.4		38.9		32.7		41.8		8.8		7.8		9.2		8.3		0.0		166.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost			18.9	27.3	26.4	14.6	11.4	22.8	42.0	68.4	194.5	426.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)			18.9	27.3	26.4	14.6	11.4	22.8	42.0	68.4	194.5	426.3
Initial Spares												
Total Proc Cost			18.9	27.3	26.4	14.6	11.4	22.8	42.0	68.4	194.5	426.3
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. 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. 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:

FY04/05 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 05 and for all flights after Mar 08. Army aircraft will not be allowed to transit through or operate in European airspace affected by these mandates. The Mode-S transponder impacts over 300 European based aircraft as well as those deploying to Europe. The recurring procurement of Mode-S kits started in FY02 and procurement and installations continue 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 with a growth capability to Mode S.

INDIVIDUAL MODIFICATION

Date: February 2003

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. Funding will procure and install Mode-S transponders for all European based aircraft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	0	0	156	156	158	84	84	84	85	96	96	96	91	37	36	36	36	44	48	48	48
Outputs	0	0	104	156	157	109	84	84	84	93	96	96	96	52	36	36	36	40	48	48	48

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	72	90	96	108	126	126	126	133	144	162	154	144	144	144	144	142	506	4080
Outputs	64	84	90	108	120	126	126	127	144	156	160	144	144	144	144	144	552	4080

METHOD OF IMPLEMENTATION:	OLR Team	ADMINISTRATIVE LEADTIME:	6 Months	PRODUCTION LEADTIME:	6 Months
Contract Dates:	FY 2004 Apr 04	FY 2005 Apr 05		FY 2006 Apr 06	
Delivery Date:	FY 2004 Oct 04	FY 2005 Oct 05		FY 2006 Oct 06	

INDIVIDUAL MODIFICATION

Date: February 2003

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E	0																			
Procurement	0																				
Kit Quantity	470	12.9	337	9.1	397	18.7	161	8.5	193	8.2	429	18.0	538	29.3	625	44.9	1080	106.4	4230	256.0	
Installation Kits	470	2.2	337	1.7	379	2.2	145	1.0	188	1.0	366	2.0	511	4.6	604	8.4	1080	23.1	4080	46.2	
Installation Kits, Nonrecurring	0	2.8		9.5				0.2						0.4		1.0		18.8		32.7	
Equipment	0																				
Equipment, Nonrecurring	0																	7.7		7.7	
Engineering Change Orders	0					1.1		0.2		0.1		0.0		1.0		2.1		2.3		6.8	
Data	0													0.6		1.7		2.6		4.9	
Training Equipment	0	0.1		0.5										0.4		1.2				2.2	
Support Equipment	0																				
Other - PM Admin	0	0.9		1.3		0.8		0.7		0.6		1.2		2.1		2.8		5.8		16.2	
Fielding	0			0.1		0.1		0.0		0.0		0.1		0.1		0.1		0.0		0.5	
Installation of Hardware	0																				
FY2002 & Prior Equip -- Kits			470	5.1																470	5.1
FY2003 Equip -- Kits	0				337	3.5														337	3.5
FY2004 Equip -- Kits	0						379	4.0												379	4.0
FY2005 Equip -- Kits	0								145	1.5										145	1.5
FY2006 Equip -- Kits	0										188	1.5								188	1.5
FY2007 Equip -- Kits	0												366	3.5						366	3.5
FY2008 Equip -- Kits	0														511	6.3				511	6.3
FY2009 Equip -- Kits	0																604	10.0		604	10.0
TC Equip- Kits	0																1080	17.8		1080	17.8
Total Installment	0	0.0	470	5.1	337	3.5	379	4.0	145	1.5	188	1.5	366	3.5	511	6.3	1684	27.8	4080	53.2	
Total Procurement Cost		18.9		27.3		26.4		14.6		11.4		22.8		42.0		68.5		194.5		426.4	

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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

P-1 Item Nomenclature
AIRBORNE DIGITIZATION (AA0702)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
SSN BU1400, PE 654201, PE 654805

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost					1.9	22.7	46.5	62.1	60.5	66.0		259.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)					1.9	22.7	46.5	62.1	60.5	66.0		259.8
Initial Spares												
Total Proc Cost					1.9	22.7	46.5	62.1	60.5	66.0		259.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The Joint Tactical Radio System (JTRS) aircraft installation lays the foundation for achieving network connectivity across the radio frequency (RF) spectrum and provides the means for digital information exchanges, both vertically and horizontally, between joint warfighting elements, while enabling connectivity to civil and national authorities. The JTRS will provide affordable, high-capacity, tactical radios to meet the interoperability requirements with all DOD services. The JTRS will provide an upgradeable capability through an open systems architecture approach in compliance with the joint technical architecture which improves system performance at minimal cost and effort. The Army Procurement Appropriations (APA) funds are required to procure JTRS A-kits and install the JTRS A & B kits into the AH-64D, U/HH-60M, CH-47F and associated Special Operations Aircraft (SOA). JTRS supports the Legacy-to-Objective transition path of the Transformation Campaign Plan.

Justification:

The FY04/05 funding provides for production facilities at each A-Kit developer. It also procures low rate initial production installation kits for the Joint Tactical Radio System (JTRS). Additionally, this funds the installation of the JTRS in the AH-64D, U/HH-60M and CH-47F aircraft. Installed A-Kits and JTRS will provide aviation platforms the capability to transmit receive, bridge and gateway between similar and diverse waveforms over multiple communications media & networks. These systems are required for Aviation's participation in the Multi-Service Operational Test & Evaluation (MOT&E).

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Joint Tactical Radio Systems (JTRS) [MOD 1]

MODELS OF SYSTEM AFFECTED: Chinook (CH47-F), Blackhawk (UH-60M/Q), Longbow Apache (AH-64D)

DESCRIPTION/JUSTIFICATION:

The FY04/05 funding provides production facilities at each A-kit developer. It also procures low rate initial production installation kits for the Joint Tactical Radio System (JTRS). Additionally, this funds the installation of the JTRS in the AH-64D, U/HH-60M and CH-47F aircraft. Installed A Kits and JTRS will provide aviation platforms the capability to transmit receive, bridge and gateway between similar and diverse waveforms over multiple communications media & networks. These systems are required for Aviation's participation in the Multi-Service Operational Test & Evaluation (MOT&E).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Received MDAP decision June 02.

