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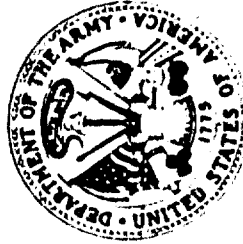
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DEPARTMENT OF THE ARMY

JUSTIFICATION OF ESTIMATES FOR FY 1990/FY 1991 BIENNIAL BUDGET

SUBMITTED TO CONGRESS

JANUARY 1989



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SELECTED
S FEB 1989
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AIRCRAFT PROCUREMENT, ARMY PROGRAMS

AIRCRAFT	MISSILES
WEAPONS & TRACKED COMBAT VEHICLES	
AMMUNITION	OTHER

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DEPARTMENT OF THE ARMY
AIRCRAFT PROCUREMENT , ARMY

JUSTIFICATION OF ESTIMATES FOR FISCAL YEARS 1990/1991 BIENNIAL BUDGET

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AIRCRAFT PROCUREMENT, ARMY

Section 1

Budget Appendix Extract

**Appropriation Language
Program and Financing Schedule**

This amount contains technical data

APPROPRIATION LANGUAGE

Army

For construction, procurement, production, modification, and modernization of aircraft, equipment, including ordnance, ground handling equipment, spare parts, and accessories therefor; specialized equipment and training devices; expansion of public and private plants, including the land necessary therefor, for the forgoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the forgoing purposes, \$3,267,500,000 in fiscal year 1990 to remain available for obligation until September 30, 1992, and \$3,377,300,000 in fiscal year 1991 to remain available for obligation until September 30, 1993, of which \$156,703,000 in fiscal year 1990 and \$338,604,000 in fiscal year 1991 shall be made available only for the Army National Guard and Army Reserve. (10 U.S.C. 2353, 2361, 3013, 4531-32; Department of Defense Appropriations Act, 1989; additional authorizing legislation to be proposed.)

(K.F.)



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Aircraft Procurement, Army
Program and Financing (in thousands of dollars) SUMMARY

Budget Plan (amounts for PROCUREMENT
actions programmed)

Identification code	21-2031-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Aircraft	1,372,182	1,430,126	1,346,389	1,366,698
00.0201	Modification of aircraft	622,090	743,065	1,131,008	1,176,973
00.0301	Spare and repair parts	512,278	552,169	676,123	564,865
00.0401	Support equipment and facilities	156,648	146,428	213,980	266,766
00.9101	Total direct program	2,663,399	2,871,788	3,267,500	3,377,300
01.0101	Reimbursable program	58,726	60,300	49,300	49,300
10.0001	Total	2,722,125	2,932,088	3,316,800	3,426,600
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-39,480	-46,496	-35,496	-35,496
13.0001	Trust funds(-)	-19,063	-13,311	-13,311	-13,311
14.0001	Non-Federal sources(-)	-163	-493	-493	-493
17.0001	Recovery of prior year obligations				
21.4002	Unobligated balance available, start of year:				
21.4003	For completion of prior year budget plans	-87,100	-44,600		
21.4007	Available to finance new budget plans	-26,966	6,290		
22.4001	Reprogramming from/to prior year budget plans	31,115	38,510		
22.4001	Unobligated balance transferred to other accounts				
24.4002	Unobligated balance available, end of year:				
24.4003	For completion of prior year budget plans	44,800			
25.0001	Available to finance subsequent year budget plans	6,951			
39.0001	Unobligated balance lapsing				
39.0001	Budget authority	2,632,199	2,871,788	3,267,500	3,377,300
Budget authority:					
40.0001	Appropriation	2,716,406	2,883,700	3,267,500	3,377,300
40.0004	Reduction pursuant to P.L. 100-463		-912		
40.0017	Appropriation rescinded (unobligated balance)	-61,200			
41.0001	Transferred to other accounts(-)	-25,007	-11,000		
43.0001	Appropriation (adjusted)	2,632,199	2,871,788	3,267,500	3,377,300
Relation of obligations to outlays:					
71.0001	Obligations incurred, net				
72.4001	Obligated balance, start of year				
74.4001	Obligated balance, end of year				
77.0001	Adjustments in expired accounts				
78.0001	Adjustments in unexpired accounts				
90.0001	Outlays				

Aircraft Procurement, Army
Program and Financing (in thousands of dollars) SUMMARY

Identification code	21-2031-0-1-051			Obligations		
	1988 actual	1989 est.	1990 est.	1990 est.	1991 est.	1991 est.
Program by activities:						
Direct program:						
00.0101	1,246,652	1,414,300	1,333,631	1,381,276		
00.0201	575,249	865,030	1,093,169	1,140,145		
00.0301	510,893	524,759	553,141	565,210		
00.0401	121,793	189,065	222,171	255,723		
00.9101	2,454,627	2,993,154	3,202,132	3,342,363		
01.0101	39,503	84,938	49,300	49,300		
10.0001	2,494,130	3,078,092	3,251,432	3,391,663		
Financing:						
Offsetting collections from:						
11.0001	-35,712	-46,496	-35,496	-35,496		
13.0001	-18,642	-13,311	-13,311	-13,311		
14.0001	-163	-493	-493	-493		
17.0001	-70,403					
21.4002	-428,009	-695,252	-555,538	-555,538		
21.4003	-87,100	-44,800				
22.4001	31,115	38,510				
24.4002	696,252	555,538	620,906	620,906		
24.4003	44,800					
25.0001	6,951					
39.0001	2,632,199	2,871,788	3,267,500	3,267,500		
Budget authority:						
40.0001	2,718,406	2,883,700	3,267,500	3,267,500		
40.0004		-912				
40.0017	-61,200					
41.0001	-25,007	-11,000				
43.0001	2,632,199	2,871,788	3,267,500	3,267,500		
Relation of obligations to outlays:						
71.0001	2,439,593	3,017,792	3,202,132	3,342,363		
72.4001	4,568,876	4,062,411	4,211,203	4,599,935		
74.4001	-4,062,411	-4,211,203	-4,599,935	-4,931,198		
77.0001	2,328					
78.0001	-70,403					
90.0001	2,877,984	2,869,000	2,813,400	3,011,100		

Aircraft Procurement, Army
Object Classification (in Thousands of dollars) SUMMARY

Identification code	21-2037-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Direct obligations:					
Other services:					
125.004		429,161	390,580	449,780	454,358
126.001	Supplies and materials	446,658	276,781	321,036	324,304
131.001	Equipment	1,578,908	2,323,793	2,431,316	2,563,701
199.001	Total Direct obligations	2,454,627	2,993,154	3,202,132	3,342,363
Reimbursable obligations:					
Other services:					
225.004		6,908	3,757	3,757	3,757
226.001	Supplies and materials	7,188	2,887	2,887	2,887
231.001	Equipment	25,409	78,484	42,656	42,656
299.001	Total Reimbursable obligations	39,503	84,938	49,300	49,300
999.901	Total obligations	2,494,130	3,078,092	3,251,432	3,391,663