NOTE: 111 Kits will be procured in FY05. 10 Kits will be used in the System Integration Lab and will not be installed.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals													25	25	25	26	41	42	41	42
Inputs																				
Outputs													16	25	25	26	36	42	41	42

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	47	47	47	48	45	45	45	46	44	45	45	45	40	41	40	41	1110	2088
Outputs	45	47	48	47	46	45	45	45	45	45	45	45	42	40	41	40	1124	2088

METHOD OF IMPLEMENTATION:	Contractor Teams	ADMINISTRATIVE LEADTIME:	8 Months	PRODUCTION LEADTIME:	4 Months
Contract Dates:	FY 2004	FY 2005	Jun 05	FY 2006	Jun 06
Delivery Date:	FY 2004	FY 2005	Oct 05	FY 2006	Oct 06

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Joint Tactical Radio Systems (JTRS) [MOD 1]

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																				
Procurement																				
Kit Quantity																				
Installation Kits							111	12.1	166	17.7	189	20.5	181	20.0	179	20.2	1272	167.4	2098	257.9
Installation Kits, Nonrecurring					1.9			1.3		2.4		5.8		5.6		5.9		170.3		193.2
Equipment																				
Software Engineering								3.0		4.5		5.2		5.0		5.1		45.1		67.9
Engineering Change Orders								1.1		1.3		1.0						0.6		4.0
Data								0.6		0.9		1.0						0.4		2.9
Training Equipment								0.5		0.7								0.2		1.4
System Test & Evaluation								0.9								5.7		28.4		35.0
Fielding								2.2		9.0		11.4		10.2		9.9		126.1		168.8
Other - PM Admin								1.0		2.2		2.9		3.0		3.1		35.0		47.2
Installation of Hardware																				
FY 2002 & Prior Equip -- Kits																				
FY 2003 -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits									101	7.8									101	7.8
FY 2006 Equip -- Kits											166	14.3							166	14.3
FY 2007 Equip -- Kits													189	16.7					189	16.7
FY 2008 Equip -- Kits															181	16.1			181	16.1
FY 2009 Equip -- Kits																	179	16.4	179	16.4
TC Equip- Kits																	1272	110.1	1272	110.1
Total Installment		0.0		0.0		0.0		0.0	101	7.8	166	14.3	189	16.7	181	16.1	1451	126.5	2088	181.4
Total Procurement Cost		0.0		0.0		1.9		22.7		46.5		62.1		60.5		66.0		700.0		959.7

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	969.2	5.0	5.6	7.6	11.3	11.2	25.1	24.3	5.5	2.8	41.7	1109.3
Less PY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Net Proc (P-1)	969.2	5.0	5.6	7.6	11.3	11.2	25.1	24.3	5.5	2.8	41.7	1109.3
Initial Spares												
Total Proc Cost	969.2	5.0	5.6	7.6	11.3	11.2	25.1	24.3	5.5	2.8	41.7	1109.3
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 reparable (DLR) secondary items from the Supply Management, Army activity of the Army Working Capital Fund.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
AIRCRAFT SURVIVABILITY EQUIPMENT (AZ3504)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

SSN AA0720; PE/Project 0604270A/665

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	440.9	9.9	37.4	3.1	14.9	7.3	7.0	7.3	7.5	7.8	90.0	633.0
Less PY Adv Proc	11.6											11.6
Plus CY Adv Proc	11.6											11.6
Net Proc (P-1)	440.9	9.9	37.4	3.1	14.9	7.3	7.0	7.3	7.5	7.8	90.0	633.0
Initial Spares	52.5		2.0									54.5
Total Proc Cost	493.3	9.9	39.4	3.1	14.9	7.3	7.0	7.3	7.5	7.8	90.0	687.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This budget line includes Aircraft Survivability Equipment (ASE) Warning Receivers and ASE Radar Countermeasures.

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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
ASE Warning Receivers								7856			2441		
ASE Radar CM		37363	16	2335	3078	13	237	7023	42	167	4898	28	175
Total		37363			3078			14879			7339		

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
ASE WARNING RECEIVERS (AZ3506)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	340.4	4.0			7.9	2.4	2.1	2.4	2.6	2.9		364.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	340.4	4.0			7.9	2.4	2.1	2.4	2.6	2.9		364.8
Initial Spares												
Total Proc Cost	340.4	4.0			7.9	2.4	2.1	2.4	2.6	2.9		364.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

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

Justification:

FY04/FY05 procures and fields a replacement Infrared camera, fields the Radio Frequency Surface To Air Missile (RFSAM) upgrade, and completes the first article testing and partial fielding of the Infrared Surface To Air Missile (IRSAM) upgrade modification kits. The upgrade modification kits will be fielded to Combat Training Centers and Home Stations. The ASET IV provides Army aviators with the aircraft survivability equipment training capability necessary to maintain the highest operator skill level and to maximize readiness.

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities			P-1 Line Item Nomenclature: ASE WARNING RECEIVERS (AZ3506)			Weapon System Type:			Date: February 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
ASE WARNING RECEIVERS AN/TPQ-45 ASE Trainer IV (ASET IV) ASET IV NRE, Upgrades, and Fielding Project Management Support								7456 400			2321 120		
Total								7856			2441		

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
ASE RADAR CM (AZ3508)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

SSN AA0720; PE/Project 0604270A/665

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	100.4	5.9	37.4	3.1	7.0	4.9	4.9	4.9	4.9	4.9	90.0	268.2
Less PY Adv Proc	11.6											11.6
Plus CY Adv Proc	11.6											11.6
Net Proc (P-1)	100.4	5.9	37.4	3.1	7.0	4.9	4.9	4.9	4.9	4.9	90.0	268.2
Initial Spares	52.5		2.0									54.5
Total Proc Cost	152.9	5.9	39.4	3.1	7.0	4.9	4.9	4.9	4.9	4.9	90.0	322.7
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Aircraft Survivability Equipment Radar Countermeasures is a summary rollup for the AN/AVR-2A, Laser Detecting Set and the AN/ALQ-211, Suite of Integrated Radio Frequency Countermeasures (SIRFC). However, all funding beyond FY02 is for the AN/AVR-2A, Laser Detecting Set. 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:

FY04/05 procures 70 AN/AVR-2A systems with Engineering Change Proposals (ECP) to complete installation on AH-64A/D aircraft and to begin installation on UH-60M aircraft in support of the Operational Requirements Document and the aircraft missions. These systems must be procured to increase the survivability of U.S. Army aircrews by detecting and alerting them of impending threats from laser aided weapon systems. SIRFC's FY04/05 procurement is funded through Special Operations Command (SOCOM).

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities			P-1 Line Item Nomenclature: ASE RADAR CM (AZ3508)			Weapon System Type:			Date: February 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
AZ3508 - ASE RADAR COUNTERMEASURES													
Suite of Integrated Radio Freq CMS (SIRFC)													
SIRFC Recurring Hardware (B Kit)		14200	6	2367									
SIRFC Recurring Hardware (A Kit)		900	6	150									
Installation - Recurring		650											
Installation - Nonrecurring		6882											
Manufacturing Facilitization		9800											
SUBTOTAL - SIRFC		32432											
AN/AVR-2A Laser Warning													
AN/AVR-2A System Acquisition		1456	10	146	1892	13	146	6113	42	146	4075	28	146
Engineering Change Proposals		2200			516								
Systems Engineering Non-Recurring		1061			516			555			573		
Project Management		214			154			355			250		
SUBTOTAL - AN/AVR-2A		4931			3078			7023			4898		
ASE Trainer (ASET) IV													
Spares		2000											
Total		39363			3078			7023			4898		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities		Weapon System Type:			P-1 Line Item Nomenclature: ASE RADAR CM (AZ3508)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
SIRFC Recurring Hardware (B Kit) FY 2002	ITT Corporation Clifton, NJ	SS/FFP	TAPO, Ft. Eustis, VA	Mar 02	Sep 03	6	2367	Yes		
AN/AVR-2A System Acquisition FY 2002	Goodrich Danbury, CT	C/FFP	CECOM, Ft. Monmouth, NJ	Jun 02	Sep 03	10	146	Yes		
FY 2003	Goodrich Danbury, CT	C/FFP	CECOM, Ft. Monmouth, NJ	Feb 03	May 04	13	146	Yes		
FY 2004	Goodrich Danbury, CT	C/FFP	CECOM, Ft. Monmouth, NJ	Jan 04	Apr 05	42	146	Yes		
FY 2005	Goodrich Danbury, CT	C/FFP	CECOM, Ft. Monmouth, NJ	Jan 05	Apr 06	28	146	Yes		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
ASE INFRARED CM (AZ3507)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	22.7		3.6		75.7	86.7	97.9	101.6	136.7	129.9	2551.1	3205.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	22.7		3.6		75.7	86.7	97.9	101.6	136.7	129.9	2551.1	3205.9
Initial Spares												
Total Proc Cost	22.7		3.6		75.7	86.7	97.9	101.6	136.7	129.9	2551.1	3205.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

ATIRCM/CMWS is a program to develop, test, and integrate defensive infrared (IR) countermeasures capabilities into existing, current generation host platforms, which includes the MH-60/MH-47, AH-64D, UH-60 and CH-47F, for more effective protection against a greater number of IR guided missile threats than afforded by currently fielded IR countermeasures. The operational requirements concept for IR countermeasure systems is known as the Suite of Integrated Infrared Countermeasures (SIIRCM). The core element of the SIIRCM concept is the Advanced Threat Infrared Countermeasure (ATIRCM), Common Missile Warning System (CMWS) program. The ATIRCM/CMWS, a subsystem to a host aircraft, is an integrated ultra-violet (UV) missile warning system and an IR Lamp/Laser Jamming and Improved Countermeasure Dispenser (ICMD). The Special Operations Command (SOCOM) is procuring ATIRCM/CMWS for the MH-47 and MH-60. The Advanced Infrared Countermeasures Munitions (AIRCMM) is designed to provide more effective protection against IR-guided missile weapon systems than current decoys by better emulating the aircraft's IR signature. The AIRCMM solution consists of three expendable flares: the current M-206, the M-211 and M-212. The CMWS also functions as a stand-alone system with the capability to detect missiles and provide audible and visual warnings to the pilot(s), and when installed with the ICMD, activating expendables to provide a degree of protection. CMWS/ICMD will be procured and installed on the AH-64, UH-60 and CH-47 platforms. ATIRCM/CMWS is the key infrared survivability system for Army Objective Force aircraft. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 funding procures initial ATIRCM/CMWS for the Army as well as nonrecurring engineering in support of the ATIRCM/CMWS A-KIT.

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities			P-1 Line Item Nomenclature: ASE INFRARED CM (AZ3507)			Weapon System Type:			Date: February 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
A-Kit Recurring Cost	B							707	2	354	9163	24	382
CMWS Recurring Hardware	B							532	2	266	9020	31	291
ATIRCM Recurring Hardware	B							19382	14	1384	29141	27	1079
Nonrecurring Engineering								34353			5235		
System Engineering (B-Kit)								6366			13357		
Training/Data								1264			2343		
Engineering Changes								99			189		
In-house/Matrix Support								3248			3753		
Project Management								538			582		
CLS											885		
Fielding Support (ISE, Transportation)								263			516		
Initial Spares								1981			5196		
Contractor System Support								6980			7311		
SOCOM Specific Nonrecurring Cost		3565											
Total		3565						75713			86691		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities		Weapon System Type:			P-1 Line Item Nomenclature: ASE INFRARED CM (AZ3507)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A-Kit Recurring Cost										
FY 2004	TBD (A-Kit) TBD	TBD	TBD	Jan 04	Oct 04	2	354	Yes		
FY 2005	TBD (A-Kit) TBD	TBD	TBD	Oct 04	Jul 05	24	382			
CMWS Recurring Hardware										
FY 2002	BAE Systems (CMWS) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Sep 02						
FY 2004	BAE Systems (CMWS) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Feb 04	Feb 05	2	266	Yes		
FY 2005	BAE Systems (CMWS) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Feb 05	Feb 06	31	291			
ATIRCM Recurring Hardware										
FY 2004	BAE Systems (ATIRCM) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Mar 04	Sep 05	14	1384	Yes		
FY 2005	BAE Systems (ATIRCM) Nashua, NH	SS/FFP	CECOM, Ft. Monmouth, NJ	Apr 05	Oct 05	27	1079			

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

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

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

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

FY 06 / 07 BUDGET PRODUCTION SCHEDULE						P-1 Item Nomenclature: ASE INFRARED CM (AZ3507)													Date: February 2003											
COST ELEMENTS	MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06													Fiscal Year 07					L A T E R					
							Calendar Year 06													Calendar Year 07										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR		APR	MAY	JUN	JUL	AUG
A-Kit Recurring Cost																														
	1	FY 04	A	2	2	0																								
	1	FY 05	A	24	8	16	2	2	2	2	2	2	2	2																
CMWS Recurring Hardware																														
	2	FY 04	A	2	2	0																								
	2	FY 05	A	31	0	31					4	4	4	4	4	4	3													
ATIRCM Recurring Hardware																														
	3	FY 04	A	14	1	13	2	3	4	4																				
	3	FY 05	A	27	0	27					2	2	2	2	2	2	2	2	3	3	3									
Total				100	13	87	4	5	6	6	8	8	8	8	6	6	6	5	2	3	3	3								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MFR	NAME/LOCATION				PRODUCTION RATES		REACHED	MFR Number	ADMINLEAD TIME		MFR	TOTAL	REMARKS																	
					MIN.	1-8-5	MAX.	D+	Prior 1 Oct	After 1 Oct	After 1 Oct	After 1 Oct	Production rates are yearly rates.																	
1	TBD (A-Kit), TBD				18.00	153.00	153.00	0	1	INITIAL	0	4	9	13																
										REORDER	0	1	9	10																
2	BAE Systems (CMWS), Nashua, NH				48.00	48.00	60.00	0	2	INITIAL	0	5	12	17																
										REORDER	0	5	12	17																
3	BAE Systems (ATIRCM), Nashua, NH				12.00	48.00	48.00	0	3	INITIAL	0	6	18	24																
										REORDER	0	7	7	14																
										INITIAL																				
										REORDER																				
										INITIAL																				
										REORDER																				

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	42.2			2.2	26.6	30.7	24.1	3.9	4.3	4.0		137.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	42.2			2.2	26.6	30.7	24.1	3.9	4.3	4.0		137.9
Initial Spares												
Total Proc Cost	42.2			2.2	26.6	30.7	24.1	3.9	4.3	4.0		137.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

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 can improve the ability of state, local and federal agencies to communicate during emergencies such as hurricanes, forest fires or terrorist incidents. A2C2S supports the Legacy-to-Objective transition path of the Transformation Campaign Plan.

(Note: Subsequent to database lock, \$9.1 million of FY 03 funds were reprogrammed into this line to support contingency operations.)