Aircraft Procurement, Army
 Program and Financing (in Thousands of dollars) FISCAL YEAR 1988

Budget Plan (amounts for PROCUREMENT
 actions programmed)

Identification code	21-2031-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Aircraft				
00.0201	Modification of aircraft				
00.0301	Spares and repair parts				
00.0401	Support equipment and facilities				
00.9101	Total direct program				
01.0101	Reimbursable program				
10.0001	Total				
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)				
13.0001	Trust funds(-)				
17.0001	Recovery of prior year obligations				
21.4002	Unobligated balance available, start of year:				
	For completion of prior year budget plans				
21.4003	Available to finance new budget plans				
21.4007	Reprogramming from/to prior year budget plans				
22.4001	Unobligated balance transferred to other accounts				
25.0001	Unobligated balance lapsing				
40.0017	Budget authority (Appropriation rescinded) (
			-32,000		
			-12,166		
			5,215		
			6,951		
			-32,000		

Aircraft Procurement, Army
Program and Financing (in Thousands of dollars) FISCAL YEAR 1986

Obligations

Identification code	21-2031-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Aircraft	19,203			
00.0201	Modification of aircraft	71,291			
00.0301	Spares and repair parts	21,369			
00.0401	Support equipment and facilities	19,796			
00.9101	Total direct program	125,659			
01.0101	Reimbursable program	2,254			
10.0001	Total	127,913			
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	76			
13.0001	Trust funds(-)	310			
17.0001	Recovery of prior year obligations	-36,188			
21.4002	Unobligated balance available, start of year:				
	For completion of prior year budget plans	-104,277			
21.4003	Available to finance new budget plans	-32,000			
21.4007	Reprogramming from/to prior year budget plans				
22.4001	Unobligated balance transferred to other accounts	9,215			
25.0001	Unobligated balance lapsing	6,951			
40.0017	Budget authority (Appropriation rescinded) (-32,000			

Aircraft Procurement, Army
 Program and Financing (in thousands of dollars) FISCAL YEAR 1987

Identification code	21-2031-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)		
		1988 actual	1989 est.	1991 est.
Program by activities:				
Direct program:				
00.0101	Aircraft			
00.0201	Modification of aircraft			
00.0301	Spares and repair parts			
00.0401	Support equipment and facilities			
00.8101	Total direct program			
01.0101	Reimbursable program			
10.0001	Total			
Financing:				
Offsetting collections from:				
11.0001	Federal funds(-)			
13.0001	Trust funds(-)			
17.0001	Recovery of prior year obligations			
21.4002	Unobligated balance available, start of year:			
	For completion of prior year budget plans			
21.4003	Available to finance new budget plans			
21.4007	Reprogramming from/to prior year budget plans			
22.4001	Unobligated balance transferred to other accounts			
	Unobligated balance available, end of year:			
24.4002	For completion of prior year budget plans			
24.4003	Available to finance subsequent year budget plans			
40.0017	Budget authority (Appropriation rescinded) (

Aircraft Procurement, Army
 Program and Financing (in thousands of dollars) FISCAL YEAR 1987

Identification code	21-2031-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Aircraft	59,200	54,845		
00.0201	Modification of aircraft	105,831	49,425		
00.0301	Spares and repair parts	34,590	4,000		
00.0401	Support equipment and facilities	23,187	11,395		
00.9101	Total direct program	222,808	119,665		
01.0101	Reimbursable program	968	2,193		
10.0001	Total	223,776	121,858		
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	3,682			
13.0001	Trust funds(-)	-34,215			
17.0001	Recovery of prior year obligations				
21.4002	Unobligated balance available, start of year:				
	For completion of prior year budget plans	-323,732	-115,568		
21.4003	Available to finance new budget plans	-55,100	-14,800		
21.4007	Reprogramming from/to prior year budget plans				
22.4001	Unobligated balance transferred to other accounts	25,900	8,510		
22.4001	Unobligated balance available, end of year:				
24.4002	For completion of prior year budget plans	115,568			
24.4003	Available to finance subsequent year budget plans	14,870			
40.0017	Budget authority (Appropriation rescinded) (-29,200			

Aircraft Procurement, Army
 Program and Financing (in Thousands of dollars) FISCAL YEAR 1988

Identification code	21-2031-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)		
		1988 actual	1989 est.	1990 est.
Program by activities:				
Direct program:				
00.0101	Aircraft	1,372,182		
00.0201	Modification of aircraft	622,090		
00.0301	Spares and repair parts	512,279		
00.0401	Support equipment and facilities	156,848		
00.9101	Total direct program	2,663,399		
01.0101	Reimbursable program	58,726		
10.0001	Total	2,722,125		
Financing:				
Offsetting collections from:				
11.0001	Federal funds(-)	-39,480		
13.0001	Trust funds(-)	-19,063		
14.0001	Non-Federal sources(-)	-183		
21.4002	Unobligated balance available, start of year:			
	For completion of prior year budget plans			
21.4003	Available to finance new budget plans		-30,000	
22.4001	Unobligated balance transferred to other accounts		30,000	
24.4002	Unobligated balance available, end of year:			
	For completion of prior year budget plans			
24.4003	Available to finance subsequent year budget plans	30,000		
39.0001	Budget authority	2,693,399		
Budget authority:				
40.0001	Appropriation	2,718,406		
41.0001	Transferred to other accounts(-)	-25,007		
43.0001	Appropriation (adjusted)	2,693,399		

Aircraft Procurement, Army
Program and Financing (in Thousands of dollars) FISCAL YEAR 1988

Obligations

Identification code	21-2031-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Aircraft	1,174,289	178,189	19,724	
00.0201	Modification of aircraft	388,127	141,362	82,601	
00.0301	Spares and repair parts	454,934	48,900	8,445	
00.0401	Support equipment and facilities	78,810	52,556	25,480	
00.9101	Total direct program	2,106,160	420,989	136,250	
01.0101	Reimbursable program	38,281	22,445		
10.0001	Total	2,142,441	443,434	136,250	
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-39,480			
13.0001	Trust funds(-)	-19,063			
14.0001	Non-Federal sources(-)	-183			
21.4002	Unobligated balance available, start of year:				
21.4003	For completion of prior year budget plans		-579,684	-136,250	
22.4001	Available to finance new budget plans		-30,000		
22.4001	Unobligated balance transferred to other accounts		30,000		
24.4002	Unobligated balance available, end of year:				
24.4003	For completion of prior year budget plans	579,684		136,250	
24.4003	Available to finance subsequent year budget plans	30,000			
39.0001	Budget authority	2,693,399			
Budget authority:					
40.0001	Appropriation	2,718,406			
41.0001	Transferred to other accounts(-)	-25,007			
43.0001	Appropriation (adjusted)	2,693,399			