Justification:

FY04/FY05 procures 6 and 7 A2C2S, respectively, to provide a digital capability for the 1st CAV, 3rd ACR, 160th, and III Corps.

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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A2C2S System Integration/Hardware					2184			19572	6	3262	21958	7	3137
Project Management Administration								1514			2464		
Engineering Support								3075			3400		
Fielding (NET, Spares)								871			1261		
Interim Contract Logistics Support								1562			1593		
Other Engineering Support													
.													
.													
Total					2184			26594			30676		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

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

Weapon System Type:

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

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A2C2S System Integration/Hardware										
FY 2003	Raytheon Huntsville AL	CPIF	AMCOM, AL	Nov 02	Mar 03					N/A
FY 2004	Raytheon Huntsville AL	CPFF/FPI	AMCOM, AL	Apr 04	Jun 04	6	3262			Mar 01
FY 2005	Raytheon Huntsville AL	CPFF/FPI	AMCOM, AL	Mar 05	May 05	7	3137			Mar 01

REMARKS: A2C2S-The competitively awarded system demonstration contract, awarded with RDTE funding in FY01, included an CPFF LRIP and FPI FRP options. 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 2003

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												L A T E R				
							Calendar Year 03												Calendar Year 04																
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S					
A2C2S System Integration/Hardware																																			
	1	FY 04	A	6	0	6																													
	1	FY 05	A	7	0	7																													
Total				13		13																													

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

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
AVIONICS SUPPORT EQUIPMENT (AZ3000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	407.6	9.9	9.2	11.3	13.3	5.2	3.4	2.6				462.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	407.6	9.9	9.2	11.3	13.3	5.2	3.4	2.6				462.5
Initial Spares												
Total Proc Cost	407.6	9.9	9.2	11.3	13.3	5.2	3.4	2.6				462.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

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

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
ANVIS/HUD (K35601)

Program Elements for Code B Items:

Code:
A

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	407.6	9.9	9.2	11.3	13.3	5.2	3.4	2.6				462.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	407.6	9.9	9.2	11.3	13.3	5.2	3.4	2.6				462.5
Initial Spares												
Total Proc Cost	407.6	9.9	9.2	11.3	13.3	5.2	3.4	2.6				462.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The AN/AVS-6, Aviator's Night Vision Imaging System (ANVIS), supports the Army Transformation objectives by permitting superior tactical mobility of rotary wing aircraft during darkness and low light conditions. AN/AVS-6 is a binocular, helmet-mounted system for Aviation crew members. The AN/AVS-6(V)3 is an enhanced night vision goggle that significantly expands the input dynamic range to support operations in conditions that vary from below "starlight" illumination levels through strong urban lighting situations. The increased capability yields enhanced mission performance and improved safety of flight compared to what is now possible using previous AN/AVS-6 systems. The AN/AVS-6(V)3 enhances survivability, lethality, and tactical mobility for aviation assets of the current Forces. This system supports the Legacy to Objective path of the Transformation Campaign Plan (TCP).

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

Justification:

FY04/05 procures AN/AVS-6(V)3 systems for fielding to the 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 2003			
ACFT Cost Elements		ID	FY 02			FY 03			FY 04			FY 05		
		CD	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			7470	1265	6	9458	1548	6	11431	1862	6	3531	565	6
Engineering Support			654			924			941			958		
Project Management Admin			796			310			314			320		
Engineering Change Orders			190			177			352			111		
Testing						200								
Fielding			135			231			257			234		
Total			9245			11300			13295			5154		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

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

Weapon System Type:

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

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
K35601 ANVIS/HUD										
FY 2002	ITT ROANOKE, VA	C/FFP	CECOM	May 02	May 03	1265	6	Yes		
FY 2003	ITT ROANOKE, VA	C/FFP	CECOM	Jan 03	Oct 03	1548	6	Yes		
FY 2004	ITT ROANOKE, VA	C/FFP	CECOM	Dec 03	Sep 04	1862	6	Yes		
FY 2005	ITT ROANOKE, VA	C/FFP	CECOM	Dec 04	Sep 05	565	6	Yes		

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	580.2	11.8	18.9	19.3	16.6	17.0	30.4	42.3	47.8	45.4		829.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	580.2	11.8	18.9	19.3	16.6	17.0	30.4	42.3	47.8	45.4		829.7
Initial Spares												
Total Proc Cost	580.2	11.8	18.9	19.3	16.6	17.0	30.4	42.3	47.8	45.4		829.7
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Program provides for Aviation Ground Support Equipment such as test sets, calibration kits, ground power units, hydraulic test stands, and tool shop sets.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

63801/B32 63801/B33

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	233.5	11.8	18.9	19.3	16.6	17.0	30.4	42.3	47.8	45.4		483.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	233.5	11.8	18.9	19.3	16.6	17.0	30.4	42.3	47.8	45.4		483.0
Initial Spares												
Total Proc Cost	233.5	11.8	18.9	19.3	16.6	17.0	30.4	42.3	47.8	45.4		483.0
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. This equipment supports Legacy and Legacy-to-Objective systems which relate to the Transformation Campaign Plan.

Justification:

FY 04/05 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, the modernization of aircraft, the 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 that cannot be repaired on the battlefield, nonflyable aircraft undergoing maintenance, heavily damaged aircraft and/or crash damaged aircraft. 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 contain AVIM Shop Set tool loads and provide the capability of maritime shipboard movement through commercial ports. These ISO containers are compatible with military/commercial roll-on/roll-off ships and military/commercial ground transportation. 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. The Apache Longbow (AH-64D) has significantly increased the requirement for 400 hertz (Hz) electrical servicing. 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 Standard Aircraft Towing System (SATS) will standardize maintenance tugs used to reposition aircraft.

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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Nondestructive Test Equipment (NDTE)													
Hardware (NDTE)					1560	60	26	1680	60	28			
Program Management Support					206			291					
Fielding					14			20					
Subtotal					1780			1991					
Flexible Engine Diagnostic System (FEDS)													
CCAD Support		1403											
RDEC Support		618											
FEDS Upgrade					100								
Program Management Support		232											
Subtotal		2253			100								
Shop Equipment Contact Maintenance (SECM)													
Fielding		10											
Subtotal		10											
Aircraft Vibration Analyzer (AVA)													
Hardware (AVA)								1613	120	13	1875	150	13
Installation(AVA MOD)		158											
Software Upgrade		100											
Program Management Support		39						319			322		
ATEC Support								250					
Subtotal		297						2182			2197		
Generic Aircraft Nitrogen Generator (GANG)													
Fielding		15											
Subtotal		15											
New Aviation Tool Set (NATS) Retrofit													
NATS-A Armament Individual Repairman Set		255											
Program Management Support		39											
Fielding		18			10								

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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Subtotal		312			10								
Aviation Ground Power Unit (AGPU)													
Hardware AGPU MOD (AH-64D)		3078	485	6	1664	40	42				1950	15	130
Hardware AGPU MOD (fleet less RAH-66)											334		
Program Management Support		348			218								
Subtotal		3426			1882						2284		
AVIM Shop Sets													
Hardware (AVIM Shop Sets)		4430	4	1108	6942	6	1157	2410	2	1205			
Hardware (AVIM ISO Shelters)		22	18	1									
Shelter Refurbishment		2078			1677			381					
Program Management Support		733			1112			479					
Fielding		24			14			10					
Subtotal		7287			9745			3280					
Containerization and Modernization Program (CAMP) Shop Sets													
Hardware (CAMP Shop Sets)											2589	2	1295
Shelter Refurbishment											293		
Program Management Support											495		
Fielding											8		
Subtotal											3385		
Unit Maintenance Aerial Recovery Kit (UMARK)													
Hardware w/crossbar (UMARK)		1839	44	42	2234	51	44	2342	51	46			
Hardware w/o crossbar (UMARK)		587	20	29	1494	37	40	1567	37	42			
Program Management Support		328			484			675					
Technical Services		243											
Nonrecurring Engineering		249											
Fielding					14			30					
Subtotal		3246			4226			4614					

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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Battle Damage Assessment Repair Kit (BDAR)													
Hardware (BDAR Fuel Cell)							56	17	3	117	37	3	
Hardware (BDAR Electrical)							752	17	44	1665	35	48	
Hardware (BDAR Fluid Line)							476	17	28	963	35	28	
Program Management Support							222			473			
Fielding							15			10			
Subtotal							1521			3228			
Aircraft Cleaning and Deicing System (ACDS)													
Hardware (ACDS)							605	11	55	2800	50	56	
Nonrecurring Engineering							293						
Technical Support							121						
Program Management Support							174			482			
Fielding										10			
Subtotal							1193			3292			
Digital Aircraft Weight Scales (DAWS)													
Hardware (DAWS)		1824	120	15									
Program Management Support		212											
Fielding							14			10			
Subtotal		2036					14			10			
Standard Aircraft Towing System (SATS)													
Hardware (SATS)							1420	71	20	2205	105	21	
Technical Services							105						
Program Management Support							264			382			
Fielding							17			20			
Subtotal							1806			2607			
HELO Maintenance Work Platform System													
Hardware (HELO-MWPS)							1500	1	1500				
Subtotal							1500						
Total		18882					19257			16597			16993

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities		Weapon System Type:			P-1 Line Item Nomenclature: AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Nondestructive Test Equipment (NDTE)										
Hardware (NDTE)										
FY 2003	TBS	C/FP	AMCOM	APR03	AUG03	60	26	YES		
FY 2004	TBS	C/FP-O	AMCOM	FEB04	JUN04	60	28	YES		
Aircraft Vibration Analyzer (AVA)										
Hardware (AVA)										
FY 2004	TBS	C/FP	AMCOM	JUL04	JUN05	120	13	YES		
FY 2005	TBS	C/FP-O	AMCOM	AUG05	JUL06	150	13	YES		
Hardware AGPU MOD (AH-64D)										
FY 2002	OLR Savannah, GA	MIPR	AMCOM	JUL02	DEC02	485	6	YES		
FY 2003	OLR Savannah, GA	MIPR	AMCOM	JAN03	MAY 03	40	42	YES		
Hardware AGPU MOD (fleet less RAH-66)										
FY 2005	OLR Savannah, GA	MIPR	AMCOM	DEC04	MAY05	15	130	NO	AUG03	
AVIM Shop Sets										
Hardware (AVIM Shop Sets)										

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities		Weapon System Type:			P-1 Line Item Nomenclature: AVIATION GROUND SUPPORT EQUIPMENT (AZ3520)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2002	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	MAR02	MAR03	4	1108	YES		
FY 2003	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	JAN03	JAN04	6	1157	YES		
FY 2004	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	JAN04	JAN05	2	1205	YES		
Hardware (AVIM ISO Shelters)										
FY 2002	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	MAR02	MAR03	18	1	YES		
Containerization and Modernization Program (CAMP) Shop Sets										
Hardware (CAMP Shop Sets)										
FY 2005	Rock Island Arsenal Rock Island, IL	MIPR	AMCOM	NOV04	NOV05	2	1295	YES		
Unit Maintenance Aerial Recovery Kit (UMARK)										
Hardware w/crossbar (UMARK)										
FY 2002	KAMAN Aerospace Corp Bloomfield, CT	SS/FP	AMCOM	MAY02	MAY03	44	42	YES		
FY 2003	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	JAN03	JAN04	51	44	YES		
FY 2004	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	JAN04	JAN05	51	46	YES		

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

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
Hardware w/o crossbar (UMARK)										
FY 2002	KAMAN Aerospace Corp Bloomfield, CT	SS/FP	AMCOM	MAY02	MAY03	20	29	YES		
FY 2003	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	JAN03	JAN04	37	40	YES		
FY 2004	KAMAN Aerospace Corp Bloomfield, CT	SS/FP-O	AMCOM	JAN04	JAN05	37	42	YES		
Battle Damage Assessment Repair Kit (BDAR)										
Hardware (BDAR Fuel Cell)										
FY 2004	TBS	C/FP	AMCOM	MAY04	SEP04	17	3	NO	NOV03	
FY 2005	TBS	C/FP-O	AMCOM	JAN05	JUL05	37	3	NO	NOV03	
Hardware (BDAR Electrical)										
FY 2004	TBS	C/FP	AMCOM	MAY04	SEP04	17	44	NO	NOV03	
FY 2005	TBS	C/FP-O	AMCOM	JAN05	JUL05	35	48	NO	NOV03	
Hardware (BDAR Fluid Line)										
FY 2004	TBS	C/FP	AMCOM	MAY04	SEP04	17	28	NO	NOV03	
FY 2005	TBS	C/FP-O	AMCOM	JAN05	JUL05	35	28	NO	NOV03	

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

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
Aircraft Cleaning and Deicing System (ACDS)										
Hardware (ACDS)										
FY 2004	TBS	C/FP	AMCOM	JAN04	JUL04	11	55	YES		
FY 2005	TBS	C/FP-O	AMCOM	DEC04	JUN05	50	56	YES		
Digital Aircraft Weight Scales (DAWS)										
Hardware (DAWS)										
FY 2002	Intercomp Minneapolis, MN	C/FP	AMCOM	SEP02	APR03	120	15	YES		
Hardware (SATS)										
FY 2004	TBS	C/FP-O	USAF	DEC03	JUL04	71	20	YES		
FY 2005	TBS	C/FP-O	USAF	DEC04	JUL05	105	21	YES		
Hardware (HELO-MWPS)										
FY 2003	TBS	C/FP	AMCOM	JUL04	JUL05	1	1500	NO	JUN04	

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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

P-1 Item Nomenclature
AIRCREW INTEGRATED SYSTEMS (AZ3110)

Program Elements for Code B Items:

Code:

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	87.4	10.5	15.1	15.0	28.9	28.7	29.6	34.2	41.4	38.1		328.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	87.4	10.5	15.1	15.0	28.9	28.7	29.6	34.2	41.4	38.1		328.7
Initial Spares												
Total Proc Cost	87.4	10.5	15.1	15.0	28.9	28.7	29.6	34.2	41.4	38.1		328.7
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The programs in Air Warrior provide improved aircrew safety, survivability and human performance that amplify the warfighting effectiveness of the Army Transformation aircraft, including the RAH-66 Comanche, AH-64A/D Apache, UH/HH-60L/M Blackhawk, OH-58D Kiowa Warrior, and CH-47D/F Chinook helicopters and Special Operations Aircraft. 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. Air Warrior programs include the HGU-56/P Helmet, the Air Warrior system, Laser Eye Protective devices, and the Cockpit Air Bag System (CABS). Air Warrior provides a system level approach to Aviation Life Support Equipment including the flight helmet, laser eye protection, and survival gear to be used in an escape and evade scenario. The Air Warrior system level approach to Aviation Life Support Equipment also includes microclimate cooling, sound attenuation devices, overwater equipment, night vision devices, extraction capability, chemical and biological protection, and the flight duty uniform. Air Warrior also includes the integration efforts on the RAH-66 Comanche, AH-64A/D Apache, UH/HH-60L/M Blackhawk, OH-58D Kiowa Warrior, and CH-47D/F Chinook helicopters and Special Operations Aircraft. Block 1 Air Warrior ensembles will be procured to integrate aircrew equipment for maximum aircrew effectiveness by providing increased mission performance and safety, reduction of equipment weight and bulk, and increased tailorability to specific missions, threats, and the various aircraft platforms operated. Air Warrior will enable the Army Aviation Warfighter to 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 Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures the Air Warrior basic ensemble, aircraft platform installation and A and B kit production. Aircraft procurement funding for all PM Air Warrior 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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware													
Aircrew Integrated Helmet System-ARNG													
---HGU-56/P Helmets		876	977	0.9									
---HGU-56/P Communication Ear Plugs		174	984	0.2									
---HGU-56/P Maxillofacial Shields		300	2203	0.1									
---IHADSS Helmets		2150	108	19.9									
Air Warrior Block 1 Ensembles					3132	522	6.0	8310	1385	6.0	8682	1447	6.0
Air Warrior A Kits & Install					1218	70	17.4	5542	319	17.4	4492	259	17.3
Air Warrior MCS (B Kits)					2880	394	7.3	8607	1179	7.3	6483	888	7.3
Total Hardware Costs		3500			7230			22459			19657		
Other Costs													
Retinal Scanning Display FBCB2 Demo		1480											
Manuals					326			567			615		
New Equipment Training								189			216		
Initial Spares								65			234		
Initial Repair Parts					96			210			2180		
Support Equipment					166			174			191		
Total Other Costs		1480			588			1205			3436		
Nonrecurring Costs													
Nonrecurring Engineering					2251								
Total Nonrecurring Costs					2251								
Air Warrior ECP		5785			73			215			200		
Systems Integration Engineering		2719			3403			2854			2880		
Project Management Admin		1279			1289			1302			1314		
Total ECP, Sys Int, & Admin Costs		9783			4765			4371			4394		
Support Costs													
Fielding		329			122			859			1232		
Total Support Costs		329			122			859			1232		
Total		15092			14956			28894			28719		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities		Weapon System Type:			P-1 Line Item Nomenclature: AIRCREW INTEGRATED SYSTEMS (AZ3110)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Aircrew Integrated Helmet System-ARNG										
---HGU-56/P Helmets										
FY 2002	DLA Fort Belvoir, VA	Reqn	DLA, Fort Belvoir, VA	Apr 02	May 03	977	0.9	Yes		
---HGU-56/P Communication Ear Plugs										
FY 2002	DLA Fort Belvoir, VA	Reqn	DLA, Fort Belvoir, VA	Sep 02	Jan 03	984	0.2	Yes		
---HGU-56/P Maxillofacial Shields										
FY 2002	Gentex Carbondale, PA	SS/FP	Redstone Arsenal, AL	Sep 02	Jan 03	2203	0.1	Yes		Jun 02
---IHADSS Helmets										
FY 2002	EFW Incorporated Fort Worth, TX	SS/FFP	Rock Island, IL	Oct 02	Nov 03	108	19.9	Yes		
Air Warrior Block 1 Ensembles										
FY 2003	TBS	C/FP	Redstone Arsenal, AL	Jun 03	Jan 04	522	6.0	Yes		Jan 03
FY 2004	TBS	C/FP	Redstone Arsenal, AL	Jun 03	Jan 04	1385	6.0	Yes		Jan 03
FY 2005	TBS	C/FP	Redstone Arsenal, AL	Jun 03	Jan 04	1447	6.0	Yes		Jan 03
Air Warrior A Kits & Install										
FY 2003	Westwind Corporation Huntsville, AL	C/FP	Redstone Arsenal, AL	Jun 03	Feb 04	70	17.4	Yes		Dec 02

REMARKS: Contractor and location for Air Warrior Block 1 Ensembles unknown until contracts awarded.

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

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

Weapon System Type:

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

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2004	Westwind Corporation Huntsville, AL	C/FP	Redstone Arsenal, AL	Jun 03	Feb 04	319	17.4	Yes		Dec 02
FY 2005	Westwind Corporation Huntsville, AL	C/FP	Redstone Arsenal, AL	Jun 03	Feb 04	259	17.3	Yes		Dec 02
Air Warrior MCS (B Kits)										
FY 2003	Carleton Technologies, Inc. Orchard Park, NY	C/FP	Redstone Arsenal, AL	Jan 03	Jan 04	394	7.3	Yes		Aug 02
FY 2004	Carleton Technologies, Inc. Orchard Park, NY	C/FP	Redstone Arsenal, AL	Jan 03	Jan 04	1179	7.3	Yes		Aug 02
FY 2005	Carleton Technologies, Inc. Orchard Park, NY	C/FP	Redstone Arsenal, AL	Jan 03	Jan 04	888	7.3	Yes		Aug 02

REMARKS: Contractor and location for Air Warrior Block 1 Ensembles unknown until contracts awarded.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

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

P-1 Item Nomenclature
AIR TRAFFIC CONTROL (AA0050)

Program Elements for Code B Items:

Code:

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	114.1	73.5	58.6	63.3	60.0	59.6	56.2	77.9	108.5	85.5		757.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	114.1	73.5	58.6	63.3	60.0	59.6	56.2	77.9	108.5	85.5		757.1
Initial Spares												
Total Proc Cost	114.1	73.5	58.6	63.3	60.0	59.6	56.2	77.9	108.5	85.5		757.1
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 and communications switching system) with the installation of state of the art digital technology. These new systems include the Voice Communication Switching System (VCSS), the DoD Advanced Automation System (DAAS), the Digital Airport Surveillance Radar (DASR). The Fixed Base Precision Approach Radar (FBPAR) which will be the Army's primary ground controlled precision approach capability to recover aircraft to fixed base facilities, ensuring safe landing in adverse weather conditions.