Aircraft Procurement, Army
Program and Financing (in Thousands of dollars) FISCAL YEAR 1989

	1988 actual	1989 est.	1990 est.	1991 est.
	Budget plan (amounts for PROCUREMENT actions programmed)			
Identification code 21-2031-0-1-051				
Program by activities:				
Direct program:				
00.0101 Aircraft				
00.0201 Modification of aircraft				
00.0301 Spares and repair parts				
00.0401 Support equipment and facilities				
00.9101 Total direct program				
01.0101 Reimbursable program				
10.0001 Total				
Financing:				
Offsetting collections from:				
11.0001 Federal funds(-)				
13.0001 Trust funds(-)				
14.0001 Non-Federal sources(-)				
21.4002 Unobligated balance available, start of year:				
For completion of prior year budget plans				
24.4002 Unobligated balance available, end of year:				
For completion of prior year budget plans				
39.0001 Budget authority				
Budget authority:				
40.0001 Appropriation				
40.0004 Reduction pursuant to P.L. 100-463				
41.0001 Transferred to other accounts(-)				
43.0001 Appropriation (adjusted)				

Aircraft Procurement, Army
 Program and Financing (in thousands of dollars) FISCAL YEAR 1989
 Obligations

Identification code	21-2031-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Aircraft		1,181,286	162,882	85,958
00.0201	Modification of aircraft		674,243	43,708	25,114
00.0301	Spares and repair parts		471,859	52,230	28,080
00.0401	Support equipment and facilities		125,112	13,664	7,452
00.9101	Total direct program		2,452,500	272,684	146,604
01.0101	Reimbursable program		60,300		
10.0001	Total		2,512,800	272,684	146,604
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)		-46,496		
13.0001	Trust funds(-)		-13,311		
14.0001	Non-Federal sources(-)		-493		
21.4002	Unobligated balance available, start of year: For completion of prior year budget plans			-419,288	-146,604
24.4002	Unobligated balance available, end of year: For completion of prior year budget plans		419,288	146,604	
39.0001	Budget authority		2,871,788		
Budget authority:					
40.0001	Appropriation		2,883,700		
40.0004	Reduction pursuant to P.L. 100-463		-912		
41.0001	Transferred to other accounts(-)		-11,000		
43.0001	Appropriation (adjusted)		2,871,788		

Aircraft Procurement, Army
 Program and Financing (in Thousands of dollars) FISCAL YEAR 1990

Identification code	21-2031-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)		
		1988 actual	1989 est.	1990 est. 1991 est.
Program by activities:				
Direct program:				
00.0101	Aircraft		1,346,389	
00.0201	Modification of aircraft		1,131,008	
00.0301	Spares and repair parts		576,123	
00.0401	Support equipment and facilities		213,980	
00.9101	Total direct program		3,267,500	
01.0101	Reimbursable program		49,300	
10.0001	Total		3,316,800	
Financing:				
Offsetting collections from:				
11.0001	Federal funds(-)		-35,496	
13.0001	Trust funds(-)		-13,311	
14.0001	Non-Federal sources(-)		-493	
21.4002	Unobligated balance available, start of year; For completion of prior year budget plans			
24.4002	Unobligated balance available, end of year; For completion of prior year budget plans			
40.0001	Budget authority (Appropriation)		3,267,500	

Aircraft Procurement, Army
 Program and Financing (in Thousands of dollars) FISCAL YEAR 1990
 Obligations

Identification code	21-2031-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Aircraft			1,151,025	127,048
00.0201	Modification of aircraft			986,880	106,745
00.0301	Spares and repair parts			492,466	54,410
00.0401	Support equipment and facilities			182,627	20,260
00.9101	Total direct program			2,793,198	308,463
01.0101	Reimbursable program			49,300	
10.0001	Total			2,842,498	308,463
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)			-35,496	
13.0001	Trust funds(-)			-13,311	
14.0001	Non-Federal sources(-)			-493	
21.4002	Unobligated balance available, start of year: For completion of prior year budget plans				-474,302
24.4002	Unobligated balance available, end of year: For completion of prior year budget plans			474,302	165,839
40.0001	Budget authority (Appropriation)			3,267,500	

Aircraft Procurement, Army
 Program and Financing (in Thousands of dollars) FISCAL YEAR 1991

Identification code	21-2031-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)		
		1988 actual	1989 est.	1990 est.
Program by activities:				
Direct program:				
00.0101	Aircraft			1,366,696
00.0201	Modification of aircraft			1,178,973
00.0301	Spare and repair parts			564,865
00.0401	Support equipment and facilities			266,766
00.9101	Total direct program			3,377,300
01.0101	Reimbursable program			49,300
10.0001	Total			3,426,600
Financing:				
Offsetting collections from:				
11.0001	Federal funds(-)			-35,496
13.0001	Trust funds(-)			-13,311
14.0001	Non-Federal sources(-)			-493
24.4002	Unobligated balance available, end of year: for completion of prior year budget plans			
40.0001	Budget authority (Appropriation)			3,377,300

Aircraft Procurement, Army
Program and Financing (in Thousands of dollars) FISCAL YEAR 1991

Obligations

Identification code	21-2031-0-1-051	1988 actual	1989 est.	1990 est.	1991 est.
Program by activities:					
Direct program:					
00.0101	Aircraft				1,168,270
00.0201	Modification of aircraft				1,008,266
00.0301	Spares and repair parts				482,729
00.0401	Support equipment and facilities				228,011
00.9101	Total direct program				2,887,296
01.0101	Reimbursable program				49,300
10.0001	Total				2,936,596
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)				-35,496
13.0001	Trust funds(-)				-13,311
14.0001	Non-Federal sources(-)				-493
24.4002	Unobligated balance available, end of year: For completion of prior year budget plans				490,004
40.0001	Budget authority (Appropriation)				3,377,300

AIRCRAFT PROCUREMENT, ARMY

Section 2

Budget Activity Justification

Activity 1 - Aircraft

Activity 2 - Modification of Aircraft

Activity 3 - Spares and Repair Parts

Activity 4 - Support Equipment and Facilities

Department of the Army	Appropriation:		FY 1990/FY 1991
Annual Budget Estimates	AIRCRAFT PROCUREMENT, ARMY		BUDGET
JUSTIFICATION			
Program or Budget Project Account	(THOUSANDS OF DOLLARS)		
Activity 1 - Aircraft			
	Actual	Estimate	Estimate
	FY 1988	FY 1989	FY 1990
Direct Obligation or Direct Budget Plan	\$1,372,182	\$1,430,126	\$1,346,389
			\$1,366,696

Section 1 - PURPOSE AND SCOPE

Provides for procurement and manufacture of airplanes, helicopters, and associated aircraft armament, flight simulators, training devices and avionics equipment.

Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Grisly Hunter - (P-1 Line Item No. 1):

	(\$ in Thousands)
	FY 1990
	FY 1991
	\$ 9,898
	\$ 9,942

These funds are requested for a classified program. Program description is provided separately.

RC-12H/K Reconnaissance Airplane (P-1 Line Item No. 5):

	(\$ in Thousands)
	FY 1990
	FY 1991
	\$ 52,739
	\$ 106,726

Funding is requested in FY 1990 (\$52.7M) to procure five RC-12K reconnaissance aircraft and associated mission equipment. In FY 1991, funding (\$106.7M) will procure ten additional RC-12K aircraft and the related mission equipment. This system, GUARDRAIL Common Sensor, provides full Signal Intelligence support, including ELINT and COMINT at the Corps level.

AR-64 Attack Helicopter (APACHE) - (P-1 Line Item No. 9 and 10):

(\$ in Thousands)
FY 1990 FY 1991
\$826,056 \$768,871

\$826.1 million (including \$90.0 million advance procurement) in FY 1990 and \$768.9 million (including \$80.0 million advance procurement) in FY 1991 is requested to procure 72 AH-64 APACHE attack helicopters in each year. This will represent the first two years of a proposed FY 1990-1994 multi-year procurement of a total of 300 aircraft. The APACHE is a twin-engine, two-place, fully integrated anti-armor weapon system capable of destroying tanks and other armored vehicles under day, night and adverse weather conditions. The aircraft employs the HELLPFIRE anti-tank missile, Hydra 70 rockets, and 30mm gun. Target acquisition is accomplished by the Target Acquisition and Designation Sight (TADS) which enables extremely accurate fire with a high first round hit probability. Night navigation is provided by the Pilot Night Vision Sensor (PNVS). The mobility, flexibility, and rapid response of the AH-64 will provide the balance required to help counter the Warsaw Pact threat and allow the AR-64 to be a key member of the Rapid Deployment Force. The request also includes funding (\$12.3 million in FY 1990 and \$12.3 million in FY 1991) to procure 5 Combat Weapon Emergency Procedures Trainers in each of the biennial budget years.

UH-60 BLACKHAWK (Multiyear Procurement) - (P-1 Line Item 11 and 12):

(\$ in Thousands)
FY 1990 FY 1991
\$386,396 \$412,657

\$386.4 million in FY 1990 and \$412.7 million in FY 1991 is requested to procure 72 UH-60 BLACKHAWK helicopters in each year. These funds include \$180.3 million in FY 1990 and \$191.0 million in FY 1991 for advance procurement of long-leadtime items required to support the FY 1988-91 and follow-on multiyear procurement of airframes. The BLACKHAWK will modernize the Army's utility helicopter fleet. It will enhance tactical mobility with increased speed, lift capacity, range, reliability, availability, maintainability, and survivability at reduced overall operating costs. This utility helicopter is the Army's first true squad carrying helicopter.

MH-60K (SOF Aircraft) - (P-1 Line Item No. 13):

(\$ in Thousands)
FY 1990 FY 1991
\$ 71,300 \$ 68,500

\$71.3 million in FY 1990 and \$68.5 million in FY 1991 is requested to procure 11 UH-60 airframes in each year. These new airframes will be converted into MH-60K Special Operations Forces aircraft using funds contained in P-1 Line Item No. 30 and 31, Special Operations Forces Aircraft Mods.

Department of the Army	Appropriation:		FY 1990/FY 1991
Annual Budget Estimates	AIRCRAFT PROCUREMENT, ARMY		BUDGET
<u>JUSTIFICATION</u>			
Program or Budget Project Account	(THOUSANDS OF DOLLARS)		
Activity 2 - Aircraft Modifications	Actual	Estimate	Estimate
	FY 1988	FY 1989	FY 1990
Direct Obligation or Direct Budget Plan	\$622,090	\$743,065	\$1,131,008
			\$1,178,973

Section 1 - PURPOSE AND SCOPE

Provides for modifications of items and upgrade of equipment procured by the Aircraft Procurement, Army appropriation, including modification kits.

Section 2 - JUSTIFICATION OF FUNDS REQUESTED

OV-1 Surveillance Airplane MODS - (P-1 Line Item No. 14 and 15):

(\$ in Thousands)
 FY 1990 FY 1991
 \$ 15,238 \$ 36,873

These funds are requested to continue the OV-1 Multi-Stage Improvement Program (MSIP). The MSIP is a program of safety, operational and reliability product improvements which will result in a significant increase in system safety, readiness, and mission capability and ensure continuous intelligence to the tactical commander. FY 1990/1991 request will provide for improvements to the Airborne Radar Surveillance System, Flight Data Recorder, Avionics, and engine.

RC-12D MODS - (P-1 Line Item No. 16):

(\$ in Thousands)
 FY 1990 FY 1991
 \$ 43,063 \$ 34,334

These funds are requested to continue upgrades to the RC-12D reconnaissance airplane to the RC-12K GUARDRAIL/Common Sensor configuration.

RU-21 MODS - (P-1 Line Item No. 17):

(\$ in Thousands)
FY 1990 FY 1991
\$ 1,531 \$ 9,839

These funds are requested to complete upgrades in avionics to the RU-21A/B/C/H and upgrades to the aircraft survivability equipment for the RU-21H. Upgrades are required to overcome marginal logistics supportability for the avionics and provide active countermeasures against hostile Continuous Wave radars and surface-air and air-air missile systems.

AR-1S MODS - (P-1 Line Item No. 18):

(\$ in Thousands)
FY 1990 FY 1991
\$ 5,890 \$ 4,380

These funds are requested to continue modifications to the AH-1 COBRA fleet which will improve reliability, safety and capability, and extend the life and increase operational readiness. FY 1990/1991 funds will provide for improvements to the radio, air filter and TOW missile system test set, and redesign of the swashplate.

AR-64 MODS - (P-1 Line Item No. 19):

(\$ in Thousands)
FY 1990 FY 1991
\$ 38,097 \$ 77,120

These funds are requested to continue modifications to the AH-64 APACHE helicopter, including integration of the Air-to-Air Stinger and Airborne Target Handover System; improvements to optics and flight data recorder; procurement of laser protective visors; and installation of electromagnetic interference protection, the AN/AVR-2 laser warning receiver and secure lighting.

CH-47 Cargo Helicopter (MODS) - (P-1 Line Item No. 20 and 21):

(\$ in Thousands)
FY 1990 FY 1991
\$304,477 \$243,794

These funds are requested to continue the modernization program which upgrades CH-47 A and C models to the D configuration. These advances in design technology improve reliability and maintainability, reduce vulnerability, and increase life expectancy of each aircraft 20 years. The CH-47 is the Army's only active medium lift helicopter and is a key element in the Rapid Deployment Force. Operating at a rate of 48 aircraft per year, the total modernization program of 472 aircraft will be completed with a three year multi-year contract in FY 1990-1992.

OH-58 MODS - (P-1 Line Item No. 22):

(\$ in Thousands)
FY 1990 FY 1991
\$ 28,234 \$ 26,126

These funds are requested to continue safety and operational enhancements to the current fleet. The modifications will also provide a standoff, defensive/offensive capability against airborne and other armed threats.

UH-1 MODS - (P-1 Line Item No. 23):

(\$ in Thousands)
FY 1990 FY 1991
\$ 9,602 \$ 23,952

These funds are requested to continue safety and sustainment modifications that will provide the Army an effective and supportable fleet of lift helicopters through the year 2007. FY 1990/1991 modifications include Improved Particle Separator, Hub Spring/Warning Device, and installation of Single Channel Ground/Airborne Radio (SINGGARS). Also included in the request are funds for upgrades to UH-1 Flight Simulators.

UH-60 MODS - (P-1 Line Item No. 24):

(\$ in Thousands)
FY 1990 FY 1991
\$ 40,966 \$ 68,972

These funds are requested to continue various safety and operational modifications to the UH-60 BLACKHAWK helicopter. FY 1990/1991 modifications include electromagnetic environment protection, external stores support system, hover infrared suppressor system, SINGGARS, auxiliary power unit particle separator, nap-of-the-earth communications, flight data recorder, glass windshield, MEDEVAC kits, and Command Control Console.

Army Helicopter Improvement Program (AHIP) - (P-1 Line Item No. 25 and 26):

(\$ in Thousands)
FY 1990 FY 1991
\$276,375 \$304,320

These funds are requested to perform modifications (36 each in FYs 1990 and 1991) to OH-58A helicopters to the AHIP (OH-58D) configuration. Included in the request is \$35.3 million in FY 1990 and \$36.5 million in FY 1991 for advance procurement to support continued production in FY 1991 and FY 1992.

Aircraft Survivability Equipment (ASE) MODS - (P-1 Line Item No. 28):

	(\$ in Thousands)
	FY 1990 FY 1991
	\$ 7,125 \$ 12,872

These funds are requested to continue modifications for aircraft survivability equipment to meet current and emerging threats. FY 1990 and 1991 modifications include the AN/ALQ-144 Infrared Jammers and the AN/APR-39A(V)1 Radar Warning Receiver.

Aircraft 9W MODS - (P-1 Line Item No. 29):

	(\$ in Thousands)
	FY 1990 FY 1991
	\$ 19,717 \$ 18,552

\$19.7 million in FY 1990 and \$18.6 million is requested for a classified program. Program description is provided separately.

Special Operations Forces (SOF) Aircraft MODS - (P-1 Line Item No. 30 and 31):

	(\$ in Thousands)
	FY 1990 FY 1991
	\$339,902 \$317,043

These funds are requested for modifications to CH-47 and UH-60 airframes into MH-47E and MH-60K Special Operations Forces aircraft. Included in the request is \$127.4 million advance procurement in FY 1990 for long lead items to support required modifications in FY 1991 for 11 MH-60Ks and 24 MH-47Es. Long lead will also support modifications to 10 MH-47Es in FY 1992. The SOF Aircraft Modifications program provides for necessary modifications to upgrade MH-47E and MH-60K helicopters to configurations necessary to conduct precise navigation and extended range operations at tactical altitudes through unfamiliar mountainous terrain in support of special operations forces.

Tractor Heavy - (P-1 Line Item No. 32):

	(\$ in Thousands)
	FY 1990 FY 1991
	\$ 791 \$ 796

\$.8 million in FY 1990 and \$.8 million in FY 1991 is requested for a classified program. Program description is provided separately.

Department of the Army	Appropriation:		FY 1990/FY 1991
Annual Budget Estimates	AIRCRAFT PROCUREMENT, ARMY		BUDGET
JUSTIFICATION			
Program or Budget Project Account	(THOUSANDS OF DOLLARS)		
Activity 3 - Spares and Repair Parts	Actual	Estimate	Estimate
	FY 1988	FY 1989	FY 1990
Direct Obligation or Direct Budget Plan	\$512,279	\$552,169	\$576,123
			\$564,865

Section 1 - PURPOSE AND SCOPE

Provides for procurement of depot repairable spares and repair parts including provisioning (initial issue), replenishment, mobilization reserve, and avionics spares.

Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Spares and Repair Parts - (P-1 Line Item No. 33):

(\$ in Thousands)
 FY 1990 \$576,123
 FY 1991 \$564,865

Initial Spares: A total of \$200.0 million in FY 1990 and \$206.6 million in FY 1991 is requested to procure spares and repair parts in support of initial fielding of new or modified systems. These funds also support the procurement of aircraft engines and engine modules over the life cycle of the aircraft. Spares are an integral part of the development of any aircraft system (new procurement or modification). Initial spares are ordered to support the major item delivery and fielding schedule to preclude grounding the system for lack of spare parts. Aircraft end items supported in FY 1990/1991 are:

Program	(\$ Millions)	
	FY 1990	FY 1991
RC-12K	18.6	14.4
AH-64	73.6	78.2
UH-60	26.4	56.2

Program	(\$ Millions)	
	FY 1990	FY 1991
OV-1	1.2	2.3
AH-1S	1.0	.6
CH-47D	22.1	16.1
AH1P	22.7	23.6
Airborne Avionics	4.0	4.4
ASE	20.4	2.2
Avionics Support Equipment	1.3	1.3
Common Ground Equipment	.3	.3
Bellfire	2.9	1.7
ATAS	5.5	5.3
Total Initial Spares	200.0	206.6

Replenishment Spares: \$376.2 million in FY 1990 and \$358.3 million in FY 1991 is requested for replenishment spares. The peacetime replenishment spares support the Army's flying hour program, depot and pipeline requirements for the life of the system. War reserves provide initial combat surge support until resupply can be established.

Department of the Army	Appropriation:		FY 1990/FY 1991
Annual Budget Estimates	AIRCRAFT PROCUREMENT, ARMY		BUDGET
JUSTIFICATION			
Program or Budget Project Account	(THOUSANDS OF DOLLARS)		
Activity 4 - Support Equipment and Facilities			
	Actual	Estimate	Estimate
	FY 1988	FY 1989	FY 1990
Direct Obligation or Direct Budget Plan	\$156,848	\$146,428	\$213,980
			\$266,766

Section 1 - PURPOSE AND SCOPE

Provides for aircraft survivability equipment, avionics support equipment, common ground equipment (including tool sets, shop sets and components thereof), ground handling/servicing equipment, special test and diagnostic equipment, fixed base airfield support equipment (air traffic control), and aviation life support equipment (ALSE); for tactical air traffic control systems; for industrial facilities including provisions for industrial facilities, depot maintenance plant equipment and value engineering; and for war consumables including lightweight rocket launchers.

Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Aircraft Survivability Equipment (ASE) - (P-1 Line Item No. 34 and 35):

	(\$ in Thousands)
	FY 1990
	FY 1991
	\$ 98,834
	\$ 109,215

Funding is required to continue procurement of Radar Warning Receivers, Infrared Jammers, Radar Jammers/Countermeasures, and Interactive Systems. The ASE program provides self-protection, both active and passive, against anti-aircraft systems. It enables Army tactical aircraft to accomplish missions on the modern battlefield by enhancing aircraft and aircrew survivability.

Avionics Support Equipment - (P-1 Line Item No. 36):

	(\$ in Thousands)
	FY 1990
	FY 1991
	\$ 23,786
	\$ 25,093

\$23.8 million in FY 1990 and \$25.1 million in FY 1991 is requested to procure aviation night vision goggles.

Common Ground Equipment - (P-1 Line Item No. 37):

(\$ in Thousands)	
FY 1990	FY 1991
\$ 46,325	\$ 75,822

Funding is required to continue procurement of various items of aircraft support equipment, including Airfield Support Equipment; Aviation Life Support Equipment; Sets, Kits and Outfits; Aviation Ground Support Equipment; Position Locator System; and the AN/PRC-112 Survival Radio.

Air Traffic Control - (P-1 Line Item No. 38):

(\$ in Thousands)	
FY 1990	FY 1991
\$ 7,782	\$ 8,284

\$7.8 million in FY1990 and \$8.3 million in FY 1991 is requested to continue the procurement of tactical Air Traffic Control (ATC) systems to fill critical shortages of equipment in both Active and Army National Guard units.

Synthetic Flight Training Systems - (P-1 Line Item No. 39):

(\$ in Thousands)	
FY 1990	FY 1991
\$ 9,959	\$ 9,939

Funding is required for upgrades to the AH-1 Flight/Weapons Simulator. This item is obsolete and is not supportable except through firms dealing in used computer equipment. Upgrade will consist of computer replacement and upgrades to avionics, aircraft survivability equipment, weaponization, and other changes dictated by aircraft modifications.

Aviation Non-System Training Devices - (P-1 Line Item No. 40):

(\$ in Thousands)	
FY 1990	FY 1991
\$ 0	\$ 7,516

Funding is required to procure the Aviation Combined Arms Tactical Trainer, which is the aviation portion of the Combined Arms Tactical Trainer (CATT). The CATT will allow networking of aviation and weapons systems to allow fully interactive war fighting in a real-time computer generated battlefield.

Industrial Facilities - (P-1 Line Item No. 41):

	(\$ in Thousands)
FY 1990	FY 1991
\$ 23,023	\$ 26,537

Funding is requested to support Army Aviation Program Industrial Facilities. The FY 1990 request includes funding for Rehabilitation and Provisioning of Industrial Facilities (\$4.6 million), Depot Maintenance Plant Equipment (\$17.2 million) and Value Engineering (\$1.3 million). The FY 1991 request includes funding for Rehabilitation and Provisioning of Industrial Facilities (\$10.6 million), Depot Maintenance Plant Equipment (\$14.7 million) and Value Engineering (\$1.3 million).

War Consumables - (P-1 Line Item No. 42):

	(\$ in Thousands)
FY 1990	FY 1991
\$ 4,271	\$ 4,360

Funding is requested for M260 and M261 Lightweight Rocket Launchers to be used on the AH-1 COBRA/TOW and AH-64 APACHE attack helicopters. These launchers are required in order to fire the new family of Hydra 70 rockets with remote set fuzing options.

AIRCRAFT PROCUREMENT, ARMY

Section 3

Comparison of Programing Requirements and Financing

Comparison of FY 1989 program requirements as reflected in the amended FY 1988/1989 Biennial Budget with FY 1989 program requirements as shown in the FY 1990/1991 Biennial Budget.

Comparison of FY 1989 financing as reflected in the amended FY 1988/1989 Biennial Budget with FY 1989 financing as shown in the FY 1990/1991 Biennial Budget.

Comparison of FY 1988 program requirements as reflected in the amended FY 1988/1989 Biennial Budget with FY 1988 program requirements as shown in the FY 1990/1991 Biennial Budget.

Comparison of FY 1988 financing as reflected in the amended FY 1988/1989 Biennial Budget with FY 1988 financing as shown in the FY 1990/1991 Biennial Budget.

COMPARISON OF FY 1989 PROGRAM REQUIREMENTS
AS REFLECTED IN THE AMENDED FY 1988/1989 BIENNIAL BUDGET
WITH THE FY 1989 PROGRAM REQUIREMENTS AS SHOWN
IN THE FY 1990/1991 BIENNIAL BUDGET
SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

Appropriation	FY 1989 Requirements Per Amended FY 1988/1989 Biennial Budget	FY 1989 Requirements Per FY 1990/1991 Biennial Budget	Increase (+) or Decrease (-)
Aircraft Procurement, Army	1,353,638	1,430,126	+76,488
Activity 1 - Aircraft			
Activity 2 - Modification of Aircraft	740,065	743,065	+3,000
Activity 3 - Spares and Repair Parts	552,169	552,169	0
Activity 4 - Support Equipment and Facilities	163,628	146,428	-17,200
TOTAL	2,809,500	2,871,788	+62,288

EXPLANATION BY ACTIVITY

Activity 1 - Aircraft - Net increase results from Congressional adjustments to the AH-64 Attack Helicopter (+\$130,400), UH-60 Blackhawk (-\$20,000) and a General Reduction of (-\$912). Other adjustments are reprogramming actions for purchase Inflation (-\$11,000) and modification of Aircraft Survivability Equipment (-\$4,000).

Activity 2 - Modification of Aircraft - The net increase is due to Congressional changes to OV-1 Surveillance Airplane (-\$6,000), AH-64 (-\$11,000), CH-47 (-\$10,000), UH-60 (-\$5,000), AHIP (+\$29,600), Airborne Avionics (+12,000) and SOF Aircraft (-\$18,500) and an Army Reprogramming for Aircraft Survivability Equipment (+\$11,900).

Activity 4 - Support Equipment and Facilities - Decrease is due to Congressional change to Aircraft Survivability Equipment (-\$9,300) and Army Reprogramming to modify Aircraft Survivability Equipment (-\$7,900).

COMPARISON OF FY 1989 FINANCING AS REFLECTED
 IN THE AMENDED FY 1988/1989 BIENNIAL BUDGET WITH FY 1989 FINANCING
 AS SHOWN IN FY 1990/1991 BIENNIAL BUDGET

	(In Thousands of Dollars)	
Appropriation	FY 1989 Financing Per Amended FY 1988/1989 Biennial Budget	FY 1989 Financing Per FY 1990/1991 Biennial Budget Increase (+) Or Decrease (-)
Aircraft Procurement, Army		
Program Requirements (Total)		
Program Requirements (Service Account)	2,840,800	+91,288
Program Requirements (Reimbursable)	(2,791,500)	(+80,288)
Less:	(49,300)	(+11,000)
Anticipated reimbursements	-49,300	+11,000
Unobligated balance available from prior year to finance new budget plans	-44,800	-44,800
Add:		
Unobligated balance transferred to other accounts	+38,510	+38,510
Reprogramming to prior year budget plans	+6,290	+6,290
BUDGET AUTHORITY		
Appropriation	2,791,500	2,871,788
		+80,288

EXPLANATION:

The reimbursable program (offsetting collections) increased by \$11,000 because of new Army National Guard orders.

Unobligated balances available at the start of the year were adjusted to reflect Congressional rescissions of \$14,800 in FY 1987 and \$30,000 in FY 1988.

The unobligated balance transferred to the accounts represents the net result of unobligate balance available from prior year (+\$44,800) and the reprogramming to prior year budget plan (-\$6,290).

The reprogramming to prior year budget plans of \$6,290 represents an FY 1987 reprogramming pending approval.

COMPARISON OF FY 1988 PROGRAM REQUIREMENTS
AS REFLECTED IN THE AMENDED FY 1988/1989 BIENNIAL BUDGET
WITH THE FY 1988 PROGRAM REQUIREMENTS AS SHOWN
IN THE FY 1990/1991 BIENNIAL BUDGET
SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

Appropriation	FY 1988		FY 1988		FY 1988 Increase (+) or Decrease (-)
	Requirements Per Amended FY 1988/1989 Biennial Budget	1,420,195	Requirements Per FY 1990/1991 Biennial Budget	1,372,182	
Aircraft Procurement, Army					
Activity 1 - Aircraft	1,420,195		1,372,182		-48,031
Activity 2 - Modification of Aircraft	628,116		622,090		-6,026
Activity 3 - Spares and Repair Parts	517,122		512,279		-4,843
Activity 4 - Support Equipment and Facilities	152,973		156,848		+3,875
TOTAL	2,718,406		2,663,399		-55,007

EXPLANATION BY ACTIVITY

Activity 1 - Aircraft - The net decrease results from a Congressional Rescission taken against the AH-64 (-\$30,000) and Army Reprogramings for Military Pay and Readiness (-\$18,013).

Activity 2 - Modification of Aircraft - The net decrease resulted from Army reprogramings for Military Pay and Readiness (-\$6,026).

Activity 3 - Spares and Repair Parts - The net decrease resulted from Army reprogramings for Military Pay and Readiness (-\$968) and below threshold reprogramming of (-\$3,875).

Activity 4 - Support Equipment and Facilities - The net increase resulted from below threshold reprogramings (+\$3,875).

COMPARISON OF FY 1988 FINANCING AS REFLECTED
IN THE AMENDED FY 1988/1989 BIENNIAL BUDGET WITH FY 1989 FINANCING
AS SHOWN IN FY 1990/1991 BIENNIAL BUDGET

	(In Thousands of Dollars)		
	FY 1988 Financing Per Amended FY 1988/1989 Biennial Budget	FY 1988 Financing Per FY 1990/1991 Biennial Budget	FY 1988 Increase (+) or Decrease (-)
Appropriation			
Aircraft Procurement, Army			
Program Requirements (Total)	2,852,206	2,722,125	-130,081
Program Requirements (Service Account)	(2,718,406)	(2,663,399)	(-55,007)
Program Requirements (Reimbursable)	(133,800)	(58,726)	(-75,074)
Less:			
Anticipated reimbursements	-133,800	-58,726	+75,074
Unobligated balance available from prior year to finance new budget plans	-87,100	-87,100	0
Reprogramming from prior year budget plans	+6,290	-26,966	-33,256
Add:			
Unobligated balance transferred to other accounts	+19,610	+31,115	+11,505
Unobligated balance available to finance subsequent year budget plans		+44,800	+44,800
Unobligated balance lapsing		+6,951	+6,951
		2,657,206	2,632,199
			-25,007

BUDGET AUTHORITY

Appropriation

EXPLANATION:

The reimbursable program (offsetting collection) decreased because orders from Foreign Military Sales did not materialize as anticipated. The reprogramming from/to prior year budget plans was adjusted as follows: FY 1986 OSD Classified reprogramming (-\$5,215), FY 1987 rescission in FY 1989 Appropriation Act (-\$14,800), FY 1987 SOF Modification reprogramming (+\$6,290) and the unobligated FY 1986 balance lapsing of -\$6,951.

The unobligated balance transferred to other accounts resulted from the FY 1986 OSD Classified reprogramming (\$5,215) approval in FY 1988 and the FY 1987 SOF modification (\$6,290) reprogramming carrying over into FY 1989.

The unobligated balance available to finance subsequent year budget plans resulted from FY 1989 Congressional rescissions to the FY 1987 of \$14,800 and FY 1988 of 30,000.

AIRCRAFT PROCUREMENT, ARMY

Section 4

Status of Aircraft Modification Programs

Status of Aircraft Modification Program

FY 1989 Modification Programs

Programs as of 31 October 1988 (\$ Millions)

<u>Program</u>	<u>Appropriated</u>	<u>Reprogramming</u>	<u>Total Program Value</u>	<u>Total Obligations</u>	<u>Total Disbursements</u>
Airplane, Surveillance, OV-1	6.2	-	6.2	-	-
Airplane, Reconnaissance, RC-12D	31.9	-	31.9	-	-
Airplane, Reconnaissance, RU-21H	7.5	-	7.5	-	-
Helicopter, Attack, AH-1S	29.3	-	29.3	-	-
AH-64 Mods	6.3	-	6.3	-	-
Helicopter, Cargo, CH-47 Mods	246.3	-	246.3	-	-
Helicopter, Observation, OH-58	17.4	-	17.4	-	-
UH-60A Mods	23.4	-	23.4	-	-
Army Helicopter Improvement Program (AHIP)	202.6	-	202.6	.1	-
Airborne Avionics	2.7	-	2.7	-	-
ASE Mods Close Combat	13.1	-	13.1	-	-
Aircraft 9WW	24.0	-	24.0	-	-
SOF Aircraft	120.5	-	120.5	-	-

Status of Aircraft Modification Program

FY 1988 Modification Programs

Programs as of 31 October 1988 (\$ Millions)

<u>Program</u>	<u>Appropriated</u>	<u>Reprogramming</u>	<u>Total Program Value</u>	<u>Total Obligations</u>	<u>Total Disbursements</u>
Airplane, Surveillance, OV-1	17.0	-	17.0	4.4	-
Airplane, Reconnaissance, RU-21H	3.2	-	3.2	-	-
AR-64 Mods	62.2	+6.8	69.0	37.1	.6
Helicopter, Cargo, CH-47 Mods	226.9	-4.5	222.4	182.8	2.5
Helicopter, Observation, OH-58	27.0	+7.8	34.8	32.8	15.3
Helicopter, Utility, UH-1	2.2	-2.2	-	-	-
UH-60A Mods	30.9	+4.5	35.4	9.2	.7
Army Helicopter Improvement Program (AHIP)	160.1	-1.4	158.7	89.9	.3
Airborne Avionics	1.0	-.1	.9	.9	.3
ASE Mods Close Combat	.1	-.1	-	-	-
Aircraft 9WW	25.8	-	25.8	19.1	6.0
SOF Aircraft Mods	54.9	-	54.9	7.5	-

Status of Aircraft Modification Program

FY 1987 Modification Programs

Programs as of 31 October 1988 (\$ Millions)

<u>Program</u>	<u>Appropriated</u>	<u>Reprogramming</u>	<u>Total Program Value</u>	<u>Total Obligations</u>	<u>Total Disbursements</u>
Airplane, Surveillance, OV-1	9.8	-1.8	8.0	6.8	1.3
Airplane, Reconnaissance, RV-1	2.6	-2.3	.3	.3	-
Helicopter, Attack, AH-1S	25.4	+4.6	30.0	26.1	11.5
AH-64 Mods	32.6	+9.9	42.6	39.9	8.1
Helicopter, Cargo, CH-47 Mods	251.0	+2.2	253.2	240.4	180.2
Helicopter, Cargo, CH-54	1.3	-1.3	0	-	-
Helicopter, Utility, UH-1	5.8	-.5	5.3	5.2	.3
UH-60A Mods	7.5	+8.0	15.5	13.0	2.6
Army Helicopter Improvement Program (AHIP)	146.7	+4.5	151.2	142.6	87.7
Airborne Avionics	.1	+2.0	2.1	2.1	1.1
ASE Mods Close Combat	3.4	-3.3	.1	.1	-
Aircraft 9WW	11.7	+8.3	20.0	20.0	12.8
Modifications under \$2.0M	.1	+2.8	2.9	2.1	1.1

AIRCRAFT PROCUREMENT, ARMY

Section 5

Flight Simulator Procurement Program

Exhibit PB-32E

Exhibit P-43

FLIGHT SIMULATOR DATA SHEET
FY 1990/1991 Program

Simulator Model: AH-64 Combat Weapon Emergency Procedures Trainer

Aircraft System Supported: AH-64 APACHE

Description of Simulator: The Combat Weapon Emergency Procedures Trainer (CWEPT) consists of a full scale mock-up crew station for the pilot and copilot/gunner, electronically interconnected to both crew stations. This will provide the instructor a means to instruct and develop procedures as well as complete weaponization training for the aircrew. It is completely computerized to provide proper inputs. The CWEPT is capable of either providing automated training scenarios or allowing instructor/crew member interaction. The AH-64 CWEPT will enable AH-64 attack helicopter units to train pilots and copilots/gunners in cockpit procedures, weapon switchology, crew integration, and emergency procedures. Training on certain tasks and maneuvers is not possible in the aircraft because of the cost of ammunition and availability of laser ranges. Without the use of the CWEPT, AH-64 aircrews will have to train individual tasks in the Combat Mission Simulator (CMS) or the actual aircraft. This places an extra time restriction on both assets that could more effectively be transferred to the CWEPT. A cost avoidance will be realized in CWEPT versus CMS/Aircraft operating cost.

Development Status: Six production devices in addition to the prototype were planned in the Basis of Issue Plan. The production devices are similar to the prototype with all devices (visual systems and aircraft configuration) undergoing upgrades beginning in FY 1988 under a pre-planned product improvement program.

<u>Funding Data:</u> (\$ in millions)	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
Quantity	4	0	4	5
Procurement (APA)	\$12.2	\$0.0	\$12.3	\$12.3
RDTE	0	0	0	0
Total	\$12.2	\$0.0	\$12.3	\$12.3

Basis for FY 1990/1991 Request: In FY 1990, 4 CWEPTs will be procured; in FY 1991, 5 CWEPTs will be procured.

Contract Data: In FY 1988, the CWEPT award is scheduled for June 1989 with delivery in January 1992. The FY 1990 award is scheduled for October 1989 with delivery in August 1992. The FY 1991 award is scheduled for October 1990 with delivery in December 1992.

EXHIBIT PB-32E

FLIGHT SIMULATOR DATA SHEET
FY 1990/1991 Program

Simulator Model: AH-64 Combat Mission Simulator

Aircraft System Supported: AH-64 APACHE

Description of Simulator: The prototype AH-64 Combat Mission Simulator will be designed to provide a training capability for flight and weapon delivery, normal and emergency procedures and sensor system operating tasks required in the operational design basis helicopter. The simulator will consist of pilot and copilot/gunner trainee modules, instructor modules, motion subsystems, visual subsystems and a computer complex. The pilot and copilot/gunner trainee modules will be replicas of the actual aircraft cockpits, and each will be mounted on a six degree freedom-of-motion base. The visual subsystem will approximate crew member video displays. Simulated imagery includes Forward Looking Infrared (FLIR), Day Television (DTV) and Direct View Optics (DVO). Pilot displays consist of the Integrated Helmet and Display Sight System Helmet Display Unit (IHADSS HDU) and a panel mounted Video Display Unit (VDU). Gunner displays include the IHADSS HDU, a target acquisition and designation sight Heads Down Display (HDD) and a TADS Heads Out Display (HOD). The simulator functions will be controlled from the instructor's station located behind each trainee module. The pilot and copilot/gunner will have the capability to train individually or may train as a team performing an integrated combat mission. One CMS will be procured in FY 1989.

Development Status: Development of the CMS was completed in FY 1988 at a cost of approximately \$84.0 million.

<u>Funding Data:</u> (\$ in millions)	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
Quantity	0	1	0	0
Procurement (APA)	0	\$22.0	0	0
RDTE	0	0	0	0
Total	0	\$22.0	0	0

Basis for FY 1990/1991 Request: In FY 1989, one CMS will be procured.

Contract Data: Award is scheduled for April 1989, with delivery in August 1991.

EXHIBIT PB-32E

FY 1990/1991 BIENNIAL BUDGET ESTIMATE
FLIGHT SIMULATOR AND OTHER AIRCRAFT TRAINING EQUIPMENT

EXHIBIT P-43

(Dollars in Millions)

APPROPRIATION: Aircraft Procurement, Army

Weapon System	Equipment Nomenclature	P-1 Line Item	FY 1988 Qty/Amount	FY 1989 Qty/Amount	FY1990 Qty/Amount	FY 1991 Qty/Amount
AH-64 (2B40)(SSN A09000)	CMS	9		1/22.0		
AH-64 (2B40)(SSN A09000)	CWEPT	9	4/12.2		4/12.3	5/12.3