Tactical Air Traffic Control equipment includes the Air Traffic Navigation Integration and Coordination System (ATNAVICS), the Tactical Airspace Integration System (TAIS), the Mobile Tower System (MOTS), and 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 at Division/Corps/Echelon Above Corps (EAC). As an Army Battle Command System (ABCS) the TAIS will provide 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 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 Infrared (IR) mode, and expedites Forward Area Rearming/Refueling Point (FARP) operations by providing positive directions to specified points. The ATNAVICS, TAIS, MOTS and PALS serve as effective risk management tools for aviation safety during night, inclement weather, and combat operations. These systems support the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY 04/05 procures fixed base and tactical ATC systems. 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, and 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 2003

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, MOTS, and PALS. This new family of tactical Air Traffic Control systems will replace previous generation equipment that is obsolete and not economically supportable and ensures Army ATC and airspace management and command and control systems will be capable of supporting the path ahead to the Objective Force.

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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Fixed Base Precision Approach Radar													
Hardware-Precision Approach Radar		11452	6	1909	9252	6	1542	4514	2	2257	2700	1	2700
Interim Contractor Support (ICS)		189		497	4173			2005			1205		
Engineer, Furnish & Install (EF&I)		4128			2570			530			315		
Fielding		438			200			100			72		
Data		97											
Subtotal Costs		16304			16692			7149			4292		
Voice Communication Switching Syst(VCSS)													
Hardware (VCSS)		1726	6	288	2102	7	300	3275	8	409			
Interim Contractor Support (FAA)					102			205					
Engineer, Furnish & Install (EF&I)		483			1056			1465			1070		
Fielding		230			622			940					
Subtotal Cost		2439			3882			5885			1070		
DoD Advanced Automation System (DAAS)													
Hardware (DAAS)		1691	3	564	1096	1	1096	623	1	623	1266	2	633
Hardware (DAAS) Remote Tower Only		124	4	31				301	1	301	1651	5	330
Engineering Support		150											
Engineer, Furnish & Install (EF&I)		1251			1238			1410			3187		
Operational Support Facility (OSF)		800			1400			1300			1100		
Training		284			275			275			600		
Subtotal Costs		4300			4009			3909			7804		
Digital Airport Surveillance Radar(DASR)													
Hardware (DASR)					3118	1	3118	3473	1	3473	7146	2	3573
Other Associated Hardware					259			294			544		
Engineer, Furnish, & Install (EF&I)		273			1347			1574			3016		
Subtotal Costs		273			4724			5341			10706		
Tactical Airspace Integration Sys (TAIS)													
Hardware (TAIS)		8822	4	2206	8650	4	2163	8235	4	2059	8700	4	2175
Production Software Support		5810			4497			4501			3076		
GFE		3615			4000			5500			4000		
Interim Contractor Support (ICS)		611			400								
Testing		87			150			200			150		

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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Fielding/NET		1668			3299			3000			2468		
Subtotal Costs		20613			20996			21436			18394		
Air Traffic Navigation and Integration													
Hardware (ATNAVICS)		5799	2	2900	7548	3	2516	9863	4	2466	9863	4	2466
Production Start Up Costs		3598											
GFE		61			709			2194			1220		
Interim Contract Support (ICS)		310			256			150			155		
Fielding		851			2308			2000			1907		
P31		2563			2168			2036					
Subtotal Costs		13182			12989			16243			13145		
Mobile Tower System (MOTS)													
Hardware (MOTS)											486	2	243
GFE											1149		
Software											110		
Integration											249		
Fielding											105		
Training											16		
Subtotal Costs											2115		
Portable Airfield Lighting System (PALS)													
Hardware (PALS)											1770	2	885
GFE											74		
Integration											84		
CLS											62		
Fielding											76		
Training											22		
Subtotal Costs											2088		
Cold Cathode Portable Landing Lights													
Hardware (Cold Cathode Lighting)		850	2	425									
Test		650											
Subtotal Costs		1500											
Total		58611			63292			59963			59614		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities		Weapon System Type:			P-1 Line Item Nomenclature: AIR TRAFFIC CONTROL (AA0050)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware-Precision Approach Radar										
FY 2002	Raytheon Cambridge, MA	C/FP-O	CECOM	Mar 02	Jun 03	6	1909	Yes		
FY 2003	Raytheon Cambridge, MA	C/FP-O	CECOM	Feb 03	Apr 04	6	1542	Yes		
FY 2004	Raytheon Cambridge, MA	C/FP-O	CECOM	Jan 04	Apr 05	2	2257	Yes		
FY 2005	Raytheon Cambridge, MA	C/FP-O	CECOM	Jan 05	Apr 06	1	2700	Yes		
Hardware (VCSS)										
FY 2002	Litton/Denro Gaithersburg MD	C/FP-O	FAA	Jun 02	Dec 02	6	288	Yes		
FY 2003	Litton/Denro Gaithersburg MD	C/FP-O	FAA	Jan 03	Jul 03	7	300	Yes		
FY 2004	Litton/Denro Gaithersburg MD	C/FP-O	FAA	Jan 04	Jul 04	8	409	Yes		
Hardware (DAAS)										
FY 2002	Raytheon Malborough MA	C/FP-O	FAA	Apr 02	Apr 03	3	564	Yes		
FY 2003	Raytheon Malborough MA	C/FP-O	FAA	Mar 03	Mar 04	1	1096	Yes		
FY 2004	Raytheon Malborough MA	C/FP-O	FAA	Jan 04	Jan 05	1	623	Yes		
FY 2005	Raytheon Malborough MA	C/FP-O	FAA	Jan 05	Jan 06	2	633	Yes		
Hardware (DAAS) Remote Tower Only										

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Aircraft Procurement, Army / 4 / Support equipment and facilities		Weapon System Type:			P-1 Line Item Nomenclature: AIR TRAFFIC CONTROL (AA0050)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2002	Raytheon Cambridge, MA	C/FP-O	FAA	Apr 02	Apr 03	4	31	Yes		
FY 2004	Raytheon Cambridge, MA	C/FP-O	FAA	Jan 04	Jan 05	1	301	Yes		
FY 2005	Raytheon Cambridge, MA	C/FP-O	FAA	Jan 05	Jan 06	5	330	Yes		
Hardware (DASR)										
FY 2003	Raytheon Cambridge, MA	C/FP-O	USAF	Jun 03	Nov 04	1	3118	Yes		
FY 2004	Raytheon Cambridge, MA	C/FP-O	USAF	Jan 04	Jul 05	1	3473	Yes		
FY 2005	Raytheon Cambridge, MA	C/FP-O	USAF	Jan 05	Jul 06	2	3573	Yes		
Hardware (TAIS)										
FY 2002	General Dynamics Falls Church Virginia	C/FP-O	AMCOM	Dec 01	Dec 02	4	2206	Yes		
FY 2003	General Dynamics Falls Church Virginia	C/FP-O	AMCOM	Dec 02	Dec 03	4	2163	Yes		
FY 2004	General Dynamics Falls Church Virginia	C/FP-O	AMCOM	Jan 04	Jan 05	4	2059	Yes		
FY 2005	General Dynamics Falls Church Virginia	C/FP-O	AMCOM	Jan 05	Jan 06	4	2175	Yes		
Hardware (ATNAVICS)										
FY 2002	Raytheon Cambridge, MA	C/FP-O	CECOM	Mar 02	Mar 03	2	2900	Yes		
FY 2003	Raytheon Cambridge, MA	C/FP-O	CECOM	Feb 03	Jan 04	3	2516	Yes		

REMARKS:

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

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

Weapon System Type:

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

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2004	Raytheon Cambridge, MA	C/FP-O	CECOM	Jan 04	Jan 05	4	2466	Yes		
FY 2005	Raytheon Cambridge, MA	C/FP-O	CECOM	Jan 05	Jan 06	4	2466	Yes		
Hardware (MOTS)										
FY 2005	TBS TBS	TBS	TBS	Jan 05	Jan 06	2	243	No	Mar 04	
Hardware (PALS)										
FY 2005	TBS TBS	TBS	TBS	Jan 05	Jan 06	2	885	No	Mar 04	
Hardware (Cold Cathode Lighting)										
FY 2002	TBS TBS	TBS	TBS	N/A	N/A	2	425	No	N/A	

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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

P-1 Item Nomenclature
INDUSTRIAL FACILITIES (AZ3300)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

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

Description:

This program provides funding to the Army Test and Evaluation Command (ATEC), Developmental Test Command (DTC) to establish, modernize, expand or replace Army-owned industrial facilities used in production testing of Aircraft and Aircraft components. It sustains Army production test capabilities through upgrade and replacement of instrumentation and equipment that is technologically and/or economically obsolete. Modernization of test instrumentation and equipment generally provides increased automation and efficiencies, improved data quality and quantity and cost avoidances to Army Program Managers. This project procures airborne instrumentation and support equipment to collect in-flight compatibility, reliability, and safety measurements of Army aircraft. Programmed funding will be used to upgrade or replace production test instrumentation and equipment at the Aviation Technical Test Center, Fort Rucker, AL and, beginning in FY07, Yuma Proving Ground, Yuma, AZ. This project supports all transition paths of the Army Transformation Campaign Plan (TCP).

Justification:

FY04/05 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; upgraded Local Area Network components and interfaces used in handling large volumes of data; test equipment used to troubleshoot flight test instrumentation; on-board instrumentation recorder for monitoring high speed digital avionics busses; high resolution digital airborne video cameras; and radios for communication with test pilots. 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 its 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 2003

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

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

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	51.6		4.9	2.6	2.5	2.5	2.6	2.6	2.6	2.6		74.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	51.6		4.9	2.6	2.5	2.5	2.6	2.6	2.6	2.6		74.4
Initial Spares												
Total Proc Cost	51.6		4.9	2.6	2.5	2.5	2.6	2.6	2.6	2.6		74.4
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The M261 19-tube and M260 7-tube rocket launchers are used to fire 2.75 Inch HYDRA 70 rockets from the following platforms: AH-64 Apache, OH-58D Kiowa Warrior, MH-60L Blackhawk, and AH-6J helicopters. The launchers are non-repairable yet durable enough to withstand as many as 32 rocket firings before being discarded. The empty weight of the M260 launcher is approximately 35 pounds, and the empty weight of the M261 launcher is approximately 82 pounds. The launcher permits fuze-timing selection from the cockpit and will launch rockets using either the MK 40 or the MK 66 motors. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 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 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
M260 (7-Tube Lightweight Launcher (LWL))													
Hardware		4235	1650	2.567	2377	924	2.573	2252	850	2.649	2244	810	2.770
Recurring Costs													
Production Support		374			255			260			263		
Nonrecurring Costs													
First Article Test		291											
Total		4900			2632			2512			2507		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

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

Weapon System Type:

P-1 Line Item Nomenclature:
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	Harvard Industries Arnold, MO	C/FP	TACOM-RI	Jul-02	Oct-03	1650	2.567	Y		Feb-02
FY 2003	Harvard Industries Arnold, MO	C/FP	TACOM-RI	Feb-03	Oct-04	924	2.573	Y		Feb-02
FY 2004	Harvard Industries Arnold, MO	C/Option	TACOM-RI	Feb-04	Oct-05	850	2.649	Y		Feb-02
FY 2005	Harvard Industries Arnold, MO	C/Option	TACOM-RI	Feb-05	Oct-06	810	2.770	Y		Feb-02

REMARKS: Competitively awarded fixed price contract to Harvard Industries July 2002. Ordering Period 1 extends through 31 Dec 2003. Option Period 1 is 01 Jan 04 to 31 Dec 04. Option Period 2 is 01 Jan 05 to 31 Dec 05. Options have been priced.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	214.9	14.7	19.6	43.7	24.6	9.8						327.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	214.9	14.7	19.6	43.7	24.6	9.8						327.4
Initial Spares												
Total Proc Cost	214.9	14.7	19.6	43.7	24.6	9.8						327.4
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:

FY04/FY05 procures 67 B-Kits and 112 AH-64D A-Kits. Supports Required Operation Capability (ROC) for NOE Communications dated 7 May 1980 and updated in approved Operational Requirement Document for the NOE Communications system dated 26 February 1994. The AN/ARC-220/VRC-100 answers Non-Line-of-Sight communication deficiency for the AH-64A/D aircraft as identified by Task Force Hawk. The AN/ARC-220 supports digitization of the battlefield and enhances Joint Services communications. The AN/ARC-220/VRC-100 communications system supports the five (5) Army modernization objectives; protect and sustain the force, protect the force, win the battlefield information war, conduct precision strikes throughout the battlefield and dominate the maneuver battle.

Exhibit P-5, Weapon ACFT Cost Analysis		Appropriation/Budget Activity/Serial No. Aircraft Procurement, Army / 4 / Support equipment and facilities			P-1 Line Item Nomenclature: AIRBORNE COMMUNICATIONS (AA0705)			Weapon System Type:			Date: February 2003		
ACFT Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
RECURRING COSTS													
A. AN/ARC-220 NOE HF Airborne Radio		5399	230	23	5080	209	26	1836	74	27	586	26	27
B. AN/VRC-100 Ground Radio					1554	42	37						
C. A-Kits		6694	165	41	23874	202	162	15769	88	179	4113	23	179
D. A-Kit Installation		63	123	1	4626	258	18	3752	202	19	1603	88	18
SUBTOTAL		12156			35134			21357			6302		
NON-RECURRING COSTS													
A. A-Kit Intergration		4356			4430								
B. Other System Test					10								
SUBTOTAL		4356			4440								
SUPPORT COST													
A. Fielding Support		2162			1955			2028			3004		
B. Program Management		888			2186			1231			490		
SUBTOTAL		3050			4141			3259			3494		
Total		19562			43715			24616			9796		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

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

Weapon System Type:

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

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A. AN/ARC-220 NOE HF Airborne Radio										
FY 2002	Rockwell International Cedar Rapids, IA	FFP	CECOM	Jan 02	Jul 02	230	23	Yes		
FY 2003	Rockwell International Cedar Rapids, IA	FFP	CECOM	Feb 03	Aug 03	209	26	Yes		
FY 2004	Rockwell International Cedar Rapids, IA	FFP	CECOM	Jan 04	Jul 04	74	27	Yes		
FY 2005	Rockwell International Cedar Rapids, IA	FFP	CECOM	Jan 05	Jul 05	26	27	Yes		
B. AN/VRC-100 Ground Radio										
FY 2003	Rockwell International Cedar Rapids, IA	FFP	CECOM	Feb 03	Aug 03	42	37	Yes		

REMARKS:

