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JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1981

AIR FORCE

DEPARTMENT OF THE

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AIRCRAFT PROCUREMENT, AIR FORCE
MISSILE PROCUREMENT, AIR FORCE
OTHER PROCUREMENT, AIR FORCE

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DEPARTMENT OF THE AIR FORCE
JUSTIFICATION OF ESTIMATES FOR FY 1981 AND FY 1982

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MISSILE PROCUREMENT, AIR FORCE

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AIRCRAFT PROCUREMENT, AIR FORCE

For construction, procurement, and modification of aircraft and equipment, including armor and armament, specialized ground handling equipment and training devices, spare parts, and accessories therefor; the U.S. share of the NATO AWACS program; specialized equipment, expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land without regard to section 9774 of title 10, United States Code, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to the approval of title as required by section 355, Revised Statutes, as amended; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things; \$8,555,043,000 to remain available for obligation until September 30, 1983 (5 U.S.C. 3109; 10 U.S.C. 2271-79; 2353, 2386, 2663, 2672, 2672a, 8012, 8062, 9501-02, 9505, 9531-32, 9741-42; 31 U.S.C. 649c, 718; 50 U.S.C. 451, 453, 455; Department of Defense Appropriation Act, 1980, additional authorizing legislation to be proposed).

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Aircraft Procurement, Air Force

Program and Financing (in thousands of dollars)							
Identification code	57-3010-0-1-051	Budget plan (amounts for procurement actions programmed)			Obligations		
		1979 actual	1980 est	1981 est	1979 actual	1980 est	1981 est.
Program by activities:							
Direct:							
1.	Combat aircraft	3,957,000	3,986,250	3,587,600	3,573,988	3,804,566	3,925,573
2.	Airlift aircraft	67,500	77,220	...	63,615	28,735	42,000
3.	Other aircraft	10,200	43,000	...	8,710	11,800	85,215
4.	Modification of inservice aircraft	943,700	1,573,900	1,795,800	1,041,660	1,336,515	1,435,803
5.	Aircraft spares and repair parts	1,193,500	1,099,670	1,549,000	1,248,527	863,873	1,451,000
6.	Aircraft support equipment and facilities	765,507	1,302,141	1,518,543	891,450	1,279,443	1,443,275
Total direct		6,937,407	8,082,181	8,555,043	6,827,950	7,326,932	8,382,866
Reimbursable program (total)		491,247	361,333	266,538	635,488	404,068	262,134
Total		7,428,554	8,443,516	8,821,581	7,463,438	7,731,000	8,645,000
10.00	Total						
Financing:							
Offsetting collections from:							
11.00	Federal funds	-75,876	-49,800	-49,800	-71,134	-49,800	-49,800
13.00	Trust funds	-484,630	-347,935	-216,538	-88,378	-347,935	-216,538
14.00	Non-federal sources	-141	-200	-200	-173	-200	-200
21.40	Unobligated balance available, start of year. For completion of prior year budget plans						
	Available to finance new budget plans	-121,359	-13,800				
22.40	Reprogramming from or to prior year budget plans		-69,400				
	Unobligated balance transferred from other accounts	-80,100			-80,100		
23.10	Unobligated balance transferred to other accounts	40,100			80,100		
24.40	Unobligated balance available, end of year. For completion of prior year budget plans						
	Available to finance subsequent year budget plans				2,213,608	2,856,724	3,033,305
25.00	Unobligated balance lapsing	13,800	13,800		13,800		
	Budget authority	5,871,107	7,976,181	8,555,043	6,871,107	7,976,181	8,555,043
Budget authority:							
40.00	Appropriation	6,893,307	7,965,240	8,555,043	6,893,307	7,965,240	8,555,043
41.00	Transferred to other accounts	-22,200	-2,859		-22,200	-2,859	
43.00	Appropriation (adjusted)	6,871,107	7,962,381	8,555,043	6,871,107	7,962,381	8,555,043
50.01	Reappropriation		13,800			13,800	
Relation of obligations to outlays:							
71.00	Obligations incurred, net						
72.40	Obligated balance, start of year				7,302,753	7,333,065	8,378,462
74.00	Obligated balance, end of year				6,595,188	8,819,439	10,380,504
77.00	Adjustments in expired accounts				-8,819,439	-10,380,504	-12,285,966
					55,693		
80.00	Outlays				5,138,195	5,772,000	6,473,000

Aircraft Procurement Air Force		24 JAN 80	
Object Classification (in thousands of dollars)			
Identification code	57-3010-0-1-051	1979 actual	1980 est
31.0	Direct obligations:		
	Equipment	6,827,950	7,326,932
	Total direct obligations	6,827,950	7,326,932
31.0	Reimbursable obligations:		
	Equipment	835,488	404,068
99.0	Total obligations	7,663,438	7,731,000
			282,134
			8,645,000

28 JAN 80

Aircraft Procurement, Air Force

Program and Financial (in thousands of dollars)		1977 Fiscal year program		
		Obligations		
Identification code	57-3010-0-1-001	Budget plan (amounts for procurement actions programmed)		
		1979 actual	1980 est	1981 est
Program by activities				
Direct:				
1	Combat aircraft	88,223		
5	Modification of inservice aircraft	150,823		
6	Aircraft spares and repair parts	36,555		
7	Aircraft support equipment and facilities	173,039		
	Total direct	448,710		
	Reimbursable program (total)	38,245		
10.00	Total	486,955		
Financing				
Offsetting collections from:				
11.00	Federal funds	-1,302		
13.00	Trust funds	104,359		
14.00	Non-federal sources	-11		
21.40	Unobligated balance available, start of year, for completion of prior year budget plans	-780,760		
	Reprogramming from or to prior year budget plans			
23.40	Unobligated balance transferred to other accounts			
25.00	Unobligated balance lapsing	80,100		
	Budget authority	110,659		

Aircraft Procurement, Air Force

28 JAN 80

Program and Financing (In thousands of dollars)		1978 Fiscal year program			
Identification code	57-3010-0-1-051	Budget plan (amounts for procurement actions programmed)		Obligations	
		1979 actual	1980 est.	1979 actual	1980 est.
		1981 est.	1981 est.	1981 est.	1981 est.
Program by activities:					
Direct:					
1.	Combat aircraft			241,788	487,888
2.	Airlift aircraft			1,360	6,190
5.	Modification of inservice aircraft			168,090	85,015
6.	Aircraft spares and repair parts			168,377	50,558
7.	Aircraft support equipment and facilities			211,801	59,886
	Total direct			791,416	689,537
	Reimbursable program (total)			166,203	45,882
10.00	Total			956,619	735,419
Financing:					
Offsetting collections from:					
11.00	Federal funds			6,044	
13.00	Trust funds			290,893	
14.00	Non-federal sources			-21	
21.40	Unobligated balance available, start of year:				
	For completion of prior year budget plans			-1,988,954	-735,419
24.40	Unobligated balance available, end of year:				
	For completion of prior year budget plans			735,419	
	Budget authority				

Aircraft Procurement, Air Force

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Program and Financing (in thousands of dollars)				1979 Fiscal year program			
Identification code	57-3010-0-1-051	Budget plan (amounts for procurement actions programmed)		Obligations			
		1979 actual	1980 est.	1981 est.	1979 actual	1980 est.	1981 est.
Program by activities							
Direct:							
1. Combat aircraft							
2. Airlift aircraft							
3. Other aircraft							
4. Modification of inservice aircraft							
5. Aircraft spares and repair parts							
6. Aircraft support equipment and facilities							
7. Aircraft support equipment and facilities							
Total direct							
Reimbursable program (total)							
Total							
10.00							
Financing:							
Offsetting collections from:							
Federal funds							
11.00							
13.00							
14.00							
21.40							
Unobligated balance available, start of year							
For completion of prior year budget plans							
Available to finance new budget plans							
Reprogramming from or to prior year budget plans							
22.40							
Unobligated balance transferred from other accounts							
24.40							
Unobligated balance available, end of year							
For completion of prior year budget plans							
Available to finance subsequent year budget plans							
26.00							
Unobligated balance lapsing							
Budget authority							
Budget authority:							
40.00							
41.00							
43.00							

Aircraft Procurement, Air Force

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Program and Financing (in thousands of dollars)

1980 Fiscal year program

Identification code 57-3010-0-1-051

Budget plan (amounts for procurement actions programmed)

Obligations

1979 actual 1980 est. 1981 est. 1979 actual 1980 est. 1981 est.

Program by activities:

Direct:

1. Combat aircraft 3,986,250 3,170,855 459,423
 2. Airlift aircraft 77,220 19,300 40,000
 4. Other aircraft 43,000 10,800 6,800
 5. Modification of inservice aircraft 1,573,900 1,102,600 212,000
 6. Aircraft spares and repair parts 1,089,870 1,712,400 162,800
 7. Aircraft support equipment and facilities 1,302,141 1,069,600 187,100

Total direct

8,082,181 6,084,556 1,098,123

Reimbursable program (total)

361,335 311,000 49,693

10.00 Total

8,443,516 6,395,556 1,147,816

Financing:

Offsetting collections from:

11.00 Federal funds -49,800
 13.00 Trust funds -417,335
 14.00 Non-federal sources -200
 21.40 Unobligated balance available, start of year:
 For completion of prior year budget plans
 24.40 Unobligated balance available, end of year:
 For completion of prior year budget plans

Budget authority

7,976,181 2,047,960 900,144

Budget authority:

40.00 Appropriation
 41.00 Transferred to other accounts

7,965,240 -2,859

49.00 Appropriation (adjusted)

7,962,381

50.01 Reappropriation

13,800

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Aircraft Procurement, Air Force

Program and Financing (In thousands of dollars)		1981 Fiscal year program		
Identification code	57-3010 0-1-051	Budget plan (amounts for procurement actions programmed)		Obligations
		1979 actual	1980 est.	1981 est.
Program by activities:				
Direct:				
1.	Combat aircraft		3,587,800	2,888,950
4.	Other aircraft		103,900	77,925
5.	Modification of inservice aircraft		1,795,800	1,153,750
6.	Aircraft spares and repair parts		1,549,000	1,239,200
7.	Aircraft support equipment and facilities		1,516,543	1,148,175
Total direct			8,555,043	6,488,000
Reimbursable program (total)			266,538	200,420
Total			8,821,581	6,688,420
Financing:				
Offsetting collections from:				
11.00	Federal funds		-49,800	-49,800
13.00	Trust funds		-216,538	-216,538
14.00	Non-federal sources		-200	-200
24.40	Unobligated balance available, end of year:			
	For completion of prior year budget plans			
Budget authority			8,555,043	8,555,043

(In Thousands of Dollars)

Program Requirement - FY 82 ...	\$9,475,023
Program Requirement - FY 81 ...	8,555,043
Program Requirement - FY 80 ...	8,082,181
Program Requirement - FY 79 ...	6,937,407

PART I PURPOSE AND SCOPE

This appropriation provides for procurement of aircraft, for modification of in-service aircraft to improve safety, extend service life, improve reliability/supportability, and enhance operational effectiveness, and for the U.S. share of the NATO AWACS program. It also provides for investment spares and repair parts including spare engines, replenishment spares, and other support equipment to include aerospace ground equipment and industrial facilities. In addition, funds are provided for the procurement of flight training simulators. Management of the aircraft program is facilitated by collecting, in a single appropriation, all funds for the prime aircraft weapon system and related specialized ground handling and test equipment.

In the activity justifications which follow, additional details are provided by budget activity. The activities are: combat aircraft, airlift aircraft, trainer aircraft, and other aircraft; modification of in-service aircraft; aircraft spares and repair parts; aircraft support equipment and facilities; and the reimbursable program.

Each of the four aircraft activities consists of the following elements, as applicable, which together constitute the weapon system cost:

a. Flyaway Cost - This element consists of the complete aircraft ready to be flown away from the manufacturer's plant and includes airframe, engines, communications and electronics equipment, photographic equipment, armament, instruments, auxiliary equipment installed in the aircraft, and certain non-recurring costs for tooling and other start-up costs.

b. Peculiar Support Equipment, Training Devices, and Technical Data - This element includes equipment requirements which are applicable to a specific weapon system such as specialized equipment for maintenance, repair and test of a weapon system, subsystem, or its components; special training devices applicable to a specific weapon system such as mobile training units, flight simulators, instrument trainers, and air navigation trainers; and procurement of engineering handbooks, manuals, and other technical data identified with the specific aircraft being procured. Requirements in these categories are established to provide for scheduled delivery of the support equipment in phase with deliveries of the weapon system.

c. Credits from Advance Procurement Prior Year - This element identifies assets applied to a program from advance procurement provided in a prior year for items having a longer lead time than the airframe.

d. Advance Procurement Current Year - This element identifies requirements associated with follow-on aircraft programs which have a longer procurement lead time than the airframe and which therefore must be procured in advance of the airframe.

PART II JUSTIFICATION OF FUNDS REQUESTED

The program to be financed with the appropriation for fiscal year 1981 includes \$3,587.8 million to procure additional modern aircraft for the combat forces and \$103.9 million for other aircraft. The fiscal year 1982 program includes \$3,173.0 million for combat aircraft, \$152.6 million for airlift aircraft, \$157.7 million for trainer aircraft, and \$232.4 million for other aircraft.

The fiscal year 1981 estimate also provides \$1,795.8 million for modification and modernization of in-service aircraft necessary for safety-of-flight, extension of service life, and to incorporate operational improvements after an aircraft has entered service. The program is designed to maintain the Air Force aircraft inventory at the most modern configuration level at minimum cost. The fiscal year 1981 estimate compares with programs of \$943.7 million and \$1,573.9 million for fiscal years 1979 and 1980, respectively. The fiscal year 1982 program is \$1,802.0 million.

Aircraft spares and repair parts are also financed under this appropriation. The spares and repair parts activity includes centrally procured and managed, investment-type spare components and repair parts associated with the procurement of new aircraft, the modification program, peculiar and common aerospace ground equipment programs, and the replenishment spares category, which provides for Air Force operational, maintenance, and overhaul programs. For fiscal year 1981, the request amounts to \$1,549.0 million. The fiscal year 1982 program is \$2,001.2 million.

The aircraft support equipment and facilities activity provides for common aerospace ground equipment, industrial facilities, war consumables, other charges, and the U.S. share of NATO AWACS. The program requirements for fiscal year 1981 are \$1,518.5 million as compared to \$1,302.1 million in fiscal year 1980. The fiscal year 1982 program is \$1,956.1 million.

The requirement for the reimbursable program for fiscal year 1981 is \$266.5 million. This program provides for those aircraft and related items which must be procured to satisfy customer orders.

SUMMARY OF REQUIREMENTS	(In Thousands of Dollars)	
	FY 1979 Actual	FY 1980 Estimate
Combat aircraft-----	\$3,957,000	\$3,587,800
Airlift aircraft-----	67,500	-
Other aircraft-----	10,200	103,900
Modification of in-service aircraft-----	943,700	1,795,800
Aircraft spares and repair parts-----	1,193,500	1,549,060
Aircraft support equipment and facilities-----	765,507	1,518,543
 TOTAL DIRECT PROGRAM-----	 6,937,407	 8,555,043
Reimbursable program-----	491,247	266,538
 TOTAL PROGRAM REQUIREMENTS (CURRENT)-----	 7,428,654	 8,821,581
Less: Portion of program to be obligated in subsequent fiscal years-----	1,408,789	2,133,161
Plus: Obligations incurred against prior year program funds-----	1,443,574	1,956,580
 TOTAL OBLIGATIONS-----	 7,463,438*	 8,645,000

SUMMARY OF PROGRAM REQUIREMENTS	(In Thousands of Dollars) FY 1982 Estimate
Combat aircraft-----	\$3,173,000
Airlift aircraft-----	152,610
Trainer aircraft-----	157,738
Other aircraft-----	232,400
Modification of in-service aircraft-----	1,802,015
Aircraft spares and repair parts-----	2,001,200
Aircraft support equipment and facilities-----	1,956,060
 TOTAL DIRECT PROGRAM-----	 \$9,475,023

(In Thousands of Dollars)

Program Requirement - FY 82 ...	\$3,173,000
Program Requirement - FY 81 ...	3,587,800
Program Requirement - FY 80 ...	3,986,250
Program Requirement - FY 79 ...	3,957,000

ACTIVITY: Combat Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of new aircraft, associated flight simulation devices, and other peculiar training and support equipment to continue modernization of U.S. combat forces and improve the efficiency of training programs.

Combat aircraft are required to attain and maintain air superiority, interdict enemy supply lines, provide reconnaissance of enemy forces, and furnish close air support to ground forces. The aircraft can be used to counter a variety of threats and offer options of response ranging from the use of diversified conventional weapons through, in the case of U.S. forces, a variety of nuclear weapons.

The FY 1981 and FY 1982 programs include funds for the procurement of A-10, F-15, F-16 (Air Combat fighter), KC-10 (Advance Tanker/Cargo), and E-3A (AWACS) Aircraft. The programs also include funds for procurement of flight simulators for the A-10 and F-16 Aircraft.

PART II JUSTIFICATION OF FUNDS REQUESTED

The total FY 1981 and FY 1982 fund requirements by FY, for procurement of combat aircraft, related support items, and advance procurement funding in support of the following year's program are: FY 1981 - \$3,587.8 million; and FY 1982 - \$3,173.0 million. Details are as follows:

A-10 (FY 1981 - 60 aircraft, \$478.1 million; FY 1982 - 46 aircraft, \$404.6 million):

The A-10 attack aircraft is specifically designed for the close air support role. It is a single-seat, twin turbofan powered, fixed wing, subsonic aircraft capable of carrying a versatile ordnance load and is armed with one 30MM rapid fire gun system. The A-10 meets the requirement to provide close supporting fire, armed escort, and armed reconnaissance in battle areas involving anti-tank and anti-mechanized vehicle operations in close proximity to friendly ground forces. The firepower, survivability, and long-loiter capability of the A-10 provide an improved close air support capability. The A-10 initial operational capability was achieved in Oct 1977, three months ahead of schedule.

F-15A/B/C/D (FY 1981 - 30 aircraft, \$747.5 million; FY 1982 - 30 aircraft, \$845.6 million):

The F-15 is a twin engine (P&W F100), single crew (B/D is two-crew), fixed swept wing, advanced tactical fighter designed for the counter air mission. It is characterized by high thrust-to-weight and low wing loading for maximum acceleration and maneuverability. The main purpose of the F-15 is to provide the Air Force with an aircraft which can defeat Soviet-built fighters of the 1980s. It has the maneuverability, armament, and fire control needed to surpass the capabilities expected from Soviet aircraft in that period. The F-15 has replaced the F-4 as the primary air superiority aircraft. Enemy fighters projected for the early 1980s will have a decided advantage over the F-4s. The basic take-off thrust-to-weight ratio of the F-15 is greater than one-to-one and will permit the F-15 to out-climb, out-accelerate, and out-turn any known or projected threat during this time period.

F-16 (Air Combat Fighter) FY 1981 - 180 aircraft, \$1,819.9 million; FY 1982 - 120 aircraft, \$1,392.7 million):

The F-16 is a new multi-purpose fighter incorporating advanced technology features proven in the Lightweight Fighter (LWF) prototype program. The goal is to deploy a fighter which can perform an acceptable spectrum of tactical air warfare tasks at minimum costs. The design characteristics of the F-16 are such as to permit high sortie rates with rapid turn around; minimum manpower/logistics burden; and exceptional air combat maneuvering performance, coupled with a potent air-to-ground weapons delivery capability. The F-16 will also enable modernization and standardization of equipment among those allied countries which choose to replace their aging tactical fighter forces with F-16s.

KC-10A (Advanced Tanker/Cargo Aircraft) (FY 1981 - 6 aircraft, \$295.0 million; FY 1982 - 6 aircraft, \$296.0 million):

The Advanced Tanker/Cargo is a derivative of the currently available wide-bodied DC-10 aircraft modified as necessary to provide air refueling capability, and to exploit fully the cargo-carrying potential inherent in the existing aircraft design. The Advanced Tanker/Cargo is an aircraft of unique versatility, with a capability to provide both long range air refueling and over-size airlift support. Combining cargo and fuel off-load capabilities results in a capability to deploy tactical fighter forces and their support equipment simultaneously, ready to fight. The Advanced Tanker/Cargo aircraft will provide a significant direct contribution to the strategic airlift force.

E-3A (AWACS) (FY 1981 - 2 aircraft, \$247.3 million; FY 1982 - 2 aircraft, \$234.1 million):

The E-3 (AWACS) provides an air-borne surveillance, command, control, and communications system for use in both tactical and strategic defensive operations. The airborne platform, and modified Boeing 707 aircraft, is common for both types of operation with interchangeability for the two missions being easily accommodated by changing the control processor software. The E-3A (AWACS) can operate as a self-contained, survivable force management center, or an adjunct to an established ground control net. Its distinguishing technical feature is the capability for long range detection and tracking of airborne objects operating at high or low altitudes over both land and water for extended periods.

(In Thousands of Dollars)

Program Requirement - FY 82 ...	\$152,610
Program Requirement - FY 81 ...	0
Program Requirement - FY 80 ...	77,220
Program Requirement - FY 79 ...	67,500

ACTIVITY: Airlift Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of new aircraft, associated flight simulators, and support items to continue improvement of the U.S. airlift forces.

PART II JUSTIFICATION OF FUNDS REQUESTED

No funds are requested for FY 1981. The FY 1982 request is for the initiation of C-X procurement. The C-X will be capable of carrying outsized cargo, such as heavy mechanized Army equipment, over intercontinental distances, as well as being capable of moving the equipment within the theater of operation. This is a major initiative to improve rapid deployment capability. Several designs are being considered and full scale engineering development will begin in FY 1981 on the selected design.

	(In Thousands of Dollars)
Program Requirement - FY 82 ...	\$157,738
Program Requirement - FY 81 ...	0
Program Requirement - FY 80 ...	0
Program Requirement - FY 79 ...	0

ACTIVITY: Trainer Aircraft

Part I Purpose and Scope

This activity provides for the procurement of new aircraft, associated flight simulation devices, and support equipment required for flight training. The FY 1982 program is for procurement of the Companion Trainer (B-52) aircraft.

Part II Justification of Funds Requested

No funds are requested for FY 1981. The FY 1982 request of \$157.7 million is for procurement of a companion trainer for the B-52. The companion trainer concept involves the use of a modified business type aircraft to provide training for B-52 crew members. The aircraft will be modified with off-the-shelf bomb/navigation equipment and a closed circuit electronic warfare suite. Actual flying time in the B-52 could be reduced by 25% through this approach. Source selection for Full Scale Engineering Development is scheduled for December 1980 and development of two prototypes will begin in January 1981. The quantity of aircraft to be procured in FY 1982 depends on the model selected for production.

(In Thousands of Dollars)

Program Requirement - FY 82 ...	\$232,400
Program Requirement - FY 81 ...	103,900
Program Requirement - FY 80 ...	43,000
Program Requirement - FY 79 ...	10,200

ACTIVITY: Other Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of TR-1 aircraft in FYs 1981 and 1982.

PART II JUSTIFICATION OF FUNDS REQUESTED

TR-1 (FY 1981 - 4 aircraft, \$103.9 million; FY 1982 - 8 aircraft, \$232.4 million):

The TR-1 is a variant of the highly capable U-2R aircraft currently in the strategic reconnaissance inventory the only U.S. aircraft capable of long loiter, standoff surveillance from altitudes above 60,000 feet with an electronic sensor horizon of over 300 NM. Equipped with the latest electronic sensors being developed in other programs, the TR-1 will provide U.S. and Allied ground and air forces an effective battlefield surveillance system into the 1990s.

(In Thousands of Dollars)

Program Requirement - FY 82 ...	\$1,802,015
Program Requirement - FY 81 ...	1,795,800
Program Requirement - FY 80 ...	1,573,900
Program Requirement - FY 79 ...	943,700

ACTIVITY: Modification of In-Service Aircraft

PART I PURPOSE AND SCOPE

This budget activity provides for modification and modernization of in-service aircraft, training devices and support equipment necessary for safety, extension of service life, and to incorporate operational improvements after an aircraft has entered service. The program is designed to maintain the Air Force aircraft inventory at the most modern configuration level at the minimum cost.

PART II JUSTIFICATION OF FUNDS REQUESTED

Modifications are necessary to enable the strategic offense, defense, tactical, and support forces to maintain superiority over hostile forces, to extend the active service life of aircraft, and to keep abreast of changing mission requirements. To ensure maximum safety for the aircraft and crews and to enhance capabilities of aircraft in a combat environment, priority modifications are necessary. Modifications are closely examined and priorities established so that only the most essential are accomplished with the funds available.

The FY 1981 program, to a large extent, consists of follow-on requirements for previously initiated modifications. Particularly significant, is the requirement to provide long range cruise missile carriage for the B-52G and the companion requirement to modernize the offensive avionics system on the B-52G/H aircraft. Funds are also included in FY 1981 to procure hardware to re-engine one KC-135 aircraft with new fuel efficient, high by-pass turbo fan engines, in accordance with Congressional direction. Other significant efforts impacting the program total include:

- (1) Increasing the strategic airlift capability.
- (2) Updating the penetration and electronic defense capabilities of various weapon systems to improve survivability in a hostile environment.
- (3) Upgrading C3 equipment on the National Emergency Airborne Command Post to the advanced configuration.
- (4) Provision of tactical support jamming capability.
- (5) Improvement in Peacetime Material Readiness through replacement of unreliable hardware with new state of the art equipment, thus increasing maintainability/reliability and decreasing support costs.

Aircraft modification kits are procured on a phased basis, lead time away from installation, which is scheduled concurrent with normal maintenance programs to the maximum extent possible. Complex modifications are installed at Air Force depots or contractor facilities, concurrent with programmed depot maintenance. Where the installation tasks are less complex or require a relatively small number of man-hours, they are accomplished in the field by assigned personnel or specialized teams dispatched from the depot or provided by contractors.

B-52 (FY 81 - \$454.8 million; FY 82 - \$384.3 million). The FY 1981 program includes: follow-on modifications for Offensive Avionics modernization, long range Air Launched Cruise Missile carriage, and Observable Difference System, in the amount of \$354.4 million; Tail Warning capability in the amount of \$16.2 million; Electronic Countermeasure Transmitter update in the amount of \$12.4 million; Electronic Countermeasure Power Management in the amount of \$16.6 million; update of R-52D navigation system in the amount of \$5.0 million; improved reliability of the defensive fire control system in the amount of \$35.5 million; and \$2.6 million for various reliability/maintainability improvements. In addition, the program includes \$2.1 million to initiate a modification to provide a Fuel Savings Advisory System on the B-52 aircraft.

The FY 1982 program will continue programs previously started, and initiate new programs to provide reliability/maintainability improvements for the B-52D automatic flight control and compass system.

F-106 (FY 81 - \$8.1 million; FY 82 - \$39.2 million). FY 1981 provides \$6.0 million to continue the reliability improvement to the X Band Transistor Assembly and \$2.1 million for other safety and reliability improvements.

FY 1982 continues modifications initiated in previous fiscal years and provides funding for initiation of a reliability/maintainability upgrade of the radar on the F-106.

A-7 (FY 81 - \$14.0 million; FY 82 - \$23.9 million). The FY 1981 program includes \$3.0 million for follow-on procurement of the chaff and flare dispenser capability and \$4.5 million to continue implementation of various improvements to the TF-41 engine. In addition, the program includes \$6.5 million to initiate a reliability modification to replace the digital scan converter.

The FY 1982 program continues modifications previously started and initiates additional TF-41 reliability improvements, \$4.6 million.

A-10 (FY 81 - \$42.1 million; FY 82 - \$46.8 million). The FY 1981 program includes \$15.3 million to modify operational aircraft consistent with reliability changes to be incorporated into aircraft on the production line, and \$26.8 million for an Inertial Navigation System (INS) for operational aircraft as a follow-on to FY 1980.

The FY 1982 program continues the aircraft update effort, \$18.6 million, and the INS procurement, \$28.2 million.

F/RF-4 (FY 81 - \$51.9 million; FY 82 - \$70.2 million). In FY 1981, funds are requested for follow-on costs of previous modifications as follows: \$1.2 million for the Chaff and Flare Dispenser capability; \$9.5 million for the Tactical Electronic Reconnaissance (TEREC) Capability; \$4.7 million to upgrade the radar warning receiver on the F-4E; \$2.5 million for an altitude line

improvement to the APQ-120 radar; \$3.6 million for a wing fold rib replacement; \$3.4 million for a reliability replacement with a digital scan converter; \$7.2 million to replace the inertial navigation system and weapons delivery system on the F-4G Wild Weasel; and \$4.9 million for various structural and reliability improvements. In addition, \$7.7 million is included for initiation of an improved secure voice capability and \$7.2 million to replace the fire/overheat warning system to improve the safety of the aircraft.

The FY 1982 program continues previously initiated modifications and initiates a program to provide for GBU-15 carriage on some F-4E aircraft.

F-15 (FY 81 - \$96.8 million; FY 82 - \$58.3 million). The FY 1981 program is comprised of \$62.0 million to modify operational aircraft to standard configuration compatible with changes being incorporated into aircraft on the production line; continuation of the improved ALR-56 countermeasures capability in the amount of \$6.4 million; \$16.3 million to complete procurement of the programmable signal processor for an improved radar capability; and \$4.4 million to continue procurement of a cockpit TV sensor/airborne video tape recorder capability. \$11.7 million is included to initiate a modification to improve reliability of the UHF radio and TACAN and provide a VHF radio and secure voice capability.

The FY 1982 program consists of continuation of the aircraft update effort and modifications previously initiated. It also includes funds to initiate an engine diagnostics capability for improved supportability of the F-100 engine.

F-16 (FY 81 - \$40.6 million; FY 82 - \$89.7 million). The FY 1981 program of \$40.6 million is to continue the update of operational aircraft to a standard configuration compatible with changes being incorporated into aircraft on the production line.

The FY 1982 program continues the update of operational aircraft and initiates an engine diagnostics capability for improved supportability of the F-100 engine.

F-111 (FY 81 - \$70.1 million; FY 82 - \$93.1 million). The FY 1981 program includes: the final increments of the improved internal countermeasures equipment in the amount of \$13.5 million and the PAVE TACK target acquisition/designation modification in the amount of \$16.7 million; \$1.7 million to continue a secure voice capability; \$6.5 million for correction of various mission limiting and safety of flight engine deficiencies; and \$31.7 million to improve reliability and safety of various airframe items and components.

Continuation of previously initiated modifications is provided for in the FY 1982 program plus the initiation of various reliability and safety modifications on the engine, avionics and airframe in the amount of \$8.6 million.

EF-111 (FY 81 - \$238.5 million; FY 82 - \$237.4 million). The FY 81 program continues procurement of a modification to incorporate an electronic countermeasure subsystem the ALQ-99, into 42 F-111A aircraft. The EF-111 will provide the capability to accomplish all tactical jamming support missions, i.e., barrier/standoff, close air support and penetration/escort jamming. The

F-111 operational performance capabilities will be preserved by installing the ALQ-99 in the weapon bay area and other subsystems will be installed internally. The EF-111A is the replacement for the EF-66 which was phased out at the end of FY 1974 due to age and obsolescence of the jamming equipment.

The FY 1982 program continues the production rate at the FY 1981 level.

C-5A (FY 81 - \$185.1 million; FY 82 - \$197.5 million). The FY 1981 program continues the production phase of the wing replacement modification necessary to achieve an increased 30,000 flying hour service life in the amount of \$166.7 million; \$3.9 million completes procurement of a safety improvement to redesign and relocate pylon components to reduce fire hazards; \$8.5 million to initiate procurement of a replacement of the unreliable weather radar with a highly reliable commercial weather radar; \$2.2 million to initiate procurement of a fuel savings advisory system to allow more efficient use of fuel; and \$3.8 million for various reliability and safety improvements.

The FY 1982 program continues the wing replacement modification, and other previously initiated modifications. Initiation of a reliability improvement for the TACAN is also included.

C-141 (FY 81 - \$48.9 million; FY 82 - \$24.3 million). The FY 1981 program provides for the final procurement of the cargo stretch and in-flight refueling modification in the amount of \$25.6 million; \$6.6 million to complete procurement of the commercial weather radar; \$7.8 million to continue the digital flight data recorder; \$1.5 million to continue the replacement of the rudder power control cylinder; \$3 million for various reliability and safety modifications; and \$7.1 million to initiate procurement of a fuel savings advisory system to allow more efficient use of fuel.

The FY 1982 program continues modifications initiated in previous fiscal years.

T-38 (FY 81 - \$6.0 million; FY 82 - \$3.0 million). In FY 1981, funds are requested for follow-on costs of previous modifications as follows: \$3.1 million for a safety improvement to the ejection seat; \$2.5 million for a fuselage dorsal longeron beefup; and \$.4 million for other structural and reliability improvements.

The FY 1982 program continues modifications initiated in previous fiscal years.

T-39 (FY 81 - \$8.0 million; FY 82 - \$1.3 million). The FY 1981 program initiates a wing reskin modification to extend the service life; \$.6 million initiates various structural and safety improvements.

The FY 1982 program continues modifications initiated in FY 1981.

C-130 (FY 81 - \$20.9 million; FY 82 - \$62.1 million). The FY 1981 program initiates procurement of a wing modification to extend the service life in the amount of \$16.0 million and \$4.9 million for various safety improvements.

The FY 1982 program continues the wing modification and safety modifications initiated in previous fiscal years and initiates a new modification to conserve fuel by adding afterbody strakes to reduce drag.

C-135 (FY 81 - \$124.8 million; FY 82 - \$94.7 million). The FY 1981 program includes follow-on support for extension of aircraft service life by reskinning the lower wing surface in the amount of \$34.3 million and the final procurement of the doppler replacement program in the amount of \$32.5 million. In addition, the FY 1981 program initiates a modification to provide a VHF AM/FM radio capability for \$7 million; an increased airborne retargeting capability in the amount of \$3.7 million; a fuel savings advisory system in the amount of \$3.0 million; and various reliability improvements in the amount of \$4.4 million. Procurement of the hardware to re-engine one KC-135 prototype is also included in FY 1981 in the amount of \$44.5 million.

The FY 1982 program continues funding of modifications initiated in previous fiscal years and also initiates improvements to the Minimum Essential Emergency Communication Network (MEECN) in the EC-135's in the amount of \$9.8 million.

E-3A (FY 81 - \$7.0 million; FY 82 - \$10.0 million). The FY 1981 program includes \$7.0 million to update operational aircraft to a standard configuration compatible with changes being incorporated into aircraft on the production line.

The FY 1982 program continues the update of operational aircraft.

E-4A (FY 81 - \$138.5 million; FY 82 - \$156.6 million). The FY 1981 request is to reconfigure the second of the three Interim Airborne Command Post aircraft to the E-4B Advanced Airborne Command Post configuration, \$133.7 million; and to provide secure voice capability and miscellaneous reliability improvements in the amount of \$9 million. \$3.9 million initiates a program to provide additional automatic data processing capability.

The FY 1982 program provides for reconfiguration of the final E-4A Interim Airborne Command Post aircraft to the E-4B Advanced Airborne Command Post configuration and other miscellaneous improvements.

HH-53 (FY 81 - \$2.5 million; FY 82 - \$1.9 million). In FY 81, continuation of a safety modification for crash worthy auxiliary fuel tanks requires \$1 million. Companion safety modification for crash worthy fuel systems requires \$6 million and various other safety and reliability improvements require \$9 million.

In FY 82 the crash worthy fuel system and a redesign of the flight mechanic seat require continuing support.

OV-10 (FY 81 - \$2.4 million; FY 82 - 0). A secure voice capability requires \$2.2 million in FY 1981 and a safety modification to provide a standby attitude indicator system requires \$2 million in FY 1981.

Other Aircraft (FY 81 - \$56.5 million; FY 82 - \$43.5 million). In FY 1981, funds are required for follow-on costs of previously initiated modifications as follows: \$18.8 million for a jam resistant secure voice communication to protect vulnerable UHF communications from hostile ECCM; \$4.0 million to provide the AN/ARC-164 UHF radio compatibility with 25Khz frequency separation when operated with VINSON secure voice equipment; \$5.2 million for a modification to the Radar Warning Receiver Signal Processor (CM442A/ALR46(V)) to provide the capability to identify and locate the latest known enemy threats; \$18.6 million to replace HF and VHF AM/FM radios with highly reliable state-of-the-art radios. The balance of \$9.8 million is for various modifications on a variety of aircraft.

The FY 1982 program continues the modifications initiated in FY 1981 and provides for initiation of a replacement for the AN/APN-150/155 Low Altitude Radar Altimeter.

Civil Reserve Air Fleet (CRAF) (FY 81 - \$78.9 million; FY 82 - \$85.8 million). The FY 1981 request of \$78.9 million is to incorporate cargo convertibility features into seven production line wide-bodied passenger carrying aircraft being procured by United States commercial air carriers to enhance the strategic airlift capability without increasing the Air Force aircraft inventory.

The FY 1982 request is for seven additional CRAF aircraft. This will enhance the strategic airlift capabilities to satisfy the time-phased deployment requirements of a major contingency.

AIR FORCE AIRCRAFT MODIFICATION PROGRAM STATUS OF FY 1980 AUTHORIZATION

Total Authorized	\$1,637.9 million
Total Appropriated	\$1,573.9 million
30 November 1979 Obligations	\$263.7 million
30 November 1979 Expenditures	\$2.9 million

The table below summarizes fund requirements for Fiscal Years 1980, 1981 and 1982 by aircraft/category:
(In Millions of Dollars)

<u>Aircraft/Category</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
B-52	\$565.1	\$454.8	\$384.3
FB-111	3.5	-	-
F-106	2.5	8.1	39.2
A-7	18.6	14.0	23.9
A-10	41.4	42.1	46.8
F/RF-4	75.9	51.9	70.2
F-15	83.2	96.8	58.3
F-16	32.1	40.6	89.7
F-111	101.0	70.1	93.1
EF-111	102.8	238.5	237.4
C-5	91.3	185.1	197.5
C-141	95.6	48.9	24.3
T-38	5.2	6.0	3.0
T-30	-	8.0	1.3
C-130	2.1	20.9	62.1
C-135	104.0	124.8	94.7
E-3A	11.0	7.0	10.0
E-4A	118.7	138.5	156.6
H-3	-	-	8.0
HH-53	3.4	2.5	1.9
OV-10	-	2.4	-
Class - Air craft	36.6	56.5	43.5
Class - Projects	41.3	99.4	70.4
CRAF	38.6	78.9	85.8
TOTAL	\$1,573.9	\$1,795.8	\$1,802.0

(In Thousands of Dollars)

Program Requirement - FY 82 ...	\$2,001,200
Program Requirement - FY 81 ...	1,549,000
Program Requirement - FY 80 ...	1,099,670
Program Requirement - FY 79 ...	1,193,500

ACTIVITY: Aircraft Spares and Repair Parts

PART I PURPOSE AND SCOPE

This activity provides funds for centrally procured and managed, investment type spare components and repair parts for the aircraft being procured, the aircraft in the inventory, the modification and modernization program, related aircraft support equipment, and spares for Other Production programs, such as ECM pods. Investment type items are defined as reparable assemblies, spares and repair parts which are centrally managed, and most items have a unit cost of \$1,000 or more.

PART II JUSTIFICATION OF FUNDS REQUESTED

Provision is made for the procurement of investment initial spares, for which the funds must be programmed in FY 1981 and 1982 to provide support for new production aircraft, common support equipment, the aircraft modification program, and Other Production programs. Replenishment or follow-on spares and repair parts funds must also be committed and obligated for those items required for the 1982 and 1983 flying hour programs (procurement lead time away - that is, funds are programmed one to two years ahead of the flying hour program, depending upon component production leadtime).

The following table compares fiscal years in the various spare and repair parts categories:

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Initial Weapon System Spares	\$242.1	\$270.2	\$238.5	\$302.2
Initial Modification Spares	82.4	67.7	102.2	128.3
Initial Common AGE Spares	11.7	13.1	19.4	18.7
Initial Other Production Spares	-	-	5.0	5.1
Total Initial Spares	\$336.2	\$351.0	\$365.1	\$454.3
Replenishment Spares	857.3	748.7	1183.9	1546.9
Total Spares and Repair Parts	\$1193.5	\$1099.7	\$1549.0	\$2001.2

Included in this combined initial/replenishment spares program are spare engines and those recoverable/replacement type items which are normally repaired and returned to stock. The basic determinant of the spares level required for an item is the time it will operate before it must be removed and repaired. This capability is Mean Time Between Demand (MTBD) and is expressed in operating hours. The MTBD of an item is applied to the operating program of the weapon system to determine how many repairables will be generated during the period. From this, required pipeline quantities, base stock, depot stocks, and attrition replacement are determined. Maximum consideration is given to improved management actions, faster repair, air transportation, and selective management of high cost items. The buy requirements are intensively reviewed semiannually by an Air Force management review team.

Initial spares include spare engines and those new recoverable/replacement type items required for initial support of aircraft being procured and aircraft modification programs. The FY 1981 program includes spares for the A-10, F-15, F-16, KC-10, E-3A, and TR-1 aircraft. The FY 1981 replenishment spares program supports peacetime operating stock requirements, includes War Reserve Materiel (WRM) spares for new aircraft being added to the inventory, and reduces WRM deficits caused by deferral of such procurement in prior years. A detailed discussion of War Reserve computation assumptions and methodology follows:

WAR RESERVE - SECONDARY ITEMS

(\$ Millions)

<u>Aircraft Replenishment Spares</u>	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
Requirement	\$2783.5	\$3512.8	\$4056.2
Applicable Assets Applied	1411.9	1637.1	1901.5
Funding Requested	155.9	87.1	337.5

Planning Assumptions: The planning assumptions used for computing aircraft replenishment spares War Reserve Materiel (WRM) requirements are contained in the DOD Consolidated Guidance (CG). The CG provides guidance regarding the length of the wartime scenarios; the gross force size (number of aircraft wings); the number of days of WRM to be funded; and other general guidance relative to the logistics area for which WRM requirements are computed.

Computation Methodology: WRM requirements are additive to peacetime needs, and are computed by a mechanized system for those items that are required for wartime usage, safety, and deemed mission essential. The WRM requirements consist of two segments as follows:

1. Prepositioned segment consists of:

a. War Readiness Spares Kits (WRSK) are air transportable packages of spares that will support specific units tasked to be deployed during the first 30 days of a war or contingency until resupply can be established. The basic configuration of a WRSK is determined by the maintenance concept to be used, i.e., Remove and Replace (RR) an item as opposed to Remove, Repair, and Replace (RRR) the item. Most of the WRSK are configured based on the maintenance RR concept since base level repair shops may not be available at the deployed site. Based upon the maintenance concept, the using major command and the Air Force Logistics Command (AFLC) determine those essential items to be included in the WRSK, which is only a small portion of the total number of items used on a day-to-day basis in peacetime. The quantity of items to be included in the WRSK are computed using factors such as item failure rates, number of items per aircraft, the flying hour program to be supported and available assets. If a RRR maintenance concept is used, then other factors such as base repair time and item pipeline time are additive to those used in the RR concept.

b. Base Level Self-Sufficiency Spares (BLSS) are spares designed to augment existing peacetime assets to support the initial increased wartime activity for specific units that will fight the war in place. BLSS requirements consider the same factors as those used in the WRSK computation. These requirements reflect the number of items required to support the base repair cycle, fill the pipeline to the depot for those items the base cannot repair, and provide a safety level to cover random demands. Those units which are authorized a WRSK are not authorized a BLSS.

2. Other War Reserve Materiel (OWRM) are spares required to sustain the force at wartime levels after the prepositioned assets are used and until the production base can be expanded to satisfy wartime consumption. OWRM requirements are determined based on the same factors used for WRSK/BLSS computations, which are applied to the total wartime flying hour program. The resulting OWRM requirements are then reduced by assets available from production, peacetime levels and WRSK and BLSS levels. OWRM assets are stored in the AFLC depots.

Changes in requirements and funding levels are caused by many factors such as new aircraft activations; changes in item failure rates; increased wartime flying hour programs; modification of existing aircraft to increase wartime capability and increased cost of items (inflation). The increase in the spares WRM requirements are driven primarily by new aircraft activations, increased wartime flying hour programs (sortie surge for tactical fighters) and inflation. The funding level for WRM spares is impacted by fiscal constraints. Due to limited resources, Air Force funding priority supports peacetime needs first and then WRM requirements. Priority support of peacetime needs is essential to ensure the force is trained and the aircraft are maintained in an operational condition in order to meet wartime taskings. The FY 1981 war reserve funding level of \$337.5 million is a considerable improvement over the \$87.1 million contained in the FY 1980 Budget, reflecting a definite commitment on the part of the Air Force to improve wartime readiness.

Aircraft initial spares requirements by weapon system and fiscal year are listed below:

<u>*AIRCRAFT INITIAL SPARES (DOLLARS IN MILLIONS)</u>		<u>FY 1981</u>	<u>FY 1982</u>
TR-1	Nr. of Acft Procured	24.9 (4)	28.4 (8)
A-10	Nr. of Acft Procured	15.1 (60)	10.8 (46)
F-15	Nr. of Acft Procured	113.1 (30)	110.7 (30)
F-16	Nr. of Acft Procured	57.4 (180)	114.0 (120)
KC-10	Nr. of Acft Procured	14.7 (6)	30.6 (6)
E-3A	Nr. of Acft Procured	13.3 (2)	7.7 (2)
*Modification Spares		102.2	128.3
Common AGE Spares		19.4	18.7
Other Production Spares		5.0	5.1
Total		365.1	454.3

*The aircraft initial spares requirements for each fiscal year are computed against the aircraft delivery schedules. Upon the determination of the requirement for each fiscal year's delivered aircraft, minimum essential financing is allocated to each fiscal year to provide adequate funding for item lead time protection.

(In Thousands of Dollars)

Program Requirement - FY 82 ...	\$1,956,046
Program Requirement - FY 81 ...	1,518,543
Program Requirement - FY 80 ...	1,302,141
Program Requirement - FY 79 ...	765,507

ACTIVITY: Aircraft Support Equipment and Facilities

PART I PURPOSE AND SCOPE

This activity provides for support equipment required to service and test aircraft and their components; for industrial machinery, equipment and facilities required in the manufacture of items funded by this appropriation; for those war consumable items required to be on hand for immediate use in the event of war; and for other charges such as electronic countermeasure equipment. The activity also provides for procurement of flight simulation equipment for aircraft that are no longer in production, and for programs not associated with one specific weapon system.

PART II JUSTIFICATION OF FUNDS REQUESTED

The estimate for this activity is comprised of the following items: (In Millions of Dollars)

<u>LINE ITEM</u>	<u>FY '979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Common Ground Equipment	\$239.0	\$282.8	\$269.1	\$352.8
Component Improvement*	110.0	-	-	-
Industrial Facilities	73.9	55.8	76.0	85.3
War Consumables	34.1	\$34.9	7.0	65.6
Other Production Charges	228.4	685.5	788.7	1134.7
NATO AWACS	80.1	243.1	377.7	317.7
ACTIVITY TOTALS	\$765.5	\$1302.1	\$1518.5	\$1956.1

* Funding transferred to RDT&E, AF appropriation beginning in FY 1980, per Congressional direction.

Common Ground Equipment

This program is for the procurement of organizational, base and depot level support equipment, both common and peculiar, for out-of-production aircraft and for common support equipment for new aircraft entering the inventory. The equipment is used on the flight line, in maintenance shops, and in the depots. The program also provides for the procurement of flight simulators and other training devices for aircraft that are out of production. Support equipment includes depot plant equipment, support equipment for modifications, common training equipment and the following federal supply groups (FSG).

- FSG 17 - Aircraft launching, landing, and ground handling equipment (trailers, platforms, slings).
- FSG 49 - Maintenance and repair shop equipment (test stands, jigs, fixtures, noise suppressors).
- FSG 61 - Electric wire and power distribution equipment (generators and generator sets, converters).
- FSG 66 - Instrument and laboratory equipment (navigational and flight instruments, electrical and electronic measuring and testing equipment).

Other Federal Supply Groups - Pumps, compressors, air-conditioners, heaters, gauges, and specialized tools.

The following table shows a comparison, by year, by category, of support equipment:

(In Millions of Dollars)

NOMENCLATURE	FY 1979	FY 1980	FY 1981	FY 1982
FSG 17	\$ 33.4	\$ 50.1	\$ 38.5	\$ 27.8
FSG 49	62.7	28.0	32.2	65.6
FSG 61	23.2	23.5	23.2	21.4
FSG 66	16.9	31.1	23.4	14.8
Other FSGs	24.4	33.0	22.4	51.8
Depot Plant Equipment	14.9	18.5	19.3	19.6
Common Training Equipment (Simulators)*	63.5	98.6	110.1	151.8
TOTAL COMMON GROUND EQUIPMENT	\$ 239.0	\$ 282.8	\$ 269.1	\$ 352.8

*Common Training Equipment includes simulators for B-52 and F-106 aircraft.

Industrial Facilities

The Industrial Facilities program provides for capital type rehabilitation of real property at Air Force owned industrial facilities; finances preparation for shipment of government production equipment to the Defense Industrial Plant Equipment Center or to other priority Air Force users; provides funds for actions necessary to bring Air Force plants into compliance with noise, air and water antipollution standards and to permit the reduction of energy consumption; and provides funds for the Air Force Industrial Readiness and Mobilization Planning Program. Funds are also requested for the Manufacturing Methods program which assures the timely establishment and improvement of manufacturing processes, techniques, or equipment required to support current and projected Air Force programs.

The following table shows a comparison, by year, of the Industrial Facilities Program:

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Expansions	1.1	1.3	16.6	5.0
Packing, Crating & Handling	.4	.2	.1	.2
Capital Type Rehabilitation	10.6	8.2	12.1	16.0
Modernization	23.8	-	.5	2.0
Manufacturing Methods	25.3	41.4	40.6	49.9
Industrial Preparedness	-	.9	-	.2
Environmental Protection	.2	.7	.3	2.0
Facilities Support	3.2	-	-	-
Energy Conservation	9.3	3.1	5.8	10.0
TOTAL Industrial Facilities	73.9	55.8	76.0	85.3

The requirements for FY 1981 in each category in the above table are as follows:

Expansions: Required for real property modifications at Air Force Plant 4 (Fort Worth, Texas); Air Force Plant 6 (Marietta, Georgia); Air Force Plant 36 (Evendale, Ohio); and others.

Packing, Crating, and Handling: Required to prepare idle government-owned equipment for shipment to other locations.

Capital Type Rehabilitation: Required for rehabilitation of government-owned, contractor-operated industrial production facilities. Included are Capital Type Rehabilitation projects for General Dynamics, Fort Worth, Texas; Lockheed-Geargia, Marietta, Georgia; Rockwell International, Palmdale, California; General Electric, Binghamton, New York, and others.

Modernization: Required for updating of selected machine tools at Air Force Plant 6 (Lockheed-Georgia, Marietta, Georgia).

Manufacturing Methods: Required for the establishment, transition and implementation onto the facility floor of new or significantly improved manufacturing methods which are based upon the results of the RDT&E and IR&D programs and which are beyond the current state of the art. Directly improves the productivity of the U.S. industrial base required to produce Air Force systems by validating new manufacturing methods and demonstrating them in the production environment. Establishes a systematic approach to production and manufacturing throughout the aerospace industry, and assures a high return-on-investment (ROI) by timely application of results across the industry, as well as reducing the cost of specific Air Force systems acquisitions. All projects are conducted under contract with private industry through competitive procurement, with results disseminated throughout the industry. All capital facility investments are borne by industry, and projects are negotiated with an Air Force business strategy aimed at securing all data rights, commitments to establish competitive production sources, and a requirement for an open end-of-contract demonstration of results achieved. The FY 1981 program includes emphasis on areas such as metallic structural materials (\$5.5 million); composite structures and materials (\$4.8 million); nondestructive evaluation (\$5.2 million); propulsion materials and components (\$5.8 million); electromagnetic windows and electronic materials and devices (\$2.4 million); and Integrated Computer Aided Manufacturing (\$16.9 million).

Environmental Protection: Required for atmospheric and water antipollution projects at Air Force Plant 65 (Teledyne, Neosho, Missouri) and Air Force Plant 83 (General Electric, Albuquerque, New Mexico).

Energy Conservation: Required for high return on investment projects at facilities such as Air Force Plant 4 (General Dynamics, Fort Worth, Texas); Air Force Plant 6 (Lockheed - Georgia, Marietta, Georgia); Air Force Plant 47 (ALCOA, Cleveland, Ohio); and Air Force Plant 59 (General Electric, Binghamton, New York).

1' COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA		2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION Air Force Plant 4/ACFJ Fort Worth Texas 76101			4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE See Item 9	7 PROJECT NUMBER	8 PROJECT COST (\$000) 237.0		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
(1) MSE Paint Dry Room (221-221)		LS			42.0
(2) Modify Wire Cut Room (221-221)		LS			75.0
(3) Environmental Control Area, Bldg #134 (310-441)		LS			120.0
35					
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
(1) The project will include: a. Constructing (4) walls from the floor to the underside of the mezz at Co. 143-145L. b. Installing (1) pedestrian and (2) 3' x 10' overhead doors. c. Installing a filtering system and additional blowers. d. Reworking existing ducts, plumbing, and electrical. e. Installing explosion proof lighting. (2) This project includes extending the east and west walls of the existing wire cut room from 8' to 12' high, and installing a ceiling, lights, sprinkler system, and duct work. Total area is 4200 square feet. (3) Construct an environmentally controlled enclosure for the fluid flow calibration equipment in Building 134. New air conditioning, heating and humidity control equipment is required.					

1 COMPONENT Air Force ✓		FY 1981 PROCUREMENT PROJECT DATA		2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION Air Force Plant 4/ACFJ Fort Worth, TX 76101			4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE 813-231	7 PROJECT NUMBER	8 PROJECT COST (\$000) 3608.0		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
Install Primary Electrical Substation No. 6		KV	20000		3608.0
36					
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
This installation is to be a 20 MVA, 60 KV - 4160 V, 3 phase substation to support the two that were installed in 1941 and 1942, the one constructed in 1956, and the two that were installed in 1967 and 1968. It is to be located adjacent to the five existing primary substations.					

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA			2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION AFP 28, General Electric Co.				4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE See Item 9	7 PROJECT NUMBER		8 PROJECT COST (\$000) 26.5		
9 COST ESTIMATES						
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)	
1. Construct Shed Roof Between Bldgs 22A and 17 (221-222)		LS			26.5	
37						
10 DESCRIPTION OF PROPOSED CONSTRUCTION The ground area between Bldgs. 22 and 17 is six (6) foot wide and eighty (80) foot long. This area has no surface drainage and the grade is such that rain and melting snow runs into Bldg. 17 and an X-Ray Area. This condition creates a serious electrocution hazard and/or the possibility of serious injury as the result of slipping on wet floors. The contractor has examined possible solutions to this problem such as regrading and installing surface drains versus constructing a shed roof and finds the shed roof to be most practical and economical. The roof will be constructed with light steel framing covered with insulated corrugated siding and roofing. This will divert rain and melting snows over the roof of Bldg 17 and ultimately to yard drainage.						

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA		2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION AF Plant 42, Lockheed CA Site Two			4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE See Item 9	7 PROJECT NUMBER	8 PROJECT COST (\$000) 75.0		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
(1) Install condensate traps in all Air Lines Site 2 (89011F)		LS			20.0
(2) Install heating & air conditioning system in Bldg 231 (826122)		LS			5.0
(3) Reseal, replace, and add new asphalt paving on various locations around flight line (116-642)		LS			50.0
38					
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
(1) Additional traps are required to eliminate moisture in air lines which presents a maintenance problem and damages air operated tools. (2) The Heating and Cooling System in the carpentry shop is inadequate for operations presently being performed. For personnel efficiency, the heating and cooling system needs to be replaced with a larger system. (3) Present storage space is provided on existing ramp and in dirt areas adjacent thereto. This presents a hazard to aircraft movement and dirt carried onto the ramp from equipment stored in dirt area presents a FOD problem.					

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA		2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION Air Force Plant No. 6/ACFL Marietta GA 30053			4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 73011F	6 CATEGORY CODE See Item 9	7 PROJECT NUMBER	8 PROJECT COST (\$000) 738.6		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
(1) Pave Engine Run Up Positions (116-664)		LS			62.6
(2) Improvement of Security Fencing, Flight Line Area (872-247)		LF			75.0
(3) Relocate Central Sealant Crib from Bldg B-1 to Bldg B-102, East Lean-to (221-221)		LS			17.1
(4) Additional Restrooms and Loading Dock for Bldg B-95 (610-123)		LS			431.9
39					
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
(1) Four-inch deep concrete on a four-inch base course will be constructed as a ground cover west of Flight Line Engine Run-up Positions 71 thru 74 for blast protection. Slope drains, underground electrical relocation, grading, and turfing are included. (2) Approximately 7,400 linear feet of 6 foot high woven wire security fencing topped by three strands of barbed wire and including seven double gates will be erected east and south of the North-South Runway from the Taxiway on the north to the existing boundary fence southwest of the south terminus of the runway. (3) The central sealant crib in Bldg B-1 will be relocated to an area of approximately 2,265 sq ft on the ground floor of the east lean-to of Bldg B-102 (Empennage Assembly Bldg). The work will include the construction of a fire-rated dividing wall between columns 6 and 7, installation of a fire resistant gypsum board ceiling, provision of explosion - proof lighting fixtures and electrical receptacles, modification of automatic sprinkler system, and installation of exhaust and H.V.A.C. Systems, service sink, floor drain, curbs and fire-rated interior doors. In addition, sealant drums will be relocated from the sealant drum storage crib, and an overhead monorail drum-handling system will be installed. (4) Construction of (2) restroom clusters which shall accommodate 400 persons with a men/women ratio of 3:1 and which shall comply with all OSHA requirements. A lift platform will also be installed which shall only be large enough to accommodate one (1) large truck at a time.					

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA			2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION AFP 83, General Electric				4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE 228-228	7 PROJECT NUMBER	8 PROJECT COST (\$000) 600.0			
9 COST ESTIMATES						
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)	
Expand casting facility (30,000 sq ft) Bldg 21		LS			600.0	
10 DESCRIPTION OF PROPOSED CONSTRUCTION						
Increasing production requirements in the Directional Solidification Cast Turbine Blades business require the expansion of these facilities in Bldg 21. An additional 30,000 square feet will satisfy the forecast load requirements. This project will include the extension of facilities into the new building addition.						

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PREVIOUS EDITIONS MAY BE USED INTERNALLY
UNTIL EXHAUSTED

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA		2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION AFP 19, General Dynamics			4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE See Item 9	7 PROJECT NUMBER	8 PROJECT COST (\$000) 16.0		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
(3) Replace security guard house (730832)		LS			16.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
3. The replacement of the main guard house at the plant entrance (Gate 23) is recommended due to deterioration because of age and termites. This is relevant for maintaining plant protection.					

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA			2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION AFP 42, Northrop Site 5				4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE See Item 9		7 PROJECT NUMBER		8 PROJECT COST (\$000) 54.5
9 COST ESTIMATES						
ITEM				U/M	QUANTITY	COST (\$000)
(1) Construct Sun Shield over Foam Storage Tanks (730-142)						3.0
(2) Install restroom facility Bldg 425 (221-221)				LS		51.5
10 DESCRIPTION OF PROPOSED CONSTRUCTION						
1. A roof-like structure will be installed over two 1800 gallon foam storage tanks. Supports and decking will be steel construction. Structure required to reduce expansion of aqueous film forming foam concentrate for fire protection. 2. Install restroom facilities in Building 425 to serve an estimated 17 men and one woman who perform Site 5 facilities maintenance operations. Restrooms shall conform to UBC, UPC, CAL/OSHA regulations, and safety and health standards for contractors performing federal supply contracts under the Walsh-Healey Public Contracts Act. Facilities for the handicapped shall be included. Connect to sewer and domestic water supply lines located approximately 120' east of Building 425.						

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA		2 DATE 6 Sept 1970	
3 INSTALLATION AND LOCATION Air Force Plant 36/ACGS Cincinnati OH 45215			4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE See Item 9	7 PROJECT NUMBER	8 PROJECT COST (\$000) 1,761.5		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
(1) West Dock (Construct) (890-152)		LS			107.1
(2) Replace Security Guard House #25 (730-835)		LS			83.64
(3) Prep to Test Area (Construct) (211-183)		LS			1570.8
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
(1) The proposed project for the West Dock provides for the construction of three (3) dock enclosures with three doors and three seals and an incline ramp to accommodate loading and unloading. Adequate lighting will be provided in the interest of safety, security and efficiency. (2) Proposed for this project is the replacement of an existing security guard house (#25) and modification and improvement of the access gate to accommodate the increased usage of Building B. The existing guard house provides for pedestrian traffic only. Adjacent fuel lines prohibit the economical utilization of the existing guard house to accommodate vehicular traffic. A sliding vehicle gate along with a pedestrian gate will be installed. Repair of road with additional paving in area adjacent to road will be done to provide for access of vehicular traffic. (3) The Prep to Test Building will encompass approximately 7,000 sq ft and will be located west of Test Cells M34 and M35. The bldg will be a prefabricated steel structure with several work stations. The work stations will have hoist systems capable of lowering to pick up an engine/mount/cowl combination or lowering to remove or install an engine from/into the transportation dolly and to mate/demate the engine to its mount. The work stations will incorporate cell type interfaces for a limited checkout of engine instrumentation. These interfaces will connect to an instrumentation room where the data acquisition, diagnostic system will be located. A storage area will be provided for instrumentation and other equipment used in preparing the engine for test.					

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA		2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION AIR FORCE PLANT 36/ACGS CINCINNATI, OH 45215			4 PROJECT TITLE EXPANSION-TEST CELL #36		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE 211-183	7 PROJECT NUMBER	8 PROJECT COST (\$000) \$9,513.0		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
Construction of Jet Engine Test Cell		LS			9,513.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
The proposed test cell will occupy approximately 15,000 sq. ft. and will be constructed of reinforced concrete similar to Test Cells 34 and 35. These cells were originally built for testing TF39 engines and have more recently been used as a testing source for high bypass, high thrust engines. The proposed location for the new test cell has been chosen due to its proximity to the planned Prep-to-Test area, Test Engineering and Engine Assembly, which simplifies maintenance and provides for efficiency in supervision. This cell will also utilize the same services provided for Cells 34 and 35, i.e. utilities, fuel, waste oil system, etc.					

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA			2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION AFP 42, Northrop Site 5				4 PROJECT TITLE Capital Type Rehabilitation		
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE See Item 9		7 PROJECT NUMBER		8 PROJECT COST (\$000) 34.0
9 COST ESTIMATES						
ITEM				U/M	QUANTITY	COST (\$000)
45 Install Headwall and culvert, repair, perimeter fence. (872-245)				LS		34.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION						
Install headwalls and culverts to support and maintain the perimeter fence on the north side of Site 5 which has been washed out due to an ineffective seal and eroded soil conditions caused by rain; regrade eroded soil and repair perimeter fence as needed.						

1 COMPONENT Air Force		FY 1981 PROCUREMENT PROJECT DATA		2 DATE 6 Sept 1979	
3 INSTALLATION AND LOCATION AFP 83 General Electric			4 PROJECT TITLE Pollution Abatement		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE 228-228	7 PROJECT NUMBER	8 PROJECT COST (\$000) 153.0		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
Spill Prevention Countermeasure Control Pollution Abatement Project		LS			153.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
This project consists of the following tasks: a. Revise drainage in chip storage area to divert oily waste to existing containment pit. b. Revise Battery Storage area to contain washdown from storage area and tie in to oil separator and then to plant sanitary sewer. c. Revise two areas to divert effluent from storm drain to sanitary sewer system after passing thru oil separator. d. Construct a containment pit 31 X 30 and lean-to for chemical storage area at south end of Bldg 10. e. Install containment around drain storage area near Bldg. 30.					

War Consumables

The funds requested, along with prior funded assets, will provide additional wartime support needed, in the event of hostilities, to sustain operations until such time as production could be expanded to provide the required level of support. Included in this program are auxiliary fuel tanks, pylons, ejector racks and adaptors which are consumed during wartime operations.

The following is a breakout, by fiscal year, of the War Consumables program:

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
F-15 Aircraft	\$ 5.4	-	-	-
F-16 Aircraft	25.3	\$34.9	\$ 7.0	\$61.4
HH-53 Aircraft	-	-	-	4.2
F-4 Aircraft	3.4	-	-	-
TOTAL War Consumables	\$34.1	\$34.9	\$ 7.0	\$65.6

Other Production Charges

This program provides for items, such as Classified Projects, Alternate Mission Equipment, Precision Location Strike System and Air Combat Maneuvering Instrumentation, that are not directly related to other procurement lines in this appropriation and cannot be reasonably allocated and charged thereto. It also includes items, such as Electronic Countermeasure (ECM) Pods, Pave Tack Pods, LANTIRN, GBU-15, and Pave Penny Pods, that are used by more than one weapon system and managed as end items themselves.

The following table provides a comparison, by fiscal year, of the items in this program:

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Classified Projects 1/				
ECM Pods	\$ 121.5	\$ 415.6	\$ 553.4	\$ 704.9
Pave Tack Pods	18.6	108.2	148.8	236.1
Pave Penny Pods	54.5	97.1	-	-
Airborne Video Tape Recorder/	10.0	20.9	28.3	22.3
Cockpit TV Sensor	8.5	12.8	13.4	10.3
Alternate Mission Equipment	8.3	22.8	25.9	20.6
Air Combat Maneuvering	4.0	8.1	6.7	6.8
Instrumentation				
GBU-15	3.0		11.2	8.8
LANTIRN			1.0	116.6
Precision Location Strike System				8.2
TOTAL OTHER PRODUCTION CHARGES	\$ 228.4	\$ 685.5	\$ 788.7	\$ 1134.6

1/ Includes \$43.1 million in FY 79, \$35.4 million in FY 80, \$36.1 million in FY 81 and \$42.4 million in FY 82 for NFIP.

Justification for the various line items is as follows:

Classified Projects: Includes the Air Force Tactical Improvement Program and several National defense projects which are classified Special Access.

ECM Pods: Includes the procurement of new pods, such as the ALQ-131, and update of inventory pods, such as the ALQ-119, to maintain capability to counter the latest Soviet threats. The pods are used on several tactical strike/reconnaissance aircraft.

Pave Tack Pods: These pods provide a 24 hour target acquisition/laser designation system for F-4E, RF-4C, and F-111F aircraft.

Pave Penny Pods: These pods are low-cost laser seekers which detect reflected laser energy from targets designated by other systems such as Pave Tack. The small, 32 pound, pod provides a day and night laser seeker capability to A-10, F-16, and A-7 aircraft.

Airborne Video Tape Recorder (AVTR)/Cockpit TV Sensor (CTVS): The AVTR records all audio available at the aircrew headset and all video displays on the radar/Electro-Optical display and head-up display (HUD). Aircrews, maintenance crews, and combat and training units use the video tape recordings to analyze mission and training results and for trouble shooting and maintenance. The AVTR is common to the entire tactical force. The CTVS will replace the existing gun camera which employs film; the advantage is that no film processing is required, making the data available for use immediately after landing. The CTVS will provide imagery data to the AVTR for recording.

Alternate Mission Equipment: The program procures electronic warfare and airborne photography/reconnaissance equipment to provide countermeasure capabilities against changing enemy electronic defenses or for other unpredicted and urgent operational requirements.

Air Combat Maneuvering Instructional (ACMI): This is a joint Air Force/Navy program to procure pods which provide accurate kill/no kill data for assessment of tactics and aircrew training at the Air Combat Maneuvering Range. The pod is mounted on a standard launch rail and transmits attitude, airspeed, altitude, angle of attack, and weapons information to ground sites.

GBU-15 PODS: This program provides a radio frequency link between an aircraft and a GBU-15 Modular Guided Weapon System from weapon launch to impact to enable man-in-the-loop guidance for improved weapon CEP and enhanced aircraft survivability. The pods are used on F-4E, F-111F and B-52D aircraft in an interdiction, defense suppression, and sea lane protection role.

Low Altitude Navigation and Targeting Infrared System for Night (LANTIRN): Includes procurement of new pods to provide a night, under weather capability on the A-10 and F-16 aircraft to automatically attack ground vehicles on low level mission in a single pass.

Precision Location Strike System (PLSS): The PLSS will provide stand-off defense suppression by near real time location and all weather strike of radar systems, and strike of non radiating targets. Funds provide the airborne relay vehicle portion of PLSS.

U.S. Contribution to NATO Airborne Warning & Control System (AWACS) Aircraft Program

This program provides the U.S. share of costs, including acquisition, operation, and support, of the NATO AWACS program. The total U.S. share through FY 1985, to be paid in annual increments, is \$1,408 million. NATO's acquisition of its own force of 18 AWACS aircraft, to be complemented by 11 United Kingdom Nimrod Airborne Early Warning aircraft, for operations in Europe will make a major improvement in the military effectiveness of the Alliance, particularly against the growing low level air attack threat posed by the Warsaw Pact. This AWACS force, with attendant equipment, basing, and modification to the European ground radar environment, will provide improved air defense and counter-air operations for NATO forces. It will provide deep look surveillance and deterrence of potential Warsaw Pact threats, and improve the military responsiveness of the Alliance through its early warning, surveillance and information distribution capabilities. In wartime, the AWACS will increase the effectiveness of Allied weapon systems while helping to standardize system capabilities. The NATO AWACS will be interoperable with the USAF AWACS, the UK Nimrod AEW, and with both U.S. tactical and European national command and control systems. The unprecedented Alliance-wide commonly funded program is the most practical way for the Alliance to attain an effective Airborne Early Warning capability.

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
NATO AWACS	\$ 80.1	\$ 243.1	\$ 377.7	\$ 317.7

COMPARISON OF FY 1980 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1980 BUDGET WITH FY 1980 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1981 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per 1980 Budget	Total Program Requirements Per 1981 Budget	Increase + or Decrease -
Combat Aircraft	\$1,875,900	\$3,986,250	\$+110,350
Air lift Aircraft	-	77,220	+77,220
Other Aircraft	43,000	43,000	-
Modification of In-Service Aircraft	1,575,100	1,573,900	-1,200
Aircraft Spares and Repair Parts	1,017,800	1,099,670	+81,870
Aircraft Support Equipment & Facilities ..	1,419,400	1,302,141	-117,259
Reimbursable Program	623,770	361,335	-262,435
Total Fiscal Year Program	\$8,554,970	\$8,443,516	\$-111,454

EXPLANATION BY BUDGET ACTIVITY

1. Combat Aircraft - (+\$110.3 million). The increase is a result of Congressional action on the FY 1980 Budget: A-7K (+\$123.3); and E-3A Advance Procurement (-\$13.0).
2. Airlift Aircraft - (+\$77.2 million). Congress added 8 C-130H aircraft to the FY 1980 Budget.
5. Modification of In-Service Aircraft - (-\$1.2 million). Congress added \$47.8 million for the EF-111, and \$5.0 million for the KC-135 re-engine program to the FY 1980 Budget and reduced CRAF by \$35.0 million and Classified Projects by \$19.0 million.
6. Aircraft Spares and Repair Parts - (+\$81.9 million). The increase resulted from Congressional action on the FY 1980 Budget: F-100 Engine Spares (+\$75.4); A-7K Spares (+\$8.5); C-130H Spares (+\$2.5); and Classified Projects Spares (-\$4.5).
7. Aircraft Support Equipment and Facilities - (-\$117.3 million). Congress deleted \$104.4 million for the Component Improvement Program from the FY 1980 Budget and reduced Other Production Charges by \$10.0 million (\$7.1 for NATO AWACS and \$2.9 for Classified the RDT&E, AF appropriation.
8. Reimbursable Program - (-\$262.4 million). The decrease is due to a revised estimate of customer orders anticipated for FY 1980.

COMPARISON OF FY 1980 FINANCING AS REFLECTED
IN FY 1980 BUDGET WITH FY 1980 FINANCING AS
SHOWN IN THE FY 1981 BUDGET

	(in Thousands of Dollars)		
	Financing Per FY 1980 Budget	Financing Per FY 1981 Budget	Increase (+) or Decrease (-)
Program requirements (Total)-----	\$8,554,970	\$8,443,516	\$-111,454
Program requirements (Service account)-----	(7,931,200)	(8,082,181)	(+150,981)
Program requirements (Reimbursable)-----	(623,770)	(361,335)	(-262,435)
Less:			
Anticipated reimbursements-----	623,770	467,335	-156,435
Reappropriation-----	-	13,800	+13,800
Add:			
Transferred to other accounts-----	-	2,859	+2,859
Appropriation-----	\$7,931,200	\$7,965,240	\$+34,040

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1980 program has decreased \$111,454 thousand since submission of the FY 1980 budget. Adjustments by category are explained below:

1. Anticipated Reimbursements. The decrease of \$156,435 thousand is due to a revised estimate of customer orders anticipated in FY 1980.
2. Reappropriation. The reappropriation is a transfer from FY 1979 to finance FY 1980 by Congressional direction, specified in P.L. 96-154.
3. Transferred to Other Accounts. \$2,859 thousand is proposed for transfer to Research, Development, Test and Evaluation, Air Force FY 1980.

COMPARISON OF FY 1979 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1980 BUDGET WITH FY 1979 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1981 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per 1980 Budget	Total Program Requirements Per 1981 Budget	Increase + or Decrease -
Combat Aircraft	\$3,975,300	\$3,957,000	-18,300
Airlift Aircraft	68,500	67,500	-1,000
Other Aircraft	10,200	10,200	-
Modification of In-Service Aircraft	987,800	943,700	-44,100
Aircraft Spares and Repair Parts	1,327,900	1,193,500	-134,400
Aircraft Support Equipment and Facilities ..	775,507	765,507	-9,500
Reimbursable Program	614,100	491,247	-122,853
Total Fiscal Year Program	\$7,758,807	\$7,428,654	-\$330,153

EXPLANATION BY BUDGET ACTIVITY

1. Combat Aircraft - (-\$18.3 million). The net decrease was caused by: a transfer by Congress of \$13.8 million from the FY 1979 A-10 program to finance the FY 1980 A-10 program; a Congressionally approved reprogramming of \$9.0 million from the F-16 to the O&M, AF appropriation; and a below threshold reprogramming of \$4.5 million to the KC-10 from the Common Ground Equipment procurement line.
2. Airlift Aircraft - (-\$1.0 million). The decrease was the result of a Congressionally approved reprogramming to CHAMPUS.
5. Modification of In-Service Aircraft - (-\$44.1 million). The decrease resulted from disapproval by Congress of the FY 1979 Supplemental Budget (\$40.0 million) and a Congressionally approved reprogramming of \$4.1 million to the O&M, AF appropriation.
6. Aircraft Spares and Repair Parts - (-\$134.4 million). The decrease was caused by the disapproval by Congress of the FY 1979 Supplemental Budget of \$134.4 million.
7. Aircraft Support Equipment and Facilities - (-\$9.5 million). The decrease was the result of a Congressional reduction of \$5.0 million to the FY 1979 Supplemental Budget request for NATO AWACS and a below threshold reprogramming of \$4.5 million from Common Ground Equipment to the KC-10.
8. Reimbursable Program - (-\$122.9 million). The decrease is due to customer orders received being less than forecast.

COMPARISON OF FY 1979 FINANCING AS REFLECTED
IN FY 1980 BUDGET WITH THE FY 1979 FINANCING AS
SHOWN IN THE FY 1981 BUDGET

	(in Thousands of Dollars)		
	Financing Per FY 1980 Budget	Financing Per FY 1981 Budget	Increase (+) or Decrease (-)
Program requirements (Total)-----	\$7,758,807	\$7,428,654	\$-330,153
Program requirements (Service account)-----	(7,144,707)	(6,937,407)	(-207,300)
Program requirements (Reimbursable)-----	(614,100)	(491,247)	(-122,853)
Less:			
Anticipated reimbursements-----	614,100	491,247	-122,853
Unobligated balance transferred from other accounts-----	-	80,100	+80,100
Add:			
Transferred to other accounts-----	8,100	22,200	+14,100
Unobligated balance to finance subsequent year budget plans	-	13,800	+13,800
Appropriation-----	\$7,152,807	\$6,893,307	\$-259,500

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1979 program has decreased \$330,153 thousand since the submission of the FY 1980 budget. Adjustments by category of financing are explained below:

1. Anticipated Reimbursements. The decrease of \$122,853 thousand is due to fewer actual customer orders in FY 1979.
2. Unobligated Balances Transferred from Other Accounts. \$80,100 thousand was transferred from Aircraft Procurement, Air Force, FY 1977 in accordance with Section 834 of the DoD Appropriation Act of 1979.
3. Transferred to Other Accounts. \$8,100 thousand was transferred to Research, Development, Test and Evaluation, FY 1979, \$13,100 thousand was transferred to Operation and Maintenance, Air Force, FY 1979, and \$1,000 thousand was transferred to CHAMPUS, FY 1979, all in accordance with Section 834 of the DoD Appropriation Act of 1979.
4. Unobligated Balance to Finance Subsequent Year Budget Plans. Financing adjustment to finance FY 1980 program per Congressional direction, specified in P.L. 96-154.

ANALYSIS OF UNOBLIGATED BALANCES - 30 SEPTEMBER 1981
SUMMARY BY CATEGORY
(In Millions of Dollars)

	<u>FY 1980</u>	<u>FY 1981</u>	<u>Total</u>	<u>% of Total Unobligated</u>
1. <u>Military Interdepartmental Purchase Requests:</u> (MIPRs)	\$27.0	\$64.0	\$91.0	3.0%
2. <u>Completing Contractual Arrangements:</u>				
a. Specification Definitions	65.7	155.7	221.4	7.3%
b. Price Redeterminations	146.7	347.7	494.4	16.3%
c. Definitionization of Contracts	252.0	597.3	849.3	28.0%
3. <u>Full Funding Policy:</u>				
a. Delayed/Revised Program Release	300.7	712.5	1,013.2	33.4%
b. Engineering Changes	108.0	256.0	364.0	12.0%
TOTAL UNOBLIGATED FY 1981	\$900.1	\$2,133.2	\$3,033.3	

EXPLANATION

Procurement funds are available for obligation for three years because of the extensive lead time required to develop detailed specifications, issue Requests For Proposals (RFPs) and to negotiate and finalize contracts for procurement of investment equipment. Unobligated balances are required for programmed and needed items on which contracts have not reached the obligational stage by the end of the fiscal year because of the procurement process.

The following are illustrative of the reasons which will cause unobligated balances at the end of each fiscal year:

1. Military Interdepartmental Purchase Request (MIPRs) (\$91.0 million) - These documents are used to request one of the other military services to procure Air Force requirements in conjunction with their own or with those of another service. Funds to support these requests remain unobligated until notification of contract award is received from the other military service. Frequently, contractual arrangements will have been completed and the obligation incurred but notification from the other service is not received in time for recording in Air Force records prior to or at the end of a fiscal year.

2. Completing Contractual Arrangements:

- a. Specification Definitions (\$221.4 million) - Unobligated funds result when specifications for newly introduced items cannot be definitized in time to permit contract negotiation prior to or at the end of the fiscal year.

- b. Price Redeterminations (\$494.4 million) - Prices are redetermined at intervals throughout the life of a contract. Final obligation for contracts must await negotiations on agreed target-ceiling formulae. In most large contracts, the rewards and penalties of multiple incentives (cost, performance and schedule) cannot be determined and obligated prior to the end of the fiscal year. Funds are reserved for these purposes when upward adjustments seem likely; however, obligation does not occur until a formal redetermination has been agreed upon and the contract amended. Unobligated funds at year end result.

- c. Definitization of Contracts (\$849.3 million) - Procurements of complex systems and large material orders may occasionally be initiated under letter contracts. The letter contract generates a partial obligation of the total program value with the balance remaining committed but unobligated pending definitization and negotiation of the detailed contract terms. These actions can carry over the end of a fiscal year and result in unobligated funds.

3. Full Funding Policy - This policy, enunciated in DoD Directive 7200.4 (October 30, 1969) provides that adequate appropriations and funds must be available in a given fiscal year for obligation, committed or set aside in a reserve account in an aggregate amount sufficient to complete the procurement of a specified number of end items and advance procurement for approved programs. Unobligated balances at the end of a fiscal year are a consequence of this policy and accrue in the following categories:

a. Delayed/Revised Program Release (\$1.013.2 million) - Adjustments in quantities or specifications of other equipment to meet changing situations or to exploit engineering improvement. Generally require prior approval of reprogramming requests which can delay program release and direction until well into the fiscal year, thus delaying the obligation of funds by the end of the fiscal year. Also, approved and funded programs are sometimes delayed/undirected beyond 30 September pending decision on an aspect of the program that has arisen requiring resolution before proceeding.

b. Engineering Changes (\$364.0 million) - Based on prior experience with systems of like nature and complexities, provision is made in procurement programs, as a percentage of the estimated cost of the item, to cover engineering improvements and design changes which will occur as a result of manufacturing experience or Air Force requirements. Engineering changes are not definitive requirements known in advance and they cannot be obligated until the change is authorized and directed. These changes occur throughout the life of the production contract and result in unobligated balances.

FLIGHT SIMULATOR PROCUREMENT PROGRAM
(DOLLARS IN MILLIONS)

APPROPRIATION: Aircraft Procurement, Air Force

Weapon System	Type	P-1 Line Item	FY79 & Prior		FY80		FY81		FY82	
			Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
A-10	OFT	2	14	\$69.8						
	WST 2/								1	\$11.4
	TOTAL		14	69.8					1	11.4
F-15	OFT	4	9	60.5	2	\$20.0				
	TOTAL		9	60.5	2	20.0				
F-16	OFT	6	5	58.2	2	11.0	2	\$11.8	7	42.8
	Added Cap 1/		-	14.1	-	1.2	-	25.1	-	22.1
	WST 2/		-	-	-	-	-	-	-	-
	TOTAL		5	72.3	2	12.2	2	36.9	7	64.9
F-106	ACPTT	41			1	0.8				
	TOTAL				1	0.8				
B-52	WST/OSMT	40/41	2	73.2	2	97.8	2/1	110.1	5	151.8
	SPARES			6.4		6.4		5.6		8.6
	TOTAL		2	79.6	2	104.2	2/1	115.7	5	160.4
EF-111	PTT	40/41								
	SPARES									
	TOTAL									
GRAND TOTAL				\$282.2		\$137.2		\$152.6		\$236.7

APPROPRIATION: Aircraft Procurement, Air Force

Weapon System	Type	P-1 Line Item	FY85		FY84		FY85		Cost To Complete		Total Cost	
			Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
<u>A-10</u>	OFT WST 2/ TOTAL	2	2	\$26.6 26.6	3 42.2	3 42.2					14 6 20	\$69.8 80.2 150.0
<u>F-15</u>	OFT TOTAL	4									11 11	80.5 80.5
<u>F-16</u>	OFT Added Cap 1/ WST 2/ TOTAL	6	4 - 1 5	31.0 26.6 37.3 94.9	3 - 2 5	23.4 17.2 34.0 74.6	2 - 3 5	\$14.6 16.0 47.6 78.2	6 - 7 13	\$49.1 36.2 126.4 211.7	31 - 13 44	241.9 158.5 245.3 645.7
<u>F-106</u>	ACPTT TOTAL	41									1 1	0.8 0.8
<u>B-52</u>	WST/OSMT Spares TOTAL	40/41	3 3	94.2 6.5 100.7	4 9.0 124.3	115.3 9.0 124.3					18/1 18/1	642.4 42.5 684.9
<u>EF-111</u>	PTT Spares TOTAL	40/41	1 1	7.6 0.3 7.9							1 1	7.6 0.3 7.9
GRAND TOTAL				\$230.1		\$241.1		\$78.2		\$211.7		\$1569.8

- 1/ Includes simulation capabilities for Electronic Warfare, Adaptive Training, Digital Radar Landmass, Limited Takeoff and Landing.
- 2/ These funds, procure Full Visual Capability only - each WST consists of two OFTs linked with Visual Capability Equipment and Software.

Legend

AGPTT Aerial Gunnery Part Task Trainer
OSMT Offensive System Mission Trainer
OPT Operational Flight Trainer
PTT Part Task Trainer
WST Weapon System Trainer

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

B-52 CLASS V

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TAIL WARNING SYSTEM, PN-2923

MODELS OF AIRCRAFT AFFECTED: B-52 G/H

DESCRIPTION/JUSTIFICATION INSTALLATION OF ACTIVE RADAR SYSTEM TO PROVIDE DETECTION AND WARNING OF AIR-TO-AIR MISSILE THREATS AGAINST THE B-52. PROVIDES AUTOMATIC MANAGEMENT OF EXPENDABLE COUNTERMEASURES (INFRARED FLARES) USED TO DECOY IR-SEEKING MISSILES. B-52 CURRENTLY HAS

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	43	41.5	61	16.6	64	16.2	61	16.1	40	12.2	269	102.6
NONRECURRING	2	5.4									2	5.4
KITS	41	11.5	61	16.1	64	16.2	61	16.1	40	12.2	267	72.1
DATA		7.4		.5								7.9
TRAINER		.6										.6
SUPPORT EQUIP.		16.6										16.6
TOTAL	43	41.5	61	16.6	64	16.2	61	16.1	40	12.2	269	102.6

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/PDM
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. ECM TRANSMITTER UPDATE, MN-2970

B-52 CLASS V

MODELS OF AIRCRAFT AFFECTED: B-52 G/H

DESCRIPTION/JUSTIFICATION REPLACES TWO OBSOLETE ALT 6-B ECM TRANSMITTERS PER AIRCRAFT WITH CURRENT ALT-28 SYSTEMS, INCLUDING FREQUENCY COVERAGE IN EXISTING "CAP" AND ADDITION OF INCREASED MODULATOR PROGRAMMING CAPABILITY. THIS MODIFICATION IS REQUIRED TO PROVIDE INCREASED JAMMER POWER, FREQUENCY COVERAGE, AND TECHNIQUE PROGRAMMING AGAINST CURRENT RADAR THREAT ENVIRONMENT.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	95	27.3	61	13.0	63	12.4	50	5.2			269	57.9
NONRECURRING	1	3.4									1	3.4
KITS	94	10.8	61	7.3	63	7.5	50	5.2			268	30.8
DATA		2.7										2.7
TRAINER		2.5										2.5
SUPPORT EQUIP.		1.8		1.0								2.8
XMIT TUBES		4.4		4.7		4.9						14.0
GIPS		1.7										1.7
TOTAL	95	27.3	61	13.0	63	12.4	50	5.2			269	57.9

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/PDM
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-91 APPROPRIATION AIRCRAFT PROCUREMENT. AIR FORCE

MODIFICATION TITLE AND NO ECH POWER MANAGEMENT MN-2973

MODELS OF AIRCRAFT AFFECTED B-52 G/H

B-52 CLASS V

DESCRIPTION/JUSTIFICATION. THERE IS AN URGENT OPERATIONAL REQUIREMENT FOR IMPROVED CAPABILITY OF EXISTING B-52 G/H ALT-28 TRANSMITTER SYSTEM. INCREASED DENSITY AND SOPHISTICATION OF RADAR THREATS CAN SATURATE THE CURRENT EC-1 SYSTEMS IN THE B-52. POWER MANAGEMENT WILL SIGNIFICANTLY IMPROVE JAMMING EFFECTIVENESS BY PROVIDING AUTOMATIC AND RAPID THREAT RADAR FREQUENCY SET-ON AND INITIATION OF APPROPRIATE COUNTERMEASURES PROGRAMS.

SCOPE OF PROGRAM.

BASIS FOR COST ESTIMATE

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
NONRECURRING	1	.9									1	.9
KITS	94	22.6	61	14.8	63	16.6	50	13.7	268	67.7	269	98.6
DATA		4.8								4.8		
TRAINER		6.7								6.7		
SUPPORT EQUIP.		8.3		4.8						13.1		
CIPS		5.4								5.4		
TOTAL	95	48.7	61	19.6	63	16.6	50	13.7	269	98.6	269	98.6

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/PDM
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO ALCM-CARRIER AIRCRAFT. MN-3022

MODELS OF AIRCRAFT AFFECTED. B-52G

B-52 CLASS V

DESCRIPTION/JUSTIFICATION. PROVIDES THE B-52G AIRCRAFT WITH THE CAPABILITY TO CARRY AND LAUNCH THE LONG RANGE AIR LAUNCHED CRUISE MISSILE. PROVIDES FOR EXTERNAL AND INTERNAL CARRIAGE.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE.	3	35.8	22	79.7	40	115.0	40	114.0	68	534.5	173	879.0
NONRECURRING				4.2		.8		.9		2.1		8.0
KITS	3	6.0	22	17.9	40	34.9	40	35.8	68	86.8	173	181.4
DATA		1.9		2.7		1.4		1.6		1.6		7.6
TRAINER				1.3								1.3
SUPPORT EQUIP.				1.8		2.3		1.6		2.7		8.4
TOOLING		23.1		18.6						42.0		83.7
PYLON		4.8		33.2		75.6		75.7		130.4		319.7
LAUNCHERS										179.2		179.2
BOMB BAY (INT)										89.7		89.7
TOTAL	3	35.8	22	79.7	40	115.0	40	114.0	68	534.5	173	879.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/PDM
LEAD TIME - 26 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION: TITLE AND NO AVIONICS MODERNIZATION, MA-3023

MODELS OF AIRCRAFT AFFECTED: B-52 G/H

B-52 CLASS V

DESCRIPTION/JUSTIFICATION PRESENT BOMBING NAVIGATION SYSTEM WAS DESIGNED USING 1950 TECHNOLOGY. SYSTEM SUFFERS FROM LOW RELIABILITY HIGH SUPPORT COST AND INADEQUATE CAPABILITY THUS REDUCING WEAPON SYSTEM EFFECTIVENESS. UPDATE REPLACES PRESENT ANALOG SYSTEM WITH A DIGITAL SYSTEM AND STATE-OF-THE-ART SENSORS AND SUBSYSTEMS. NEW SYSTEM IS REQUIRED TO MEET THE STRATEGIC BOMBER MISSION REQUIREMENTS AND TO INTERFACE WITH THE INTRODUCTION OF CRUISE MISSILES ON THE B-52.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	5	59.3	31	323.4	64	239.4	61	199.1	108	347.8	269	1169.0
NONRECURRING		9.3		44.8		16.2		22.0		23.7		116.0
KITS	5	27.3	31	95.8	64	180.5	61	164.9	108	288.5	269	757.0
DATA		5.5		33.0		5.0		1.4		1.7		46.6
TRAINER		1.5		46.0		13.3				16.8		77.6
SUPPORT EQUIP.		6.0		103.8		24.4		10.8		17.1		162.1
TOOLING		9.7										9.7
TOTAL	5	59.3	31	323.4	64	239.4	61	199.1	108	347.8	269	1169.0

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/PDM
LEAD TIME - 24 MONTHS

B-52 CLASS V

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ODS/FRODS, MN-3041

MODELS OF AIRCRAFT AFFECTED: B-52G

DESCRIPTION/JUSTIFICATION THIS MODIFICATION SUPPORTS THE SALT II. B-52 BOMBERS CAPABLE OF LAUNCHING ALCM'S MUST BE IDENTIFIABLE FROM OVERHEAD FOR SALT II/MIRV COUNTING PURPOSES. THE MOD MUST BE COMPLETED AND FULLY INTEGRATED INTO MOD/DELIVERY SCHEDULE FOR B-52G MODS FOR OFFENSIVE AVIONICS SYSTEM (OAS-MN3023) AND CRUISE MISSILE CARRIAGE (MN3022). IT MUST MEET THE SCHEDULE FOR FIRST DELIVERY OF MODIFIED B-52 AIRCRAFT FOR ALCM CARRIAGE.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE			24	28.8	40	10.0	40	5.7	69	7.8	173	52.3
NONRECURRING												
KITS				20.0		3.9						23.9
DATA			24	3.0	40	5.5	40	5.7	69	7.8	173	22.0
TOOLING				.6		.3						.9
				5.2		.3						5.5
TOTAL			24	28.8	40	10.0	40	5.7	69	7.8	173	52.3

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/PDM
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO DIGITAL BNS/INS MN-18411B

MODELS OF AIRCRAFT AFFECTED B-52D

DESCRIPTION/JUSTIFICATION REPLACES CURRENT COMPUTER PORTION OF ASB-15 BOMBING/NAVIGATION SYSTEM WITH A DIGITAL WITH DIGITAL BOMB/NAV COMPUTER AND A STANDARD PRECISION INERTIAL PLATFORM. PRESENT RELIABILITY AND SUPPORTABILITY MAKE REPLACEMENT SYSTEM NECESSARY TO KEEP AIRCRAFT A VIABLE ELEMENT OF THE STRATEGIC FORCE. MANY LINE REPLACEABLE UNITS ARE NOT AVAILABLE DUE TO OBSOLESCENCE AND LACK OF INDUSTRY BIDS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	35	67.6	44	42.1		5.0					79	114.7
NONRECURRING	1	17.0									1	17.0
KITS	34	36.8	44	30.0							78	66.8
DATA		7.2										7.2
TRAINER		.3		9.3		4.0						13.6
SUPPORT EQUIP.		6.3		2.8		1.0						10.1
TOTAL	35	67.6	44	42.1		5.0					79	114.7
METHOD OF IMPLEMENTATION	INSTALLATION - DEPOT											
	LEAD TIME - 18 MONTHS											

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. MODERNIZE DEFENSIVE FIRE CONTROL MN-66136B

B-52 CLASS IV

MODELS OF AIRCRAFT AFFECTED B-52H

DESCRIPTION/JUSTIFICATION THE FAILURE RATE OF THE ASG-21 FIRE CONTROL SYSTEM IS INCREASING RAPIDLY, AS WELL AS THE CONDEMNATION RATE OF THE COMPONENTS. THIS RESULTS IN HIGH LOGISTICS SUPPORT COSTS. THIS MODIFICATION WILL REDUCE THE NUMBER OF LINE REPLACEABLE UNITS. UPDATE THE SYSTEMS TO CURRENT TECHNOLOGY AND PROVIDE LOGISTICALLY SUPPORTABLE SYSTEMS. THE IMPROVED PERFORMANCE WILL ENHANCE MISSION ACCOMPLISHMENT.

SCOPE OF PROGRAM.

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
	2.1	20	14.3	76	35.5						96	51.9
BASIS FOR COST ESTIMATE												
KITS			20	6.1	76	32.9					96	39.0
DATA				5.1								5.1
SUPPORT EQUIP.	2.1		3.1	2.6								7.8
	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	2.1	20	14.3	76	35.5						96	51.9

METHOD OF IMPLEMENTATION. INSTALLATION - ORG/FIELD
LEAD TIME - 22 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO FUEL SAVINGS ADVISORY SYSTEM

B-52 CLASS IV

MODELS OF AIRCRAFT AFFECTED B-52 D/G/H

DESCRIPTION/JUSTIFICATION INSTALLS A STANDARD FUEL SAVINGS ADVISORY SYSTEM. DECLINING OIL RESERVES AND INCREASING FUEL COSTS DICTATE FUEL CONSERVATION TO THE MAXIMUM EXTENT POSSIBLE. ADDITIONAL OPERATIONAL ADVANTAGES WILL ACCRUE IN THAT DURING STOP MISSIONS THE SYSTEM COULD PROVIDE AN ADDITIONAL 30 MINUTES OF POSITIVE CONTROL OR ALLOW THE BOMBER TO DESCEND TO LOW ALTITUDES 300 MILES EARLIER.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE					3	2.1	81	9.4	264	25.1	348	36.6
NONRECURRING					3	2.1					3	2.1
KITS							81	6.3	264	25.1	345	31.4
DATA								1.5				1.5
SUPPORT EQUIP.								1.6				1.6
TOTAL					3	2.1	81	9.4	264	25.1	348	36.6

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/PDM
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO AUTOMATIC FLIGHT CONTROL SYSTEM (AFCS) MN-18420B

MODELS OF AIRCRAFT AFFECTED B-52D

B-52 CLASS IV

DESCRIPTION/JUSTIFICATION PROVIDES FOR GENERAL IMPROVEMENT IN B-52D AFCS MAINTAINABILITY SAFETY AND RELIABILITY BY ADDING A DUAL PITCH CHANNEL AND REPLACING THE MAIN AMPLIFIER, SERVO CONTROL AND STEERING COUPLER WITH ONE SOLID STATE LINE REPLACEABLE UNIT. IT ALSO REPLACES THE COMMAND SELECTOR FORCE TRANSDUCER SAFETY MONITOR AND REMOVES THE AUTO APPROACH AMPLIFIER AND RELAY BOX. IT REPLACES THE N-1 COMPASS SYSTEM WITH A NEW ATTITUDE HEADING AND REFERENCE SYSTEM. SYSTEM RELIABILITY IS DECREASING AND THE PITCH AXIS PRESENTS A SAFETY HAZARD IN LOW LEVEL AND AERIAL REFUEL NODES

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE												
KITS												
DATA							16	6.3	62	25.8	78	32.1
TRAINER								3.7				3.7
SUPPORT EQUIP.								1.0				1.0
TOTAL								3.0				3.0
							16	14.0	62	25.8	78	39.8
METHOD OF IMPLEMENTATION												
INSTALLATION - DEPOT/PDM							16	14.0	62	25.8	78	39.8
LEAD TIME - 18 MONTHS												

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. X BAND TRANSISTOR ASSY. MN-18246B

MODELS OF AIRCRAFT AFFECTED F-106

F-106 CLASS IV

DESCRIPTION/JUSTIFICATION. INCORPORATES A NEW RADAR RECEIVER INTO THE MA-1/ASQ-25 FIRE CONTROL SYSTEM. THE PRESENT RADAR RECEIVER HAS A LOW RELIABILITY AND A PARAMETRIC AMPLIFIER WHICH IS OBSOLETE AND BECOMING LOGISTICALLY UNSUPPORTABLE. THE LOGISTICS SUPPORT COST OF THE PRESENT RECEIVER IS \$2.6 MILLION PER YEAR. THE NEW RECEIVER WHICH CONSISTS OF AN X BAND TRANSISTOR AND ASSEMBLY WILL REDUCE THE ANNUAL SUPPORT COST TO ONE THIRD OF THE CURRENT COST. THE LOW RELIABILITY OF THE PRESENT RADAR RECEIVER CAUSES F-106 MISSION DEGRADATION.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	---	---	---	---	---	---	---	---	---	---	---
NONRECURRING	2	2.4	2	2.4	117	6.0	100	5.0	---	---	219	13.4
KITS	2	1.0	2	1.0	117	6.0	100	5.0	---	---	2	1.0
DATA				.6					---	---	217	11.0
SUPPORT EQUIP.				.8					---	---		.6
TOTAL	2	2.4	2	2.4	117	6.0	100	5.0	---	---	219	13.4

METHOD OF IMPLEMENTATION. INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

F-106 CLASS IV

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE
MODIFICATION TITLE AND NO RADAR UPGRADE/MODERNIZATION (RUMM), MN-18245B

MODELS OF AIRCRAFT AFFECTED F-106A/B

DESCRIPTION/JUSTIFICATION THIS MODIFICATION WILL REPLACF 41 UNITS OF THE MA-1/ASQ-25 RADAR SUBSYSTEM WHICH WERE DESIGNED IN THE 1950S AND WHICH HAVE A LOW RELIABILITY OF 2.39 HOURS MEAN-TIME-BETWEEN-FAILURES (MTBF). THE TECHNOLOGY DEVELOPED FOR THE F-14, F-15 AND F-18 AIRCRAFT AVIONICS MAKE IT POSSIBLE TO SIGNIFICANTLY IMPROVE THE RELIABILITY OF THE RADAR ANTENNA TRANSMITTER, VIDEO PROCESSING AND DISPLAYS. THE NEW RADAR DESIGN USING THIS TECHNOLOGY WILL HAVE A FIELD MTHF OF 50 HOURS.

SCOPE OF PROGRAM

PRIOR	FY-80	FY-81	FY-82	OUTYEAR	TOTAL	
QTY	COST	QTY	COST	QTY	COST	
---	----	----	----	----	----	----
45	32.9	169	104.9	214	137.8	

BASIS FOR COST ESTIMATE

NONRECURRING	4	11.9	4	11.9
KITS	41	20.0	169	95.2
DATA	1.0	3.8		
SUPPORT EQUIP.		5.9		
TOTAL	45	32.9	169	104.9
	214	137.8		

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/FIELD TEAM
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO CHAFF/FLARE DISPENSER, MN-2981

MODELS OF AIRCRAFT AFFECTED A-7D

A-7 CLASS V

DESCRIPTION/JUSTIFICATION INSTALLS THE ALE-40 CHAFF/FLARE DISPENSER SYSTEM FOR A SELF-PROTECTION COUNTERMEASURE CAPABILITY AGAINST BOTH RADAR DIRECTED AND INFRARED GUIDED THREATS. THIS SYSTEM ALLOWS FOR SUCCESSFUL DECOY OR OTHERWISE COUNTERING INTERFERENCE TO THE PRIMARY MISSION OF THE AIRCRAFT. THE EMPLOYMENT OF HOSTILE FORCES SEVERELY IMPACTS THE SURVIVABILITY OF TACTICAL AIRCRAFT OPERATING IN A COMBAT ENVIRONMENT. THE USAF A-7

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	191	8.5	72	2.1	96	3.0					359	13.6
NONRECURRING	1	1.5									1	1.5
KITS	190	5.1	72	2.1	96	3.0					358	10.2
DATA		.8										.8
TRAINFR		.8										.8
SUPPORT EQUIP.		3										.3
TOTAL	191	8.5	72	2.1	96	3.0					359	13.6

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 21 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TF-41 HP TURBINE, MN-47816B

A-7 CLASS IV

MODELS OF AIRCRAFT AFFECTED: A-7D(TF-41 ENGINE)

DESCRIPTION/JUSTIFICATION THE TF-41 HAS HAD SERIOUS PROBLEMS WITH FAILURES IN THE HOT SECTION, IN MANY CASES DIRECTLY RELATED TO THE SECOND-STAGE HIGH PRESSURE TURBINE BLADE. NUMEROUS FAILURES HAVE RESULTED IN A SAFETY-OF-FLIGHT PROBLEM AND GROUNDING OF AIRCRAFT WHILE THE ENGINE WAS FORCED INTO THE OVERHAUL LINE. THIS MODIFICATION PROVIDES A LONG TERM CORRECTION FOR THE HIGH PRESSURE TURBINE FAILURES.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	30	3.3	30	3.3	67	3.8	134	7.5	304	17.0	565	34.9
BASIS FOR COST ESTIMATE												
NONRECURRING		.8										.8
KITS	30	2.5	30	3.3	67	3.8	134	7.5	304	17.0	565	34.1
DATA				*								*
TOTAL	30	3.3	30	3.3	67	3.8	134	7.5	304	17.0	565	34.9

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT

LEAD TIME - 9 MONTHS

A-7 CLASS IV

FI-81 APPROPRIATION HARDWARE
DIGITAL SCAN CONVERTER MN-68045B

DESCRIPTION/JUSTIFICATION MODIFICATION WILL REPLACE TWO L7NE REPLACEABLE UNITS (LRU) WITH THE DIGITAL SCAN CONVERTER. THE AN/APQ-126 RADAR DISPLAY SUB-GROUP INSTALLED IN A-7D AIRCRAFT IS EXPERIENCING A LOW MEAN TIME BETWEEN FAILURE (MTBF) RELIABILITY OF 80 HOURS. THE COMBINED MTBF OF THE PROPOSED DIGITAL SCAN CONVERTER GROUP IS 500 HOURS BASED ON MORE THAN TWO YEARS OF FLYING IN AN OPERATIONAL ENVIRONMENT.

	PRIOR	FY-80	FY-81	FY-82	OUTYEAR	TOTAL
	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
	-----	----	----	----	----	-----
			80	6.5	192	8.5 87 4.3
						359 19.3

KITS	80	3.2	192	7.7	87	4.3	359	15.2
DATA		.4						.4
TRAINER		.5						.5
SUPPORT EQUIP.		2.4		.8				3.2

INSTALLATION - ORG/INTERMEDIATE
LEAD TIME - 10 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO AMPLIFIER REPLACEMENT MN-48846B

A-7 CLASS IV

MODELS OF AIRCRAFT AFFECTED A-7 TF-41

DESCRIPTION/JUSTIFICATION NEW DESIGN AMPLIFIER TO REPLACE EXISTING CAPACITOR, WHICH HAS A
DETREMENTAL FAILURE HISTORY OF 965 FAILURES INCLUDING ONE AIRCRAFT LOSS AND 4 INFLIGHT
EMERGENCIES. NEW DESIGN INCORPORATES INTEGRATED PRINTED CIRCUITRY WITH THE FOLLOWING
ADVANTAGES 1. 10% REDUCTION IN NEW COST. 2. 50% REDUCTION IN REPAIR LABOR. 3. NO PARTS
OBSELESCENCE. 4. 16% FEWER PARTS. 5. PRECISION CONTROL OF ENGINE LIMITS

SCOPE OF PROGRAM

PRIOR	FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---
	209	4.2	326	6.0					535	10.2

BASIS FOR COST ESTIMATE

KITS	209	3.9	326	6.0					535	9.9
DATA		*								*
SUPPORT EQUIP.		.3								.3
TOOLING		*								*
	---	---	---	---	---	---	---	---	---	---
TOTAL	209	4.2	326	6.0					535	10.2

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 11 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

A-10 CLASS V

FY-31 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO INERTIAL NAVIGATION SYSTEM (INS)

MODELS OF AIRCRAFT AFFECTED A-10

DESCRIPTION/JUSTIFICATION INS WILL PROVIDE AN AUTONOMOUS NAVIGATION CAPABILITY. LOW LEVEL TACTICS IMPOSED BY COMBAT ENVIRONMENT PRECLUDES RELIANCE ON EXTERNAL NAVIGATIONAL AIDS. EUROPEAN TERRAIN AND WEATHER DICTATE AUTONOMOUS CAPABILITY IN TACTICAL SITUATIONS. A-10 NAVIGATION REQUIREMENT DOCUMENTED IN OPERATIONAL EVALUATIONS.

SCOPE OF PROGRAM

PRIOR	FY-80	FY-81	FY-82	OUTYEAR	TOTAL
QTY	COST	QTY	COST	QTY	COST
---	---	---	---	---	---
22	15.3	120	26.8	120	28.2
				153	37.8
					415
					108.1

BASIS FOR COST ESTIMATE:

NONRECURRING	1	6.5			1	6.5
KITS	21	4.8	120	26.8	120	28.2
DATA		2.4				2.4
SUPPORT EQUIP.		1.6				1.6
	22	15.3	120	26.8	120	28.2
					153	37.8
					415	108.1

TOTAL

METHOD OF IMPLEMENTATION - INSTALLATION - DEPOT/FIELD TEAM
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO APU FUEL CONTROL NN-29018B

MODELS OF AIRCRAFT AFFECTED A-10

A-10 CLASS IV

DESCRIPTION/JUSTIFICATION CHANGE FROM A LOW PRESSURE FUEL SYSTEM. THE EXISTING LOW PRESSURE FUEL SYSTEM HAS EXHIBITED SEVERE IN-SERVICE RELIABILITY PROBLEMS RELATING TO DIAPHRAGM FAILURES, PUMP SHAFT FAILURES, GOVERNOR INSTABILITY AND AIR PUMP FAILURES. WOULD ALSO PROVIDE IMPROVED TEMPERATURE CONTROL DURING START FLIMINATF THE STARTER AIR PUMP ASSEMBLY. AND WILL PROVIDE A MORE CONSISTENT START TIME OVER A WIDER RANGE OF ALTITUDE AND TEMPERATURE THAN CURRENTLY AVAILABLE.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE												
NONRECURRING												
KITS												
DATA												
SUPPORT EQUIP.												
TOOLING												
TOTAL												

METHOD OF IMPLEMENTATION INSTALLATION - ORG/INTERMEDIATE
LEAD TIME - 24 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO STABILITY AUGMENTATION SYSTEM (SAS) MN-38505B

A-10 CLASS IV

MODELS OF AIRCRAFT AFFECTED A-10

DESCRIPTION/JUSTIFICATION PILOTS HAVE REPORTED THAT WITH THE PRESENT SAS IT IS EXTREMELY DIFFICULT TO MAKE ACCURATE AZIMUTH CORRECTIONS IN ORDER TO REFINE LATERAL PIPPER PLACEMENTS DURING WEAPONS DELIVERY. SLOW, SMOOTH INPUTS HELP TO ALLEVIATE THIS PROBLEM. BUT THIS REQUIRES LONGER TARGET TRACKING TIMES WHICH ADVERSELY IMPACT VULNERABILITY UNDER COMBAT CONDITIONS. AN IMPROVED SAS DESIGN HAS BEEN SUCCESSFULLY FLIGHT TESTED AND IS EFFECTIVE FOR CONTINUED WEAPON DELIVERY CAPABILITY AND MISSION EFFECTIVENESS. RETROFIT OF THIS CHANGE IS MANDATORY.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	---	---	---	---	---	---	---	---	---	---	---
NONRECURRING												
KITS			73	1.9	75	2.0	46	1.2			194	5.1
TRAINER				.1								.1
SUPPORT EQUIP.				.5								.5
TOTAL			73	2.7	75	2.0	46	1.2			194	5.9

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT
LEAD TIME - 22 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO TACTICAL ELECTRONIC RECONNAISSANCE. MN-2707

MODELS OF AIRCRAFT AFFECTED: RF-4C

F/RP-4 CLASS V

DESCRIPTION/JUSTIFICATION INSTALLS THE AN/ALQ-125 TERC IN RF-4C AIRCRAFT. THIS MODIFICATION WILL PROVIDE A SYSTEM OF SENSORS. RECEIVERS AND PROFSSORS WHICH WILL DETECT IDENTIFY. LOCATE AND RECORD INFORMATION PERTAINING TO EMANATIONS OF GROUND BASED EMITTERS. IT ALSO PROVIDES INTERFACE FOR POSITIONAL DATA FROM AN/ARN-101 DIGITAL AVIONICS SYSTEM.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS . COST ESTIMATE	18	44.4				9.5					18	53.9
NONRECURRING	1	3.9									1	3.9
KITS	17	24.1									17	24.1
DATA		5 0										5.0
SUPPORT EQUIP.		10.3				9.5						19.8
TOOLING		1.1										1.1
TOTAL	18	44.4				9.5					18	53.9

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 24 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

MODIFICATION TITLE AND NO ALR-69 RWR UPDATE (COMPASS TIE) MN-3052

DESCRIPTION/JUSTIFICATION

UPGRADES THE ALR-46 RADAR WARNING RECEIVER (RWR) TO PROVIDE AN IMPROVED CAPABILITY TO DETECT

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	---	---	---	---	---	---	---	---	---	---
	10.5	28	6.7	115	21.1	369	58.0	512	94.3			

[illegible]

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MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. PARKHILL TAC SECURE VOICE

MODELS OF AIRCRAFT AFFECTED. RF-4

DESCRIPTION/JUSTIFICATION PARKHILL SECURE VOICE PROVIDES ON-LINE ENCRYPTION/DECRYPTION OF HF
NARROW BAND FREQUENCY RANGES UP TO THE SECRET LEVEL. THE TSEC/KY-75 IS DESIGNED FOR OPERATION
IN ALL AIRCRAFT APPLICATIONS.

F/RP-4 CLASS V

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
	37	2.5	74	1.3	210	4.1					321	7.9
BASIS FOR COST ESTIMATE												
NONRECURRING	1	1.1									1	1.1
KITS	36	.7	74	1.3	210	4.1					320	6.1
DATA		.7										.7
TOOLING		*										*
TOTAL	37	2.5	74	1.3	210	4.1					321	7.9

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 24 MONTHS

0

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* LESS THAN \$ 50 000

... 2: APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO.	VINSON TAC SECURE VOICE
1. 10/1/68	
2. 10/1/68	
3. 10/1/68	
4. 10/1/68	
5. 10/1/68	
6. 10/1/68	
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97. 10/1/68	
98. 10/1/68	
99. 10/1/68	
100. 10/1/68	

MODELS OF AIRCRAFT AFFECTED: F/RF-4

DESCRIPTION/JUSTIFICATION: VINSON SECURE VOICE PROVIDES ON-LINE ENCRYPTION/DECRYPTION OF VHF/UHF AM/FM HALF-DUPLEX RADIO FOR ALL CLASSIFICATION OF TRAFFIC. THE TSEC/KY-58 IS DESIGNED FOR OPERATION IN AIRCRAFT INSTRUMENT PANELS OR RADIO-CONSOLE CONTROL PANELS, OR IT MAY BE LOCATED IN EQUIPMENT BAYS AND OPERATED BY A REMOTE CONTROL UNIT (RCU).

SCOPE OF PROGRAM				BASIS FOR COST ESTIMATE:								T O T A L	
PRIOR		FY-80		FY-81		FY-82		OUTYEAR		QTY		COST	
QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	----	---	----	999	5.2	191	1.9	410	4.3	---	----	1600	11.4
NONRECURRING													
				1	.1							1	.1
				998	4.9	191	1.9	410	4.3			1599	11.1
KITS													
					.1								.1
DATA													
					.1								.1
TOOLING													
---	----	---	----	999	5.2	191	1.9	410	4.3	---	----	1600	11.4
TOTAL													

METHOD OF IMPLEMENTATION.

INSTALLATION - DEPOT/FIELD TEAM
LEAD TIME - 24 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT. AIR FORCE

MODIFICATION TITLE AND NO APQ-120 ALTITUDE LINE IMPV. MN-16509B

MODELS OF AIRCRAFT AFFECTED F-4E/G

F/RF-4 CLASS IV

DESCRIPTION/JUSTIFICATION THIS MOD CORRECTS A DESIGN DEFICIENCY BY IMPLEMENTING AN AUTOMATIC ACQUISITION MODE AND AN IMPROVED FEEDHORN IN THE APQ FIRE CONTROL SYSTEM WITH GREATLY IMPROVED ACQUISITION TIMES IN THE NORMAL BORESIGHT ACQUISITION MODE. IMPROVED SYSTEM PERFORMANCE IN THE CLUTTER ENVIRONMENT AND ENHANCED TRACKING IN THE VICINITY OF THE ALTITUDE LINE.

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE

	PRIOR	FY-80	FY-81	FY-82	OUTYEAR	TOTAL
	QTY	COST	QTY	COST	QTY	COST
KITS	640	8.6				
DATA						
SUPPORT EQUIP.						
SIMULATOR MODS						
TOTAL	640	8.6	2.5		640	11.1

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 10 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO WING FOLD RIB, MN-16529B

MODELS OF AIRCRAFT AFFECTED F/RF-4

DESCRIPTION/JUSTIFICATION THIS MODIFICATION INCORPORATES A FATIGUE IMPROVEMENT TO THE WING BY REPLACING THE INNER WINGFOLD RIB WITH AN IMPROVED RIB, AND COLD WORKING FASTENER HOLES IN LOWER TORQUE BOX SKIN. THIS MODIFICATION IS THE RESULT OF STRUCTURAL FATIGUE TESTING AND SERVICE REVEALED DEFICIENCIES.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	1303	17.8	257	4.9	183	3.6					1743	26.3
NONRECURRING	1	.1									1	.1
KITS	1'02	16.1	257	4.6	183	3.4					1742	24.1
DATA		.1										.1
TOOLING		1.5		.3		.2						2.0
TOTAL	1303	17.8	257	4.9	183	3.6					1743	26.3

METHOD OF IMPLEMENTATION. INSTALLATION - DEPOI/FIELD TEAM
LEAD TIME - 17 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO DIGITAL SCAN CONVERTER (D) MN-18501B

MODELS OF AIRCRAFT AFFECTED. F-4D

DESCRIPTION/JUSTIFICATION THIS DIGITAL DISPLAY SYSTEM PROVIDES AIRCREWS A MORE DETAILED PICTURE WITH A REQUIREMENT FOR ONLY ONE CONTRAST/BRIGHTNESS SETTING. THE DIGITAL SCAN CONVERTER GROUP ALLOWS OPERATION WITH A HIGHER GAIN SETTING RESULTING IN A LONGER RANGE DETECTION IN THE AIR TO AIR MODE. THE MEAN TIME BETWEEN FAILURE (MTBF) OF THE PRESENT F-4D SCAN CONVERTER IS 7 HOURS WHILE THE DSCG INCREASES RELIABILITY TO A 200 HOUR MTBF.

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
NONRECURRING	1	1.0									1	1.0
KITS	58	3.0	129	6.7	47	2.4					234	12.1
DATA		.6										.6
TRAINER		.2		.3								.5
SUPPORT EQUIP.		.4		1.0		1.0						2.4
TOTAL	59	5.2	129	8.0	47	3.4					235	16.6

METHOD OF IMPLEMENTATION INSTALLATION - FIELD
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO INERTIAL NAVIGATION SYSTEM, MN-19501B

MODELS OF AIRCRAFT AFFECTED. F-4G

F/RF-4 CLASS IV

DESCRIPTION/JUSTIFICATION THE OPERATIONAL READINESS OF THE F-4G IS DEGRADED BY LOW RELIABILITY (17 HOURS MEAN TIME BETWEEN FAILURE) OF THE PRESENT INERTIAL NAVIGATION ATTACK SYSTEM. REPLACEMENT WITH THE AN/ARN-101 DIGITAL AVIONICS INERTIAL NAVIGATION AND WEAPON DELIVERY SYSTEM WILL ENHANCE OPERATIONAL CAPABILITIES THROUGH INCREASED RELIABILITY (105 HOURS MTBF), MAINTAINABILITY AND WEAPON SYSTEM AVAILABILITY.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE												
NONRECURRING			2	13.3	23	7.2	60	30.6	31	13.6	116	64.7
ITS	1	11.6									1	11.6
DATA	1	.5			23	6.8	60	20.2	31	11.4	115	38.9
TRAINER		.7						3.4				4.1
SUPPORT EQUIP.		.5				.4		4.5		.2		6.7
								2.5				3.4
TOTAL	2	13.3	23	7.2	60	30.6	31	13.6			116	64.7
METHOD OF IMPLEMENTATION	INSTALLATION - DEPOT/FIELD TEAM											
LEAD TIME	- 18 MONTHS											

F/RF-4 CLASS IV

DESCRIPTION/JUSTIFICATION. REPLACES THE PRESENT FENWAL ENGINE BAY FIRE/OVERHEAT ELECTRICAL SENSING ELEMENTS WITH SYSTRON-DONNER PNEUMATIC TYPE SENSING ELEMENTS. PRESENT CONTROL AND AIRCRAFT WIRING TO ENGINE BAY WILL BE UTILIZED. PRESET SYSTEM GIVES A HIGH RATE OF FALSE FIRE/OVERHEAT INDICATION.

[illegible]

NONRECURRING					
KITS					
DATA					
TRAINER					
TOTAL					

05

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO CORRECT AN/APX-81 INTERROGATION, MN-69051B

MODELS OF AIRCRAFT AFFECTED: F-4E

DESCRIPTION/JUSTIFICATION THE AN/APX-81 PROVIDES A CAPABILITY TO

OF THE RECEIVER/TRANSMITTER (RT)-961A PORTION OF THE AN/APX-81 IS REQUIRED TO CORRECT AN
OPERATIONAL DEFICIENCY.

MODIFICATION

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE					159	2.5					159	2.5
KITS					159	2.4					159	2.4
DATA						.1						.1
TOTAL					159	2.5					159	2.5

METHOD OF IMPLEMENTATION INSTALLATION - ORG/INTERMEDIATE
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO CBU-15 CARRIAGE

MODELS OF AIRCRAFT AFFECTED F-4E

DESCRIPTION/JUSTIFICATION PROVIDES CAPABILITY FOR AN RF LINK WITH GBU-15 WEAPON FROM LAUNCH TO IMPACT IMPROVE CULAR ERROR OF PROBABILITY (CEP) AND ENHANCES AIRCRAFT SURVIVABILITY ON ARN-101 EQUIPPED F-4E. MOD INCORPORATES ONE DATA LINK CONTROL PANEL AND TWO WEAPON PYLON HARNESSSES PER AIRCRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE												
KITS												
DATA												
SUPPORT EQUIP.												
TOTAL												

METHOD OF IMPLEMENTATION INSTALLATION - ORG/INTERMEDIATE
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

F-15 CLASS V

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO ALR-56 RWR UPDATE. MN-3010

MODELS OF AIRCRAFT AFFECTED F-15

DESCRIPTION/JUSTIFICATION THE CURRENT ALR-56 WAS DESIGNED TO THE RADAR THREAT ENVIRONMENT AS IT
EXISTED AT THE TIME THE HARDWARE WAS DESIGNED. THE TREMENDOUS THREAT PROLIFERATION
EXPERIENCED SINCE THEN HAS CAUSED THE EQUIPMENT TO BECOME OPERATIONALLY DEFICIENT. THIS WILL
UPDATE THE ALR-56 RADAR WARNING RECEIVER TO THE CURRENT THREAT.

SCOPE OF PROGRAM

PRIOR	FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	---	---	---	---	---	---	---	---
1.8	196	4.2	312	6.4	132	2.9			640	15.3

BASIS FOR COST ESTIMATE.

NONRECURRING	1.0	.2							640	12.9
KITS			196	3.6	312	6.4	132	2.9		.4
TRAINER										.8
SUPPORT EQUIP.	.8									
---	---	---	---	---	---	---	---	---	---	---
1.8	196	4.2	312	6.4	132	2.9			640	15.3

TOTAL

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/FIELD TEAM
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO. PROGRAMMABLE SIGNAL PROCESSOR (PSP) IN-3018

F-15 CLASS V

MODELS OF AIRCRAFT AFFECTED F-15 C/D

DESCRIPTION/JUSTIFICATION: APC-63 RADAR REQUIRES MULTI-TARGET DISCRIMINATION/RAID SIZE ESTIMATION WHILE IN THE TARGET TRACK MODE. SUBSTITUTION OF A PSP FOR THE CURRENT "HANDWIRED" SIGNAL PROCESSOR PERMITS IMPLEMENTATION OF A SEARCH WHILE TRACK/EXPAND MODE TO ENABLE THE PILOT TO DETERMINE AT BEYOND VISUAL RANGE THE NUMBER/LOCATION OF MULTIPLE HOSTILE AIRCRAFT IN THE VICINITY OF THE TARGET. THIS INFLUENCES THE TYPE OF ATTACK TO BE EMPLOYED. FUTURE CHANGES CAN BE MADE BY SOFTWARE VICE HARDWARE.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	22	14.3	16	4.9	52	16.3					90	35.5
BASIS FOR COST ESTIMATE:												
NONRECURRING	1	1.6									1	1.6
KITS	21	6.0	16	4.9	52	16.3					89	27.2
DATA		.1										
SUPPORT EQUIP.		6.6										6.6
TOTAL	22	14.3	16	4.9	52	16.3					90	35.5

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 23 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO UHF/VHF RADIOS/TACAN. MN-68118B

MODELS OF AIRCRAFT AFFECTED: F-15

F-15 CLASS IV

DESCRIPTION/JUSTIFICATION: UPDATED UHF/VHF/TACAN COMMUNICATIONS EQUIPMENT AND VINSON TACTICAL SECURE VOICE EQUIPMENT ARE BEING INSTALLED ON THE PRODUCTION LINE FOR THE F-15C/D AIRCRAFT. THIS MODIFICATION IS REQUIRED TO STANDARDIZE THE F-15 AIRCRAFT. THE F-15 INTEGRATED COMMUNICATIONS CONTROL PANEL (ICCP) MAKES ACCOMPLISHING ALL COMMUNICATION MODIFICATIONS AT ONE TIME MANDATORY.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE.												
NONRECURRING												
KITS					110	9.6	114	10.0	425	14.7	649	34.3
TRAINER						.1						.1
TOTAL					110	11.7	114	10.6	425	14.7	649	37.0

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT
LEAD TIME - 21 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. UPDATE MODIFICATIONS

F-15 UPDATE

MODELS OF AIRCRAFT AFFECTED. F/TF-15

DESCRIPTION/JUSTIFICATION AIRCRAFT REQUIRE UPDATE TO CORRECT DEFICIENCIES REVEALED DURING DEVELOPMENT AND INITIAL OPERATIONAL USE. CORRECTIONS ARE INCORPORATED IN PRODUCTION AT THE EARLIEST TIME. UPDATE MODS ARE REQUIRED TO MAINTAIN CONFIGURATION CONTROL OF DELIVERED AIRCRAFT AND THOSE TOO FAR INTO PRODUCTION FOR INCORPORATION. THE REQUIREMENTS LISTED ARE KNOWN PROBLEMS AND ARE REPRESENTATIVE OF THE TOTAL MODIFICATIONS ANTICIPATED.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	158.8	---	73.4	---	62.0	---	25.7	---	---	---	319.9
OTHER	---	158.8	---	73.4	---	62.0	---	25.7	---	---	---	319.9
TOTAL	---	158.8	---	73.4	---	62.0	---	25.7	---	---	---	319.9

F-15 REPRESENTATIVE UPDATE MODIFICATIONS

PROXIMATE SPLITTER

THE SPLITTER IS A PORTION OF THE ENGINE WHICH SPLITS FAN AIRFLOW INTO TWO STREAMS. THE PRESENT DESIGN ALLOWS AUGMENTOR PRESSURE PULSES TO BE TRANSMITTED FORWARD THROUGH THE FAN DUCT AND CAUSE FAN STALLS. DUE TO THE "REMOTE" LOCATION OF THE SPLITTER, THE CORE COMPRESSOR "SEES" THE FAN STALL AND IT, IN TURN, STALLS AND STAGNATES. THE PROXIMATE SPLITTER WILL REDUCE THE TENDENCY OF THE CORE COMPRESSOR TO "SEE" FAN STALLS. THUS, CORE ENGINE STALLS DUE TO AUGMENTOR PROBLEMS ARE REDUCED.

LIGHT-OFF DETECTOR (LOD)

A LOD PROGRAM WAS INITIATED TO DEVELOP A SYSTEM CAPABLE OF OPTICALLY SENSING AUGMENTOR FLAME AND HOLDING OR RETARDING AUGMENTOR FUEL FLOW UNTIL AN AUGMENTOR LIGHT IS ACHIEVED. THE LOD SYSTEM CONSISTS OF AN ULTRA VIOLET SENSOR AND POWER/SIGNAL CONDITIONING UNIT MOUNTED ON THE AUGMENTOR DUCT WHICH VIEWS THE FLAME THROUGH A LINER PORT. INCORPORATION OF THIS SYSTEM WILL SIGNIFICANTLY REDUCE AUGMENTOR INITIATED STALLS AND, CONSEQUENTLY, ENGINE STAGNATIONS.

ENGINE FILTRATION SYSTEM

PRESENT ENGINE FUEL FILTRATION IS NOT ADEQUATE TO PREVENT MAIN FUEL PUMP (MFP) DAMAGE FROM FOREIGN OBJECTS OR UNIFIED FUEL CONTROL (UFC) SERVO "HANG UPS" FROM CONTAMINATION. FOREIGN OBJECT DAMAGE TO THE MFP CAN CAUSE AN ENGINE INFLIGHT SHUTDOWN. SERVO VALVE HANG UPS IN THE UFC CAN CAUSE MOMENTARY SCHEDULE EXCURSION WHICH COULD RESULT IN STALLS AND STAGNATIONS. AN ENGINE MOUNTED FILTER UPSTREAM OF THE MFP VANE STAGE, FINER WASH AND LAST CHANCE SERVO FILTER WILL SUBSTANTIALLY REDUCE THESE OCCURRENCES.

IMPROVED AUGMENTOR OPERATION

INCONSISTENT AUGMENTOR OPERATION HAS BEEN EXPERIENCED DURING ACCEPTANCE TESTING. APPROXIMATELY 28% OF THE ENGINES FLOWN AT MCAIR REQUIRE MAINTENANCE ACTION TO CLEAR INFLIGHT AUGMENTOR ANOMALIES. OPERATIONALLY, THE MAJORITY OF THE STALL/STAGNATION INCIDENTS OCCUR DURING AUGMENTATION. MORE THAN HALF OF THE REPORTED INCIDENTS ARE INDUCED BY RUMBLE. MODIFICATIONS TO THE FLAMEHOLDER TO IMPROVE RUMBLE TOLERANCE ARE BEING DEVELOPED TO CORRECT THIS CONDITION.

AVIONICS INTERMEDIATE SHOP (AIS) WORKLOAD/STATION ENHANCEMENTS

OPERATIONAL EXPERIENCE WITH THE AIS HAS SHOWN THAT THE STATION WORKLOAD IS TOO HIGH FOR THE TIME AVAILABLE. THE STATION HARDWARE/SOFTWARE IS BEING INVESTIGATED FOR METHODS TO IMPROVE THE WORKLOADING PROFILE, INCLUDING CHANGING TEST STATION LRU ASSIGNMENTS, PROVIDING ALTERNATE TESTING CAPABILITY FOR MISSION CRITICAL LRUS, AND REDUCING THE STATION TIME FOR LOADING AND STORING TEST PROGRAM REVISIONS. STATION MODIFICATIONS BEING INVESTIGATED INCLUDE A CHANGE TO MAGNETIC DISK (IN LIEU OF TAP) STORAGE.

TEST TESTABILITY/WORKLOAD IMPROVEMENTS

TEST PROGRAMS/PROCEDURES SUPPORTING 25 F-15 TEWS LINE REPLACEABLE UNITS (LRU) AND PLUG-IN MODULE ASSEMBLIES (PIMAS) ARE UNDERGOING EXTENSIVE FIELD USAGE. THIS EXPERIENCE IS IDENTIFYING AREAS WHERE IMPROVEMENTS TO BOTH SOFTWARE AND HARDWARE ARE REQUIRED TO CORRECT FAULT ISOLATION ANOMALIES, OPTIMIZE TEST TIMES, AND ENHANCE TEST STATION PERFORMANCE AND MAINTAINABILITY IN MARGINAL AREAS.

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

F-15 CLASS IV

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO ENGINE DIAGNOSTICS

MODELS OF AIRCRAFT AFFECTED: F-15(F-100 ENGINES)

DESCRIPTION/JUSTIFICATION PROVIDES AN ON-BOARD ENGINE DIAGNOSTIC CAPABILITY TO ENHANCE ENGINE
TRIM EVENT DETECTION AND TROUBLESHOOTING AND HISTORICAL DATA COLLECTION FOR HEALTH
TRENDING. THIS CAPABILITY IS REQUIRED TO FULLY IMPLEMENT THE ON-CONDITION MAINTENANCE CONCEPT
FOR THE MODULAR F-100 ENGINE.

SCOPE OF PROGRAM

PRIORITY	FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	---	---	72	18.6	580	176.8	652	195.4
---	---	---	---	---	72	18.6	580	176.8	652	195.4
---	---	---	---	---	72	18.6	580	176.8	652	195.4

BASIS FOR COST ESTIMATE

KITS

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION 11111 AND NO UPDATE MODIFICATIONS

MODELS OF AIRCRAFT AFFECTED F-16

DESCRIPTION/JUSTIFICATION AIRCRAFT REQUIRE MODS TO CORRECT DEFICIENCIES REVEALED DURING DEVELOPMENT AND INITIAL USE. CORRECTIONS ARE INCORPORATED IN PRODUCTION AT THE EARLIEST TIME. UPDATE MODS ARE REQUIRED TO MAINTAIN CONFIGURATION CONTROL OF DELIVERED AIRCRAFT AND THOSE TOO FAR INTO PRODUCTION FOR INCORPORATION REQUIREMENTS LISTED ARE KNOWN PROBLEMS AND ARE REPRESENTATIVE OF THE TOTAL MODIFICATIONS ANTICIPATED.

F-16 UPDATE

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	---	---	---	---	---	---	---	---	---	---	---
	14.0		30.0	40.6	70.0	208.4						363.0
OTHER	---	---	---	---	---	---	---	---	---	---	---	---
	14.0		30.0	40.6	70.0	208.4						363.0
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
	14.0		30.0	40.6	70.0	208.4						363.0

F-16 REPRESENTATIVE UPDATE MODIFICATIONS

HEADS-UP DISPLAY UPDATE
UPDATE THE HEADS-UP DISPLAY (HUD) TO PROVIDE NECESSARY AIM-9L CUEING FOR DEFINING PROPER LAUNCH CRITERIA.
CHANGES WILL ALSO PROVIDE A PROGRAMMABLE MEMORY CAPABILITY TO CORRECT OTHER MINOR DEFICIENCIES.

WEAPONS PYLON COMPATIBILITY WITH NATO WEAPONS
CURRENT WEAPONS PYLON DOES NOT COMPLY WITH NATO STANDARD REGARDING LOCATION OF THE WEAPON ELECTRICAL CONNECTOR. MODIFICATION WILL UPDATE PYLON TO CARRY FULL FAMILY OF CURRENT AND FUTURE NATO WEAPONS ON THE PARENT PYLON.

DEPARTURE WARNING SYSTEM
INSTALL AN AURAL TONE WARNING SYSTEM TO ALERT THE PILOT WHEN HE IS ENTERING FLIGHT CONDITIONS WHICH COULD RESULT IN THE AIRCRAFT DEPARTING CONTROLLED FLIGHT AND POSSIBLE SPIN OR AIRCRAFT LOSS.

ENGINE RELATED MODIFICATIONS
A SUBSTANTIAL NUMBER OF CHANGES TO THE ENGINE WILL BE ACCOMPLISHED TO REDUCE SUSCEPTABILITY TO STALL/STAGNATION, IMPROVE RELIABILITY AND REDUCE FAILURES.

LIMITED DISPLACEMENT CONTROLLER
REPLACE THE ISOMETRIC CONTROLLER FOR THE FLIGHT CONTROL STICK WITH A LIMITED DISPLACEMENT CONTROLLER.
CHANGE WILL IMPROVE FLYING QUALITIES AND REDUCE PILOT FATIGUE.

SIMULATED AIRCRAFT MAINTENANCE TRAINER
THE SIMULATED AIRCRAFT MAINTENANCE TRAINER DESIGN IS BASELINED TO THE PHYSICAL CONFIGURATION AUDIT F-16A TAIL #7). THE TRAINER MUST BE UPDATED TO REFLECT THE CONFIGURATION OF AIRCRAFT ASSIGNED TO OPERATIONAL BASES.

PRECHECK REFUEL VALVES
INCORPORATE A PRECHECK REFUEL VALVE IN THE FUEL SYSTEM TO MINIMIZE RISK OF FUEL SPILLS. CHANGE WILL ALLOW SAFE REFUELING DURING QUICK TURNAROUND OPERATIONS WITH THE ENGINE RUNNING.

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO ENGINE DIAGNOSTICS

MODELS OF AIRCRAFT AFFECTED: F-16

F-16 CLASS IV

DESCRIPTION/JUSTIFICATION PROVIDES AN ON-BOARD ENGINE DIAGNOSTIC CAPABILITY TO ENHANCE ENGINE
TRIM EVENT DETECTION AND TROUBLESHOOTING AND HISTORICAL DATA COLLECTION FOR HEALTH
TRENDING. THIS CAPABILITY IS REQUIRED TO FULLY IMPLEMENT THE ON-CONDITION MAINTENANCE CONCEPT
FOR THE MODULAR F-100 ENGINE.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	---	---	---	---	---	240	19.7	240	20.2	480	39.9
KITS	---	---	---	---	---	---	240	19.7	240	20.2	480	39.9
TOTAL	---	---	---	---	---	---	240	19.7	240	20.2	480	39.9

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO IMPROVED FCM/ALQ-137, MN-2960

MODELS OF AIRCRAFT AFFECTED FB-111

F-111 CLASS V

DESCRIPTION/JUSTIFICATION THE CURRENT ECM SYSTEM IS FREQUENCY LIMITED TO

SCOPE OF PROGRAM.

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	30	51.1	22	22.9	13	13.5					65	87.5
BASIS FOR COST ESTIMATE:												
NONRECURRING	1	2.7									1	2.7
KITS	29	30.2	22	22.9	13	13.5					64	66.6
PATA		7.0										7.0
TRAINER		.3										.3
SUPPORT EQUIP.		5.6										5.6
TOOLING		5.3										5.3
TOTAL	30	51.1	22	22.9	13	13.5					65	87.5

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. PAVE TACK/GUIDED MUNITIONS, MN-3013

F-111 CLASS V

MODELS OF AIRCRAFT AFFECTED: F-111F

DESCRIPTION/JUSTIFICATION FULLY INTEGRATES THE PAVE TACK POD WITH FORWARD LOOKING INFRARED AND LASER RANGER/DIGNATOR, AND WITH THE F-111 NAVIGATION/ATTACK SYSTEM.

SCOPE OF PROGRAM.

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	34	46.6	34	31.1	27	16.7					95	94.4
BASIS FOR COST ESTIMATE.												
NONRECURRING	1	7.1									1	7.1
KITS	33	23.3	34	25.1	27	16.7					94	65.1
DATA		6.7										6.7
TRAINER		1.1										1.1
SUPPORT EQUIP.		5.9		6.0								11.9
TOOLING		2.5										2.5
TOTAL	34	46.6	34	31.1	27	16.7					95	94.4

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

F-111 CLASS IV

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO REPLACE CONVERTER MULTIPLEXER, MN-16308B

MODELS OF AIRCRAFT AFFECTED FB/F-111 D/F

DESCRIPTION/JUSTIFICATION THIS NEW CONVERTER MULTIPLEXER HAS BEEN DESIGNED WITH CURRENT STATE-OF-THE-ART ELECTRONICS. A WIRE-WAPPED MOTHER BOARD REPLACES THE OLD FLEXPRINT CABLE AND HOUSING ASSEMBLY. HIGH DENSITY PACKAGING HAS REDUCED THE CARD COUNT FROM 60 TO 17 AND PARTS FROM 7000 TO 3600. THE UNIT IS BUILT TO THE ORIGINAL CONVERTER SPECIFICATION AND IS COMPLETELY INTERCHANGEABLE WITH THE PRESENT CONVERTER. MEAN TIME BETWEEN FAILURE SHOULD IMPROVE FROM 28 HOURS TO 383 HOURS.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	93	18.6			44	12.4	111	19.2			248	50.2
	6	5.2									6	6.7
NONRECURRING	87	8.9			44	5.6	111	14.9			242	29.4
KITS		2.2				1.0		1.0				4.2
DATA		.3				2		3.3				.5
TRAINER		2.0				4.1						9.4
SUPPORT EQUIP.												
TOTAL	93	18.6			44	12.4	111	19.2			248	50.2

BASIS FOR COST ESTIMATE:

INSTALLATION - ORG/FIELD
LEAD TIME - 12 MONTHS

METHOD OF IMPLEMENTATION

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

F-111 CLASS IV

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO. REDESIGN ELECTRONIC PROCESSOR UNIT (EPU) - APQ-130, MN-18317C

MODELS OF AIRCRAFT AFFECTED: F-111

DESCRIPTION/JUSTIFICATION: THE EPU CONSISTS OF 32 CIRCUIT BOARDS CONTAINING 275 MICROCIRCUITS AND A TOTAL OF 7715 PIECE PARTS. REDESIGN WOULD REPLACE THE MICROCIRCUITS WITH OFF-THE-SHELF SOLID STATE DEVICES. REDUCE NUMBER OF CARDS TO 20 AND REDUCE TOTAL PARTS COUNT TO 1200. ALSO, A NEW BUILT-IN TEST CAPABILITY WILL BE INCORPORATED TO PROVIDE IMPROVED FLIGHT LINE ISOLATION TO ALL APQ-130 LRU'S AND REDUCE REMOVAL RATE.

SCOPE OF PROGRAM:

PRIOR QTY COST	FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	1	2.8	55	5.9	25	2.7	81	11.4

BASIS FOR COST ESTIMATE

NONRECURRING	1	2.8	55	4.8	25	2.7	1	2.8
KITS				.5			80	7.5
DATA				.6				.6
SUPPORT EQUIP.								
TOTAL	1	2.8	55	5.9	25	2.7	81	11.4

METHOD OF IMPLEMENTATION INSTALLATION - ORG/INTERMEDIATE
LEAD TIME - 24 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO GENERAL PURPOSE COMPUTER MN-19304B

MODELS OF AIRCRAFT AFFECTED FB/F-111D/F

F-111 CLASS IV

DESCRIPTION/JUSTIFICATION THIS MODIFICATION WILL REPLACE THE EXISTING UNRELIABLE GENERAL PURPOSE COMPUTER WITH A NEW STATE OF THE ART COMPUTER TO INCREASE MEAN TIME BETWEEN FAILURE AND REDUCE LOGISTICS SUPPORT COST.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE												
NONRECURRING												
KITS			3	2.6							3	2.6
DATA					1.1		133	15.0	103	13.2	236	28.2
TRAINER								2.5				3.6
SUPPORT EQUIP.								.3				.3
								4.0		4.8		8.8
TOTAL					3	3.7	133	21.8	103	18.0	239	43.5

METHOD OF IMPLEMENTATION INSTALLATION - ORG

LEAD TIME - 14 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT. AIR FORCE

MODIFICATION TITLE AND NO. FUEL TANK SHIELDING MN-37274A

F-111 CLASS IV

MODELS OF AIRCRAFT AFFECTED F/F3-111 AIRCRAFT

DESCRIPTION/JUSTIFICATION- THIS MODIFICATION INSTALLS SHIELDS ON THOSE AREAS OF THE F-111 FUEL TANK SYSTEM WHICH ARE SUBJECT TO PENETRATION BY HIGH ENERGY FRAGMENTS GENERATED IN THE EVENT OF A FAN BLADE OR COMPRESSOR DISK FAILURE. THE FAILURE OF A FAN BLADE OR COMPRESSOR DISK POSES A HIGH PROBABILITY OF A FUEL TANK PUNCTURE, WITH A SUBSEQUENT DANGER OF FIRE AND POSSIBLE AIRCRAFT LOSS.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	88	8.1	152	9.2	118	7.3	53	3.3			411	27.9
NONRECURRING	2	2.0									2	2.0
KITS	86	5.1	152	9.2	118	7.3	53	3.3			409	24.9
DATA		.3										.3
TRAINER		.1										.1
TOOLING		.6										.6
TOTAL	88	8.1	152	9.2	118	7.3	53	3.3			411	27.9

METHOD OF IMPLEMENTATION- INSTALLATION - DEPOT/FIELD TEAM
LEAD TIME - 21 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO: CREW MODULE HARNESS INPV NN-38012A

F-111 CLASS IV

MODELS OF AIRCRAFT AFFECTED F-111

DESCRIPTION/JUSTIFICATION MODIFICATION REDESIGNS HEADREST AND INERTIA REEL STRAP ROUTING WILL ALLEVIATE CIPAL INJURY PROBLEMS EXPERIENCED BY MANY CREW MEMBERS DURING EJECTION FROM THE F-111 AIRCRAFT.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	---	210	2.7	213	2.7	---	---	---	---	423	5.4
KITS	---	---	210	2.6	213	2.7	---	---	---	---	423	5.3
DATA	---	---	---	---	---	.1	---	---	---	---	---	.1
TOTAL	---	---	210	2.7	213	2.7	---	---	---	---	423	5.4

METHOD OF IMPLEMENTATION INSTALLATION - ORG/FIELD
LEAD TIME - 9 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. REDESIGN COMPRESSOR DISK/HUB. MN-48639A

F-111 CLASS IV

MODELS OF AIRCRAFT AFFECTED. F-111(TF-30 ENGINE)

DESCRIPTION/JUSTIFICATION: MODIFICATION PROVIDES A REDESIGN OF THE FIRST STAGE COMPRESSOR DISK TO ELIMINATE STRESS LEVELS THAT CONTRIBUTE TO COMPONENT FAILURE. THE NEED FOR REDESIGN WAS IDENTIFIED WHEN SIX DISKS IN AIR FORCE TF-30 ENGINES DEVELOPED CRACKS IN THE BLADE RETAINING SLOTS. SUBSEQUENT EDDY CURRENT SAMPLING INSPECTION OF TWENTY-SEVEN DISKS IN THE REPAIR LINE REVEALED FIVE ADDITIONAL CRACKS. FAILURE OF THE BLADE RETAINING LUG WILL RELEASE A MINIMUM OF TWO COMPLETE FIRST STAGE FAN BLADES AND THE ENGINE CASE CANNOT CONTAIN A FAILURE OF THIS MAGNITUDE. THIS REDESIGN WAS INITIATED TO PRECLUDE FURTHER FAILURES OF THIS NATURE.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	244	1.4	303	2.4	311	2.5	303	2.6			1166	8.9
KITS	244	1.4	308	2.4	311	2.5	303	2.6			1166	8.9
DATA		*										*
TOTAL	244	1.4	308	2.4	311	2.5	303	2.6			1166	8.9

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: TACTICAL SUPPORT AIRCRAFT (EW), MN-3015

MODELS OF AIRCRAFT AFFECTED: EF-111A

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION

EF-111 CLASS V

FORCES ON A WORLDWIDE BASIS IN PEACETIME.
ELECTRONIC COUNTER COUNTERMEASURE TRAINING OF AIR DEFENSE

SCOPE OF PROGRAM

	PRIOR	FY-80	FY-81	FY-82	OUTYEAR	T O T A L
	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
	6 175.4	3 102.8	12 238.5	12 237.4	9 178.8	42 932.9
BASIS FOR COST ESTIMATE:						
NONRECURRING	19.9					19.9
KITS	6 113.7	3 89.8	12 168.2	12 231.1	9 178.8	42 781.6
DATA	23.6	4.0	21.2			48.8
TRAINER	.4	4.0	12.9			17.3
SUPPORT EQUIP.	17.8	5.0	36.2	6.3		65.3
TOTAL	6 175.4	3 102.8	12 238.5	12 237.4	9 178.8	42 932.9

METHOD OF IMPLEMENTATION INSTALLATION - CONTRACTOR
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO H-WING MODIFICATION MN-182388

MODELS OF AIRCRAFT AFFECTED: C-5

C-5 CLASS IV

DESCRIPTION/JUSTIFICATION THE CURRENT C-5 WINGS HAVE AN ESTIMATED 7,100 HOUR SERVICE LIFE. THE FIRST C-5A WILL REACH ITS SERVICE LIFE BY 1982 UNLESS MODIFIED. THIS MODIFICATION WILL INSTALL A NEW CENTER, INNER AND OUTER WING TO EXTEND THE C-5A LIFE BY 30,000 FLYING HOURS, OPERATING AT A 200,000 POUND NORMAL PAYLOAD.

SCOPE OF PROGRAM.

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:			4	85.4	12	166.7	18	181.8	42	398.0	76	831.9
KITS			4	72.3	12	151.8	18	181.8	42	398.0	76	803.9
TOOLING				8.0		11.1						19.1
MOD O. SPARES				5.1		3.8						8.9
TOTAL			4	85.4	12	166.7	18	181.8	42	398.0	76	831.9

METHOD OF IMPLEMENTATION INSTALLATION - CONTRACTOR
LEAD TIME - 30 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT. AIR FORCE

MODIFICATION TITLE AND NO PYLON COMPONENT REDES/RELOC, MN-18247A

C-5 CLASS IV

MODELS OF AIRCRAFT AFFECTED: C-5

DESCRIPTION/JUSTIFICATION: THE ELECTRICAL SYSTEM IN THE PYLON AREA IS SUBJECT TO CHAFING WITH FUEL AND HYDRAULIC SYSTEMS. CHAFING OF AN ELECTRICAL WIRE ON A HYDRAULIC TUBE RESULTED IN A FIRE. THIS MOD WILL PERROUTE THE ELECTRICAL, HYDRAULIC, AND FUEL SYSTEMS AND PROVIDES ELECTRICAL DISCONNECTS AT ENTRANCE AND EXIT FROM PYLON TO ALLOW INSTALLATION/REMOVAL OF PYLON WHILE LEAVING ELECTRICAL SYSTEM INSTALLED.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	8	4.5	41	5.2	28	3.9					77	13.6
BASIS FOR COST ESTIMATE:												
NONRECURRING		2.5										2.5
KITS	8	.9	41	5.2	28	3.9					77	10.0
DATA		1.1										1.1
TOTAL	8	4.5	41	5.2	28	3.9					77	13.6

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT
LEAD TIME - 14 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO COMMERCIAL WEATHER RADAR MN-19201B

C-5 CLASS IV

MODELS OF AIRCRAFT AFFECTED. C-5A

DESCRIPTION/JUSTIFICATION REMOVES THE MIL-SPEC C-5 MULTI-MODE RADAR SYSTEM AND INSTALLS ARINC 564 COMMERCIAL TYPE WEATHER RADAR WITH GROUP B COMPONENTS COMMON WITH THE C-141 RADAR. THE MULTI-MODE IS EXPERIENCING ABOUT 30 HOUR MTBF AND THE COMMERCIAL TYPE EQUIPMENT A MINIMUM OF 500 MTBF.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
BASIS FOR COST ESTIMATE												
	2	8.5	51	8.0	24	4.1					77	20.6
NONRECURRING												
KITS	1	6.6									1	6.6
DATA	1	.3	51	8.0	24	4.1					76	12.4
TRAINER		.4										.4
SUPPORT EQUIP.		.7										.7
TOOLING		.4										.4
		.1										.1
TOTAL	2	8.5	51	8.0	24	4.1					77	20.6

METHOD OF IMPLEMENTATION. INSTALLATION - DEPOT/FIELD TEAM
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

C-5 CLASS IV

MODIFICATION TITLE AND NO FUEL SAVINGS ADVISORY SYSTEM

MODELS OF AIRCRAFT AFFECTED C-5

DESCRIPTION/JUSTIFICATION. INSTALLS A STANDARD FUEL SAVINGS ADVISORY SYSTEM. DECLINING OIL RESERVES AND INCREASING FUEL COSTS DICTATE FUEL CONSERVATION TO THE MAXIMUM EXTENT POSSIBLE.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
	10	2.2	25	2.0	42	4.0					77	8.2
BASIS FOR COST ESTIMATE:												
NONRECURRING	1	.7	25	2.0	42	4.0					1	.7
KITS	9	.7									76	6.7
DATA		.4										.4
TRAINER		.4										.4
TOTAL	10	2.2	25	2.0	42	4.0					77	8.2

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

C-141 CLASS V

MODIFICATION TITLE AND NO. STRETCH & AERIAL REFUELING, MN-2875

MODELS OF AIRCRAFT AFFECTED: C-141

DESCRIPTION/JUSTIFICATION MODIFICATION WILL LENGTHEN THE C-141 FUSELAGE BY 280 INCHES. STRENGTHEN THE CENTER FUSELAGE, AND INSTALL IN FLIGHT REFUELING CAPABILITIES. THIS MODIFICATION WILL INCREASE CARGO VOLUME BY 30% AND PERMIT LONGER FLIGHTS WITHOUT GROUND REFUELING.

SCOPE OF PROGRAM:

PRIOR	FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
113	189.5	124	76.0	34	25.6				271	291.1

BASIS FOR COST ESTIMATE:

NONRECURRING	1	63.1							1	63.9
KITS	112	86.4	124	73.2	34	25.6			270	185.2
DATA		4.1		2.0						6.1
TRAINER		1.9								1.9
TOOLING		34.0								34.0
TOTAL	113	189.5	124	76.0	34	25.6			271	291.1

METHOD OF IMPLEMENTATION INSTALLATION - CONTRACTOR
LEAD TIME - 9 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

C-141 CLASS IV

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO IMPROVED WEATHER RADAR PROGRAM, MN-16622B

MODELS OF AIRCRAFT AFFECTED C-141

DESCRIPTION/JUSTIFICATION THIS MODIFICATION REMOVES THE APN-59B RADAR SYSTEM AND INSTALLS A COMMERCIAL (ARINC 564) PILOT OPERABLE WEATHER RADAR. THIS WILL REDUCE LOGISTICS SUPPORT COSTS AND SIGNIFICANTLY IMPROVE MAINTAINABILITY AND RELIABILITY BY INCREASING SYSTEM MEAN TIME BETWEEN FAILURE FROM THE PRESENT 20 HOURS TO A CONTRACT WARRANTED 500 HOURS. THE PILOT OPERABLE CAPABILITY REDUCES THE NAVIGATOR REQUIREMENT TO ALL EXCEPT CERTAIN SPECIAL OPERATIONAL MISSIONS.

SCOPE OF PROGRAM	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	2	1.9	154	8.0	119	6.6					275	16.5
NONRECYCLING	2	.9									2	.9
KITS			154	8.0	119	6.6					273	14.6
DATA		.4										.4
TRAINER		.3										.3
SUPPORT EQUIP.		.3										.3
TOTAL	2	1.9	154	8.0	119	6.6					275	16.5
METHOD OF IMPLEMENTATION	INSTALLATION - DEPOT											
	LEAD TIME - 14 MONTHS											

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE
MODIFICATION TITLE AND NO DIGITAL FLIGHT DATA RECORDER. MN-19608A

MODELS OF AIRCRAFT AFFECTED C-141 A/B

DESCRIPTION/JUSTIFICATION THE PRESENT SYSTEM RECORDS 4 PARAMETERS ON FOIL. HIGH FAILURE RATE. ALONG WITH NO MEANS OF VERIFYING PROPER RECORDING OF DATA AND THE LIMITED NUMBER OF PARAMETERS REQUIRE AN IMPROVED SYSTEM. TO PERMIT MORE COMPREHENSIVE INVESTIGATIONS. MOD INCLUDES INSTALL OF A FLIGHT DATA ACQUISITION UNIT, AFT LOCATED RECORDER, AND COCKPIT VOICE RECORDER.

SCOPE OF PROGRAM

P R I O R	F Y - 8 0		F Y - 8 1		F Y - 8 2		O U T Y E A R		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	---	---	---	---	---	---	---	---
2	2.4	190	7.8	83	3.6				275	14.8

Basis for Cost Estimate

	2	2-1	190	7-7	83	3-6	2	2-1
NONRECURRING							273	11-3
KITS								1-0
DATA		1-0		.1				.1
TRAINER								
SUPPORT EQUIP.		.3						3

TOTAL

METHOD OF IMPLEMENTATION

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

C-141 CLASS IV

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. FUEL SAVINGS ADVISORY SYSTEM

MODELS OF AIRCRAFT AFFECTED C-141

DESCRIPTION/JUSTIFICATION INSTALLS A STANDARD FUEL SAVINGS ADVISORY SYSTEM. DECLINING OIL RESERVES AND INCREASING FUEL COSTS DICTATE FUEL CONSERVATION TO THE MAXIMUM EXTENT POSSIBLE.

SCOPE OF PROGRAM	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
	43	7.1	80	6.2	152	12.9					275	26.2
BASIS FOR COST ESTIMATE												
NONRECURRING	1	1.5									1	1.5
KITS	42	3.3	80	6.2	152	12.9					274	22.4
DATA		1.0										1.0
SUPPORT EQUIP.		1.3										1.3
	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	43	7.1	80	6.2	152	12.9					275	26.2

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO EJECTION SEAT SEQUENCE MN-18203A

MODELS OF AIRCRAFT AFFECTED: T-38

T-38 CLASS IV

DESCRIPTION/JUSTIFICATION INSTALLS AN EJECTION INTERSEAT SEQUENCING SYSTEM THAT CAN BE INITIATED FROM EITHER SEAT POSITION, EJECTION SEAT DIVERGENCE, AN ALL GAS ACTUATED SEAT/MAN SEPARATION SYSTEM, AND A BALLISTIC POWERED INERTIAL REEL. THIS MOD WILL INSURE CORRECT EJECTION POSTURE. WILL ELIMINATE SEAT/MAN SEPARATOR FIRING LANYARD ENTANGLEMENT OR PREMATURE ACTUATION AND PREVENT COLLISION OF EJECTED CREW MEMBERS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	1	.5	263	1.9	414	3.1	207	1.6			885	7.1
NONRECURRING	1	.5	263	1.8	414	3.0	207	1.6			1	.5
KITS											884	6.4
DATA				.1								.1
TRAINER						.1						.1
SUPPORT EQUIP.						*						*
TOOLING						*						*
TOTAL	1	.5	263	1.9	414	3.1	207	1.6			885	7.1

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/CONTRACTOR
LEAD TIME - 15 MONTHS

120

* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT. AIR FORCE

MODIFICATION TITLE AND NO. FUSELAGE DORSAL LONGERON. MN-19203A

T-38 CLASS IV

MODELS OF AIRCRAFT AFFECTED. T-38A/R

DESCRIPTION/JUSTIFICATION EVALUATION OF A RECENT DURABILITY AND DAMAGE TOLERANCE ASSESSMENT (DADTA) STUDY IDENTIFIED PROBLEMS WITH THE DORSAL LONGERON AND FUSELAGE STATION 284 SPLICE BOLTS ON SEVERE USE T-38 AIRCRAFT. SAFETY LIMITS AND INSPECTION INTERVALS WERE ESTABLISHED BUT. INSPECTION IS NOT FEASIBLE DUE TO INACCESSIBILITY AND THE POTENTIAL OF DAMAGE BY INSPECTING. A BEEF-UP STEEL DOUBLER WILL BE ADDED. FASTENER HOLES CAN BE COLD WORKED AND/OR INTERFERENCE FASTENERS INSTALLED. FAILURE TO DO THIS MOD WILL RESULT IN GROUNDING OF AIRCRAFT.

SCOPE OF PROGRAM.

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	1	1.8	65	2.7	65	2.5	24	1.3			155	8.3
NONRECURRING	1	1.5									1	1.5
KITS		.2	65	2.7	65	2.5	24	1.3			154	6.7
DATA		.1										.1
TOOLING				*								*
TOTAL	1	1.8	65	2.7	65	2.5	24	1.3			155	9.3
METHOD OF IMPLEMENTATION	INSTALLATION - DEPOT											
	LEAD TIME - 17 MONTHS											

* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO WING RESKIN MN-19316A

MODELS OF AIRCRAFT AFFECTED T-39

T-39 CLASS IV

DESCRIPTION/JUSTIFICATION THIS MOD WILL RE-SKIN AIRCRAFT WING SKINS TO EXTEND STRUCTURAL FATIGUE
LIFE OF WINGS FROM 22 500 HOURS TO 45,000 HOURS. NEW SKIN WILL POSSESS SUPERIOR CRACK
TOLERANCE CHARACTERISTICS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OU, YEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE					1	7.4	26	.8	108	3.2	135	11.4
NONRECURRING KITS					1	7.4	26	.8	108	3.2	1	7.4
TOTAL					1	7.4	26	.8	108	3.2	135	11.4

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT
LEAD TIME - 22 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

C-130 CLASS IV

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO OUTER WING. MN-69025C

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION. STRUCTURAL INTEGRITY DATA INDICATES REQUIREMENT FOR OUTER WING MODIFICATION IN THE MID 80'S DUE TO FATIGUE AND CORROSION PROBLEMS AT SEVERAL LOCATIONS ON THE WING. FAILURES HAVE OCCURRED IN THE OUTER WING LOWER FRONT BEAM CAPS. WITH RELATED CRACKS FOUND IN SPAR WEBS AND LOWER FORWARD WING SKIN PANELS AND STRESS CORROSION CRACKING HAS BEEN IDENTIFIED IN THE WING DRY BAYS. INTERIM SOLUTIONS OF REPAIRING OR REPLACING FAILED COMPONENTS HAVE BEEN IMPLEMENTED.

SCOPE OF PROGRAM:

PRIOR	FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	---	---	---	---	---	---	---	---
	21	16.0	84	46.0	393	252.9	498	314.9		

BASIS FOR COST ESTIMATE:

NONRECURRING

KITS

DATA

TOTAL

METHOD OF IMPLEMENTATION
INSTALLATION - DEPOT/PDM
LEAD TIME - 32 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

C-130 CLASS IV

MODIFICATION TITLE AND NO PROPELLER FLIGHT ILLU STOP. MN-69077A

MODELS OF AIRCRAFT AFFECTED C-130

DESCRIPTION/JUSTIFICATION THE FLIGHT IDLE STOP WILL PREVENT THE PROPELLER FROM INADVERTENTLY GOING INTO REVERSE. THIS OCCURS IF A THROTTLE INCREASE CABLE BREAKS ON EITHER AN AIRCRAFT WITH AN UNDAMPENED THROTTLE CABLE TENSION REGULATOR OR ONE WITH A SEVERELY WORN REGULATOR DAMPENER. THREE INCIDENTS HAVE OCCURRED AS A RESULT OF BROKEN THROTTLE CABLES. THIS MODIFICATION WILL INSTALL A MECHANICAL STOP ON THE PROPELLER, CONTROL SWITCHES IN THE THROTTLE QUADRANT, AND THE NECESSARY INTERCONNECTING WIRING.

SCOPE OF PROGRAM	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	---	32	1.0	360	4.1	305	3.3	---	---	697	8.4
NONRECURRING			2	.2							2	.2
KITS			30	.3	360	3.4	305	3.0			695	6.7
DATA				.2								.2
SUPPORT EQUIP.				.1								.1
MOD OF SPARES				.2		.7		.3				1.2
TOTAL	---	---	32	1.0	360	4.1	305	3.3	---	---	697	8.4
METHOD OF IMPLEMENTATION	INSTALLATION - DEPOT											
	LEAD TIME - 12 MONTHS											

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

C-130 CLASS IV

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIP FORCE
MODIFICATION TITLE AND NO AFTERBODY STRAKES MN-68059B

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION: STRAKES ARE NEEDED FOR DRAG REDUCTION AND FUEL CONSERVATION. PRIOR STUDIES INDICATE SUBSTANTIAL FUEL SAVINGS POSSIBLE AND AMORTIZATION POSSIBLE IN 2 TO 5 YEARS, DEPENDING ON FUEL COSTS.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
	301	3.5	406	4.6	301	3.5	406	4.6	707	8.1		
	301	3.4	406	4.6	301	3.4	406	4.6	707	8.0		
						.1				.1		
	301	3.5	406	4.6	301	3.5	406	4.6	707	8.1		

BASIS FOR COST ESTIMATE

KITS
DATA

TOTAL

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 6 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO RE-ENGINE

MODELS OF AIRCRAFT AFFECTED KC-135

C-135 CLASS V

DESCRIPTION/JUSTIFICATION PROCURES ALL HARDWARE REQUIRED TO RE-ENGINE ONE KC-135 AIRCRAFT, WHICH HAS THE OLDER TECHNOLOGY J-57 TURBOJET ENGINES, WITH NEW FUEL EFFICIENT, HIGH BY-PASS TURBO FAN ENGINES, INCREASING THE THRUST BETWEEN 40 AND 62 PERCENT DEPENDING ON ENGINE SELECTION. TOTAL DESIGN, DEVELOPMENT AND TESTING EFFORTS RELATING TO THIS PROTOTYPE ARE FUNDED IN THE RDT&E APPROPRIATION AND INSTALLATION LABOR IS PLANNED IN THE OPERATION & MAINTENANCE APPROPRIATION.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE			5.0	1	44.5						1	49.5
NONRECURRING			5.0									
KITS					1	44.5					1	44.5
TOTAL			5.0	1	44.5						1	49.5
METHOD OF IMPLEMENTATION	INSTALLATION - CONTRACTOR											
	LEAD TIME - 30 MONTHS											

CLASS V

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO.	AIRBORNE LAUNCH CONTROL SYSTEM (ALCS) PHASE III
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
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78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

MODELS OF AIRCRAFT AFFECTED **EC135A/C/G**

DESCRIPTION/JUSTIFICATION THE ALCS WAS DESIGNED TO PROVIDE AN ALTERNATIVE MEANS OF PROGRAMMING/LAUNCHING MINUTEMAN MISSILES IN THE EVENT GROUND LAUNCH CONTROL CENTERS (LCCS) ARE DESTROYED. THE CURRENT ALCS CAN SELECT PRESTORED TARGETS AND LAUNCH MISSILES. HOWEVER IT CANNOT (1) DETERMINE MISSILE STATUS (IT MUST "SHOOT IN THE DARK") OR (2) RETARGET SURVIVING OR WITHHELD MINUTEMAN III MISSILES.

SCOPE OF PROGRAM

SCOPE OF PROGRAM	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING					1	2.6					1	2.6
KITS							6	12.0	2	4.2	8	16.2
DATA												.4
TRAINER								1.8		1.8		4.3
TOTAL					1	3.7	6	13.8	2	6.0	9	23.5

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT. AIR FORCE

MODIFICATION TITLE AND NO. LIFE EXTENSION-WING RESKIN, MN-14302B

MODELS OF AIRCRAFT AFFECTED: C-135

C-135 CLASS IV

DESCRIPTION/JUSTIFICATION: SERVICE LIFE OF C-135 AIRCRAFT IS 8,500 TANKER EQUIVALENT FLYING HOURS. REPLACEMENT OF LOWER WING SKIN IS REQUIRED TO ALLOW THE AIRCRAFT TO MEET PROGRAMMED SERVICE LIFE. FLIGHT RESTRICTIONS HAVE BEEN PLACED ON ALL AIRCRAFT EXCEEDING 8,500 FLIGHT HOURS. MODIFICATION INSTALLS 2024-T351 MATERIAL WHICH HAS SUPERIOR CRACK TOLERANCE CHARACTERISTICS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	234	82.9	84	30.0	72	34.3	72	44.1	278	203.0	740	394.3
NONRECURRING		4.2										4.2
KITS	234	76.9	84	30.0	72	34.3	72	44.1	278	203.0	740	388.3
DATA		.5										.5
TOOLING		1.3										1.3
TOTAL	234	82.9	84	30.0	72	34.3	72	44.1	278	203.0	740	394.3

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT
LEAD TIME - 22 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO DOPPLER REPLACEMENT, MN-16405B

MODELS OF AIRCRAFT AFFECTED: C-135

C-135 CLASS IV

DESCRIPTION/JUSTIFICATION: THE C-135 AIRCRAFT ARE EQUIPPED WITH AN OBSOLETE DOPPLER NAVIGATION SYSTEM WHICH HAS A LOW SYSTEM RELIABILITY AND HIGH MAINTENANCE SUPPORT COST. THIS MODIFICATION REPLACES THE OBSOLETE DOPPLER WITH THE COMMON STRATEGIC DOPPLER SYSTEM TO PROVIDE A RELIABILITY IMPROVEMENT AND REDUCE SUPPORT COSTS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
161	21.6	330	33.1	260	32.5						751	87.2
BASIS FOR COST ESTIMATE:												
NONRECURRING	1	2.9									1	2.9
KITS	160	16.9	330	30.0	260	29.5					750	76.4
DATA		.7		.9		.4						2.0
TRAINER				1.9		2.6						4.5
SUPPORT EQUIP.		1.1										1.1
TOOLING				.3								.3
TOTAL	161	21.6	330	33.1	260	32.5					751	87.2

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT
LEAD TIME - 9 MONTHS

* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MODIFY HORIZONTAL STABILIZER KN-49153B

MODELS OF AIRCRAFT AFFECTED C-135

C-135 CLASS IV

DESCRIPTION/JUSTIFICATION ENGINEERING ANALYSIS INDICATES STRUCTURAL FATIGUE PROBLEMS IN THE LEFT AND RIGHT HORIZONTAL STABILIZER. THIS MOD WILL REPLACE AND REWORK THE COMPONENT PARTS AND STRUCTURES TO MAKE THE STABILIZER LIFE EQUIVALENT TO THE WING RESKIN LIFE.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE					1	3.2	180	5.1	517	17.8	698	26.1
NONRECURRING					1	2.0					1	2.0
KITS							180	5.1	517	17.8	697	22.9
DATA						*					*	
TOOLING						1.2						1.2
TOTAL					1	3.2	180	5.1	517	17.8	698	26.1

METHOD OF IMPLEMENTATION
INSTALLATION - DEPOT/PDM
LEAD TIME - 17 MONTHS

* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. FUEL SAVINGS ADVISORY SYSTEM

MODELS OF AIRCRAFT AFFECTED: C-135

C-135 CLASS IV

DESCRIPTION/JUSTIFICATION INSTALLS A STANDARD FUEL SAVINGS ADVISORY SYSTEM. DECLINING OIL RESERVES AND INCREASING FUEL COSTS DICTATE FUEL CONSERVATION TO THE MAXIMUM EXTENT POSSIBLE.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIC FOR COST ESTIMATE					1	3.0	170	17.1	569	49.2	740	69.3
NONRECURRING					1	1.5					1	1.5
KITS							170	14.0	569	49.2	739	63.2
DATA						1.5						1.5
SUPPORT EQUIP.								3.1				3.1
TOTAL					1	3.0	170	17.1	569	49.2	740	69.3

METHOD OF IMPLEMENTATION - INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

131

* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

C-135 CLASS V

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE
MODIFICATION TITLE AND NO 616A 100 KILOWATT TRANSMITTER (MEECN)

MODELS OF AIRCRAFT AFFECTED EC-135 C/J/H/P

DESCRIPTION/JUSTIFICATION MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN), ASSURES TRANSMISSION OF

PROGRAM 616A ELIMINATES DEFICIENCIES IN THE AIR FORCE PORTION OF THE MEECN VLF/LF SYSTEM ACCORDING TO REQUIREMENTS ESTABLISHED BY THE JCS AND SIO. CINCS. THE 100 KILOWATT TRANSMITTER WILL INCREASE THE RADIATED SIGNAL ENERGY BY 7 db, WHICH WILL YIELD A SIGNIFICANT INCREASE IN VLF/LF LINK RANGE.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
BASIS FOR COST ESTIMATE												
KITS							4	2.9	19	9.6	23	12.5
DATA								.2		1.1		1.3
SUPPORT EQUIP.								.8		4.0		4.8
TOTAL							4	3.9	19	14.7	23	18.6

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME 13 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT. AIR FORCE

MODIFICATION TITLE AND NO 616A. TE MODE ANTENNA (MEECN)

MODELS OF AIRCRAFT AFFECTED EC-135 C/J/H/P

DESCRIPTION/JUSTIFICATION
TRANSMISSION OF

MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN), ASSURES

PROGRAM 616A ELIMINATES DEFICIENCIES IN THE AIR FORCE PORTION OF THE MEECN VLF/LF SYSTEM ACCORDING TO REQUIREMENTS ESTABLISHED BY THE JCS AND SIOP CINCS. THE TE (TRANSVERSE ELECTRIC) MOD ANTENNA WILL PERMIT THE RECEPTION OF HORIZONTALLY POLARIZED SIGNALS WHICH WILL SIGNIFICANTLY INCREASE LINK PERFORMANCE, BECAUSE THE MAJOR PART OF ENERGY TRANSMITTED FROM THE TRAILING WIRE ANTENNAS ON THE AIRBORNE COMMAND POSTS IS IN THE HORIZONTALLY POLARIZED MODE.

SCOPE OF PROGRAM.

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE												
KITS												
DATA												
SUPPORT EQUIP.												
TOTAL												
METHOD OF IMPLEMENTATION												
INSTALLATION - DEPOT												
LEAD TIME - 12 MONTHS												

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

E-3 UPDATE

MODIFICATION TITLE AND NO. UPDATE

MODELS OF AIRCRAFT AFFECTED. E-3

DESCRIPTION/JUSTIFICATION AIRCRAFT REQUIRE MODIFICATION TO CORRECT DEFICIENCIES REVEALED DURING DEVELOPMENT AND INITIAL USE. CORRECTIONS ARE INCORPORATED IN PRODUCTION AT THE EARLIEST TIME. UPDATE MODIFICATIONS ARE REQUIRED TO MAINTAIN CONFIGURATION CONTROL OF DELIVERED AIRCRAFT AND THOSE TOO FAR INTO PRODUCTION FOR INCORPORATION. REQUIREMENTS LISTED ARE KNOWN PROBLEM AREAS AND ARE REPRESENTATIVE OF THE TOTAL MODIFICATIONS ANTICIPATED.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
			7.3		7.0		10.0		20.0			44.3
			7.3		7.0		10.0		20.0			44.3
	---	---	---	---	---	---	---	---	---	---	---	---
			7.3		7.0		10.0		20.0			44.3
			7.3		7.0		10.0		20.0			44.3
	---	---	---	---	---	---	---	---	---	---	---	---

BASIS FOR COST ESTIMATE

AIRCRAFT

TOTAL

E-3A REPRESENTATIVE UPDATE MODIFICATIONS

RADOME IMPROVEMENT. REPLACES SURVEILLANCE HALF OF RADOME WITH NEW TAPERED DESIGN TO INCREASE RELIABLE DETECTION AND HEIGHT ACCURACY MEASUREMENT. (OLD RADOME IS RETURNED FOR PRODUCTION INCORPORATION ON IFF SIDE OF NEW AIRCRAFT.)

RADAR MODIFICATION. BLOCK CHANGE OF 25 APPROVED CHANGES TO CORRECT DEFICIENCIES IN CURRENT RADAR.

SPECTRAL CONTROL FEATURE (SCF). SCF MODIFIES FOUR COMPONENTS TO MINIMIZE PERFORMANCE DEGRADATION. WITHOUT THIS MODIFICATION THE E-3A WOULD NOT HAVE FREQUENCY CLEARANCE TO OPERATE IN EUROPE. THIS IS AN ABSOLUTE MISSION NECESSITY.

ATTITUDE AND HEADING REFERENCE SYSTEM (AHRS) REPLACEMENT. REPLACES CURRENT 200-400 HOUR MEANTIME BETWEEN FAILURE (MTBF) AHRS WITH A NEW STATE OF THE ART REPLACEMENT (2000 HOUR MTBF).

FLIGHT DIRECTOR "RADII" MARKER. ADDS A REMOTE SLEW SWITCH TO THE CONTROL YOKE TO ENABLE THE PILOT TO REMOTELY POSITION THE HEADING MARKER ON THE HORIZONTAL SITUATION INDICATOR.

FORWARD FORCED AIR COOLING. THIS MOD WILL ADD CONTINUOUS COOLING OF THE E-12 AND E-19 COOLING RACKS AS WELL AS OPERATION OF BOTH FORWARD AND AFT COOLING SYSTEMS WITHOUT STALLING THE DRAW-THROUGH SYSTEM FAN.

FAST/SLOW INDICATOR. RELOCATES THE FLAP POSITION INPUT OF THE SPEED DEVIATION INDICATOR SUBSYSTEM TO THE OUTBOARD FLAP POSITION TRANSMITTER.

E-4 CLASS V

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MONIFICATION TITLE AND NO E-4A TO E-4B RECONFIGURATION. MN-3044

MODELS OF AIRCRAFT AFFECTED E-4A

DESCRIPTION/JUSTIFICATION THREE E-4A INTERIM ADVANCED AIRBORNE COMMAND POST (AAECP) AIRCRAFT ARE SCHEDULED FOR RETROFIT TO THE E-4B CONFIGURATION FOLLOWING DEFENSE SYSTEM ACQUISITION REVIEW COUNCIL (USARC) III APPROVAL IN EARLY 1980. THE MODIFICATION CONSISTS OF RECONFIGURING THE INTERIM C-135 C3 EQUIPMENT INSTALLED ON THE E-4A AND INTEGRATING IT WITH THE NEWLY DEVELOPED E-4B C3 EQUIPMENT. THE E-4B CONFIGURATION GREATLY INCREASES FORCE CONNECTIVITY, IMPROVES RELIABILITY AND PROVIDES NUCLEAR HARDENING.

SCOPE OF PROGRAM

PRIOR	FY-80	FY-81	FY-82	OUTYEAR	TOTAL
QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
10.0	1 114.3	1 133.7	1 153.8		3 411.8
	1.0	1.3	1.3		3.6
	60.2	74.7	95.6		230.5
	1 53.1	1 57.7	1 56.9		3 167.7
10.0					10.0
10.0	1 114.3	1 133.7	1 153.8		3 411.8

BASIS FOR COST ESTIMATE:

DATA

C3 EQ

AIRCRAFT

ADV. PROC.

TOTAL

METHOD OF IMPLEMENTATION

INSTALLATION - CONTRACTOR

LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO AUTOMATIC DATA PROCESSING (ADP)

MODELS OF AIRCRAFT AFFECTED E-4B

E-4 CLASS V

DESCRIPTION/JUSTIFICATION TO IMPROVE THE E-4 BATTLE STAFF MANAGEMENT CAPABILITY, PROVIDE CRITICAL AND TIME SENSITIVE INFORMATION TO THE NATIONAL COMMAND AUTHORITY; AND PROVIDE A CREDIBLE MEANS OF PROSECUTING THE SIOP. ADP WILL ACCOMPLISH THIS BY REDUCING THE MANUAL MANIPULATION OF SIOP DATA. THE ADP SYSTEM WILL CONSIST OF MINI-COMPUTER, MASS STORAGE, DISPLAY DEVICES, PRINTERS AND INTERFACES TO ON-BOARD COMMUNICATIONS EQUIPMENT. FOUR E-4B AIRCRAFT WILL BE MODIFIED. ADP FOR AIRCRAFT 5 & 6 WILL BE INCLUDED IN BASELINE PRODUCTION.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS					1	1.6				1.4	1	3.2
DATA									3	6.5	3	6.5
SUPPORT EQUIP.						1.4				.4		1.8
MOD OF SPARES						.3						.3
						.4				1.9		2.3
TOTAL					1	3.9			3	10.2	4	14.1

METHOD OF IMPLEMENTATION INSTALLATION - CONTRACTOR
LEAD TIME - 9 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO VINSON/PARKHILL TAC SECURE VOICE

MODELS OF AIRCRAFT AFFECTED: OV-10A

OV-10 CLASS V

DESCRIPTION/JUSTIFICATION TO PROVIDE SECURE AIR TO AIR AND AIR TO GROUND VHF AND HF VOICE COMMUNICATIONS FOR FLIGHT CREW IN THE OV-10 AIRCRAFT. PARKHILL IS PRIMARILY DESIGNED FOR USE ON HIGH-FREQUENCY (HF) RADIO CIRCUITS TO PROTECT VOICE COMMUNICATIONS OF PERISHABLE INTELLIGENCE VALUE AT THE CONFIDENTIAL AND SECRET LEVEL. VINSON SECURE VOICE PROVIDES ONLINE ENCRYPTION/DECRYPTION OF VHF/UHF, AM/FM HALF-DUPLEX RADIO FOR ALL CLASSIFICATION TRAFFIC.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE			1	*	88	2.2					89	2.2
NONRECURRING			1	*							1	*
KITS					88	2.2					88	2.2
DATA				*							*	*
TOTAL			1	*	88	2.2					89	2.2

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 24 MONTHS

* LESS THAN \$ 50 000

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO HAVE QUICK

MODELS OF AIRCRAFT AFFECTED MULTI

MULTI CLASS V

DESCRIPTION/JUSTIFICATION: THERE IS A NEED TO PROTECT COMMUNICATIONS FROM HOSTILE ELECTRONIC COUNTER-COUNTERMEASURES. THE HAVE QUICK PROGRAM WILL PROVIDE INTERIM PROTECTION WHILE LONG RANGE TECHNOLOGIES ARE BEING DEVELOPED.

SCOPE OF PROGRAM

	PRIOR	FY-80	FY-81	FY-82	OUTYEAR	TOTAL
	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
	---	---	---	---	---	---
	515	6.7	879	18.8		1394 25.5
BASIS FOR COST ESTIMATE						
NONRECURRING		.6	1.8			2.4
KITS	515	3.9	879	13.8		1394 17.7
DATA		.4	1.0			1.4
SUPPORT EQUIP.		1.8	2.2			4.0
TOTAL	---	---	---	---	---	---
	515	6.7	879	18.8		1394 25.5

METHOD OF IMPLEMENTATION: INSTALLATION - ORG/FIELD
LEAD TIME - 11 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

MULTI CLASS V

FY-81 APPROPRIATION . AIRCRAFT PROCUREMENT . AIR FORCE

MODIFICATION TITLE AND NO. VINSON TAC SECURE VOICE

MODELS OF AIRCRAFT AFFECTED: MULTI AN/ARC-164

DESCRIPTION/JUSTIFICATION . VINSON SECURE VOICE PROVIDES ON-LINE ENCRYPTION/DECRYPTION OF VHF/UHF
AN/FM HALF-DUPLEX RADIO FOR ALL CLASSIFICATION OF TRAFFIC. THE TSEC/KY-58 IS DESIGNED FOR
OPERATION IN AIRCRAFT INSTRUMENT PANELS OR RADIO-CONSOLE CONTROL PANELS, OR IT MAY BE LOCATED
IN EQUIPMENT BAYS AND OPERATED BY A REMOTE CONTROL UNIT (RCU). THIS MODIFICATION ENABLES THE
AN/ARC-164 TO OPERATE IN THE 25 KHZ BASEBAND MODE WITH THE VINSON EQUIPMENT.

SCOPE OF PROGRAM	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	---	---	---	---	---	---	---	---	---	---	---
NONRECURRING	---	---	---	---	---	---	---	---	---	---	---	---
KITS	---	---	---	---	---	---	---	---	---	---	---	---
DATA	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
METHOD OF IMPLEMENTATION	---	---	---	---	---	---	---	---	---	---	---	---
INSTALLATION - FIELD	---	---	---	---	---	---	---	---	---	---	---	---
LEAD TIME - 9 MONTHS	---	---	---	---	---	---	---	---	---	---	---	---

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO. HF SINGLE SIDE BAND RADIO MR-16620C

MULTI CLASS IV

MODELS OF AIRCRAFT AFFECTED MULTI

DESCRIPTION/JUSTIFICATION CURRENT RADIOS DO NOT MEET THE 1980 REQUIREMENTS FOR CHANNEL SPACING. FREQUENCY ACCURACY AND STABILITY AND PARKHILL COMPATIBILITY. THE ARC-123 AND AT-440 HAVE HIGH LOGISTICS SUPPORT COSTS (OLD UNRELIABLE TUBE TYPE EQUIPMENTS) LOW MEAN TIME BETWEEN DEMAND AND OBSOLETE DESIGN ON MANY SUB-ASSEMBLIES. THIS IS THE SECOND STEP IN THE HF MODERNIZATION PROGRAM. STANDARDIZATION OF HF RADIOS WILL PROVIDE SUBSTANTIAL LOGISTICS COST REDUCTIONS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	---	5	.8	505	11.5	603	12.7	603	13.8	1716	38.8
NONRECURRING	5	.8					3	.5	3	.6	11	2.3
KITS					505	8.6	600	10.0	600	10.6	1705	29.2
DATA						.5		.3		.2		1.0
TRAINER						.9		.8		1.0		2.7
SUPPORT EQUIP.						1.1		1.1		1.4		3.6
TOTAL	5	.8	505	11.5	603	12.7	603	13.8			1716	38.8

METHOD OF IMPLEMENTATION: INSTALLATION - ORG/FIELD
LEAD TIME - 12 MONTHS

MULTI CLASS IV

FY-81 APPROPRIATION AIRCRAFT PROCUREMENTS AM/EM RADIOS MN-17612C

STANDARD VHS AND NO

MODELS OF AIRCRAFT AFFECTED: MULTI

MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION IN FEB 1977 THE AIR STAFF VALIDATED A REQUIREMENT TO PROVIDE A 25KHZ VHF AM/FM RADIO CAPABILITY FOR SELECTED AIRCRAFT WHICH WERE AFFECTED BY THE FAA AND THE INTERNATIONAL COMMUNICATION IMPLEMENTATION ON 1 JAN 1977 OF 25KHZ CHANNEL COMMUNICATION WHERE VHF/AM IS THE PRIMARY FREQUENCY BAND FOR CIVILIAN/MILITARY AIR TRAFFIC CONTROL. THE GOAL OF THE DIRECTED PROGRAM IS TO MEET ALL KNOWN OPERATIONAL REQUIREMENTS, STANDARDIZE THE VHF INVENTORY, IMPROVE RELIABILITY AND MAINTAINABILITY.

SCOPE OF PROGRAM.

	PRIOR	FY-80	FY-81	FY-82	OUTYEAR	TOTAL
	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
857	9.3	1044	8.6	572	7.1	2473
						25.0
857	6	.9	.3			1.8
	8.2	1044	7.0	572	6.5	21.7
	.5	.7	.3			1.5
						25.0

RACIS FOR COST ESTIMATE.

[illegible]

INSTALLATION - FIELD

METHOD OF IMPLEMENTATION	INSTALLATION - FIELD	LEAD TIME - 11 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. UPDATE RWR SIGNAL PROCESSOR, MN-68044B

MULTI CLASS IV

MODELS OF AIRCRAFT AFFECTED MULTI

DESCRIPTION/JUSTIFICATION MODIFICATION INCLUDES UPDATE TO RECEIVE THE LATEST PARAMETER CHANGES TO THE HARDWARE AND SOFTWARE THAT ARE REQUIRED TO UPDATE AND CORRECT 15 KNOWN CHANGES TO THE CM442A/ALR46(V). REQUIRED FOR FIRST LINE AIRCRAFT TO HAVE THE CAPABILITY TO IDENTIFY AND LOCATE THE LATEST KNOWN ENEMY THREATS.

SCOPE OF PROGRAM.

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	450	7.6	600	5.2	705	5.2					1755	18.0
NONRECURRING												
KITS	450	4.6	600	4.3	705	5.2					1755	14.1
DATA		.8										.8
TRAINER		.7		.9								1.6
SUPPORT EQUIP.		1.4										1.4
TOTAL	450	7.6	600	5.2	705	5.2					1755	18.0

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/FIELD TEAM
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT. AIR FORCE

MODIFICATION TITLE AND NO CLASSIFIED PROJECTS

MODELS OF AIRCRAFT AFFECTED: MULTI-AIRCRAFT

CLASSI CLASS V

DESCRIPTION/JUSTIFICATION THESE FUNDS ARE REQUIRED TO PROVIDE FOR THE MODIFICATION OF VARIOUS AIRCRAFT AND AIRBORNE SYSTEMS USED IN CLASSIFIED MISSIONS. WHICH BECAUSE OF THEIR SENSITIVE NATURE REQUIRE THE APPLICATION OF SPECIAL MANAGEMENT AND SECURITY SAFEGUARDS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	---	---	---	---	---	---	---	---	---	---	---
	48.3		41.3		99.4		70.4		168.6		428.0	
CLASSIFIED	48.3		41.3		99.4		70.4		168.6		428.0	
TOTAL	48.3		41.3		99.4		70.4		168.6		428.0	

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION: AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO. STD LOW ALTITUDE RADAR ALTIMETER. MN-19605C

MULTI CLASS IV

MODELS OF AIRCRAFT AFFECTED MULTI

DESCRIPTION/JUSTIFICATION: PROPOSED MODIFICATION WILL REPLACE EXISTING RADAR ALTIMETERS REFERENCED WITH A NEW SOLID STATE ALTIMETER. NEW SYSTEM WILL MEET REQUIREMENTS OF ARINC SPECIFICATION (BEING DEVELOPED) WITH A RELIABILITY GOAL GREATER THAN 2000 HOURS. FURTHER, IT WILL BE A DIRECT REPLACEMENT WITH NO CHANGE TO AIRCRAFT WIRING. EXISTING SYSTEMS HAVE A LOW RELIABILITY AND HIGH LOGISTIC SUPPORT COST. THEY ARE OVER TEN YEARS OLD AND ARE ENCOUNTERING NUMEROUS PARTS SUPPLY PROBLEMS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		T O T A L	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE												
NONRECURRING												
KITS							6	7.0			6	7.0
DATA							350	2.7	2677	23.5	3027	26.2
TRAINER								1.2				1.2
SUPPORT EQUIP.								.7				.7
								2.3				2.3
TOTAL							356	13.9	2677	23.5	3033	37.4

METHOD OF IMPLEMENTATION INSTALLATION - ORG/INTERMEDIATE
LEAD TIME - 9 MONTHS

MODIFICATION OF AIRCRAFT
FY-81 PROGRAM

FY-81 APPROPRIATION AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO CIVIL RESERVE AIR FLEET (CRAF)

CRAF CLASS 1

MODELS OF AIRCRAFT AFFECTED WIDE BODIED CIVIL A/C (B-747/DC-10/L-1011)

DESCRIPTION/JUSTIFICATION: EXISTING MILITARY STRATEGIC CARGO AIRLIFT CAPABILITY, AUGMENTED BY CURRENTLY AVAILABLE CRAFT STAGE III CARGO CAPABILITY, IS DEFICIENT IN SATISFYING THE TIME PHASED DEPLOYMENT REQUIREMENTS OF A MAJOR CONTINGENCY. ADDITIONALLY, MANY OF THE CURRENT CRAF CARGO AIRCRAFT ARE 20 YEARS OLD, OR OLDER, AND ARE BEING PHASED OUT OF THE COMMERCIAL FLEET. TO IMPROVE OUR STRATEGIC AIRLIFT CAPABILITY, THE AIR FORCE DEVELOPED A PROGRAM FOR THE ADDITION OF MILITARY CARGO CONVERTIBILITY FEATURES DURING INITIAL FABRICATION OF CIVIL PASSENGER AIRCRAFT. THE MODIFICATIONS INCLUDE ADDITION OF A NOSE VISOR OR SIDE-LOADING CARGO ACCESS DOOR AND A STRENGTHENED FLOOR, REMOVABLE CARGO HANDLING KITS, ROLLERS AND RAILS ARE REQUIRED FOR EACH AIRCRAFT TO INSURE COMPATIBILITY WITH THE MILITARY 463L CARGO HANDLING SYSTEM. THE PROGRAM ALSO INCLUDES COMPENSATION (BASED ON A 16-YEAR SERVICE LIFE) FOR THE INCREASED OPERATING COSTS RESULTING FROM INCREASED NET OPERATING WEIGHT.

SCOPE OF PROGRAM

PRIOR	FY-80	FY-81	FY-82	OUTYEAR	TOTAL
QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
15.0	6 38.6	7 78.9	7 85.8	23 326.9	43 545.2

BASIS FOR COST ESTIMATE

B-747	15.0	1 2.5	2 40.0	2 43.9	6 156.3	11 257.7
DC-10		5 36.1	5 38.9		5 54.5	15 129.5
L-1011				5 41.9	12 116.1	17 158.0
TOTAL	15.0	6 38.6	7 78.9	7 85.8	23 326.9	43 545.2

METHOD OF IMPLEMENTATION INSTALLATION - CONTRACTOR
LEAD TIME - 18 MONTHS

MISSILE PROCUREMENT, AIR FORCE

For construction, procurement, and modification of missiles, rockets, spacecraft and related equipment, including spare parts and accessories therefore, ground handling equipment, and training devices; expansion of public and private plans, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land without regard to section 9774 of title 10, United States Code, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to the approval of title as required by section 355, Revised Statutes, as amended; and plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things; \$3,042,284 to remain available for obligation until September 30, 1983 (5 U. S. C. 3109; 10 U. S. C. 2271-79, 2353, 2386 2663, 2672, 2672a, 8012, 8062, 9501-02, 9505, 9531-32, 9741-42; 31 U. S. C. 649c, 718; 50 U. S. C. 451, 453, 455; Department of Defense Appropriation Act, 1980 additional legislation to be proposed.

28 JAN 80

Missile Procurement, Air Force

Program and Financing (in thousands of dollars)

Identification code	57-3020-0-1-051	Budget plan (amounts for procurement actions programmed)				Obligations		
		1979 actual	1980 est.	1981 est.	1979 actual	1980 est.	1981 est.	
Program by activities:								
Direct								
1.	Ballistic missiles	66,100	108,500	139,900	202,534	141,671	145,697	
2.	Other missiles	386,900	612,300	792,631	370,951	520,812	956,048	
3.	Modification of inservice missiles	32,400	72,800	96,092	54,274	60,137	102,257	
4.	Spares and repair parts	61,300	94,900	143,949	61,809	68,301	154,393	
5.	Other support	926,300	1,294,485	1,867,712	980,125	1,025,824	1,276,533	
Total direct		1,473,000	2,182,985	3,042,284	1,672,593	1,816,745	2,634,918	
Reimbursable program (total)		105,112	42,857	61,223	92,264	48,255	55,082	
10 00	Total	1,578,112	2,225,842	3,103,507	1,764,857	1,865,000	2,690,000	
Financing								
Offsetting collections from:								
11 00	Federal funds	-95,951	-30,500	-56,500	-54,393	-30,500	-56,500	
13 00	Trust funds	-5,665	-15,341	-4,223	11,737	-15,341	-4,223	
14 00	Non-federal sources	-12	-500	-500	-13	-500	-500	
21 40	Unobligated balance available, start of year:							
	For completion of prior year budget plans	-30,550	3,484					
23 40	Reprogramming from or to prior year budget plans							
	Unobligated balance transferred to other accounts	1,946			-835,304	-588,951	-956,277	
24 40	Unobligated balance available, end of year:							
	For completion of prior year budget plans				1,946			
25 00	Unobligated balance lapsing	25,120			588,951	956,277	1,389,784	
40 00	Budget authority (appropriation)	1,473,000	2,182,985	3,042,284	1,473,000	2,182,985	3,042,284	
Budget authority:								
40 00	Appropriation	1,578,112	2,160,385	3,042,284	1,579,800	2,160,385	3,042,284	
41 00	Transferred to other accounts	-105,112			-106,800			
42 00	Transferred from other accounts		7,600			7,600		
43 00	Appropriation (adjusted)	1,473,000	2,167,985	3,042,284	1,473,000	2,167,985	3,042,284	
50 01	Reappropriation		15,000			15,000		
Relation of obligations to outlays:								
71 00	Obligations incurred, net				1,682,288	1,816,659	2,628,777	
72 40	Obligated balance, start of year				1,503,574	1,639,046	1,847,705	
74 40	Obligated balance, end of year				-1,639,046	-1,847,705	-2,634,482	
77 00	Adjustments if expired accounts				-9,592			
90 00	Outlays				1,537,223	1,607,000	1,842,000	

Missile Procurement, Air Force

28 JAN 80

Object Classification (in thousands of dollars)

Identification code	57-3020-0-1-051	1979 actual	1980 est	1981 est
31.0	Direct obligations:			
	Equipment	1,672,693	1,816,745	2,634,918
	Total direct obligations	1,672,693	1,816,745	2,634,918
31.0	Reimbursable obligations:			
	Equipment	92,204	45,255	55,082
99.0	Total obligations	1,764,957	1,862,000	2,690,000

Missile Procurement, Air Force

28 JAN 80

Program and Financing (in thousands of dollars)

1977 Fiscal year program
Obligations

Identification code 57-3020-0-1-051

Budget plan (amounts for
procurement actions programmed)

1979 actual 1980 est 1981 est 1979 actual 1980 est 1981 est

Program by activities:

Direct:

1. Ballistic missiles
2. Other missiles
3. Modification of inservice missiles
4. Spares and repair parts
5. Other support

Total direct
Reimbursable program (total)

10.00 Total

Financing:

Offsetting collections from:

11.00 Federal funds

13.00 Trust funds

14.00 Non-federal sources

21.40 Unobligated balance available, start of year

For completion of prior year budget plans

25.00 Reprogramming from or to prior year budget plans

Unobligated balance lapsing

40.00 Budget authority (appropriation)

86,373

9,064

7,387

6,484

34,707

144,015

717

144,732

-134

3,687

-2

-173,403

25,120

25,120

Missile Procurement, Air Force				26 JAN 60
Program and Financing (in thousands of dollars)				1976 Fiscal year program
Identification code 57-3020-0-1-051		Budget plan (amounts for procurement actions programmed)		Obligations
		1979 actual	1980 est.	1981 est.
Program by activities:				
Direct:				
1. Ballistic missiles				
2. Other missiles				
3. Modification of inservice missiles				
4. Spares and repair parts				
5. Other support				
Total direct				
Reimbursable program (total)				
10.00	Total	53,309	78,110	78,110
		121,890	75,073	75,073
		23,910	11,371	11,371
		11,418	5,601	5,601
		145,174	99,933	99,933
		355,701	270,088	270,088
		5,379	2,380	2,380
		362,080	272,468	272,468
Financing:				
Offsetting collections from:				
11.00	Federal funds	1,692		
13.00	Trust funds	13,715		
14.00	Non-federal sources	1		
21.40	Unobligated balance available, start of year:			
	For completion of prior year budget plans			
23.40	Reprogramming from or to prior year budget plans	-851,901	-272,468	-272,468
	Unobligated balance transferred to other accounts			
24.40	Unobligated balance available, end of year:	1,946		
	For completion of prior year budget plans			
40.00	Budget authority (appropriation)	272,468		

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Missile Procurement, Air Force

1979 Fiscal Year Program

Program and Financing (in thousands of dollars)

Obligations

identification code	57-3020-0-1-051	Budget plan (amounts for procurement actions programmed)				obligations	
		1979 actual	1980 est.	1981 est.	1979 actual	1980 est.	1981 est.
Program by activities:							
Direct:							
1.	Ballistic missiles	66,100			62,652	2,761	487
2.	Other missiles	386,900			239,997	62,239	64,664
3.	Modification of Inservice missiles	32,400			22,977	7,966	1,457
4.	Spares and repair parts	61,300			43,907	9,600	7,793
5.	Other support	926,300			803,244	80,632	42,424
Total direct		1,473,000			1,172,977	183,196	116,825
Reimbursable program (total)		105,112			65,166	15,744	4,200
Total		1,578,112			1,238,145	198,942	121,025
Financing:							
Offsetting collections from:							
11.00	Federal funds	-95,951			-95,951		
13.00	Trust funds	-5,665			-5,665		
14.00	Non-federal sources	-12			-12		
21.40	Unobligated balance available, start of year:						
	For completion of prior year budget plans	-3,484					
24.40	Reprogramming from or to prior year budget plans						
	Unobligated balance available, end of year:						
	For completion of prior year budget plans						
40.00	Budget authority (appropriation)	1,473,000			1,473,000		
Budget authority:							
40.00	Appropriation	1,579,800			1,579,800		
41.00	Transferred to other accounts	-106,800			-106,800		
43.00	Appropriation (adjusted)	1,473,000			1,473,000		

25 JAN 80

Missile Procurement, Air Force

Program and Financing (in thousands of dollars)				1980 Fiscal year program	
Identification code	57-3020-0-1-051	Budget plan (amounts for procurement actions programmed)		Obligations	
		1979 actual	1980 est.	1981 est.	1981 est.
		1979 actual	1980 est.	1981 est.	1981 est.
Program by activities:					
Direct:					
1.	Ballistic missiles		108,500		60,800
2.	Other missiles		612,300		363,500
3.	Modification of Inservice missiles		72,800		40,800
4.	Spares and repair parts		94,900		53,100
5.	Other support		1,294,485		845,259
	Total direct		2,182,985		1,363,459
	Reimbursable program (total)		42,857		27,131
10.00	Total		2,225,842		1,390,590
Financing:					
Offsetting collections from:					
11.00	Federal funds		-30,500		-30,500
13.00	Trust funds		-11,857		-11,857
14.00	Non-federal sources		-500		-500
21.40	Unobligated balance available, start of year:				
	For completion of prior year budget plans				
24.40	Unobligated balance available, end of year:				
	For completion of prior year budget plans				
40.00	Budget authority (appropriation)		2,182,985		2,182,985
	Budget authority:				
40.00	Appropriation		2,160,385		2,160,385
42.00	Transferred from other accounts		7,600		7,600
43.00	Appropriation (adjusted)		2,167,985		2,167,985
50.01	Reappropriation		15,000		15,000

Missile Procurement, Air Force

28 JAN 80

Program and Financing (in thousands of dollars)		1981 Fiscal year program		
Identification code	57-3020-0-1-051	Obligations		
		Budget plan (amounts for procurement actions programmed)		
		1979 actual	1980 est.	1981 est.
Program by activities:				
Direct:				
1.	Ballistic missiles		139,900	110,500
2.	Other missiles		792,631	883,684
3.	Modification of inservice missiles		98,092	77,500
4.	Spare and repair parts		143,949	110,139
5.	Other support		1,867,712	905,673
Total direct			3,042,284	1,867,486
Reimbursable program (total)			61,223	39,251
10.00	Total		3,103,507	1,926,747
Financing:				
Offsetting collections from:				
11.00	Federal funds		-56,500	-56,500
13.00	Trust funds		-4,223	-4,223
14.00	Non-federal sources		-500	-500
24.40	Unobligated balance available, end of year:			
	For completion of prior year budget plans			
40.00	Budget authority (appropriation)		3,042,284	1,176,760
				3,042,284

(In Thousands of Dollars)

Program Requirements - FY 1982	- \$3,916,568
Program Requirements - FY 1981	- \$3,042,284
Program Requirements - FY 1980	- \$2,182,985
Program Requirements - FY 1979	- \$1,473,000

PURPOSE AND SCOPE OF APPROPRIATION

This appropriation provides for procurement, installation, and checkout of strategic ballistic missiles and other missiles, modification of in-service missiles, and initial and replenishment spares and repair parts for missile systems. It also provides for operational space systems, boosters, payloads, drones, associated ground support equipment, nonrecurring maintenance of industrial facilities, machine tool modernization, and special programs support.

1. Ballistic Missiles - Provides for procurement of the higher yield MK-12A re-entry vehicle to replace the MK-12 re-entry vehicle on 300 MINUTEMAN III missiles and accommodations for AFSATCOM and 616A equipment in MINUTEMAN and TITAN launch control centers.
2. Other Missiles - Provides for procurement of Air and Ground Launched Cruise Missiles, peculiar support equipment, and training equipment. Procurement of the AIM-7F/M SPARROW and the AIM-9L/M SIDEWINDER, continues in FY 1981 and FY 1982. Provides for target drones, for missiles testing and aircrew training. Requests authorization in FY 1982 to initiate procurement of AGM-88 HARM and AGM-65D MAVERICK air-to-ground missiles and Tactical Drones.
3. Modification on In-Service Missiles - Provides modification of missiles to improve reliability and safety, extend service life, and to incorporate operational improvements based on in-service use.
4. Spares and Repair Parts - Provides for initial and replenishment spare and repair parts for ballistic missiles, other missiles, remotely piloted vehicles (RPV), peculiar support equipment, replacement equipment, provisioning documentation, and spares for the modification programs.
5. Other Support - Provides for special program activities, modernization of Government-owned production facilities, procurement of launch vehicles, spacecraft, and peculiar support equipment for operational space systems.

SUMMARY OF REQUIREMENTS	(In Thousands of Dollars)		
	FY 1979 Actual	FY 1980 Estimate	FY 1981 Estimate
Ballistic missiles-----	\$ 66,100	\$ 108,500	\$ 139,900
Other missiles-----	386,900	612,300	722,631
Modification of in-service missiles-----	32,400	72,800	98,092
Spares and repair parts-----	61,300	94,900	143,949
Other support-----	926,300	1,294,485	1,867,712
TOTAL DIRECT PROGRAM-----	\$1,473,000	\$2,182,985	\$3,042,284
Reimbursable program-----	105,112	42,857	61,223
TOTAL PROGRAM REQUIREMENTS (CURRENT)-----	\$1,578,112	\$2,225,842	\$3,103,507
Less: Portion of program to be obligated In subsequent fiscal years-----	319,967	835,252	1,176,760
Plus: Obligations incurred against prior year program funds-----	506,812	471,410	763,253
TOTAL OBLIGATIONS-----	\$1,764,957	\$1,862,000	\$2,690,000

SUMMARY OF PROGRAM REQUIREMENTS	(In Thousands of Dollars)	
	FY 1982	Estimate
Ballistic missiles-----	\$ 98,574	
Other missiles-----	1,265,084	
Modification of in-service missiles-----	132,906	
Spares and repair parts-----	151,793	
Other Support-----	2,268,211	
TOTAL DIRECT PROGRAM-----	\$3,916,568	

ACTIVITY: 1. Ballistic Missiles

(In Thousands of Dollars)
 Program Requirements - FY 1982 - \$ 98,574
 Program Requirements - FY 1981 - \$139,900
 Program Requirements - FY 1980 - \$108,500
 Program Requirements - FY 1979 - \$ 66,100

PART I - PURPOSE AND SCOPE

This activity provides for complete operational intercontinental ballistic missiles, including the airframe structure and installed power units, communications guidance and control equipment, re-entry vehicle (excluding nuclear payloads), instruments and auxiliary equipment installed in the missiles, and penetration aids. It also provides for peculiar ground support equipment in direct support of operational ballistic missiles including ground guidance and control systems, equipment to maintain the operational status of the system, specialized ground handling equipment, and system trainers. The ground equipment is used to transport, assemble and disassemble, maintain, checkout, launch, and guide ballistic missiles. The specialized training equipment includes system trainers for proficiency training of maintenance and operator crews. This activity also provides for the modernization of the ballistic missile launch and launch control facilities and the integration of new equipment into the launch control center. It includes hardware, training equipment, data and site activation effort required to modernize ballistic missile facilities.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The MINUTEMAN missile is a three stage solid propellant Intercontinental Ballistic Missile (ICBM), hardened and dispersed in underground silos to survive an attack by the enemy and retain a capability to perform the assigned mission. MINUTEMAN II carries one re-entry vehicle and has the capability to carry chaff and penetration aids to defeat area type defenses. MINUTEMAN III has a Post Boost Vehicle for the deployment of two or three MK-12 re-entry vehicles and chaff. The FY 1981 request provides funds to continue procurement of the MK-12A re-entry vehicle as a replacement for the MK-12 on 300 MINUTEMAN IIIs. The higher yield of the MK-12A will provide MINUTEMAN with an improved capability against targets designated by the Single Integrated Operational Plan. Under ICBM C3 Integration, procurement will be continued for MINUTEMAN and TITAN launch control center accommodations for installation of Air Force Satellite Communications system, Strategic Air Command Digital Network, and 616A equipment. These added capabilities will increase the reliability of emergency war order reception. (RDT&E PE 11213F)

The following tabulation shows the composition of ballistic missile program requirements:

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Weapon System Cost				
Advance Procurement (PY -)	\$59,900	\$ 91,958	\$ 88,113	\$37,263
Current Year Program	-3,500	-9,700	-4,800	-3,644
Advance Procurement (CY +)	56,400	82,258	83,313	33,619
WEAPON SYSTEM TOTAL	9,700	4,800	3,644	
(Procurement Quantity)	66,100	87,058	86,957	33,619
ICBM C ³ INTEGRATION		<u>21,442</u>	<u>52,942</u>	<u>64,955</u>
TOTAL BUDGET ACTIVITY 1	\$66,100	\$108,500	\$139,900	\$98,574

ACTIVITY: 2. Other Missiles

(In Thousands of Dollars)
 Program Requirements - FY 1982 - \$1,265,084
 Program Requirements - FY 1981 - \$ 792,631
 Program Requirements - FY 1980 - \$ 612,300
 Program Requirements - FY 1979 - \$ 386,900

PART I - PURPOSE AND SCOPE

This activity provides funds for the weapon system cost for procurement of strategic air-to-ground and ground-to-ground missiles, tactical air-to-air and air-to-ground missiles and target drones. Weapon system cost includes flyaway costs (airframe, propulsion equipment, electronics and armament) and peculiar support equipment (PSE), system peculiar training equipment and publications and technical data.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1981 budget estimate includes requests for funds for the procurement of the Air Launched Cruise Missile (ALCM), the Ground Launched Cruise Missile (GLCM), the SPARROW and SIDEWINDER air-to-air tactical missiles, and target drones. Descriptions and justification for the requests follow:

AGM-86B/AGM-109, ALCM - The ALCM is a small, long range, accurate, nuclear armed, air-to-ground cruise missile planned for use on the B-52G bomber. The missile is internally guided by an inertial navigation system which is updated by terrain contour matching. The ALCM will expand the lethal footprint of penetrating strategic bomber forces by providing additional target coverage and routing flexibility and by stressing enemy defenses. FY 81 funds will procure 480 missiles and support equipment. (RDT&E PE64361F)

BCM-109 GLCM - The GLCM is a small, long range, accurate, ground-to-ground cruise missile which will provide increased firepower for theater forces and release Quick Reaction Alert aircraft to participate in the conventional role. The cruise missile will combine with command, control, communication, and launch control hardware/software to comprise the weapon system. FY 1981 funds will cover procurement of eleven missiles, six transporter/erector/launchers, and six launch control centers. (RDT&E PE64362F)

AIM-7F/M SPARROW - The Sparrow is a rocket propelled air-to-air missile guided by a solid state radar homing device with dual mode continuous wave (CW) or pulse doppler (PD). The AIM-7F/M was developed to provide for defense against enemy aircraft and to maintain air superiority. The funds requested for FY 1981 will provide for the continued procurement of the AIM-7M with the advanced monopulse seeker. (RDT&E PE27161F)

AIM-9L/M SIDEWINDER - The SIDEWINDER is designed for close-in "dogfight" combat against highly maneuverable fighter aircraft. Designed for visual attack, the SIDEWINDER has an improved infrared seeker with solid electronics, an active optical fuze, and an annular blast fragmentation warhead, all combining to result in increased lethality. The funds requested for FY 1981 will provide for the initial procurement of the improved "M" version of the missile featuring improved guidance and control and reduced smoke rocket motor. (RDT&E PE 27161F)

AGM-65D MAVERICK - The AGM 65D version of the MAVERICK missile incorporates Imaging Infrared (IIR), using thermal detection technology to provide an effective 24 hour day/night/adverse weather weapon. There are no procurement funds requested in FY 1981. The FY 1982 authorization requested will initiate the production effort. (RDT&E PE64608F)

Target Drones - Target Drones are remotely piloted vehicles which are used to simulate subsonic and supersonic enemy aircraft. They are used to develop air-to-air missile tactics, train aircrews, and to test and evaluate aircraft and missile weapon systems. The funds requested for FY 1981 and the authorization requested for FY 1982 will provide for the continued procurement of full scale and sub-scale maneuvering target drones. (RDT&E PE35116F)

AGM-88A HARM - The AGM-88A HARM is an air-to-surface anti-radiation missile designed to damage or suppress radar-directed air defense systems. Advanced features include moderate size and weight, high speed, high accuracy, high sensitivity, wideband frequency coverage in a single seeker, long stand off range and the ability to change to different target frequencies while the missile is in flight. There are no procurement funds requested in FY 1981. The FY 1982 authorization requested will initiate the production effort for the Air Force. (PE 77162F)

Tactical Drones - A small expendable unmanned aircraft named the LOCUST will be used as a low cost air defense suppression system. It will carry a radar seeker for target acquisition and a fragmentary warhead to damage/destroy enemy air defense systems. It will be ground launched and will operate autonomously, requiring no data link for command and control. There are no procurement funds requested in FY 1981. The FY 1982 authorization requested will initiate the production effort. (RDT&E PE64746F)

The following table summarizes Other Missiles requirements:

<u>Weapon System</u>	<u>FY 1979</u>	<u>(In Thousands of Dollars)</u>		
		<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Air Launched Cruise Missile (ALCM)	\$ 90,800	\$364,400	\$543,605	\$511,047
Ground Launched Cruise Missile (GLCM)	20,200	8,200	87,868	243,434
AIM-7F/M Sparrow	122,800	124,200	115,908	117,743
AIM-9L/M Sidewinder	95,500	86,800	43,428	40,665
AGM-45A Shrike	12,000			
AGM-65A Maverick	34,300	8,400		
AGM-65D Maverick (IIR)				191,954
AGM-88A Harm				136,144
Target Drones	11,300	20,300	1,822	19,100
Tactical Drones				4,997
Total	\$386,900	\$612,300	\$792,631	\$1,265,084

(In Thousands of Dollars)

Program Requirements - FY 1982	- \$132,906
Program Requirements - FY 1981	- \$ 98,092
Program Requirements - FY 1980	- \$ 72,800
Program Requirements - FY 1979	- \$ 32,400

ACTIVITY: 3. Modification of In-Service Missiles

PART I - PURPOSE AND SCOPE

This activity provides for modification of missile systems and drones, direct ground support equipment, missile training equipment, and components of these equipments. These costs include modification kits, revised handbooks, and training effort. These programs are designed to improve reliability, enhance performance, and increase maintainability by incorporating approved modifications resulting from technical advances, service use, and continuing test programs.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1981 modification program consists of (1) missile systems Class IV modifications which are necessary for safety improvements, extension of service life, and to incorporate operational improvements after a missile has been placed in the inventory, (2) a Class V modification to MINUTEMAN launch facilities to provide extended survivable power; and (3) an update modification to convert AIM-7F Sparrow missiles to the production line configuration. Advances in technology and long retention necessitate the modification of in-service missile systems to enable the strategic, tactical, and support forces to maintain superiority over hostile forces. The modification program was reviewed to determine the priority of essential mission requirements for inclusion in the FY 1981 Budget Request.

Class I Modification (FY 1981 \$71,569, FY 1982 \$72,882) The FY 1981 program will provide for modifications to improve reliability, maintainability, and extend service life of the BQM-34 Target Drone, AGM-45 Shrike, AIM-4 Falcon, LG-25 TITAN, AGM-78 SRAM, LGM-30 MINUTEMAN, the Emergency Rocket Communications System, and classified projects. The FY 1982 program will continue modifications on these systems except the BQM-34 Target Drone and the AIM-4 Falcon. (Includes NFIP)

LCM-30B/C MINUTEMAN II/III Class V Modification (FY 1981 \$19,437, FY 1982 \$52,912) This program will replace lead acid batteries in MINUTEMAN launch facilities with new lithium power cells. These new cells are expected to provide emergency, survivable power for a period of times as long as that provided by the present system. The FY 1981 and FY 1982 programs will modify 50 and 130 launch facilities, respectively.

AIM-7F Sparrow Update (FY 1981 \$7,086, FY 1982 \$7,112) This program provides for the correction of deficiencies detected during follow-on operational test and evaluation.

The following table summarizes modification update requirements:

	<u>FY 1979</u>	(In Thousands of Dollars) <u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
<u>REQUIREMENT</u>				
Class IV Modifications (Includes NFIP)				
Class V Modifications:				
CIM-10 BOMARC		900		
LCM-30 F/G MINUTEMAN II/III		20,900	19,437	52,912
Target Drones	900			
Update:				
AIM-7E Sparrow		5,000	7,086	7,112
ACM-45A SHRIKE		4,700		
TOTAL	\$32,400	\$72,800	\$98,092	\$132,906

ACTIVITY: 4. Spares and Repair Parts

(In Thousands of Dollars)
Program Requirements - FY 1982 - \$151,793
Program Requirements - FY 1981 - \$143,949
Program Requirements - FY 1980 - \$ 94,900
Program Requirements - FY 1979 - \$ 61,300

PART I - PURPOSE AND SCOPE

This activity provides for the procurement of initial and replenishment spares and repair parts for ballistic missiles, other missiles, target drones, peculiar support equipment, training equipment, replacement equipment, provisioning documentation, and spares for modification programs.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The funds for FY 1981 and FY 1982 will provide for the procurement of initial spares, replacement equipment, and replenishment spares. Initial spares are investment type items normally procured in support of the weapon system delivery schedule. Replacement equipment includes peculiar support equipment in support of out-of-production systems, equipment common to several systems, and equipment required by specialized repair activities. Replenishment spares include components and repair parts required for the continued support of missiles, drones and related support equipment maintained in the operational inventory. The FY 1981/82 requirements for spares and repair parts were developed by detailed provisioning actions which consider operational deployment of the end item, usage rate trends and, for time-change items, the service life of the weapon system.

The breakdown of Spares and Repair Parts requirements follows:

	FY 1979	(In Thousands of Dollars)			FY 1982
		FY 1980	FY 1981		
<u>INITIAL SPARES (I/S)</u>					
MINUTEMAN, Weapon System	\$ 2,600	\$ 700	\$ 709	\$ 508	
Air Launched Cruise Missile	3,400	6,800	27,535	5,994	
Ground Launched Cruise Missile			9,313	16,663	
SPARROW		400	2,633	4,870	
SIDEWINDER	900	100	2,227	2,445	
SHRIKE	600				
Imaging Infra-Red Maverick				4,003	
HARM				9,652	
Target Drones	200	700	202	1,196	
TOTAL	7,700	8,700	42,619	45,331	
Modification I/S	1,200	1,630	2,631	5,001	
Replacement Equipment	24,700	31,570	33,406	34,830	
Replenishment Spares	27,700	53,000	65,253	66,631	
TOTAL SPARES & REPAIR PARTS	\$61,300	\$94,900	\$143,949	\$151,793	

ACTIVITY: 5. Other Support

(In Thousands of Dollars)

Program Requirements - FY 1982 - \$2,268,211
Program Requirements - FY 1981 - \$1,867,712
Program Requirements - FY 1980 - \$1,294,485
Program Requirements - FY 1979 - \$ 926,300

PART I - PURPOSE AND SCOPE

This activity provides for industrial facilities, space programs, and special programs. Industrial facilities provide for expansion or modification of Government-owned production facilities, nonrecurring maintenance and modernization of machine tools and equipment, preparation, crating, and shipping of Government tools, improved manufacturing methods, and environmental protection measures instituted at Government-owned plants. Space programs provide launch vehicles, space vehicles, peculiar ground support equipment, and miscellaneous launch support requirements other than those chargeable to the Operations and Maintenance appropriation.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1981 budget request of \$1,867,712 includes \$509,282 for operational space programs, \$18,930 for industrial facilities, and \$1,339,500 for special programs. The FY 1982 request for authorization of \$2,268,211 includes \$574,689 for operational space programs, \$15,304 for industrial facilities and \$1,678,218 for special programs.

COMSEC - This program supports the national objective of providing communications security on all critical communications systems. Tasks under this program apply technology to develop COMSEC products for use in Air Force weapon systems, and supports the Air Force Security Secure Tempest Testing and Analysis program. This program is an integral part of the national COMSEC program, which is administered by the National Security Agency. The FY 1981 and FY 1982 funds provide for the procurement of peculiar communications equipment for the program. (RDT&E PE 33401F)

NAVSTAR Global Positioning System (GPS) - The operational NAVSTAR GPS will consist of 24 satellites, a ground control station and approximately 25,000 sets of user equipment for all services. Each user will be able to precisely determine his position (to better than two meter accuracy) and velocity (to a few centimeters per second), in three dimensions, anywhere in the world, in all types of weather conditions. There are no missile procurement funds requested for FY 1981. The FY 1982 funds provide for the procurement of two operational spacecraft. (RDT&E PE 64778F)

Space Launch Support - This program provides the Inertial Upper Stages (IUS) and spares support for Air Force operational space programs which include the NAVSTAR Global Positioning Systems, the Defense Satellite Communications System, the Defense Support Program, the Defense Meteorological Satellite Program, the Satellite Data System, and the Deep Space Surveillance System. The FY 1981 funds are for the purchase of spares for Interface Verification Equipment and the Vandenberg AFB launch processing system. The FY 1982 funds are for the purchase of three IUS and spares for Interface Verification Equipment and the Vandenberg AFB launch processing system. (RDT&E PE 63411F, 35171F)

Satellite Data System (SDS) - The SDS is a multi-purpose communications system which in conjunction with the Navy Fleet Satellite Communications Program (FLTSATCOM) has the high priority mission of supporting communications for the strategic forces and between Air Force Satellite Control Facility ground stations. The FY 1981 funds will provide a continuing replenishment launch capability, procurement of one satellite, contractor orbital incentives and satellite readiness configuration testing. The FY 1982 request for authorization is for the procurement of long lead components, launch support services, satellite modifications and propellants. (RDT&E PE 35158F)

Defense Meteorological Satellite Program (DMSP) - DMSP is a system which provides timely high-quality visual and infrared cloud imagery and other meteorological information to support operations of the U.S. armed forces. The FY 1981 funds provide for one complete satellite and launch system. In addition, procurement of three ionospheric sensors and one microwave imaging sensor are planned for FY 1981. Engineering support and services for satellite launch and on-orbit operations will also be procured. In FY 1982, funds provide for procurement of special sensors to provide meteorological and ionospheric data. Also included in FY 1982 are funds to provide engineering services, launch and on-orbit operation of one satellite. (RDT&E PE 35160F)

Defense Support Program - The DSP satellites contain sensors which provide near real-time data to the National Command Authorities and other designated users. The FY 1981 funds are for Inertial Upper Stage (IUS)/payload compatibility, launch readiness including satellite storage and testing, other related support, General System Engineering/Integration, and DSP Augmentation. The FY 1982 funds will continue to support the above FY 1981 efforts, plus build a new satellite. (RDT&E PE 12431F)

Defense Satellite Communications System (DSCS) - The Defense Satellite Communications System provides Super High Frequency (SHF) satellite communications for secure voice and high data rate transmissions in support of unique and vital national security requirements for worldwide military command and control, crises management, intelligence data relay, early warning detection, treaty monitoring and surveillance information, and diplomatic traffic. The Defense Communications Agency is responsible for overall DSCS program management, systems engineering, orbital operations, and satellite communications architecture. The DSCS Program consists of a space segment, which is an Air Force responsibility, a multi-user terminal segment of ground, airborne, and naval elements, and an operational control segment. The authorized DSCS Space Segment consists of four operational and two in-orbit spare satellites positioned over four geographical areas to provide global (less polar) coverage. Existing DSCS II satellites will be replenished with DSCS III satellites which will provide increased channelization, flexibility, and anti-jam capability. DSCS III satellites will include an UHF and, in future, SHF capability for Emergency Action Message dissemination. Earth terminals to meet Air Force communications requirements are procured through the U.S. Army.

The FY 81 funds provide for the acquisition of four sets of advance buy items for the initial four DSCS III production satellites to be acquired in FY 1982 and for DSCS III qualification satellite refurbishment. Expendable launch vehicle support for propellants, satellite-launch vehicle integration, and partial payment for boosters previously procured are also funded. First time integration associated with transitioning from expendable launch vehicles to the Shuttle and Federal Contract Research Center support will be continued. Two Inertial Upper Stage (IUS) integration kits for interface compatibility between the universal IUS and the DSCS satellite will be procured. Also, DSCS III Shuttle compatibility modifications will be initiated and the solid state amplifier development continued. In FY 1982, four DSCS III production satellites will be acquired and first time integration, launch vehicle support, solid state amplifier development, and Shuttle compatibility modifications continue. (RDT&E PE 33110F)

Air Force Satellite Communications System (AFSATCOM) - The AFSATCOM system is a satellite based Ultra High Frequency communications system with transponders carried as secondary payloads on host spacecraft. The AFSATCOM system provides direct communications between the National Command Authorities, the JCS, the military CINCs and the nuclear capable forces. The FY 81 funds procure 4 single channel transponders (SCT) for integration into the DSCS III spacecraft. There are no FY 1982 funds. (RDT&E PE 33601F)

Space Boosters - The Space Boosters program provides consolidated launch support for the requirements common to USAF space programs and an austere expendable launch vehicle backup to guarantee the launch of critical USAF operational payloads in the event that the Space Shuttle program is delayed or the Orbiter fleet is grounded. The FY 1981 funds are to continue efforts to maintain critical Titan III production capability until Space Shuttle Initial Operational Capability at the Kennedy Space Center, Florida. Maintenance of this capability involves procuring two additional Titan III (34)D backup vehicles (advance buy to be initiated by FY 1980 reprogramming request) with decision points to advance these two vehicles through major production stages keyed to critical Space Shuttle development milestones. (RDT&E PE 35119F)

Space Shuttle - The space shuttle is a NASA development program to provide an advanced, reusable, manned orbiter vehicle which will be capable of transporting payloads to low earth orbit. To carry payloads to higher operational orbits, the Air Force will build an unmanned Inertial Upper Stage (IUS). The IUS will be used by both DOD and NASA. The funds requested for FY 1981 and FY 1982 provide for the procurement of common and unique support equipment for the Vandenberg AFB (VAFB) shuttle launch site, the VAFB Launch Processing System (VLPS) equipment, the unique ground and airborne support equipment for the IUS and the initial spares to support this equipment. (RDT&E PE 64311F, 64411F)

A summary of the funding requirements for space programs is as follows:

	FY 1979	FY 1980	FY 1981	FY 1982
COMSEC				
NAVSTAR GPS				
Space Launch Support	\$ 19,700	\$ 20,509	\$ 15,690	\$ 13,447
Satellite Data System	17,00	25,905	709	71,856
Defense Meteorological Satellite Program	37,900	100,223	93,823	29,502
Defense Support Program	29,101	21,600	42,719	40,023
Defense Satellite Communications System	123,400	103,862	51,931	21,101
Air Force Satellite Communications System	13,900	17,300	93,040	192,280
Space Boosters	100	192	13,464	113,253
Space Shuttle	11,500	23,000	66,813	
	<u>91,700</u>	<u>162,500</u>	<u>131,093</u>	<u>93,227</u>
TOTAL SPACE PROGRAMS	\$344,301	\$475,091	\$509,282	\$574,689

Industrial Facilities (FY 81, \$18,930; FY 82 \$15,304) - This is a continuing program associated with Government owned production facilities which includes requirements for plant expansions; packing crating, and handling of plant equipment; capital-type rehabilitation; environmental protection, manufacturing methods; and energy conservation.

Special Programs (FY 81, \$1,339,500; FY 82, \$1,678,218). Special Program requirements are of a sensitive nature requiring special access. (Includes NFI' & Special Update)

COMPARISON OF FY 1981 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1980 BUDGET WITH FY 1981 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1981 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS (In Thousands of Dollars)

	Program Requirements Per 1980 Budget	Program Requirements Per 1981 Budget	Increase (+) or Decrease (-)
Ballistic Missiles	\$ 130,795	\$ 139,900	\$ + 9,105
Other Missiles	925,207	792,631	- 182,576
Modification of In-Service Missiles	92,371	98,092	+ 5,721
Spares and Repair Parts	113,782	143,949	+ 30,167
Other Support	1,332,545	1,867,712	+ 535,167
Reimbursable Program		61,223	+ 61,223
	\$2,644,700	\$3,103,507	\$ + 458,807

1. Ballistic Missiles (\$ +9,105) This increase was caused by a combination of adding the Air Launch Control System Phase III to the FY 81 Budget for \$1.417 and changes caused by revised economic escalation indices.

2. Other Missiles (\$ -182,576) This net increase was due to the following program changes:

Air Launched Cruise Missiles (\$ +82,305) Increase was caused by a deferral of nonrecurring costs from FY 1980 to 1981, and revised economic escalation indices.

Ground Launched Cruise Missile (\$ -61,232) The net decrease was caused by a reduction in the buy quantity from 45 to 11 missiles and increases caused by revised economic escalation indices.

AIM-7F/M Sparrow (\$ +11,908) Increase is due to revised economic escalation indices offset by a decrease in quantity of 50 missiles.

AIM-9L/M Sidewinder (\$ +3,828) Increase is due to a change in the missile model and revised escalation indices.

Target Drones (\$ -5,678) Decrease is because it was decided to defer the procurement of sub-scale target drones.

The following programs decreased because initiation of procurement was deferred until FY 1982.

AGM-65D Maverick (\$ -146,900)
AGM-88A HARM (\$ -56,000)
Tactical Drones (\$ -10,807)

3. Modification of In-Service Missiles (\$ +5,721) - Class IV funds were increased (\$ +10,269) due to a new requirement for modification of the Shrike fuze antenna, increases in the Shrike gravity bias modification program, and escalation applicable to all Class IV modifications. Minuteman Class V funds for Extended Survivable Power were increased (\$ +1,166) for economic escalation adjustments. The AIM-7F Update program was increased (\$ +86) for economic escalation adjustment. The Minuteman update program was deleted (\$ -2,300) due to the lack of definitive retrofit requirements. The Shrike Update requirement was transferred to a Class IV (\$ -3,500) due to the termination of missile procurement before production incorporation.
4. Spares and Repair Parts (\$ +30,167) - The program was increased due to the increase in programs to be supported and the revised economic escalation indices.
5. Other Support (\$ +535,167) - Significant changes were related to: Space Launch Support (\$ -57,202) decreased as a result of deletion of procurement of seven Inertial Upper Stages (IUS); Satellite Data System (\$ -13,632) decrease is a result of reduction of excess funds by OSD; Defense Meteorological Satellite Program (DMSP) (\$ -13,006) decreased due to the deletion of a requirement for a spacecraft; Defense Satellite Communications System (DSCS) (\$ -49,475) decreased due to a decision to slip the procurement of four DSCS III spacecraft to FY 82; Space Boosters (\$ +31,258) program increased as a result of procuring two additional Titan back-up boosters; Space Shuttle (\$ +33,524) increased due to additional procurement of Vandenberg AFB items; Industrial Facilities (\$ +8,132) was increased due to an increase in the manufacturing technology program as a result of increased emphasis on the MX, AMRAAM and Cruise Missile programs; Special Program (\$ +605,657) were increased by additional classified requirements. Other increases to programs were a result of changes in the escalation rates.
6. Reimbursable Program (\$ +61,223) - Reimbursements for FY 81 were not estimated in the FY 80 budget.

COMPARISON OF FY 1980 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1980 BUDGET WITH FY 1980 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1981 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS (In Thousands of Dollars)

	Program Requirements Per 1980 Budget	Program Requirements Per 1981 Budget	Increase (+) or Decrease (-)
Ballistic Missiles	\$ 108,500	\$ 108,500	\$ N/C
Other Missiles	649,100	612,300	- 36,800
Modification of In-Service Missiles	72,800	72,800	N/C
Spares and Repair Parts	94,900	94,900	N/C
Other Support	1,363,300	1,294,485	- 68,815
Reimbursables	42,770	42,857	+ 87
Total Fiscal Year Program	\$2,331,370	\$2,225,842	\$-105,528

1. Ballistic Missiles (N/C)

2. Other Missiles (\$ -36,800) - Congress reduced the AIM-7F/M Sparrow program by \$20,000 and transferred \$16,800 of the Ground Launched Cruise Missile program to the RDT&E appropriation.

3. Modification of In-Service Missiles (N/C)

4. Spares and Repair Parts (N/C)

5. Other Support (\$ -68,815) - DMSP (\$ -6,200) decreased due to deletion of funds by Congress for procurement of primary sensor for block 6 qualification test model; DSCS (\$ - 61,115) decreased as a result of Congressional action to delete DSCS II satellites 17 and 18, and a reprogramming to Space Boosters; Space Boosters (+15,900) increased as a result of OSD decision to procure long lead items for two additional TITAN boosters; Space Shuttle (\$-3,400) decreased as a result of Congressional action; Special Programs (\$ -14,000) were reduced by Congressional action.

6. Reimbursables (\$ +87) - This minor increase is due to a revised estimate of customer orders.

COMPARISON OF FY 1980 FINANCING AS REFLECTED
IN FY 1980 BUDGET WITH FY 1980 FINANCING AS
SHOWN IN FY 1981 BUDGET

	(in Thousands of Dollars)		
	Financing Per FY 1980 Budget	Financing Per FY 1981 Budget	Increase (+) or Decrease(-)
Program requirements (Total)-----	\$2,331,370	\$2,225,842	\$-105,528
Program requirements (Service account)-----	(2,288,600)	(2,182,985)	(-105,615)
Program requirements (Reimbursable)-----	(42,770)	(42,857)	(+87)
Less:			
Anticipated reimbursements-----		42,857	+87
Reappropriation-----		15,000	+15,000
Transferred from other accounts-----		7,600	+7,600
Appropriation-----	\$2,288,600	\$2,160,385	\$-128,215

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1980 program has been decreased \$105,528 thousand since submission of the FY 1980 budget. Adjustments by categories are explained below:

1. Anticipated Reimbursements. The increase is due to a revised estimate of customer orders anticipated in FY 1980.
2. Resappropriation. The increase of \$15,000 thousand is a transfer from FY 1977 Aircraft Procurement to finance FY 1980, by Congressional direction, specified in P.L. 96-154.
3. Transferred from Other Accounts. \$7,600 thousand is proposed for transfer from other Other Procurement, Air Force FY 1980.

COMPARISON OF FY 1979 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1980 BUDGET WITH FY 1979 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1981 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS (In Thousands of Dollars)

	Program Requirements		Program Requirements Per 1981 Budget	Increase (+) or Decrease (-)
	Per 1980 Budget	Per 1981 Budget		
Ballistic Missiles	\$ 66,100	\$ 66,100		\$ N/C
Other Missiles	411,600	386,900		-24,700
Modification of In-Service Missiles	33,800	32,400		- 1,400
Spares and Repair Parts	61,300	61,300		N/C
Other Support	940,700	926,300		-14,400
Reimbursable Program	9,800	105,112		+95,312
Total Fiscal Year Program	\$1,523,300	\$1,578,112		\$+54,812

1. Ballistic Missiles (N/C)

2. Other Missiles (\$ -24,700) - AIM-7F Sparrow funds of \$4,300; AIM-9L Sidewinder funds of \$1,900 and AGM-45A Shrike funds of \$18,500 were reprogrammed to O&M.

3. Modification of In-Service Missiles (\$ -1,400) - Minuteman Class IV modification funds were reprogrammed to cover a shortfall in the Operations and Maintenance, Defense Agencies appropriation.

4. Spares and Repair Parts (N/C)

5. Other Support (\$ -14,400) - DMSP (\$ -15,099) was reduced by a decision to delay one spacecraft; AFSATCOM (\$ -4,300) was reduced by internal reprogramming to other programs due to a decision to delete procurement of DSCS III single channel transponders; Industrial Facilities (\$ +4,999) manufacturing technology program was increased as a result of the increased emphasis on the MX, AMRAAM and Cruise Missile programs.

6. Reimbursable Program (\$ +95,312) - This increase is because it was determined that reimbursements slated for the RDT&E appropriation were a proper charge to the Missile Procurement Appropriation.

COMPARISON OF FY 1979 FINANCING AS REFLECTED
IN FY 1980 BUDGET WITH THE FY 1979 FINANCING AS
SHOWN IN THE FY 1981 BUDGET

	(in Thousands of Dollars)		
	Financing Per FY 1980 Budget	Financing Per FY 1981 Budget	Increase (+) or Decrease (-)
Program Requirements (Total)-----	\$1,523,200	\$1,578,112	\$+54,812
Program requirements (Service account)-----	(1,513,500)	(1,473,000)	-40,500
Program requirements (Reimbursable)-----	(9,800)	(105,112)	+95,312
Less:			
Anticipated Reimbursements:-----	9,800	105,112	+95,312
Add:			
Transferred to other accounts-----	66,300	106,800	+40,500
Appropriation-----	\$1,579,800	\$1,579,800	-

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1979 program has been increased \$54,813 thousand since submission of the 1980 budget. Adjustments by category of financing are explained below:

1. Anticipated Reimbursements: The increase of \$95,312 thousand is due to receipt of actual customer orders in FY 1979.
2. Transferred to Other Accounts. \$29,000 thousand was transferred to Operation and Maintenance, Air Force FY 1979, \$6,500 thousand was transferred to CHAMPUS, FY 1979 and \$5,000 thousand was transferred to Claims, Defense FY 1979, in accordance with section 834 of the DoD Appropriation Act of 1979.

ANALYSIS OF UNOBLIGATED BALANCES - 30 SEPTEMBER 1981
SUMMARY BY CATEGORY
(In Millions of Dollars)

	<u>FY 1980</u>	<u>FY 1981</u>	<u>Total</u>	<u>% of Total</u> <u>Unobligated</u>
1. <u>Military Interdepartmental Purchase Requests:</u> (MIPRs)	\$23.0	\$140.0	\$163.0	11.9%
2. <u>Completing Contractual Arrangements:</u>				
a. Specification Definitions	37.8	230.7	268.5	19.6%
b. Price Redeterminations	49.0	298.9	347.9	25.4%
c. Definitization of Contracts	27.4	167.1	194.5	14.2%
3. <u>Full Funding Policy:</u>				
a. Delayed/Revised Program Release	38.1	231.8	269.9	19.7%
b. Engineering Changes	17.7	108.3	126.0	9.2%
TOTAL UNOBLIGATED FY 1981	\$193.0	\$1,176.8	\$1,369.8	

EXPLANATION

Procurement funds are available for obligation for three years because of the extensive lead time required to develop detailed specifications, issue Requests For Proposals (RFPs) and to negotiate and finalize contracts for procurement of investment equipment. Unobligated balances are required for programmed and needed items on which contracts have not reached the obligational stage by the end of the fiscal year because of the procurement process.

The following are illustrative of the reasons which will cause unobligated balances at the end of each fiscal year:

1. Military Interdepartmental Purchase Request (MIPRs) (\$163.0 million) - These documents are used to request one of the other military services to procure Air Force requirements in conjunction with their own or with those of another service. Funds to support these requests remain unobligated until notification of contract award is received from the other military service. Frequently, contractual arrangements will have been completed and the obligation incurred but notification from the other service is not received in time for recording in Air Force records prior to or at the end of a fiscal year.

2. Completing Contractual Arrangements:

a. Specification Definitions (\$268.5 million) - Unobligated funds result when specifications for newly introduced items cannot be definitized in time to permit contract negotiation prior to or at the end of the fiscal year.

b. Price Redeterminations (\$347.9 million) - Prices are redetermined at intervals throughout the life of a contract. Final obligation for contracts must await negotiations on agreed target-ceiling formulae. In most large contracts, the rewards and penalties of multiple incentives (cost, performance and schedule) cannot be determined and obligated prior to the end of the fiscal year. Funds are reserved for these purposes when upward adjustments seem likely; however, obligation does not occur until a formal redetermination has been agreed upon and the contract amended. Unobligated funds at year end result.

c. Definitization of Contracts (\$194.5 million) - Procurements of complex systems and large material orders may occasionally be initiated under letter contracts. The letter contract generates a partial obligation of the total program value with the balance remaining committed but unobligated pending definitization and negotiation of the detailed contract terms. These actions can carry over the end of a fiscal year and result in unobligated funds.

3. Full Funding Policy - This policy, enunciated in DoD Directive 7200.4 (October 30, 1969) provides that adequate appropriations and funds must be available in a given fiscal year for obligation, committed or set aside in a reserve account in an aggregate amount sufficient to complete the procurement of a specified number of end items and advance procurement for approved programs. Unobligated balances at the end of a fiscal year are a consequence of this policy and accrue in the following categories:

a. Delayed/Revised Program Release (\$269.9 million) - Adjustments in quantities or specifications of other equipment to meet changing situations or to exploit engineering improvements generally require prior approval of reprogramming requests which can delay program release and direction until well into the fiscal year, thus delaying the obligation of funds by the end of the fiscal year. Also, approved and funded programs are sometimes delayed/undirected beyond 30 September pending decision on an aspect of the program that has arisen requiring resolution before proceeding.

b. Engineering Changes (\$126.0 million) - Based on prior experience with systems of like nature and complexities, provision is made in procurement programs, as a percentage of the estimated cost of the item, to cover engineering improvements and design changes which will occur as a result of manufacturing experience or Air Force requirements. Engineering changes are not definitive requirements known in advance and they cannot be obligated until the change is authorized and directed. These changes occur throughout the life of the production contract and result in unobligated balances.

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO MINUTEMAN EXTENDED SURVIVABLE POWER

MODELS OF MISSILES AFFECTED LGM-30 (III)

DESCRIPTION/JUSTIFICATION THIS MODIFICATION CONSISTS OF REPLACING THE LEAD ACID BATTERIES IN MINUTEMAN LAUNCH FACILITIES WITH NEW POWER CELLS. THESE NEW CELLS ARE EXPECTED TO PROVIDE MINUTEMAN MISSILES WITH ABOUT OF EMERGENCY SURVIVABLE POWER VICE THE CURRENT DUE TO LACK OF ENDURANCE OF CURRENT POWER SYSTEMS, THIS MODIFICATION IS ESPECIALLY IMPORTANT TO THE SAC EMERGENCY WAR ORDER MISSION.

SCOPE OF PROGRAM	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	----	35	20.9	50	19.4	130	52.9	335	170.0	550	263.2
BASIS FOR COST ESTIMATE												
NONRECURRING			35	12.0	50	19.3	130	52.6	335	168.6	550	252.5
KITS				.3		.1		.2		1.1		1.7
DATA												
TOTAL			35	20.9	50	19.4	130	52.9	335	170.0	550	263.2
METHOD OF IMPLEMENTATION	INSTALLATION - CONTRACTOR/FIELD TEAM(S)											
LEAD TIME -	9 MONTHS											

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE
MODIFICATION TITLE AND NO MODERNIZE AIM-4F/G MISSILE FLD EQUIPMENT MN-670408

EFFECTS OF MISSILES AFFECTED AIM-4F/G MISSILE CONSOLES/F-106A/B MISSILE

DESCRIPTION/JUSTIFICATION REPLACE HIGH FAILURE CONSOLE SUBASSEMBLIES WITH SOLID STATE COMPONENTS.
APPROXIMATELY 70% OF ALL CONSOLE SPARE COMPONENTS ARE IN A REPAIRABLE STATE DUE TO THE
NONAVAILABILITY OF CONVENTIONAL VACUUM TUBE TYPE CIRCUIT COMPONENTS. REPAIR IS PRESENTLY
BEING ACCOMPLISHED BY CANNIBALIZATION OF SPARE CONSOLE COMPONENTS TO OBTAIN PARTS. MANY
CONSOLE SPARE COMPONENTS HAVE BEEN CANNIBALIZED TO THE POINT OF CONDEMNATION.

SCOPE OF PROGRAM

PRIORITY	FY-80		FY-81		FY-82		OUT/LAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	---	---	---	---	---	---	---	---
---	7	3.3	13	3.9	---	---	---	---	20	7.2
---	---	---	---	---	---	---	---	---	---	---
---	7	2.1	13	3.9	---	---	---	---	20	6.0
---	---	---	---	---	---	---	---	---	---	---
---	7	3.3	13	3.9	---	---	---	---	20	7.2

BASIS FOR COST ESTIMATE

KITS
DATA

TOTAL

METHOD OF IMPLEMENTATION - INSTALLATION - CONTRACTOR/FIELD TEAM(S)
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT. AIR FORCE

MODIFICATION TITLE AND NO. NUCLEAR SAFETY FEATURES, MN-28006A

MODELS OF MISSILES AFFECTED LGM-25C (TITAN II) MK-6 REENTRY VEHICLE

DESCRIPTION/JUSTIFICATION TO UPDATE TO THE STATE-OF-THE-ART THE NUCLEAR SAFETY FEATURES ON THE MK-6 REENTRY VEHICLE.

SCOPE OF PROGRAM

BASIS FOR COST ESTIMATE

NONRECURRING
KITS
DATA
SUPPORT EQUIP.

TOTAL

METHOD OF IMPLEMENTATION

INSTALLATION - DEPOT
LEAD TIME - 24 MONTHS

PRIOR	FY-80	FY-81	FY-82	OUTYEAR	T O T A L
QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
---	---	---	---	---	---
---	---	3.0	22 1.8	43 3.6	65 8.4
---	---	1.5	22 1.8	43 3.6	65 8.4
---	---	.2			.2
---	---	1.3			1.3
---	---	3.0	22 1.8	43 3.6	65 8.4

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO: TITAN II RTMN MN-590738

MODELS OF MISSILES AFFECTED: LGM-25C

DESCRIPTION/JUSTIFICATION: MODIFY THE TITAN II RADIO TYPE MAINTENANCE NETWORK (RTMN) BASE REPEATERS AND ADD BATTERY CHARGER FOR THE TRANSCIVERS. THE PRESENT SYSTEM HAS BEEN INSTALLED SINCE THE MISSILE SYSTEM BECAME OPERATIONAL. IT IS THE PRIMARY COMMUNICATION SYSTEM WHEN THE PROPELLANT TRANSFER SYSTEM (PTS) IS IN OPERATION AND SECONDARY SYSTEM WHEN MAINTENANCE IS BEING PERFORMED IN THE SILO. DUE TO THE AGE OF THE SYSTEM AND SAFETY ASPECT OF PTS OPERATION THIS MODIFICATION IS REQUIRED.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	1	1.0	20	3.2	34	3.2					55	7.4
NONRECURRING	1	.4	20	1.8	34	3.1					1	.5
KITS											54	4.9
DATA		.6										.6
TRAINER				1.4								1.4
TOTAL	1	1.0	20	3.2	34	3.2					55	7.4

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/FIELD TEAM
LEAD TIME - 18 MONTHS

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO SHRIKE FUZE ANTENNA IMPROVEMENT MN-19609B

MODELS OF MISSILES AFFECTED AGM-45A/B-6, -9

DESCRIPTION/JUSTIFICATION

A SERIOUS PROBLEM HAS BEEN DETECTED IN THE AGM-45 PROXIMITY FUZING SYSTEM.

INSTALLATION OF LIMITER DIODES IS REQUIRED TO CORRECT THIS PROBLEM.

SCOPE OF PROGRAM

SCOPE OF PROGRAM	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RASIS. FOR COST ESTIMATE	---	---	---	---	---	---	---	---	---	---	---	---
KITS	---	---	---	---	---	---	---	---	---	---	---	---
SUPPORT EQUIP.	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
METHOD OF IMPLEMENTATION	---	---	---	---	---	---	---	---	---	---	---	---
INSTALLATION - FIELD	---	---	---	---	---	---	---	---	---	---	---	---
LEAD TIME - 10 MONTHS	---	---	---	---	---	---	---	---	---	---	---	---

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO SHRIKE GRAVITY BIAS

MODELS OF MISSILES AFFECTED AGM-45 A/B-9

DESCRIPTION/JUSTIFICATION DURING INITIAL OPERATIONAL TEST AND EVALUATION

AND A MEASURABLE PROBABILITY OF KILL. THE DEFICIENCY WILL BE CORRECTED BY ADDING A GYRO
AND RELOCATING THE PRESSURE PORTS TO PROVIDE A GRAVITY BIAS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	200	2.2	500	4.7	1150	11.0					1850	17.9
NONRECURRING		.1										.1
KITS	200	1.9	500	4.7	1150	11.0					1850	17.6
DATA		.1										.1
SUPPORT EQUIP.		.1										.1
TOTAL	200	2.2	500	4.7	1150	11.0					1850	17.9

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/CONTRACTOR
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. MODIFY AGM-69A COMPUTER, MN-48005B

MODELS OF MISSILES AFFECTED AGM-69A

DESCRIPTION/JUSTIFICATION A LARGE PERCENTAGE OF THE CARRIER COMPUTER FAILURES ARE ATTRIBUTED TO CORROSION OF THE INTEGRATED CIRCUIT (IC) PACKAGES. THE CORROSION IS BOTH INTERNAL AND EXTERNAL TO THE PACKAGES. THIS CHANGE WOULD DEVELOP AND REPLACE THE EXISTING IC PACKAGES. THEREBY REDUCING "LOCK-UP" PROBLEMS. FAILURE TO IMPLEMENT THIS CHANGE MAY LEAD TO EVEN HIGHER FAILURE RATES AS THE AGM-69A SYSTEM LIFE IS EXTENDED.

SCOPE OF PROGRAM	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE												
NONRECURRING			1	3.9							1	3.9
KITS			8	1.0	144	12.4	249	22.6			401	36.0
DATA				.3								.3
SUPPORT EQUIP.				2.2								2.2
TOTAL			9	7.4	144	12.4	249	22.6			402	42.4
METHOD OF IMPLEMENTATION	INSTALLATION - ORG/INTERMEDIATE											
	LEAD TIME - 9 MONTHS											

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO. IMPROVED EMERGENCY ROCKET COMM SYSTEM MN-16525C

MODELS OF MISSILES AFFECTED: 494L PAYLOAD

DESCRIPTION/JUSTIFICATION DUE TO THE AGING OF THE SYSTEM MANY ELECTRONIC PARTS REQUIRED FOR REPAIR ARE NOT AVAILABLE AND/OR DIFFICULT AND COSTLY TO OBTAIN. MODIFICATION WILL INCORPORATE CURRENT STATE OF THE ART ELECTRONIC COMPONENTS WHICH ARE STANDARD PRODUCTION ITEMS AND AVAILABLE FROM MULTIPLE SOURCES, INTO PAYLOAD CONTROL-MONITOR CONSOLE CONTROL-MONITOR DATA TRANSFER AND ASSOCIATED SUPPORT EQUIPMENT.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	---	---	---	---	---	---	---	---	---	---	---	---
NONRECURRING	3	8.7	4	.6	16	2.7	15	3.8			3	8.7
KITS											35	7.1
DATA		1.6										1.6
TRAINER				.4								.4
SUPPORT EQUIP.		.1		.3		.4		.1				.9
TOTAL	3	10.4	4	1.3	16	3.1	15	3.9			38	18.7

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO BRINE CHILLER UNITS REPLACEMENT, MN-18543B

MODELS OF MISSILES AFFECTED LGM-30

DESCRIPTION/JUSTIFICATION ENVIRONMENTAL CONTROL SYSTEM BRINE CHILLER UNIT AND INSTRUMENT AIR COMPRESSOR LIFE STUDY REVEALED THE BRINE CHILLER AND INSTRUMENT AIR COMPRESSOR HAVE OPERATED BEYOND THEIR DESIGN AND ARE NOW WORN-OUT. THE PRESENT BRINE CHILLER AND INSTRUMENT AIR COMPRESSOR WILL BE REPLACED WITH NEW DESIGN'D BRINE CHILLER AND INSTRUMENT AIR COMPRESSOR. NEW BRINE CHILLERS WILL HAVE A SMALLER LOAD CAPACITY AND WILL REQUIRE LESS ELECTRICAL ENERGY. MODIFICATION WILL BE BY WING AND ENGINEERING IS REQUIRED FOR DIFFERENT WING CONFIGURATIONS.

SCOPE OF PROGRAM:

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	53	2.1	196	7.7	359	13.1	284	8.4	77	2.5	969	33.8
NONRECURRING		.6		1.0		1.8		8.1	77	2.5		4.0
KITS	53	1.2	196	4.9	359	10.0	284	8.1	77	2.5	969	26.7
DATA		.3		.7		.8		.3				1.8
TRAINER				.5		.5						1.3
TOTAL	53	2.1	196	7.7	359	13.1	284	8.4	77	2.5	969	33.8

METHOD OF IMPLEMENTATION INSTALLATION - CONTRACTOR/FIELD TEAM(S)
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO. SYLVANIA SECURITY SYSTEM, MN-56149B

MODELS OF MISSILES AFFECTED LGM-30 F/G, WINGS II-V

DESCRIPTION/JUSTIFICATION MODIFICATION WILL CONSIST OF CHANGING THE OUTER ZONE ALARM CONTRL DRAWER LOGIC CIRCUITRY TO DISCRIMINATE AGAINST NUISANCE ALARMS CAUSED BY ANIMALS, BIRDS, WEEDS, RAIN AND SNOW, AND TO ALARM ONLY ON HUMAN INTRUDERS. TESTS OF A NEW DESIGN PROCESSOR HAVE DEMONSTRATED A REDUCTION OF NUISANCE ALARMS OF 80 PERCENT CAN BE ACHIEVED. MODIFICATION WILL BE ACCOMPLISHED IN THREE PHASES. PHASE I AND II ARE DEVELOPMENT AND TEST PHASES. PHASE III IS THE PRODUCTION PHASE.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	11	1.1			671	3.5					682	4.6
NONRECURRING	11	1.1			671	3.4					11	1.1
KITS		*				.1					671	3.4
DATA												.1
TOTAL	11	1.1			671	3.5					682	4.6

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT/CONTRACTOR
LEAD TIME - 15 MONTHS

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO BOEING SECURITY SYSTEM, MN-58056C

MODELS OF MISSILES AFFECTED: LGM-30F/G WING I SQD 20. WING VI

DESCRIPTION/JUSTIFICATION: MODIFICATION WILL CONSIST OF CHANGING THE DRAWER LOGIC CIRCUITRY TO DISCRIMINATE BETWEEN NUISANCE ALARMS CAUSED BY ANIMALS BIRDS WEEDS AND RAIN AND SNOW AND THOSE VALID ALARMS CAUSED BY HUMAN INTRUDERS. EACH NUISANCE ALARM IS RESPONDED TO BY A TWO MAN TEAM. MANNING CRITERIA IS FOR RESPONSE TO 84 ALARMS PER WEEK. AN AVERAGE OF 400 ALARMS PER WEEK ARE BEING EXPERIENCED. THIS BECOMES UNMANAGEABLE FROM MANNING AND COST STANDPOINTS.

SCOPE OF PROGRAM

	PRIOR		FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE	---	----	---	----	10	2.0	350	9.5	---	----	360	11.5
NONRECURRING			10	1.1							10	1.1
KITS				.7			350	8.5			350	9.2
DATA				.2				1.0				1.2
TOTAL	-----	-----	10	2.0	350	9.5	-----	-----	-----	-----	360	11.5

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 18 MONTHS

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO IMPROVE ROCKET MOTORS MN-58204B

MODELS OF MISSILES AFFECTED: LGM-30F (MINUTEMAN)

DESCRIPTION/JUSTIFICATION THE LGM-30F THIRD STAGE ROCKET MOTOR (M57A1) HAS DEVELOPED A FLAP/BOOT DEBOND IN THE IGNITER PORT AS A RESULT OF AGE. FLAP-TO-BOOT FAILURES ARE BEING FOUND ON SOME STAGE III ROCKET MOTORS DURING ROUTINE X-RAY/VISUAL INSPECTION. THERE ARE 96 MOTORS INVOLVED HAVING A REPLACEMENT COST OF \$48 000 000. A MODIFICATION IS REQUIRED TO CORRECT THIS CONDITION AND MAINTAIN THE MISSILE IN OPERATIONAL STATUS.

SCOPE OF PROGRAM:

PRIOR	FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	48	2.2	---	---	---	---	96	4.4
---	---	---	1	.1	---	---	---	---	1	.1
---	---	---	47	2.1	48	2.2	---	---	95	4.3
---	---	---	---	*	---	---	---	---	---	*
---	---	---	48	2.2	48	2.2	---	---	96	4.4

BASIS FOR COST ESTIMATE:

NONRECURRING
KITS
DATA

TOTAL

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE
MODIFICATION TITLE AND NO. MOD 7/8 INSTR UNIT TEST SETS, MN-590758

MODELS OF MISSILES AFFECTED LGM-30

DESCRIPTION/JUSTIFICATION THE TEST SETS ARE USED TO CHECKOUT THE MOD 7/8 INSTRUMENTATION PACKAGES THAT ARE INSTALLED ON MISSILES FIRED FROM VANDENBERG AFB. THE EXISTING ELECTRONIC COMMERCIAL EQUIPMENT (ECE) IN THE MOD 7/8 INSTRUMENTATION TEST SETS ARE BECOMING UNSTABLE AND IN NEED OF MAJOR REPAIR. THESE UNITS ARE NO LONGER MANUFACTURED AND PARTS ARE NOT AVAILABLE FOR PROCUREMENT. ACTION REQUIRED TO EVALUATE CURRENT AVAILABLE ELECTRONIC EQUIPMENT TO DETERMINE AN ACCEPTABLE REPLACEMENT WHICH BEST MEETS THE TEST SETS NEEDS.

SCOPE OF PROGRAM

PRIOR	FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	---	---	---	---	---	---	---	---
			12	2.7					12	2.7
			1	1.0					1	1.0
			11	1.3					11	1.3
				.4						.4
			12	2.7					12	2.7

BASIS FOR COST ESTIMATE

NONRECURRING
KITS
DATA

TOTAL

METHOD OF IMPLEMENTATION INSTALLATION - CONTRACTOR
LEAD TIME - 9 MONTHS

MODIFICATION OF MISSILES
FY-81 PROGRAM

FY-81 APPROPRIATION MISSILE PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO AIM 7 UPDATE

MODELS OF MISSILES AFFECTED AIM-7F SPARROW

DESCRIPTION/JUSTIFICATION IN JAN 78, A PERFORMANCE OPTIMIZATION PROGRAM WAS INITIATED TO CORRECT DEFICIENCIES IDENTIFIED IN FOLLOW ON TEST & EVALUATION AND TO IMPROVE PERFORMANCE IN CLUTTER AND ELECTRONIC COUNTER MEASURES ENVIRONMENT. SPECIFICALLY FOUR CHANGES ARE PLANNED:

SCOPE OF PROGRAM

PRIORITY	FY-80		FY-81		FY-82		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
200	200	5.0	850	7.1	850	7.1	2472	20.8	4372	40.0
NONRECURRING KITS										
SUPPORT EQUIP.										
TOTAL	200	5.0	850	7.1	850	7.1	2472	20.8	4372	40.0

METHOD OF IMPLEMENTATION INSTALLATION - CONTRACTOR
LEAD TIME - 12 MONTHS

OTHER PROCUREMENT, AIR FORCE

For procurement and modification of equipment (including ground guidance and electronic control equipment, and ground electronic and communication equipment), and supplies, materials, and spare parts therefor, not to exceed five hundred and ninety passenger motor vehicles for replacement, and forty for augmentation, and expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land without regard to Section 9774 of title 10, United States Code, for the foregoing purposes, and such lands and interests therein may be acquired, and construction prosecuted thereon prior to the approval of Title as required by Section 355, Revised Statutes, as amended: reserve plant and Government and contractually-owned equipment layaway \$2,972,687 available for obligation until September 30, 1983 (5 U.S.C. 3109; 10 U. S. C. 2110, 2353, 2386, 8012, 9505, 9531-32, 33 U.S.C. 638a, 638c, 649c, 718, 50 U.S.C. 491-94 Department of Defense Appropriation Act 1980)

Other Procurement, Air Force

25 JAN 80

Program and Financing (in thousands of dollars)		Budget plan (amounts for procurement actions programmed)				Obligations	
Identification code	57-3080-0-1-051	1979 actual	1980 est.	1981 est.	1979 actual	1980 est.	1981 est.
Program by activities:							
Direct:							
1.	Munitions and associated equipment	305,276	330,862	285,203	305,500	244,300	313,044
2.	Vehicular equipment	134,490	157,400	167,699	132,041	127,382	165,177
3.	Electronics and telecommunications equipment	524,764	589,159	707,759	528,672	506,755	744,525
4.	Other base maintenance and support equipment	1,388,180	1,555,300	1,801,826	1,390,629	1,539,246	1,833,807
Total direct		2,352,710	2,632,741	2,972,687	2,354,842	2,417,683	2,855,573
Reimbursable program (total)		157,244	252,453	193,774	136,640	217,317	182,427
Total		2,509,954	2,885,194	3,166,461	2,491,482	2,635,000	3,038,000
Financing:							
Offsetting collections from:							
11.00	Federal funds	-107,082	-176,700	-179,700	-86,960	-176,700	-179,700
13.00	Trust funds	-50,232	-70,753	-9,074	14,666	-70,753	-9,074
14.00	Non-Federal sources	-50	-5,000	-5,000	-99	-5,000	-5,000
21.40	Unobligated balance available, start of year						
	For completion of prior year budget plans						
	Available to finance new budget plans	-37,000	-10,600		-715,315	-568,520	-838,714
23.40	Reprogramming from or to prior year budget plans	-60,055			-37,000	-10,600	
	Unobligated balance transferred to other accounts	5,965					
24.40	Unobligated balance available, end of year				5,965		
	For completion of prior year budget plans						
	Available to finance subsequent year budget plans				589,520	838,714	986,175
25.00	Unobligated balance lapsing	10,600	10,600		10,600	10,600	
	Budget authority	2,363,150	2,632,741	2,972,687	2,363,150	2,632,741	2,972,687
Budget authority:							
40.00	Appropriation	2,362,250	2,634,031	2,972,687	2,362,250	2,634,031	2,972,687
41.00	Transferred to other accounts	-36,100	-14,990		-36,100	-14,990	
43.00	Appropriation (adjusted)						
50.01	Reappropriation	2,326,150	2,619,141	2,972,687	2,326,150	2,619,141	2,972,687
		37,000	13,600		37,000	13,600	
Relation of obligations to outlays:							
71.00	Obligations incurred, net				2,419,291	2,382,547	2,825,426
72.40	Obligated balance, start of year				1,434,931	1,642,773	1,671,320
74.40	Obligated balance, end of year				-1,642,773	-1,671,320	-1,936,646
77.00	Adjustments in expired accounts				19,013		
90.00	Outlays				2,230,361	2,354,000	2,561,000

Other Procurement, Air Force

28 JAN 80

Object Classification (in thousands of dollars)

Identification code	57-3080-0-1-051	1979 actual	1980 est.	1981 est.
31.0 Direct obligations:				
Equipment		2,354,842	2,417,683	2,856,573
Total direct obligations		2,354,842	2,417,683	2,856,573
31.0 Reimbursable obligations:				
Equipment		136,640	217,317	162,427
Total obligations		2,491,482	2,635,000	3,019,000

28 JAN 80

Other Procurement, Air Force

Program and Financing (in thousands of dollars)

1977 Fiscal year program
Obligations

Identification code	57-3080-0-1-051	Budget plan (amounts for procurement actions programmed)	
		1979 actual	1980 est. 1981 est.

Program by activities:

- Direct:
1. Munitions and associated equipment
 2. Vehicular equipment
 3. Electronics and telecommunications equipment
 4. Other base maintenance and support equipment

Total direct

Reimbursable program (total)

10.00 Total

Financing:

Offsetting collections from:

11.00 Federal funds

13.00 Trust funds

21.40 Unobligated balance available, start of year:

For completion of prior year budget plans

Reprogramming from or to prior year budget plans

25.00 Unobligated balance lapsing

Budget authority

21,474
5,605
87,073
4,360
118,512
5,513
124,025

14,550
20,727

-213,492
54,090

Other Procurement, Air Force

26 JAN 60

Program and Financing (in thousands of dollars)		1978 Fiscal Year Program	
Identification code	57-3080-0-1-051	Budget plan (amounts for procurement actions programmed)	
		1979 actual	1980 est.
Program by activities:			
Direct:			
1.	Munitions and associated equipment	20,694	31,700
2.	Vehicular equipment	29,266	9,282
3.	Electronics and telecommunications equipment	123,898	114,148
4.	Other base maintenance and support equipment	52,429	13,026
Total direct		226,289	168,156
Reimbursable program (total)		26,586	25,210
10.00	Total	252,875	193,366
Financing:			
Offsetting collections from:			
11.00	Federal funds	5,482	
13.00	Trust funds	44,173	
14.00	Non-federal sources	-19	
21.40	Unobligated balance available, start of year:		
	For completion of prior year budget plans	-501,823	-193,366
	Available to finance new budget plans	-37,000	
23.40	Reprogramming from or to prior year budget plans		
	Unobligated balance transferred to other accounts	5,985	
24.40	Unobligated balance available, end of year:		
	For completion of prior year budget plans	193,366	
25.00	Unobligated balance lapsing	37,000	
Budget authority			

Other Procurement, Air Force

26 JAN 60

Program and Financing (in thousands of dollars)		1960 Fiscal year program		
Identification code	57-3060-0-1-051	Obligations		
		Budget plan (amounts for procurement actions programmed)		
		1979 actual	1981 est.	1981 est.
Program by activities:				
Direct:				
1.	Munitions and associated equipment	330,862		187,600
2.	Vehicle equipment	157,400		50,400
3.	Electronics and telecommunications equipment			
4.	Other base maintenance and support equipment	589,159		346,899
				128,200
		1,955,300		1,482,087
				12,419
		2,632,741		2,104,666
		252,453		150,000
				80,029
		2,885,194		2,284,666
				375,246
Total direct				
Reimbursable program (total)				
10.00	Total			
Financing:				
Offsetting collections from:				
11.00	Federal funds	-176,700		-176,700
13.00	Trust funds	-70,753		-70,753
14.00	Non-federal sources	-5,000		-5,000
21.40	Unobligated balance available, start of year:			
	For completion of prior year budget plans			
24.40	Unobligated balance available, end of year:			
	For completion of prior year budget plans			
				-630,528
				252,290
		2,632,741		2,632,741
Budget authority				
Budget authority:				
40.00	Appropriation	2,634,031		2,634,031
41.00	Transferred to other accounts	-14,890		-14,890
43.00	Appropriation (adjusted)			
50.01	Reappropriation	2,619,141		2,619,141
		13,600		13,600

Other Procurement, Air Force

28 JAN 80

Program and Financing (in thousands of dollars)		1981 Fiscal year program		
Identification code	57-3080-0-1-051	Obligations		
		Budget plan (amounts for procurement actions programmed)		
		1979 actual	1980 est.	1981 est.
Program by activities:				
Direct:				
1.	Munitions and associated equipment		285,203	188,930
2.	Vehicular equipment		167,899	107,455
3.	Electronics and telecommunications equipment		707,759	452,980
4.	Other base maintenance and support equipment		1,801,826	1,611,201
Total direct			2,972,687	2,360,566
Reimbursable program (total)			193,774	72,000
Total			3,166,461	2,432,566
Financing:				
Offsetting collections from:				
11.00	Federal funds		-179,700	-179,700
13.00	Trust funds		-9,074	-9,074
14.00	Non-federal sources		-5,000	-5,000
24.40	Unobligated balance available, end of year:			
	For completion of prior year budget plans			733,895
Budget authority			2,972,687	2,972,687

INTRODUCTORY STATEMENT

DIRECT BUDGET PLAN - OTHER PROCUREMENT, AIR FORCE

	(In Thousands of Dollars)		
	<u>FY 1980</u>	<u>FY 1981</u>	<u>Difference</u>
<u>BUDGET ACTIVITY</u>			
Munitions	330,882	295,203	- 35,679
Vehicles	157,400	167,899	+ 10,499
Electronics and Telecommunications	589,159	707,759	+118,600
Other Base Maint & Support Equip	<u>1,555,300</u>	<u>1,801,826</u>	<u>+246,526</u>
TOTAL DIRECT PROGRAMS	<u>2,632,741</u>	<u>2,972,687</u>	<u>+339,946</u>

The Other Procurement, Air Force (OPAF), Appropriation provides the central procurement of all major ground equipment except for that equipment which is peculiar to the support of individual airborne weapon systems. Provision is also made for procurement of the spares and repair parts, supplies and materials, modification, and industrial facilities integral to the procurement programs. It also provides for local procurement of equipment items costing \$3,000 or more, not centrally procured.

The appropriation consists of four budget activities: (1) Munitions and Associated Equipment; (2) Vehicular Equipment; (3) Electronics and Telecommunications Equipment, and (4) Other Base Maintenance and Support Equipment.

The total direct budget plan for FY 1981 is \$2,972.7 million, an increase of \$339.9 million over the direct budget plan for FY 1980 as shown above. This increase is a result of the following changes:

Munitions - Net decrease is a result of numerous adjustments most significant of which are 30MM and Rockete decreases (\$59.0 million) offset by GBU-15 and BSU-50 increases.

Vehicles - \$10.5 million increase accommodates greater emphasis on readiness vehicles such as flight line cargo-utilities vehicles to support fighter/bomber and missile missions.

Electronic and Telecommunications Equipment - \$118.6 million net increase associated with programs such as the Defense Support Program, Joint Tactical Communications Program, and BMEWS upgrade.

Other Base Support Equipment - \$12.9 million increase for new requirements not now included in the FY 1980 program, a net increase of \$38.9 million in on-going programs, and an increase of \$120.9 million for Selected Activities, and an increase of \$73.8 million for Special Update program.

New obligational authority equal to the amount of the direct budget plan is required to finance the planned FY 1981 program.

FY 1981 HIGHLIGHTS

Program requirements for Munitions and Associated Equipment are \$295.2 million, a decrease of \$35.7 million under FY 1980 due to the deletion of caliber .38 cartridges, and a reduction in 20mm and other on-going program requirements. The new program requirements in FY 1981 includes: CCU-44/B Impulse Cartridge, BSU-50 Inflatable Retarder, and B-83 Training Bombs.

Program requirements for Vehicular Equipment are \$167.9 million, an increase of \$10.5 million over the program for FY 1980. The FY 1981 program will provide two Rapid Runway Repair Sets for use in Europe, continue the program to modernize Red Horse squadrons, procure armored vehicles for nuclear security forces, and improve NATO interoperability by procuring European non-tactical vehicles for use in Europe. The program also provides a slight reduction of the backlog of overaged vehicles, including passenger carrying.

Program requirements for Electronic and Telecommunications equipment are \$707.8 million, an increase of \$118.6 million over the FY 1980 program. The FY 1981 program continues the Defense Support Program, Joint Tactical Communication Program and the RMEWS upgrade.

Program requirements for Other Base Maintenance and Support Equipment are \$1,801.8 million, an increase of \$246.5 million over the FY 1980 program. Selected Activities realized an increase of \$120.9 million. New items in FY 1981 account for \$12.6 million, for procurement of Portable Runway Lighting Sets, Tactical Shelters (S-530), and Productivity Investments.

The individual budget activity justifications elaborate on the FY 1981 program requirements and provide additional detail on the above outlined increases.

SUMMARY OF REQUIREMENTS	(In Thousands of Dollars)		
	FY 1979 Actual	FY 1980 Actual	FY 1981 Estimate
Munitions and associated equipment-----	\$ 305,276	\$ 330,882	\$ 295,203
Vehicular Equipment-----	134,490	157,400	167,899
Electronic and telecommunications equipment-----	524,764	582,159	707,759
Other base maintenance and support equipment-----	1,388,180	1,555,300	1,801,826
TOTAL DIRECT PROGRAM	2,352,710	2,632,741	2,972,687
Reimbursable program-----	157,244	252,453	193,774
TOTAL PROGRAM REQUIREMENTS (CURRENT),	2,509,954	2,885,194	3,166,461
Less: Portion of program to be obligated in subsequent fiscal years-----	395,154	630,528	733,895
Plus: Obligations incurred against prior year program funds-----	376,882	380,334	586,434
TOTAL OBLIGATIONS-----	2,491,682	2,635,000	3,019,000

Direct Program Requirements - FY 1981 - \$295,203
 Direct Program Requirements - FY 1980 - \$330,882
 Direct Program Requirements - FY 1979 - \$305,276

ACTIVITY: Munitions and Associated Equipment

PART I - PURPOSE AND SCOPE

Provides munitions for Tactical and Strategic Forces including: munitions and associated equipment, armament training devices, spares and repair parts, and equipment modifications. This materiel is required for: (1) the training of aircrews in weapon employment, (2) maintaining pilot/crew combat proficiency; (3) training weapons personnel in maintenance, storage, movement, assembly, and loading of munitions; and (4) the procurement of War Reserve Materiel (WRM) to meet specified Inventory Objectives.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1981 Program includes funds for the procurement of Small Arms Ammunition, 20MM Training Cartridges, 30MM Training/High Explosive Incendiary/Armor Piercing Incendiary Cartridges; Practice Bombs (BDU-33, MK-82, BDU-38), Guided Bombs, Flares and Fuzes. These funds will provide for procurement of training, base defense, and War Reserve Materiel (WRM) Munitions and associated equipment.

The following table summarizes the program requirements for each of the major categories of munitions and associated equipment in the past, current and budget year programs.

DIRECT PROGRAM REQUIREMENTS
(In Thousands of Dollars)

	<u>1979</u>	<u>1980</u>	<u>1981</u>
1. Rockets and Launchers			
2. Cartridges	12,103	6,197	571
3. Bombs	154,180	194,485	138,696
4. Targets	64,860	78,303	84,293
5. Other Items	658	3,185	7,074
6. Fuzes	35,185	22,595	41,506
7. Other Weapons	37,946	26,117	23,063
	<u>344</u>	<u>-</u>	<u>-</u>
Total Direct Program Requirements	305,276	330,882	295,203

Rockets and Launchers - Provides for procurement of practice rockets and miscellaneous rocket components to support training requirements.

Cartridges - Provides for continued procurement of 20MM training cartridges used in tactical aircraft guns, 30MM Training/High Explosive Incendiary (HEI), Armor Piercing Incendiary (API) Cartridges used in the A-10 aircraft and MXU-4A/A Engine Starters.

Bombs - The FY 1981 program provides for procurement of Laser Bomb Guidance Kits and several practice bombs as well as initial procurement of the BSU-50 Air Inflatable Retarder, and procurement of the GBU-15.

Targets - Provides for procurement of aerial tow targets for air-to-air gunnery training.

Other Items - Provides for procurement of a variety of flares, Spares and Repairs Parts, and Modification.

Fuzes - Provides for procurement of the FMU-112 impact or short delay fuze for retarded bombs, the FMU-81 impact short delay fuze for laser guided bombs, and the MK-339 Mechanical Time Fuze for cluster munitions.

(In Thousands of Dollars)

Direct Program Requirements - FY 1981	- \$167,899
Direct Program Requirements - FY 1980	- \$157,400
Direct Program Requirements - FY 1979	- \$134,490

ACTIVITY: Vehicular Equipment

PART I - PURPOSE AND SCOPE

Provide for all classes and types of direct mission related vehicles to support operational readiness of the active and reserve forces, including the capability to sustain a wartime surge of forces for the length of the conflict. Examples of vehicles types are material handling equipment, refuelers, aircraft launch and recovery vehicles, and fire fighting equipment. Also included are vehicles to support base operations.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Provides for the procurement of critical materiel handling equipment, the replacement of old and unreliable support vehicles, the upgrading of combat engineering capability, improvement of aircraft launch and recovery support, and replacement of overage and uneconomical vehicles in order to improve peacetime efficiency.

The following table summarizes the program requirements for each of the major categories of equipment in the past, current and budget year programs.

DIRECT PROGRAM REQUIREMENTS
(In Thousands of Dollars)

	<u>1979</u>	<u>1980</u>	<u>1981</u>
1. Passenger Carrying Vehicles	\$ 3,597	\$ 5,045	\$ 15,568
2. Cargo and Utility Vehicles	48,747	46,519	61,671
3. Special Purpose Vehicles	25,976	44,826	41,098
4. Firefighting Equipment	9,525	5,258	4,171
5. Materials Handling Equipment	18,124	31,371	22,089
6. Base Maintenance Support	<u>28,521</u>	<u>24,381</u>	<u>23,302</u>
Total Direct Program Requirements	\$134,490	\$157,400	\$167,899

Passenger Carrying Vehicles - Provides for replacement of unreliable ambulances and buses which have a high coverage rate and excessive costs to repair and maintain. The FY 1981 program is \$10.6 million more than FY 1980, however, this category represents less than 10% of the entire vehicle program.

Cargo and Utility Vehicles - Provides for procurement of general purpose and tactical cargo vehicles which make up the backbone of the intra-base cargo distribution system, as well as provides support to off base operating locations in a tactical environment. This category consists of key readiness vehicles which are direct aircraft munitions and missile support equipment. The FY 1981 request is \$15.2 million more than FY 1980 because of increased emphasis on procurement of these readiness related vehicles.

Special Purpose Vehicles - The FY 1981 request is \$3.8 million less than FY 1980 because of reduced aircraft refueling truck procurement. Provides for replacement of maintenance trucks, aircraft towing tractors, and for the procurement of security response vehicles required to protect nuclear sites, and equipment needed to support increased wartime aircraft sorties in NATO and Korea.

Firefighting Equipment - Provides equipment required for aircraft crash and rescue service and for structural protection of base property. The FY 1981 request is \$1.1 million less than FY 1980 because of reduced procurement of the P-12 structural fire truck.

Materials Handling Equipment - Provides for procurement of 463L system forklifts and cargo loaders to support aerial port and munitions operations. The FY 1981 request is \$9.3 million less than FY 1980 primarily due to the buyout of wide-body aircraft cargo loading elevators.

Base Maintenance Support Equipment - Provides funding for construction and maintenance equipment required for airfield and ground maintenance. This category also includes equipment required to upgrade Rapid Runway Repair and Red Horse units. The FY 1981 program is \$1.1 million less than FY 1980 primarily due to the buyout of snow removal trucks in FY 1980.

(In Thousand of Dollars)
 Direct Program Requirements - FY 1981 - \$707,759
 Direct Program Requirements - FY 1980 - \$589,159
 Direct Program Requirements - FY 1979 - \$524,764

ACTIVITY: Electronic and Telecommunications Equipment

PART I - PURPOSE AND SCOPE

Provides electronic and telecommunications systems for command and control of the operational forces, the detection of hostile forces, and Air Force-wide communications.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The funds requested provide for procurement of items of equipment and modifications kits, peculiar test and maintenance equipment for electronic and telecommunications systems, subsystems, and supporting activities required for effective command and control of the communications with the forces, wherever deployed. Provision is also made for the supporting structure requirements, such as enroute and terminal navigational and landing guidance, intelligence, and security of Air Force activities, facilities and personnel. Also included are items such as communications and navigation radio equipment, landline communications equipment, detection and surveillance radars, communications security devices, data processing and display equipment, meteorological equipment, peculiar test equipment used in the operation and maintenance of these systems, and the spares, repair parts, components, and modification kits needed for assurance of effective and continued operation.

The following table summarizes the program requirements for each of the major categories of equipment in the past, current and budget year programs:

		<u>DIRECT PROGRAM REQUIREMENTS</u> (In Thousands of Dollars)		
		<u>1979</u>	<u>1980</u>	<u>1981</u>
1.	Communications Security Equipment			
2.	Intelligence Programs	27,334	37,972	29,660
3.	Electronics Programs	28,940	13,875	17,216
4.	Special Comm - Electronics Projects	50,914	83,045	177,873
5.	Air Force Communications	156,907	240,178	152,420
6.	DCA Programs	48,396	42,386	116,771
7.	Organization and Base	50,191	27,920	25,578
8.	Modifications	142,639	113,507	114,001
		<u>19,443</u>	<u>25,276</u>	<u>74,240</u>
	Total Direct Program Requirements	524,764	589,159	707,759

Communications Security Equipment - \$29.7 million is requested for Communications Security Equipment. This program is for the procurement and installation of devices for encryption and decryption of communications, to ensure security of voice, teletype and data communications. Included is equipment to secure data networks and tactical radios. The FY 1981 request is approximately \$8 million less than the FY 1980 program because of reduced FY 81 requirements to secure new tactical equipment entering the inventory.

Intelligence Programs - This program provides the equipment for worldwide USAF collection, processing, and reporting of intelligence information. The FY 1981 program is approximately \$3 million more than the FY 1980 program primarily because of increased requirements for the Intelligence Data Handling System.

Electronics Programs - This program includes electronic equipment to augment existing systems and to replace obsolete equipment. Included is equipment for Tactical Air Control Systems, the Defense Satellite Program, and tracking of space objects. The FY 1981 program increases by approximately \$90 million because of planning procurements for the Defense Support Program, the tactical Air Control Systems and the USAF Command and Control program.

Special Comm - Electronics Programs - This program procures electronic equipment to satisfy specific mission requirements. Included are Automatic Data Processing Equipment; Air Base Defense Systems and equipment for operational range improvements. The FY 1981 program decrease of approximately \$88 million over FY 1980 is attributable to decreased procurements for the Spanish AC&W (Combat Grande), Air Base Defense programs and completion of the Joint Surveillance System procurement.

Air Force Communications - These programs are the primary Air Force Communications terminal equipments used to provide common user facilities. Included are Air Force satellite communications terminals, equipment used in communications centers, and inter-operable tactical ground equipment. The FY 1981 program increase of approximately \$74 million over FY 1980 is due to increased procurement for the Telephone Exchange, TRI-TAC, and ground mobile force terminal programs.

DCA Programs - These programs are in support of the Defense Communications System. Included are the Wideband Systems Upgrade and the Automated Technical Control program.

Organization and Base - Included in this program is electronic equipment for individual Air Force units and bases. It includes training equipment, mobility radios, NATO Readiness Enhancement equipment, spares and repair parts.

Modifications - This program is for the modification of existing electronic equipment to increase capability, provide a new capability, or correct an operational deficiency. The FY 1981 program increases by approximately \$49 million because of improvements to the Ballistic Missile Early Warning System.

(In Thousands of Dollars)

Direct Program Requirements - FY 1981 - \$1,801,826
Direct Program Requirements - FY 1980 - \$1,555,300
Direct Program Requirements - FY 1979 - \$1,388,180

ACTIVITY: Other Base Maintenance and Support Equipment

PART I - PURPOSE AND SCOPE

Provides ground support equipment, not otherwise provided with the major weapons systems, for operational forces and supporting structure. Included are test equipment, personal safety and rescue equipment, medical and dental equipment, and automated materials handling equipment for improving the efficiency of the Air Force supply and maintenance system.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The funds requested provide for (1) test equipment for maintenance, calibration, repair and checkout of weapon systems, electronics equipment and communications apparatus; (2) personnel safety items to safeguard the lives of aircrew and other personnel; (3) equipment for repair and overhaul at maintenance shops, mechanization of materials handling systems at Air Force bases depots and passenger and cargo terminals; (4) electric power equipment and area lighting; (5) base support equipment, base level procurement of equipment with a unit cost of \$3,000 or more for medical, food service, repair, and administrative activities; (6) special support projects including national foreign intelligence programs, Air Force elements of the atomic energy surveillance program and industrial preparedness products to support production of equipment funded in this appropriation; and (7) modification kits required to assure effective and continuous operation of equipment. Requirements are computed considering world-wide authorizations and available assets, including repairables and those on order.

The following table summarizes the program requirements for each of the major categories of equipment in the past, current and budget year program.

DIRECT PROGRAM REQUIREMENTS
(In Thousands of Dollars)

	<u>1979</u>	<u>1980</u>	<u>1981</u>
1. Test Equipment	\$ 30,322	\$ 31,975	\$ 35,547
2. Personal Safety & Rescue Equipment	21,068	21,466	24,230
3. Depot Plant & Materials Handling Equipment	19,358	24,175	33,744
4. Electrical Equipment	1,992	6,274	7,287
5. Base Support Equipment	74,354	77,729	107,970
6. Special Support	<u>1,241,086</u>	<u>1,393,681</u>	<u>1,593,048</u>
Total Direct Program Requirements	\$1,388,180	\$1,555,300	\$1,801,826

Major procurements planned in FY 1981 include:

Test Equipment - Provides calibration packages for Air Force bases and Air Logistic Centers, Precision Measurement Equipment Laboratories and Metrology Center, oscilloscopes, electronic counters, spectrometric equipment and other items costing less than \$900,000 each. The FY 1981 program is slightly more than FY 1980, for escalation and for the procurement of lower than \$900,000 test equipment items.

Personal Safety and Rescue Equipment - Provides anti-gravity garments, chemical and biological defense protection equipment and miscellaneous items costing less than \$900,000 each. The FY 1981 program is slightly more than FY 1980 with greater emphasis placed upon chemical and biological defense protection equipment.

Depot Plant and Materials Handling Equipment - Includes Base Mechanization Equipment (BME) for five Air Logistic Centers and various air bases; Air Terminal Mechanization equipment for one COMUS and two overseas air freight terminals; and other maintenance and repair shop equipment costing less than \$900,000 each. The increase in FY 1981 program is an effort to update the BME and modernize shop equipment at bases and depots.

Electrical Equipment - Provides generators and other electrical items costing less than \$900,000 each. The FY 1981 program represents a slight increase over FY 1980.

Base Support Equipment - Provides local purchase investment equipment with a unit cost of \$3,000 or more and centrally procured equipment such as aircraft arresting barriers, cargo pallets, photographic equipment and spares and repair parts. The FY 1981 increase of \$30.2 million is mainly the result of increasing Medical & Dental Equipment, Base Procured Equipment and Productivity Enhancement while initiating a buy of Tactical Shelters, Productivity Investment, and Portable Aircraft Lighting Sets.

Special Support Projects - Includes intelligence equipment and systems, industrial preparedness, and equipment modifications. An increase in the program for Selected Activities and the special update program along with increases for various line items within the program accounts for the increase of \$199.4 million in this program over FY 1980.

1980 PROGRAM

COMPARISON OF REQUIREMENTS AS SHOWN IN FY 1980 BUDGET WITH REQUIREMENTS AS SHOWN IN FY 1981 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Program Requirements 1980 Budget	Program Requirements 1981 Budget	Increases (+) or Decreases (-)
Munitions and Associated Equipment	\$ 335,000	\$ 330,882	- 4,118
Vehicular Equipment	157,400	157,400	0
Electronics & Telecommunications Equipment	619,400	589,159	- 30,241
Other Base Maintenance & Support Equipment	1,559,300	1,555,300	- 4,000
Reimbursable Program	127,120	252,453	+125,333
Total Fiscal Year Program	\$2,798,220	\$2,885,194	+ 86,974

EXPLANATION BY BUDGET ACTIVITY

1. Munitions and Associated Equipment (\$-4.1 million)
Congress deleted the MJU-7B infrared countermeasures flare (\$-4.1 million)
2. Vehicular Equipment (N/C)
Various internal program adjustments have been made, with no net change in the total vehicle program.
3. Electronics and Telecommunications Equipment (\$-30 million)
Congress reduced the program by \$12 million. This included Intelligence Data Handling System (\$3 million), ADPE (\$2 million), Tactical Air Control System Improvements (\$2 million), Combat Supply System (\$5 million). \$18 million is being identified for reprogramming to other higher priority DOD programs, \$7 million to other DOD agencies, \$7 million to Missile Procurement, AF and \$3 million to the Other Base Maintenance account.

4. Other Base Maintenance and Support Equipment (-4.0 million)

Congress reduced the program by \$6.8 million. This included Base Procured Equipment (\$-4.0 million), Medical and Dental Equipment (\$-2.5 million), Tactical Shelter S-530 (\$-5.6 million) and Selected Activities (\$+5.3 million). An additional \$2.8 million was transferred from Electronics and Telecommunications Equipment.

5. Reimbursable Program (+252.5 million)

The increase of \$252.5 million is due to a revised estimate of customer orders anticipated in FY 1980.

COMPARISON OF FY 1980 FINANCING AS REFLECTED
IN FY 1980 BUDGET WITH FY 1980 FINANCING AS
SHOWN IN FY 1981 BUDGET

	(in Thousands of Dollars)		
	Financing Per FY 1980 Budget	Financing Per FY 1981 Budget	Increase (+) or Decrease (-)
Program requirements (Total)-----	\$2,798,220	\$2,885,194	\$+86,974
Program requirements (Service account)-----	(2,671,100)	(2,632,741)	(-38,359)
Program requirements (Reimbursable)-----	(127,120)	(252,453)	(+125,333)
Less:			
Anticipated reimbursable-----	127,120	252,453	+125,333
Reappropriation-----	-	13,600	+13,600
Add:			
Transferred to other accounts-----	-	14,890	+14,890
Appropriation-----	\$2,671,100	\$2,634,031	\$-37,069

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1980 program has been increased \$86,974 thousand since submission of the FY 1980 budget. Adjustments by category of financing are explained below:

1. Anticipated Reimbursements. The increase of \$125,333 thousand is due to a revised estimate of customer orders anticipated in FY 1980.
2. Reappropriation. The increase of \$13,600 thousand is a financing adjusted directed by Congress, P.L. 96-154.
3. Transferred to Other Accounts. \$7,600 thousand is proposed for transfer to Missile Procurement, Air Force FY 1980 and \$7,290 is proposed for transfer to Other DoD Agencies.

1979 PROGRAM

COMPARISON OF REQUIREMENTS AS SHOWN IN FY 1980 BUDGET WITH REQUIREMENTS AS SHOWN IN FY 1981 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Program Requirements 1980 Budget	Program Requirements 1981 Budget	Increases (+) or Decreases (-)
Munitions and Associated Equipment	320,076	305,276	-14,800
Vehicular Equipment	137,462	134,490	-2,972
Electronics & Telecommunications Equipment	549,064	524,764	-24,300
Other Base Maintenance & Support Equipment	1,398,548	1,388,180	-10,368
F Imbursable Program	<u>200,400</u>	<u>157,244</u>	<u>-43,156</u>
Total Fiscal Year Program	2,605,550	2,509,954	-95,596

EXPLANATION BY BUDGET ACTIVITY

1. Munitions and Associated Equipment (\$-14.8 million)

Congress reduced the program \$4.4 million for a financing transfer to FY 1980. Programs reduced were: 30MM HEI (\$-1.0 million), Laser Bomb Guidance Kit (\$-1.2 million), MJU-2 Flare (\$-1.1 million) and FMU Fuze (\$-1.1 million). 10 million was reprogrammed to the Operation and Maintenance, Air Force Appropriation.

2. Vehicular Equipment (\$-3.0 million)

Supplemental request to Congress for Material Handling Equipment was denied.

3. Electronic and Telecommunications Equipment (\$-24.3 million)

An \$18 million dollar reduction resulted from reprogrammings to higher priority Air Force requirements. \$17 million was reprogrammed to the Operation and Maintenance, Air Force Appropriation, and \$1 million was transferred to the Campus program. \$6 million was reduced by Congress as a financing transfer to FY 1980.

4. Other Base Maintenance and Support Equipment (\$-10.4 million)

Supplemental requests to Congress (\$6.0 million for Air Cargo Pallets and (\$2.5 million) for Intelligence Program were both denied. The Air Force reprogrammed \$1.0 million from Base Mechanization, and \$1.0 million from Chemical & Biological Defense Program to the Operation and Maintenance, Air Force Appropriation for higher priority Air Force requirements. An increase of \$1.1 million from Foreign Military Sales makes the net change to the program equal (\$-10.4).

5. Reimbursable Program (\$-43.2 million)

The decrease of \$43.2 is due to receipt of actual customer orders in FY 1979.

COMPARISON OF FY 1979 FINANCING AS REFLECTED
IN FY 1980 BUDGET WITH FY 1979 FINANCING AS
SHOWN IN FY 1981 BUDGET

	(in Thousands of Dollars)		
	Financing Per FY 1980 Budget	Financing Per FY 1981 Budget	Increase (+) or Decrease (-)
Program requirements (Total)-----	\$2,605,550	\$2,509,954	\$-95,596
Program requirements (Service account)-----	(2,405,150)	(2,352,710)	(-52,440)
Program requirements (reimbursable)-----	(200,400)	(157,244)	(-43,156)
Less:			
Anticipated Reimbursements-----	200,400	157,404	-42,996
Transferred from other accounts-----	37,000	-	-37,000
Reappropriation-----	-	37,000	+37,000
Add:			
Transferred to other accounts-----	5,600	36,100	+30,500
Unobligated balance to finance subsequent year budget plans-----	-	10,600	+10,600
Appropriation-----	\$2,373,750	\$2,362,250	\$-11,500

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1979 Program has been decreased \$95,596 thousand since submission of the FY 1980 budget. Adjustments by category of financing are explained below:

1. Anticipated Reimbursements. The decrease of \$42,996 thousand is due to receipt of actual customer orders in FY 1979.
2. Transferred from other Accounts. The decrease of \$37,000 thousand is the result of redefining appropriation transfers resulting from Congressional direction as reappropriations. Reappropriation is defined as amounts of new authority resulting from Congressional action to continue the availability of funds that would otherwise expire.
3. Reappropriation. The increase of \$37,000 thousand is the result of redefining the Congressional directed transfer from FY 1978 Other Procurement, Air Force to FY 1979 Other Procurement, Air Force as a reappropriation.
4. Transferred to Other Accounts. \$5,600 thousand was transferred to Research, Development, Test and Evaluation, Air Force FY 1979, \$29,500 thousand was transferred of Operation and Maintenance, Air Force 1979, and \$1,000 thousand was transferred to Operation and Maintenance, Defense Agencies (CHAMPUS) FY 1979 in accordance with Section 834 of the FY 1979 DoD Appropriation Act.
5. Unobligated Balance to finance subsequent year Budget Plans. Financing adjustment to finance FY 1980 program per Congressional direction contained in P.L. 96-154.

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20MM Training	0	9.1	228	Truck, Stake/Platform	51	3.3	246
30MM Training/30MM HEI/ 30MM API Cartridges	9, 10, 11	117.3	229	Truck, Pickup, 1/2 T, 4x2	54	6.6	247
MXU-4A/A Engine Starter	14	3.2	230	Truck, Pickup, 1/2 T, 4x2	55	3.9	248
MK-82 Bomb, Empty	17	9.5	231	Truck, Carry-All	58	3.1	249
BSU-49 Inflatable Retarder	18	4.8	232	Truck, Cargo, 2 1/2 T,	59	6.4	250
Laser Bomb Guidance Kits	21	36.0	233	6x6, M35	60	4.6	251
GRU-15	22	20.3	234	Truck, Cargo 5 T, M813	63	3.0	252
Bomb, Practice, BDU-33	23	7.2	235	Truck, Tractor, 5 Ton	65	6.2	253
Aerial Tow Target	27	6.6	236	Truck, Tractor 44500-54000	67	4.0	254
Flare, IR, MJU-7B	30	3.9	237	GVW	73	11.5	255
Flare, IR, MJU-2	32	3.2	238	Truck, Dump 5 Ton	76	5.0	256
M-206 Cartridge Flare	33	16.9	239	Truck, Tank, Fuel, 5,000	78	3.7	257
FMU-81	40	7.9	240	Gal, R-9	81	3.9	258
FMU-112	42	9.3	241	Tractor, A/C Tow, MB-2	87	3.0	259
MK-339 Mech Time	44	4.4	242	Tractor, Tow, AGE, Wheeled	89	3.2	260
VEHICULAR EQUIPMENT							
Bus, 28 Passenger	47	4.2	243	Armored Vehicle	90	4.6	261
Bus, 44 Passenger	48	5.2	244	Extinguisher, Fire, 150 lb	91	7.1	262
Truck Ambulance	49	3.2	245	Truck, Forklift, 4000 lb	95	3.2	263
				GED/DED 144"			
				Truck, Forklift, 6,000 lb			
				Truck, Forklift, 10,000 lb			
				25 A/C Loader			

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Crane, 7-50 Ton	106	3.9	266	SAMTEC COMM	145	3.4	283
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<u>ELECTRONICS AND TELECOMMUNICATIONS EQUIPMENT</u>							
Traffic Control and Landing	124	8.7	268	Ground Directed Bombing System	148	7.4	285
Tactical Air Control System	125	8.2	269	Space Shuttle	150	24.0	286
Improvements (TACSI)	127	85.3	270	Satellite Control Facility	151	19.7	287
Defense Support Program	129	6.5	271	Restricted Airspace Control	152	4.3	288
Spacetrack	130	12.3	272	Space and Missile Test Center/ Western Test Range(SAMTEC/ WTR)	153	4.6	289
USAFE Command/Control System	131	4.1	273	Constant Watch	154	5.8	290
Defense Meteorological Satellite Program (DMSP)	132	5.5	274	Telephone Exchange	157	18.7	291
Tactical SIGINT Support	133	14.7	275	Joint Tactical Communications Program (TRI-TAC)	158	37.7	292
Transportable Ground Intercept Facility (TGIF)	134	16.8	276	USREDCOM	159	7.8	293
Side Looking Airborne Radar (SLAR) Processing Equipment	135	4.8	277	Air Force Satellite Communi- cations System (AFSATCOM)	160	22.1	294
TEREC Ground Processor	136	11.0	278	Automated Telecommunications Program	161	7.3	295
Tactical Radar Equipment	137	22.4	279	Teletypewriter Equipment	162	7.0	296
Automatic Data Processing Equipment	138	8.6	280	Ground Mobile Force Terminal	163	15.5	297
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OTHER PROCUREMENT, AIR FORCE

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Training Support Equipment	170	20.8	300	ment	203	30.6	313
Radio Equipment	178	3.7	301	Pallet, Air Cargo, 108"x88"208		11.1	314
Communications-Electronics				Tactical Shelter S-530	211	5.6	315
Class IV Modifications	181	16.0	302	Productivity Enhance-			
Traffic Control and Handling				ment	213	4.4	316
System (TRACALS)				Productivity Investments	214	4.3	317
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Ballistic Missile Early Warning				Intelligence	219	3.1	318
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Tactical Equipment				Application Center	221	5.3	319
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				Industrial Preparedness	225	10.2	321

OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT

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(LAD)	194	6.8	308
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Power Plant A/E 24 U-8	200	3.9	311

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 8

Nomenclature: 20 MM Training

Mission/Description: The 20 MM ammunition with inert projectiles is used for training aircrews on a variety of aircraft gun systems.

Cost Data:

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	1,364,000	9,042,000	3,200,000
	3.3	21.6	9.1

Basis for FY 1981 Request: The FY 1981 request is required to support projected peacetime consumption during the FY 1981 funded delivery period, and maintain pipeline/stock levels.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 9, 10, 11

Nomenclature: 30 MM Training/30 MM HEI/30 MM API Cartridges

Mission/Description: The 30 MM Cartridge used with the GAU-8 Gun System is designed to be effective against a broad spectrum of Close Air Support (CAS) targets. The GAU-8 is specifically designed to defeat Soviet medium/heavy tanks, which are critical CAS targets in a European conflict. The gun is effective against softer CAS targets, such as personnel, armored personnel carriers, and trucks. The GAU-8 Gun fire can be placed closer to friendly troops than other weapons due to its accuracy, small lethal radius, and low probability of gross error. This contributes to the effectiveness of the A-10 aircraft for which it was designed.

Cost Data:

(In Millions of Dollars)

	<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
Training	3,450,000	29.0	3,450,000	30.2	3,500,000	36.5
High Explosive	1,458,000	18.2	1,458,000	18.8	500,000	9.9
Incend (HEI)						
Armor Piercing	5,683,000	90.4	5,883,000	102.1	3,100,000	70.9
Incend (API)						

Basis for FY 1981 Request: The FY 1981 request is required to support projected peacetime consumption during the FY 1981 funded delivery period, maintain pipeline/stocklevels, and procure an increment of the WRM inventory objective.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 14

Nomenclature: MXU-4A/A Engine Starter

Mission/Description: The MXU-4A/A engine starter is installed in aircraft starter assemblies to start turbocjet engines on B-52, KC-135, F-111, F-4, F-105 and F-106 aircraft.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	35	3.2

Basis for FY 1981 Request: To support peacetime requirements during the FY 1981 funded delivery period without drawing down peacetime operating and War Reserve Materiel (WRM) stock levels.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 17

Nomenclature: MK-82 Bomb, Empty

Mission/Description: This is a 500 pound general purpose bomb filled with concrete, vermiculite or sand to simulate the drop trajectory of a high explosive bomb. It is used for aircrew training and proficiency.

Cost Data:

(In Millions of Dollars)

	FY 1979		FY 1980		FY 1981	
	Qty	Amt	Qty	Amt	Qty	Amt
	29,028	1.1	14,612	6.2	20,000	9.5

Basis for FY 1981 Request: The FY 1981 request is required to support projected peacetime consumption during the FY 1981 funded delivery period and maintain a pipeline/stocklevel.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 18

Nomenclature: BSU-49 Inflatable Retarder

Mission/Description: The BSU-49 Inflatable Retarder provides the USAF with the capability for supersonic, low-level delivery of MK-82 500-pound general purposes bombs. The pilot has the option of either high or low drag release. It consists of two major assemblies; a low drag stabilizer and a ram air inflated retardation device which is stored in the stabilizer when not deployed.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	3,500	3.6	6,420	4.8

Basis for FY 1981 Request: The FY 1981 request provides for an additional increment of War Reserve Materiel (WRM) stocks

RD&E Related Activity: PE 64602

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 21

Nomenclature: Laser Bomb Guidance Kits

Mission/Description: The Laser Bomb Guidance Kit consists of a computer control group and an airfoil assembly that can be attached to 500-pound and 2,000 pound General Purpose Bombs. The computer control group contains a seeker head to detect laser energy reflected from a target illuminated by a ground or airborne target designator. The computer control directs the warhead on a line-of-sight trajectory to the target. This item is used by tactical aircraft against point targets such as bridges and refineries, and has a high degree of accuracy.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
8,600	52.3	4,300	34.0	4,300	36.0

Basis for FY 1981 Request: The FY 1981 request is required to support projected peacetime consumption during the FY 1981 funded delivery period, maintain pipeline/stocklevels, and procure an increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE
MUNITIONS DATA SHEET

P-1 Line Item: 22

Nomenclature: GBU-15

Mission/Description: The GBU-15 Modular Guided Weapon System is a family of guidance, control, and airframe modules which, when combined with a warhead, can be configured as different weapons tailored for various attack and target conditions. The Cruciform Wing Weapon (CWW) which is planned for procurement in FY 81 is optimized for low altitude attack.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	--	--	--	60	20.3

Basis for FY 1981 Request: The FY 1981 program will procure an increment of the War Reserve Material (WRM) objective, and support follow-on operational test and evaluation.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 23

Nomenclature: Bomb, Practice, BDU-33

Mission/Description: This 25-pound practice bomb has a teardrop shaped metal body with a tube cavity lengthwise through the center, a conical afterbody, and a cruciform type fin in the aft end of the bomb body. A firing pin, inertia tube, flag assembly and cotter pin are separate components of the bomb body. This bomb is used to provide the Tactical Air Force with aircrew weapons delivery training.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	441,600	565,000	600,000
	4.7	6.1	7.2

Basis for FY 1981 Request: The FY 1981 request is required to support projected peacetime consumption during the FY 1981 funded delivery period, and maintain pipeline/stocklevels.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item 27

Nomenclature: Aerial Tow Target

Mission/Description: The Aerial Tow Target System will be employed as a towed aerial target for use by tactical fighters and interceptor aircrews in developing and maintaining air-to-air gunnery skills. The system will also be used in operational testing and evaluation of guns, gunsights, gun directors and ammunition, and in tactics development.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
-	-	300	3.2	700	6.6

Basis for FY 1981 Request: Procurement is required to support projected peacetime consumption during the FY 1981 funded delivery period and maintain pipeline/stocklevels.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 30

Nomenclature: Flare, IR, MJU-7B

Mission/Description: The MJU-7B is an infra-red countermeasures flare used by the F-4 aircraft to counter heat seeking missiles. It is dispensed from the AN/ALE-40(V).

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
50,000	1.8	-	-	100,000	3.9

Basis for FY 1981 Request: Procurement required to support projected peacetime consumption during the FY 1981 funded delivery period, maintain pipeline/stocklevels, and procure an increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE

AMUNIT.ONS DATA SHEET

P-1 Line Item: 32

Nomenclature: Flare 1R MJU-2

Mission/Description: This is an infra-red flare which contains a pyrotechnic grain that produces an infrared output intended to protect the RF-4C against heat seeking missiles.

Cost Data :

<u>(In Millions of Dollars)</u>					
<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
-	-	38,000	2.0	56,000	3.2

Basis for FY 1981 Request: Procurement is required to support projected peacetime consumption during the FY 1981 funded delivery period.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 33

Nomenclature: M-206 Cartridge Flare

Mission/Description: This flare will provide the A-10 aircraft self-protection countermeasures against I.R. homing threats. It is dispensed from the AN/ALE-40 dispenser system.

Cost Data:

<u>(In Millions of Dollars)</u>			
	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	1,000,000 14.4	613,000 9.4	1,000,000 16.9

Basis for FY 1981 Request: The FY 1981 request is required to support projected peacetime consumption during the FY 1981 funded delivery period, maintain pipeline/stockpiles, and procure an increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 40

Nomenclature: FMU-81

Mission/Description: The FMU-81 is an impact short delay bomb fuze designed for use in nose and tail fuze wells of guided or unguided low-drag general purpose bombs. The fuze will be used with laser guided bombs.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
19,200	9.0	9,000	4.4	15,000	7.9

Basis for FY 1981 Request: Procurement is required to support projected peacetime consumption during the FY 1981 funded delivery period, maintain pipeline/stocklevels, and procure an increment of the War Reserve Materiel (WRM) inventory objective, consistent with laser guided bomb fuze requirements.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 42

Nomenclature: FMU-112

Mission/Description: This is an electronic impact or short delay fuze designed to fit the standard 3-inch fuze well on bombs such as the M-117 and the MK-80 series guided or unguided bombs. It is usable on both high and low performance aircraft.

(In Millions of Dollars)						
<u>Cost Data :</u>	FY 1979		FY 1980		FY 1981	
	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
	-	-	9,000	9.9	13,000	9.3

Basis for FY 1981 Request: Procurement is required to support projected peacetime consumption during the FY 1981 funded delivery period and procure a time phased increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 44

Nomenclature: MK-339 Mech Time

Mission/Description: The MK-339 is a mechanical time fuze used with chaff and 1.111et bombs and cluster munitions which utilize the SUU-30 dispenser. It provides two pre-set pilot-selectable delay fuze function times (arming wires) each settable from 1 to 50 seconds in calibrated 0.1 second increments.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	25,000	4.4

Basis for FY 1981 Request: Procurement is required to support projected peacetime consumption during the FY 1981 funded delivery period, to maintain pipeline/stocklevels and to procure fuzes for selected cluster bombs currently in the War Reserve Materiel (WRM) stockpile to increase their operational effectiveness.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 47

Nomenclature: Bus, 28 Passenger

Mission/Description: This commercial bus equips our bases with a fuel efficient diesel vehicle for base shuttle bus operations and transport of large aircraft crews and related flight gear. It is also used to transport dependent school children as well as large groups during military exercises.

Cost Data:

(in Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	-	56	150
	-	1.4	4.2

Basis for FY 1981 Request: The inventory objective is 1458 with a procurement requirement of 958 through the FY 1981 funded delivery period. 150 are budgeted in FY 1981 deferring 808 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 48

Nomenclature: Bus, 44 Passenger

Mission/Description: This commercial bus supplies our bases with a large capacity fuel efficient diesel vehicle which is used primarily as a school bus for dependent children. It is used also to transport passengers to and from aircraft and terminals where distant aircraft parking or weather dictates.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
75	3.1	39	2.6	120	5.2

Basis for FY 1981 Request: The inventory objective is 678 with a procurement requirement of 450 through the FY 1981 funded delivery period. The FY 1981 budget quantity is 120 deferring 330 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 49

Nomenclature: Truck Ambulance

Mission/Description: This is a four wheel drive field ambulance, powered by a gasoline engine with air conditioning. It is capable of transporting four litter patients or eight seated passengers.

Cost Data:

(In Millions of Dollars)					
FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
23	.5	-	-	117	3.2

Basis for FY 1981 Request: The inventory objective is 658 with a procurement requirement of 357 through the FY 1981 funded delivery period. The FY 1981 quantity is 117 deferring 240 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 51

Nomenclature: Truck, Stake/Platform

Mission/Description: This vehicle is a gasoline engine driven commercial vehicle with enclosed cab, steel and wood body and movable stake siding and boards. Much of its use entails delivery of critical parts, equipment and other cargo to flight line maintenance activities, hospitals, and other base supply customers. It is purchased primarily in the 1 1/2 ton 4x2 configuration, however, where mission permits, the downsized 1 ton version is purchased for increased fuel economy and maneuverability.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
448	3.5	505	3.8	326	3.3

Basis for FY 1981 Request: The inventory objective is 4,568 with a procurement requirement of 2,029 through the FY 1981 funded delivery period. 326 are budgeted in FY 1981, deferring 1703 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 54

Nomenclature: Truck, Pickup 1/2T, 4x2

Mission/Description: This is a standard commercial 1/2 ton pickup truck with a six cylinder gasoline engine, two wheel drive and an automatic transmission. In addition to general transportation of cargo and personnel, it supports flight line, base maintenance supply and security police operations.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
479	2.4	1,032	5.4	1,087	6.6

Basis for FY 1981 Request: The inventory objective is 11,076 with an FY 1981 procurement requirement of 8,183. 1,087 are budgeted in FY 1981 deferring 7,096 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 55

Nomenclature: Truck, Pickup 1/4T, 4x2

Mission/Description: This is a commercial, 4x2, 1/4 ton compact pickup truck used to transport light cargo and personnel. It is part of an Air Force program to selectively downsize to more fuel efficient vehicles, where possible, without causing adverse mission impact.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
209	1.0	200	1.0	500	3.9

Basis for FY 1981 Request: The inventory objective is 2,517 with an FY 1981 procurement requirement of 1,096. 694 are budgeted in FY 1981 deferring 402 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 58

Nomenclature: Truck, Carry all

Mission/Description: This is a commercial carryall, capable of carrying a minimum of eight passengers (including driver). The vehicle is used by communication, weather and radar sites as a combination cargo and group personnel carrier; by medical repair teams, to transport test and repair equipment to hospitals and medical facilities; by SAC missile and aircraft alert crews; and in some instances, as air transportation for personnel and their luggage.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
245	1.7	252	2.2	326	3.1

Basis for FY 1981 Request: The inventory objective is 2439 with a requirement of 986 through the FY 1981 funded delivery period. The FY 1981 budget quantity is 326 deferring 660 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 59

Nomenclature: Truck, Cargo, 2 1/2T, 6x6, M35

Mission/Description: This vehicle is of military design with open or closed cab and with lattice type side extensions. It is gasoline or multi-fuel engine driven with six wheel drive used to haul cargo and equipment, transport troops and their gear, and to tow trailers up to 10,000 lb.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	186	6.4

Basis for FY 1981 Request: The inventory objective is 3,802 with a procurement requirement of 2,964 through the FY 1981 funded delivery period. 186 are budgeted in FY 1981, deferring 2,778 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 60

Nomenclature: Truck, Cargo 5T, M813

Mission/Description: This is a military design truck. 5 ton, DED, 6x6 with a driving front axle, manual engagement, and 2 driving rear axles. It is an all terrain vehicle used to transport personnel and cargo and is assigned primarily to USAF tactical mobility forces.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
75	3.1	41	1.9	93	4.6

Basis for FY 1981 Request: The inventory objective is 470 with a procurement requirement of 234 through the FY 1981 funded delivery period. The FY 1981 budget quantity is 93 deferring 141 to subsequent years.

OTHER PROCUREMENT, AIR FORCE
VEHICULAR EQUIPMENT DATA SHEET

P-1 Line Item: 63

Nomenclature: Truck, Tractor, 5 Ton

Mission/Description: This is a standard design commercial truck tractor. It is equipped with automatic transmission, fifth wheel, and all electrical and air connections required for towing a trailer. It is used for towing trailers and semi-trailers to support medical missions, refueling operations, runway foaming, engine test stands, and trailers for instructional groups.

Cost Data:

<u>(In Millions of Dollars)</u>				
<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u> <u>Amt</u>
126	3.5	135	4.1	91 3.0

Basis for FY 1981 Request: The inventory objective is 1,221, with a procurement requirement of 653 through the FY 81 funded delivery period. The FY 1981 budget quantity is 91, deferring 562 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 65

Nomenclature: Truck, Tractor 44500-54000 GVM

Mission/Description: This vehicle is a diesel engined 10 ton commercial 6x4 truck tractor. It is used for towing critical direct mission support equipment such as: F-6 and MJ-1's (5000 gallon aircraft refueling trailers); MSG-1 mobile radar tracking vans; SAC LGM-30 missile trailers; liquid oxygen and nitrogen trailers, the Air Force Orientation Group audio-visual equipment van; and F-6/F-7 runway foaming tanker fire trucks.

(In Millions of Dollars)

Cost Data:

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	197	151	131
	7.8	6.6	6.2

the FY 1981 funded

Basis for FY 1981 Request: The inventory objective is 1,474 with a procurement requirement of 705 through the FY 1981 delivery period. 131 are budgeted in FY 1981, deferring 574 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 67

Nomenclature: Truck, Dump 5 ton

Mission/Description: This is a standard commercial dump truck, with enclosed steel cab, which is purchased in either 4 or 8 cubic yard capacities, and 4x2, 6x4 drive chassis configurations. It is used to haul and dump cleared materials such as dirt, rocks, trees, stumps and brush. During winter operations it becomes a direct mission support vehicle, critical to sanding of taxilways, runways and base roadways. The 4x4 and 6x4 types are extensively used in all terrain heavy construction operations and large scale snow hauling.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
418	11.5	157	3.6	151	4.0

Basis for FY 1981 Request: The inventory objective is 1,891 with a procurement requirement of 576 through the FY 1981 funded delivery period. 151 are budgeted in FY 1981, deferring 425 to subsequent years.

VEHICULAR DATA SHEET

Mission/Description: This commercial-chassis, diesel-engine truck has a 5,000 gallon tank with integral pumps and filters. It is used to service all types of aircraft with fuel.

(In Millions of Dollars)

	FY 1979		FY 1980		FY 1981	
	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
-	-	-	175	15.2	120	11.5

Basis for FY 1981 Request: The inventory objective is 2,096 with an FY 1981 procurement requirement of 1,621. The FY 1981 budget quantity is 120 with 1,501 deferred to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 76

Nomenclature: Tractor, A/C Tow MB-2

Mission/Description: A commercial tractor which has a diesel engine and 4 wheel drive. It tows aircraft up to 500,000 pounds including B-52 bombers, large cargo/refueling aircraft such as the C-141 and KC-135. These vehicles significantly enhance launch, turnaround and aircraft maintenance capability.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
51	3.5	56	4.0	61	5.0

Basis for FY 1981 Request: The inventory objective is 505 with a procurement requirement of 245 through the FY 81 funded delivery period. The FY 1981 budget quantity is 61 deferring 184 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 78

Nomenclature: Tractor, Tow AGE, Wheeled

Mission/Description: This is a new vehicle recently introduced to the Air Force inventory for the purpose of replacing the aerospace ground equipment (AGE) tow tractor. Primary use of this tractor is towing and positioning support ground equipment around aircraft; however, when equipped with special trailer connections, it is also used for towing MHU-12M munitions trailers.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
24	.3	106	1.5	229	3.7

Basis for FY 1981 Request: The inventory objective is 2,430 with a procurement requirement of 590 through the FY 1981 funded delivery period. The FY 1981 budget quantity is 229 deferring 361 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 81

Nomenclature: Armored Vehicle

Mission/Description: This is a gasoline engine driven vehicle with driving front axle, automatic transmission, and armored protection on the sides top and underbody. The armor is capable of protecting occupants from small arms fire, grenades, and flammable fluids. It is equipped with a roof ring mount for M60 type machine gun and firing ports for M16 rifles equipped with grenade launchers for use by four fully equipped security policemen, including the driver. It is used as an escort vehicle for SAC missiles being returned to base for maintenance and for perimeter patrol at missile sites.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
150	4.9	187	6.2	125	3.9

Basis for FY 1981 Request: The inventory objective is 634 with a procurement requirement of 261 through the FY 1981 funded delivery period. The FY 1981 budget quantity is 125 deferring 136 to FY 1982.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 87

Nomenclature: Extinguisher, Fire, 150 lb

Mission/Description: This is a wheeled 150 lb capacity vaporized liquid fire extinguisher designed for ramp use on small fires resulting from spills, run-ups, etc. It is designed to be used by non-professional fire fighters (usually aircraft mechanics). It replaces the USAF CB (chloro-bromomethane) extinguishers declared hazardous by OSHA in 1974. Flight line extinguishers have not been purchased in 10 years and CB agents are in critically short supply.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
700	.7	2,310	2.7	2,400	3.0

Basis for FY 1981 Request: The inventory objective is 13,462 with a procurement requirement of 9,987 through the FY 1981 funded delivery period. The FY 1981 budget quantity is 2,400 deferring 7,587 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 89

Nomenclature: Truck, Forklift, 4000 lb GED/DED 144"

Mission/Description: This commercial forklift has a diesel engine and a telescoping mast assembly which permits reaching heights from 68" to 144". It replaces both the 4000 pound standard mast forklift and 4000 pound low-mast forklift in the AF inventory. It is the basic general cargo handling forklift for traffic management operations, warehouses, and materials holding areas. This is a productivity enhancement vehicle which permits better utilization and efficiency of personnel and fuel.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
69	1.1	189	3.2	189	3.2

Basis for FY 1981 Request: The inventory objective is 2043 with a procurement requirement of 1087 through the FY 1981 funding delivery period. The FY 1981 budget quantity is 189 deferring 898 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR EQUIPMENT DATA SHEET

P-1 Line Item: 90

Nomenclature: Truck Forklift, 6000 lb

Mission/Description: This is a 6000-lb commercial forklift with pneumatic tires and 168" lift capability. It is used for munitions handling, aerial port operations, base supply warehouses, maintenance shop and materials holding area support AF-wide. The equipment is purchased in electric, gasoline and diesel engined models, as well as in a rough-terrain configuration. The rough-terrain model is a support vehicle for USAF mobility units.

Cost Data:

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>
	123	2.5	124
		3.5	4.6

Basis for FY 1981 Request: The inventory objective is 1,741 wit a procurement requirement of 669 through the FY 1981 funded delivery period. The FY 1981 budget quantity is 142 deferring 527 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 91

Nomenclature: Truck, Forklift, 10,000 lb

Mission/Description: This 10000 lb commercial forklift is used as the basic 463L system support vehicle to handle 108"x88" pallets in conjunction with pallet trailers. The vehicle is compatible with, and supports all strategic and tactical airlift aircraft except the wide-body Civil Reserve Air Force aircraft.

Cost Data:

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	83	239	151
	3.6	10.3	7.1

Base for FY 1981 Request: The inventory objective is 1817 with a procurement requirement of 774 in FY 1981. 151 are budgeted in FY 1981 deferring 623 to subsequent years.

OTHER PROCUREMENT, AIR FORCE
VEHICULAR EQUIPMENT DATA SHEET

P-1 Line Item: 95

Nomenclature: 25 A/C Loader

Mission/Description: This vehicle is diesel powered, air transportable and has an adjustable conveyORIZED cargo platform. It is used at major air cargo terminals for mechanized loading/off loading and ground transport of palletized air cargo; and provides minimum turn around time for cargo aircraft.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	--	50	6.2	23	3.2

Basis for FY 1981 Request: The inventory objective is 413 with a procurement requirement of 336 through the FY 1981 funding delivery period. The FY 1981 budget quantity is 23 deferring 313 to subsequent years. A remanufacture program will satisfy the deferred quantity.

OTHER PROCUREMENT, AIR FORCE
VEHICULAR EQUIPMENT DATA SHEET

P-1 Line Item: 100

Nomenclature: Loader Scoop

Mission/Description: This family of vehicles can be defined as a diesel engined commercial scoop type front end loader of 1½ or 2½ cubic yard capacity. It is used by Civil Engineering for base maintenance, construction/repair, bulk handling (rocks, sand, gravel), and snow removal, excavating, trenching and sanitary fill support at bases worldwide. It is also slated for Rapid Runway (RRR) in Europe and the Red Horse Modernization project. It comes in either pneumatic tired 4x4 or tracked configuration; depending on mission requirements.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
134	7.3	68	4.0	53	3.1

Basis for FY 1981 Request: The inventory objective is 637 with a procurement requirement of 354 through the FY 1981 funded delivery period. The FY 1981 budget quantity is 53 deferring 301 to subsequent years.

OTHER PROCUREMENT, AIR FORCE
VEHICULAR EQUIPMENT DATA SHEET

P-1 Line Item: 103

Nomeclature: Cleaner, Runway/Street

Mission/Description: This is a commercial sweeper used on all airfield surfaces and streets to control foreign object damage to aircraft tires and engines and sweep snow. Current assets are in poor condition and are rapidly becoming unsupportable due to age and lack of spares. The equipment is purchased in both the towed rotary sweeper configuration and a self-propelled vacuum suction model. During winter operations the snow sweeper is a direct mission support vehicle at SAC and TAC bases.

Cost Data:

<u>(In Millions of Dollars)</u>					
<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
111	2.9	78	3.3	69	3.0

Basis for FY 1981 Request: The inventory objective is 1003 with a procurement requirement of 682 through the FY 1981 funded delivery period. The FY 1981 budget quantity is 69 deferring 613 to subsequent years.

OTHER PROCUREMENT, AIR FORCE
VEHICULAR EQUIPMENT DATA SHEET

P-1 Line Item: 106

Nonenclature: Crane, 7--50 Ton

Mission/Description: These are commercial cranes used by civil engineering, munitions, aircraft maintenance, R&D contractors and ATC instructors. Specific mission requirements are: heavy cargo lifting, earth moving/ construction, munitions handling, SAC silo missile changes, ATC missile change training, ship loading/offloading, and aircraft crash recovery operations.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
13	1.5	45	3.9	41	3.9

Basis for FY 1981 Request: The inventory objective is 562 with a procurement requirement of 233 through FY 1981. The budget quantity is 41 deferring 192 to subsequent years.

OTHER PROCUREMENT, AIR FORCE
VEHICULAR EQUIPMENT DATA SHEET

P-1 Line Item: 109

Nomenclature: Modifications

Mission/Description: Provides for modification of vehicles to extend life expectancy, correct deficiencies, and avoid costly replacement programs.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	2.6	--	1.0	--	3.8

Basis for FY 1981 Request: To continue efforts begun in previous years. The largest project is the modification of the 25K Loader.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 124

Nomenclature: Traffic Control and Landing

Mission/Description: This program provides ground facilities and equipment (fixed and mobile) necessary to provide safe, orderly and expeditious USAF aircraft movements. Included are systems necessary for the DOD mission but not provided by the FAA in major functional areas: enroute and terminal navigation, approach and landing, air traffic control communications, and necessary interfaces with other systems (both National and International).

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	3.4	-	9.9	-	8.7

Basis for FY 1981 Request: Procurement of open planar array antennas to eliminate the display of false or secondary radar returns at fixed radar sites and a new communications control system for USAF air traffic control facilities.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 125

Nomenclature: Tactical Air Control System Improvements (TACSI)

Mission/Description: This program provides tactical commanders with all mobile communications and electronic equipment required to control deployed tactical forces. This equipment is necessary for Commanders to effectively execute and control all tactical air operations such as counter air, interdiction, close air support, tactical air reconnaissance, tactical airlift, and air traffic control.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	-	-
			8.2

Basis for FY 1981 Request: Procurement of System Trainer and Exercise Modules. The deployable sets will be used to train TACS operations personnel in different mission functions associated with simulated air battle situations.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 127

Nomenclature: Defense Support Program

Mission/Description: The Defense Support Program provides to the National Command Authorities. A secondary mission is to provide data on

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	16.7	-	24.0	-	85.3

Basis for FY 1981 Request: Procurement of equipment to modify existing ground stations for compatibility with satellites containing enhanced capability; equipment to modify the Ground Communications Network to integrate the Simplified Processing Station and improve message survivability; and procurement of S-band Mobile Ground Terminals.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 129

Nomenclature: Spacetrack

Mission/Description: Spacetrack consists of radar and optical sensors and provides support to the Space Computation Center. The center takes data from assigned Aerospace Defense Command Sensors, contributing sensors/agencies and from scientific organizations for electronic processing

Cost Data:

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	-	15.2	-
		1.2	6.5

Basis for FY 1981 Request: To continue the GEODSS deployment (FCRC) and fund modifications to existing surveillance sensors which support the overall space defense mission of targeting and threat/damage assessment.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

Item: 130

Nomenclature: USAF Command/Control System

Mission/Description: The program is to improve the tactical command, control, and communications capabilities available to CINCUSAFE/COMAFS in the central region of Europe. The EIFEL/DISTEL portion of the program will use an ADP system developed by the German Air Force to be installed in the Sembach Allied Tactical Operations Center (ATOC). The operational application of Special Intelligence Systems (OASIS) portion integrates intelligence and operational information in support of USAF operations in Europe.

(In Millions of Dollars)

Cost Data:

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	.7	--	1.0	--	12.3

Basis for FY 1981 Request: Procurement of ADP equipment required to support the EIFEL/DISTEL Automated Control and additional core and disk storage capacity for OASIS.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 131

Nomenclature: Defense Meteorological Satellite Program (DMSP)

Mission/Description: The DMSP mission is to provide timely, high-quality global weather data to support special missions and to provide direct real time readouts to mobile terminals to support local tactical operations. Two satellites are maintained in polar orbit at all times to provide global cloud cover data four times a day; in the early morning, near noon, the early evening and near midnight.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	-	-
	6.7	3.5	4.1

Basis for FY 1981 Request: Procurement of DMSP unique hardware to upgrade the command and control and mission data processing equipment to function with improved spacecraft and sensors.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 132

Nomenclature: Tactical SIGINT Support

Mission/Description: This program will provide improved communications between the SIGINT collection systems and Tactical Air Control Systems.

(In Millions of Dollars)			
	FY 1979		
	Qty	Amt	
	FY 1980		
	Qty	Amt	
	-	-	
	-	-	5.5

Cost Data:

basis for FY 1981 Request: Procurement of AN/TSC-XX systems to be used in the mobile SIGINT environment. Also, replacement of outdated and unreliable communication vans in support of Emergency Reaction Air Force Special Security office facilities.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 133

Maneuver: Transportable Ground Intercept Facility (TGIF)

Description: The TGIF and related intelligence collection packages carried by the will be the principal collection and processing asset for Air Force tactical support. Coverage of certain essential targets is now concentrated in exposed forward ground facilities that will not survive the initial phase of combat and have insufficient range, both laterally and in depth. The TGIF will program will correct this deficiency.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	35.9	-	14.7

Basis for FY 1981 Request: Procurement of equipment to upgrade the prototype IGIF.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 134

Nomenclature: Side Looking Airborne Radar (SLAR) Processing Equipment

Mission/Description: The SLAR UPD-4 system is the only reconnaissance system capable of detecting tactical size targets that are fixed/mobile/moving/emitting/ non-emitting at large stand-off ranges. 12 UPD-4 systems are operational in Europe with one ground station at Zweibrücken AB, Germany.

(In Millions of Dollars)				
<u>Cost Data:</u>	FY 1979		FY 1980	
	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
	-	7.0	-	11.1
			-	16.8

Basis for FY 1981 Request: Procurement of equipment to provide two complete ground stations, one each for USAFE and PACAF.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 135

Nomenclature: TEREC Ground Processor

Mission/Description: The Tactical Electronic Reconnaissance (TEREC) System provides Tactical Commanders with a capability to rapidly establish and maintain a hostile electronic order of battle. TEREC, through a UHF/HF radio data link from reconnaissance aircraft, provides data on location and operating characteristics of hostile emitters to ground based facilities for target selection, weapons selection and employment tactics. The TEREC Remote Terminal (TRT) is a portable ground processing device capable of receiving, formatting, and printing hard copy reports on emitter type and location to Tactical Command and Control/Operations personnel.

(In Millions of Dollars)					
<u>Cost Data:</u>		<u>FY 1979</u>		<u>FY 1980</u>	
		<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
		--	--	--	--
				<u>Qty</u>	<u>Amt</u>
				--	4.8

Basis for FY 1981 Request: Procurement of six TRT's and downlink simulator.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 136

Nomenclature: Tactical Radar Equipment:

Mission/Description: This program acquires three AN/TPS-43E radars to be used as repair cycle assets. Each of the AN/TPS-43E sets in the present inventory must be returned to Sacramento for depot overhaul once each five years. Acquisition of these repair cycle assets will prevent degradation to the operational availability of the AN/TPS-43E inventory.

Cost Data:

(In Millions of Dollars)			
FY 1979		FY 1980	
Qty	Amt	Qty	Amt
-	-	-	-
			11.0

Basis for FY 1981 Request: Procurement of seven AN/TPS-43E repair cycle assets.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 137

Nomenclature: Automatic Data Processing Equipment

Mission/Description: This program provides automatic data processing equipment necessary for the Air Force mission. This procurement effort represents the most economic option based on current known factors such as price, purchase option terms and systems life for USAF ADP inventory (installed and planned).

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	16.9	-	25.7	-	22.4

Basis for FY 1981 Request: Representative purchases planned are mass storage devices to upgrade Air Defense Weapons Center; procurement of equipment for Interactive Processing and Display System for the Air Force Global Weather Center; and purchase of enhancements to the Honeywell 68/80's at the AF Data Service Center to take advantage of accumulated purchase credits.

OTHER PROCUREMENT, AIR FORCE

P-1 Line Item: 138

World Wide Military Command and Control System (WWCCS) ADPE

Mission/Description: The WWMCCS is the world-wide command and control system that provides the means for operational direction and technical administrative support involved in the function of command and control of the U.S. Military Force. In order of priority and emphasis, WWMCCS supports the National Command Authorities, Command and Control systems of Unified/Specified Commands and WWMCCS related management/information systems of other DOD components.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	$\frac{\text{Qty}}{\text{Amt}}$	$\frac{\text{Qty}}{\text{Amt}}$	$\frac{\text{Qty}}{\text{Amt}}$
-	4.7	-	8.6

Basis for FY 1981 Request: Procurement of equipment to upgrade the Honeywell H6000 system supporting the Joint Deployment Agency mission at USKEDCOM; equipment for the Communications Support Segment at NORAD; and equipment to upgrade/interface MAJCOM systems.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 141

Nomenclature: Spanish AC&W Upgrade (Combat Grande)

Mission/Description: COMBAT GRANDE is a joint project of the U.S. and Spanish governments to update Spanish air defense facilities. The project is a result of the 1970 Agreement of Friendship and Cooperation between the two governments. On 21 June 1976, the Senate ratified a new five-year treaty with Spain. The program will provide a ground based surveillance and control system to meet Spanish air defense requirements for high performance aircraft and increased security for U.S. forces based in Spain.

Cost Data :

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	-	-
	4.8	29.2	5.3

Basis for FY 1981 Request: Procurement of miscellaneous COMBAT GRANDE upgrades.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 143

Nomenclature: Air Base Defense System

Mission/Description: This program provides for increased security protection of alert aircraft and special weapons storage areas through procurement and deployment of physical security sensor systems. Deployment of these sensor systems enhances security levels and results in an avoidance of personnel increases required to meet the increased terrorist threat. The systems consist of interior and exterior sensors, and sensor related equipment configured as closed systems to protect storage areas, alert aircraft parking areas, and individual aircraft shelters. Sensor activations are transmitted to a local control area and to remotely located displays.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	12.0	-
		29.6	17.6

Basis for FY 1981 Request: Procurement of equipment for the Perimeter Surveillance systems; buried line intrusion detectors; permanent individual resource protection sensors; and sheltered aircraft sensors.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

I-1 Line Item: 145

Nomenclature: SAMTEC COMM

Mission/Description: SAMTEC manages both the Eastern Test Range (ETR) at Patrick AFB, Florida, and the Western Test Range (WTR) at Vandenberg AFB, California. These Ranges support this nation's ballistic, space, aeronautical and guided missile programs.

(In Millions of Dollars)					
<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	--	--	3.7	--	3.4

Cost Data:

Basis for FY 1981 Request: To provide for the modernization of the telephone system at Ascension and Antigua; conversion of the Grand Bahamas Range Communications Control Center; replacement of radio equipment, acquisition of a Cape Canaveral microwave system, modernization of the ETR teletype systems expansion of the undersea cable system, modernization of the WTR range timing systems and modernization of the Vandenberg digital transmission system.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 146

Nomenclature: Range Improvement Equipment

Mission/Description: The operational range mission is to ensure combat readiness of aircrews through training, tactics development, and evaluation of existing and new capabilities in a realistic environment. This program provides instrumentation and equipment necessary to support the operational range mission. The primary function of this improved capability will be to provide: overall range safety; real-time control of simultaneous missions; management of range resources; operational control of forces; information for real-time assessment of test and exercise objectives; and conservation of resources through a more effective test and training capability.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	-	-
	33.2	24.1	26.6

Basis for FY 1981 Request: Procurement of an Air Combat Maneuvering Instrumentation System for Homestead AFB; upgrade and modernization of range instrumentation and the data collection center at the Utah Test and Training Range; and video edit, aircrew debrief and range instrumentation equipment for Nellis AFB.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 148

Nomenclature: Ground Directed Bombing System

Mission/Description: This program acquires a highly mobile, lightweight, self-contained, precision radar designed to provide all-weather, day/night support for aircraft flying strategic or tactical missions.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
-	-	-
-	-	7.4

Basis for FY 1981 Request: Procurement of an additional three AN/TPB-1C radars to equip active Air Force units.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 150

Nomenclature: Space Shuttle

Mission/Description: This effort includes the procurement of hardware for the communications and navigational aids required to support Space Shuttle operations at Vandenberg AFB (VAFB), Kennedy Space Center (KSC), and Johnson Space Center (JSC).

Cost Data:

(In Millions of Dollars)

	FY 1979		FY 1980		FY 1981	
	Qty	Amt	Qty	Amt	Qty	Amt
	-	13.5	-	25.2	-	24.0

Basis for FY 1981 Request: Procurement of communications security equipment for KSC and VAFB, a Microwave Scanning Beam Landing System, and communications support equipment such as an area warning system, closed circuit television, timing/countdown systems and an operational voice system.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 151

Nomenclature: Satellite Control Facility (SCF)

Mission/Description: The SCF is a National Range tasked to support the research, development, test evaluation, and operation of satellite systems of the Department of Defense. It consists of a Headquarters and the Satellite Test Center (STC) at Sunnyvale AFS, California, a communication satellite calibration site at Camp Parks, California, and ten remote tracking stations. The mission is two-fold: (1) to support systems test and operation of assigned DOD satellite programs with real-time telemetry, tracking, command and control, and (2) to provide the orderly planning, implementation, operation, and maintenance of those support systems and equipment necessary to satisfy operational requirements.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	6.8	-	11.7	-	19.7

Basis for FY 1981 Request: To enhance the Data Systems Modernization program to meet essential support requirements and reduce operations and maintenance costs. Procurement of a high efficiency telemetry system; a Radome for the SATCOM antenna at the Indian Ocean Station, communication equipments to replace degraded equipment and the upgrade of Oakhanger/ Guam Tracking Station.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 152

Acronym/Description: Restricted Airspace Control

Mission/Description: This program is a joint Department of Defense (Tri-Service), Department of Transportation (FAA) project for upgrading radar and communications facilities used to provide command and control in the R-2508 restricted airspace. The primary objectives are to establish a single facility to control the entire restricted airspace and to establish a management and control system to allow optional joint and shared use by military and civilian users. The primary DOD users are the Naval Weapons Center at China Lake, the Air Force Flight Test Center at Edwards AFB, the Army's Fort Irwin and the 35th Tactical Fighter Wing at George AFB.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	7.3	-	4.5	-	4.3

Basis for FY 1981 Request: To provide for procurement and installation of radar site/communications equipment at China Lake Range Control Center.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 153

Nomenclature: Space and Missile Test Center/Western Test Range (SAMTEC/WTR)

Mission/Description: SAMTEC/WTR is an Air Force managed National Range headquartered at Vandenberg AFB, California. Launch pads and related support facilities are located at Vandenberg with telemetry, radar and optical tracking stations located on the California mainland, and stretching through the Pacific area. SAMTEC/WTR supports US space launches, ICBM testing and aircraft test flights.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	5.1	-	4.6	-	4.6

Basis for FY 1981 Request: Procurement of enhancements to the Range Safety Display System; Data Acquisition and Transmission Security hardware; Telemetry Doppler hardware; a Meteorological Sounding System; and replacement of outdated instrumentation; recorders for telemetry sites at Vandenberg AFS and Pillar Point AFB, operating system for the Data Processing Security Program and computers for the Radar Embedded computer replacement project. It also provides the hardware for the Metric Data Processing Systems, the Range Safety Display System and the Integrated Meteorological Processing System; and an update of the Missile Flight Control Center consoles and communication panels.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 154

Nomenclature: Constant Watch

Mission/Description: This program upgrades the Korean Tactical Air Control System and, in particular, provides the communications and related Command and Control equipment to enable a hardened Tactical Air Control Center to function as a joint (USAF/ROKAF) facility. The existing facility is extremely vulnerable and has insufficient communications for wartime operations. The USAF/ROKAF Memorandum of Understanding calls for the ROKAF to provide the required facility and for the USAF to install and operate communications and display equipment.

Cost Data:

(in Millions of Dollars)					
FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	3.0	-	2.2	-	5.8

Basis for FY 1981 request: Procurement of additional communications and automatic data processing equipment to support the Korean Tactical Air Control System and the Korean Air Intelligence System.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 157

Nomenclature: Telephone Exchange

Mission/Description: This program replaces existing government owned central office telecommunications telephone systems with a standardized electronic telecommunication system telephone switch at Air Force installations. Additionally, digital telephone switches-interoperable with the European Telephone System will be installed in semi-hardened facilities at European air bases.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	4.1	-
		-	18.7

Basis for FY 1981 Request: Procurement of dial-central switches for Vandenberg AFB, Wright-Patterson AFB, Kirtland AFB and European Survivable switches.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 158

Nomenclature: Joint Tactical Communications Program (JTC-1) (TR1-TAC)

Mission/Description: This joint service program acquires interoperable tactical communications equipment which can be commonly used in combat. This hardware will upgrade current systems from an analog to a digital communications capability.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	-	-
	-	4.8	37.7

Basis for FY 1981 Request: Procurement of TROPO Scatter Radios AN/TRC-170, which will provide a totally secureable, wideband point to point transmission system on the tactical battlefield.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 159

Nomenclature: USREDCOM

Mission/Description: This program acquires tactical communications - electronics equipment to support the U.S. Readiness Command, USAF and USAF and USAF share equally in program acquisition costs.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	.5	-	2.1	-	7.8

Basis for FY 1981 Request: Procurement of AN/TRC-170 Tropo Scatter Radios and TSC-60 high frequency radios. These will be used by the Joint Communications Support Element when deployed in support of crises around the world.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 160

Nomenclature: Air Force Satellite Communications System (AFSATCOM)

Mission/Description: This program procures the ground communications segment of the AFSATCOM system which will provide a survivable and reliable means for the National Command Authorities to disseminate command and control information to the Single Integrated Operational Plan forces during pre-, trans-, and post attack environments.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	26.9	-	28.3	.	22.1

Basis for FY 1981 Request: Completion of the Launch Control Center terminal procurement, and procurement of five Single Channel Transponder Injection Subsystems for use with the Defense Satellite Communications System.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 161

Nomenclature: Automated Telecommunications Program

Mission/Description: This program will provide hardware to automate selected telecommunications centers.

<u>(In Millions of Dollars)</u>						
<u>Cost Data:</u>	<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
	-	1.5	-	3.4	-	7.3

Basis for FY 1981 Request: Procures autodin terminals and optical character recognition equipment for telecommunications centers.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 162

Nomenclature: Teletypewriter Equipment

Mission/Description: This program will replace obsolete and unsupportable fixed plant and tactical teletypewriters with state-of-the-art equipment.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	3.2	-	7.0

Basis for FY 1981 Request: Procurement of Fixed Plant Teletypewriters.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 163

Nomenclature: Ground Mobile Force Terminal

Mission/Description: This program provides mobile satellite communication terminals using DSCS satellites to overcome serious communications deficiencies in the Tactical Air Control System and increase the effectiveness in which tactical air power is employed.

Cost Data:

(In Millions of Dollars)			
FY 1979		FY 1980	
Qty	Amt	Qty	Amt
-	10.3	-	-
			15.5

Basis for FY 1981 Request: Procurement of AN/TSC-100A and AN/TSC-94A terminals.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 164

Nomenclature: Wideband Systems Upgrade

Mission/Description: This program improves the reliability/maintainability/performance of selected Defense Communications Systems Wideband transmission facilities. Improvements will provide digital equipment and enhance the quality of communications to support such systems as AUTODIN, AUTOVON, AUTOSEVCOM and Command and Control Networks supporting Unified and Specified Commanders. These facilities are scheduled for updating based on the DOD system improvement plan prepared by the Defense Communications Agency.

Cost Data:

(In Millions of Dollars)

	FY 1979		FY 1980		FY 1981	
	Qty	Amt	Qty	Amt	Qty	Amt
	-	8.1	-	5.9	-	15.2

Basis for FY 1981 Request: FY 1981 funding supports the Digital European Backbone (DEB), which will provide a wideband digital transmission system in the European Theater by acquiring equipment for 11 additional sites; and continues the VFCT and DCS overwire procurements.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 166

Nomenclature: Automated Technical Control

Mission/Description: This program will procure processor or assisted capabilities for the Defense Communication System (DCS). It provides the basic building block capability for implementing System Control in the DCS. System Control, which consists of transmission, traffic, and network control, provides the capability to ensure that the overall performance of the DCS is achieved and maintained in a cost effective manner.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	7.8	-	2.4	-	3.6

Basis for FY 1981 Request: Procurement of additional station level equipments.

OTHER PROCUREMENT, AIR FORCE
ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

p-1 Line Item: 170

Nomenclature: Training Support Equipment

Mission/Description: In 1970, the Air Force prepared a consolidated plan for the development and procurement of critical threat equipment required to update the USAF test and training ranges. Many aircraft combat losses in Southeast Asia were traced to the lack of a capability to conduct operational training, testing and evaluation in a realistic combat environment. Studies show that if a combat crew survives the first ten missions, its victory/survivability chances increase 50 percent. This program provides the necessary equipment to permit aircrews to gain this level of experience under mock combat conditions.

(In Millions of Dollars)

Cost Data:

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
-	20.0	30.9	20.8

Basis for FY 1981 Request: Procures MST-T1 Multiple Threat Emitter; MSR-T1 Receiver; Tactical Radar Threat Generators; C2 simulator an MPQ-T3 AAA Emitter; an MTE-6 Modular Threat Emitter; an AN/MLQ-T2 communications jammer; and AN/MSQ-T1A acquisition radars.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 178

Nomenclature: Radio Equipment

Mission/Description: This program will replace outdated and nearly obsolete inventory for which many manufacturers will no longer supply spare parts. Much of the equipment in use is more than 20 years old.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	3.7

Basis for FY 1981 Request: Procurement of R-390 radio receivers; and upgrade of the HF Cemetery Network by acquiring and installing new radio voice and teletype systems.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 181

Nomenclature: Communications-Electronics Class IV Modifications

Mission/Description: Class IV modifications are defined as:

- d. Safety Modifications, usually of an urgent nature, to eliminate radiation, electrical or physical hazards.
- b. Correction of Deficiencies Modifications required to improve reliability and maintainability, electro-magnetic compatibility or communications security.
- c. Logistics. Modifications to extend service life, improve logistic support posture, or operating or reduce support costs.

Cost Data:

(In Millions of Dollars)

	FY 1979		FY 1980		FY 1981	
	Qty	Amt	Qty	Amt	Qty	Amt
	-	12.5	-	11.3	-	16.0

Basis for FY 1981 Request: Procurement of modifications to TACAN/VOR equipment to replace selected components with those of solid state design and a similar modification to the AN/FPS-77 weather radar. Also permits continuation of the RF translator modification effort.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 182

Nomenclature: Traffic Control and Landing System (TRACALS) Modifications

Mission/Description: This program provides modifications to ground facilities and equipment (fixed and mobile) necessary to provide safe, orderly, and expeditious world-wide USAF aircraft movements. Included are systems necessary for the DOD mission but not provided by FAA in major functional areas: enroute and terminal navigation, approach and landing, air traffic control communications, and necessary interfaces with other systems (both National and International).

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	4.5	-	5.1

Basis for FY 1981 Request: Procurement of equipment to correct deficiencies on the AN/TPN-19 Landing Control Central; and modification of the OJ-314 Communications Control Systems.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 185

Nomenclature: Ballistic Missile Early Warning System (BMEWS)

Mission/Description: The BMEWS provides detection and warning of a mass ICBM and/or SLBM raid launched over the Northern, Pacific, Atlantic and Polar regions to impact on the North American Continent, and of a mass IRBM raid against the United Kingdom. A secondary role is to provide satellite detection and tracking data to the SPACETRACK system.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	6.0	-	-	-	44.0

Basis for FY 1981 Request: Procures equipment for the upgrade of the detection radar including the Missile Impact Predictor growth, at Thule Greenland. This upgrade will permit the detection of reentry vehicles, the confirmation of satellite early warning data, and provide higher confidence attack characterization.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC AND TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 186

Nomenclature: Tactical Equipment Modifications

Mission/Description: This program provides increased capabilities for the current ground Tactical Communications - Electronics inventory.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
-	-	-	3.7	-	9.1

Basis for FY 1981 Request: Procurement of Ultra Low Sidelobe Antennas to be installed on AN/TPS-43E radar sets. This modification will significantly decrease the radar susceptibility to interference, enemy stand-off jamming and destruction by anti-radiation missiles.

OTHER PROCUREMENT, AIR FORCE
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 187

Nomenclature: Base/ALC Calibration Package

Mission/Description: The Base/ALC Metrology and Calibration (METCAL) Equipment Program provides calibration standards grouped in a series of generic measurement packages or consoles, to all major Air Force activities having a Base Precision Measurement Equipment Laboratory (BPME). There are 116 BPMEs supported.

<u>Cost Data:</u>					
<u>(In Millions of Dollars)</u>					
<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	3.5	--	3.9	--	1.3

Basis for FY 1981 Request: To provide equipment to enable each major Air Force activity to attain standardized measurement and optimum self-sufficiency in the calibration and maintenance of critical precision measurement equipment (PME) required for daily base operational capability.

OTHER PROCUREMENT, AIR FORCE
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 190

Nomenclature: Signal Generator

Mission/Description: This is a general purpose commercial multi-application VHF-UHF radio frequency signal generator which produces modulated or unmodulated signals in frequency range of 0.5 to 512 MHZ. It is used to test and align airborne and ground radio receivers and associated electronic equipment.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
880	5.5	700	4.6	700	5.0

Basis for FY 1981 Request: Provides current state of the art signal generators to replace obsolete and unrepairable signal generators now in the inventory and to keep pace with modern technology.

OTHER PROCUREMENT, AIR FORCE

OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 194

Nomenclature: Laser Acquisition Device (LAD)

Mission/Description: This device attaches to the aircrew members helmet. It senses laser energy from a designated target and directs head motion until the designated target is within the aiming reticle. This reduces target acquisition time in the target area.

Cost Data:

(In Millions of Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	251	6.2	400	6.8

Basis for FY 1981 Request: The FY 1981 request provides for procurement of an additional 400 units against an established requirement of 1,851 units.

OTHER PROCUREMENT, AIR FORCE

OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 195

Nomenclature: Chemical and Biological Defense Program

Mission/Description: This program is for procurement of chemical and biological defense equipment to enhance survivability and enable AF units to conduct operations in a toxic environment.

Cost Data:

(In Millions of Dollars)

	FY 1979		FY 1980		FY 1981	
	Qty	Amt	Qty	Amt	Qty	Amt
	-	9.7	-	8.0	-	11.0

Basis for FY 1981 Request: Provides funding for procurement of Advanced Decontamination Equipment, Advanced Point Detectors, and Aircrew Respirator System to enable USAF forces to perform mission operations in an otherwise lethal environment. Increased emphasis on chemical and biological defense requires that the forces be provided this new and improved equipment.

OTHER PROCUREMENT, AIR FORCE

OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 197

Nomenclature: Base Mechanization Equipment

Mission/Description: The Air Force requires adequately equipped facilities, in which to maintain and store weapon systems/supplies in the most efficient and productive manner possible. Modern equipment is needed to achieve this objective. The use of mechanized equipment eliminates multiple handling of materials and provides: responsiveness to the needs of the customer through maximum material handling productivity; maximum flexibility at minimum investment cost; simplification of parts inventory and maintenance tasks and safe and efficient operations.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	-	-
	9.3	11.7	13.2

Basis for FY 1981 Request: To modernize material handling for maintenance supply and distribution functions in the AFLC Logistics Centers and certain bases. The system and equipment to be procured result from economic analysis/industrial engineering studies which indicate a substantial cost saving or valid mission need.

OTHER PROCUREMENT, AIR FORCE

OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 200

Nomenclature: Power Plant A/E 24 U-8

Mission/Description: This is a light weight and air transportable power plant consisting of two 60/120 KW gas turbine generator sets mounted on a pallet which includes a distribution panel fuel system and cable storage.

Cost Data:

(In Millions of Dollars)					
FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	18	3.3	18	3.9

Basis for FY 1981 Request: To provide compact portable, uninterruptable power for communications and electronic equipment used in support of the Tactical Air Control System and the USAF Security Service programs.

OTHER PROCUREMENT, AIR FORCE

OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 202

Nomenclature: Base Procured Equipment

Mission/Description: Bases and Units throughout the Air Force require and are authorized equipment that must be acquired directly from GSA, DLA, one of the other Services or from commercial concerns. This program provides funds for local procurement of equipment costing \$3,000 or more each. Included are roads and grounds maintenance equipment; vehicle maintenance shop equipment; word processing equipment; specialized tool kits and test equipment; civil engineer maintenance, electrical, and carpenter shop equipment; specialized laboratory equipment; foreign electric power converters; food service equipment; printing plant equipment; refrigerators, freezers and air conditioners; heating equipment; microform equipment; office repairs and communications equipment. None of this equipment is centrally procured.

Cost Data:

(In Millions Dollars)

FY 1979		FY 1980		FY 1981	
Qty	Amt	Qty	Amt	Qty	Amt
-	20.3	-	25.9	-	30.2

Basis for FY 1981 Request: The request provides for procurement of authorized equipment to support day to day operation of 134 air bases and 2719 smaller installations and to provide a minimum acceptable work and living environment for military and civilian members of the Air Force.

OTHER PROCUREMENT, AIR FORCE

OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item 203

Nomenclature: Medical and Dental Equipment

Mission/Description: This program provides medical and dental equipment for the Air Force Medical Service in support of a world-wide comprehensive health care system. It supports hospitals, clinics, a global aeromedical evacuation system, physiological training units, and specialized medical and dental training facilities and laboratories.

Cost Data:

(In Millions of Dollars)

	FY 1979	FY 1980	FY 1981
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	-	-
	20.8	22.2	30.6

Basis for FY 1981 Request: It provides for replacement of equipment worn beyond economical repair; modernization of obsolete equipment; real property installed equipment for medical facilities; and procurement of War Readiness equipment.

OTHER PROCUREMENT, AIR FORCE
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 208

Nomenclature: Pallet, Air Cargo, 108" x 88"

Mission/Description: This pallet is an integral part of the 463-L cargo system for the C-5, C-141, C-130 and KC-10 aircraft. They provide a means to expedite cargo handling and rapid turnaround of aircraft in both peace and war environments.

(In Millions of Dollars)

Cost Data:

	FY 1979		FY 1980		FY 1981	
	Qty	Amt	Qty	Amt	Qty	Amt
	16,552	9.6	12,000	10.0	12,000	11.1

Basis for FY 1981 Request: 12,000 pallets are required to replace condemnations and losses, and to build toward an inventory objective sufficient to fully support airlift capabilities in war.

OTHER PROCUREMENT, AIR FORCE

OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 211

Nomenclature: Tactical Shelter S-530

Mission/Description: This shelter provides space and environment required for Combat Communications and Tactical Air Control units to maintain sophisticated communications - electronics equipment in the field.

<u>Cost Data:</u>					
<u>(In Millions of Dollars)</u>					
<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	--	--	--	58	5.6

Basis for FY 1981 Request: Provides for procurement of 58 tactical shelters against an Air Force requirement of 314 units.

OTHER PROCUREMENT, AIR FORCE
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item. 213

Nomenclature: Productivity Enhancement

Mission/Description: This program will provide funds for the Fast-Payback Capital Investment Program, a program to enhance productivity and reduce operating costs. Equipment purchased is identified by organizations throughout the Air Force with the commensurate savings and amortization data specifically identified. Amortization must be achieved within two years and items procured must be commercially available so they may be put into use in the minimum time.

Cost Data:

(In Millions of Dollars)

<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	3.6	--	3.8	--	4.4

Basis for FY 1981 Request: A two year saving of \$3.9 million (over the cost of the equipment) and a life cycle saving of \$31.2 million is expected to result from the FY 1981 program.

OTHER PROCUREMENT, AIR FORCE
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 214

Nomenclature: Productivity Investments

Mission/Description: This program will provide funds for the Productivity Investment Program, a program to purchase items costing over one million dollars, to enhance productivity and reduce operating costs. Equipment purchased is identified by organizations throughout the Air Force with the commensurate savings and amortization data specifically identified. Amortization must be achieved within four years and items procured must be commercially available so they may be put into use in the minimum time.

Cost Data:

<u>(In Millions of Dollars)</u>					
<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	--	--	--	--	4.3

Basis for FY 1981 Request: Provides funds for projects that have a greater than ten percent Internal Rate of Return (IRR) and exhibit manpower savings. These funds cover four projects: Intrusion Detection System (\$4.6 million), Numerical Control Equipment (\$1.7 million), Advance Word Processing System (\$1.3 million) and the Air Force Portion of the Transportation Operational Personnel Property Standard System (\$4.7 million).

OTHER PROCUREMENT, AIR FORCE
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 219

Nomenclature: Scientific/Technical Intelligence

Mission/Description: This program provides data reduction, photo processing, and printing equipment for the Foreign Technology Division (FTD). FTD provides scientific, engineering, and technical intelligence information on foreign aerospace activities and related efforts. FTD also supports Air Force and DOD inputs to the National Intelligence Estimates (NIEs), maintains the only DOD scientific and technical (S&T) intelligence reference library, and acts as DOD executive agent for radar and infrared intelligence data processing.

Cost Data:

<u>(In Millions of Dollars)</u>			
<u>FY 1979</u>		<u>FY 1980</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	5.1	--	--
		--	3.1

Basis for FY 1981 Request: To provide improved data analysis and production capabilities, replace old and obsolescent equipment, and acquire the test and calibration instruments necessary to operate and maintain existing systems.

OTHER PROCUREMENT, AIR FORCE

OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 221

Organization: Air Force Technical Applications Center

Mission/Description: This program supports the Atomic Energy Detection System operated by the Air Force Technical Application Center. It provides the primary national technical means for verifying compliance of signatory states with terms of the Limited Test Ban Treaty, Threshold Test Treaty, Peaceful Nuclear Explosion Treaty and the Comprehensive Test Ban Treaty currently under negotiation.

Cost Data:

(In Millions of Dollars)

	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	-	-	-
	11.0	8.3	5.3

Basis for FY 1981 Request: Provides a variety of equipment required for seismic, nuclear debris collection and analysis,

OTHER PROCUREMENT, AIR FORCE
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 222

Nomenclature: Imagery Collection

Mission/Description: This program supports Defense Mapping Agency for development of a metric approach to navigation and

<u>(In Millions of Dollars)</u>					
<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
--	7.3	--	4.2	--	3.1

Basis for FY 1981 Request: To provide funds to support the mission of this classified program.

OTHER PROCUREMENT, AIR FORCE
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT DATA SHEET

P-1 Line Item: 225

Nomenclature: Industrial Preparedness

Mission/Description: This program provides the resources required for all plans, actions, or measures necessary to establish or maintain an industrial base, both government-owned and privately-owned to support current, wartime or other contingency military requirements. It includes industrial preparedness planning, modernization and maintenance on government-owned production facilities, and a manufacturing technology program which is designed to improve productivity and lower costs.

<u>Cost Data:</u>				
<u>(In Millions of Dollars)</u>				
<u>FY 1979</u>		<u>FY 1980</u>		<u>FY 1981</u>
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u> <u>Amt</u>
--	2.2	--	3.2	-- 10.2

Basis for 1981 Request: The request represents a continuing effort to support industrial preparedness objectives primarily for the Electromagnetic Window/Electronics focal area and the Munitions focal area of the Manufacturing Technology Program. Emphasis is on the expendable portion of munitions and ground based sensing and electronic sub-systems in support of tactical missile or space systems.

ANALYSIS OF UNOBLIGATED BALANCES - 30 SEPTEMBER 1981
SUMMARY BY CATEGORY
(In Milli of Dollars)

	<u>FY 1980</u>	<u>FY 1981</u>	<u>Total</u>	<u>% of Total Unobligated</u>
1. <u>Military Interdepartmental Purchase Requests:</u>				
(MIPRs)	\$32.8	\$95.4	\$128.2	13.0%
2. <u>Completing Contractual Arrangements:</u>				
a. Specification Definitions	39.6	115.2	154.8	15.7%
b. Price Redeterminations	28.5	82.9	111.4	11.3%
c. Definitization of Contracts	40.6	118.2	158.8	16.1%
3. <u>Full Funding Policy:</u>				
a. Delayed/Revised Program Release	68.7	199.6	268.3	27.2%
b. Engineering Changes	42.1	122.6	164.7	16.7%
TOTAL UNOBLIGATED FY 1981	\$252.3	\$733.9	\$986.2	

EXPLANATION

Procurement funds are available for obligation for three years because of the extensive lead time required to develop detailed specifications, issue Requests For Proposals (RFPs) and to negotiate and finalize contracts for procurement of investment equipment. Unobligated balances are required for programmed and needed items on which contracts have not reached the obligational stage by the end of the fiscal year because of the procurement process.

The following are illustrative of the reasons which will cause unobligated balances at the end of each fiscal year:

1. Military Interdepartmental Purchase Request (MIPRs) (\$128.2 million) - These documents are used to request one of the other military services to procure Air Force requirements in conjunction with their own or with those of another service. Funds to support these requests remain unobligated until notification of contract award is received from the other military service. Frequently, contractual arrangements will have been completed and the obligation incurred but notification from the other service is not received in time for recording in Air Force records prior to or at the end of a fiscal year.

2. Completing Contractual Arrangements:

a. Specification Definitions (\$154.8 million) - Unobligated funds result when specifications for newly introduced items cannot be definitized in time to permit contract negotiation prior to or at the end of the fiscal year.

b. Price Redeterminations (\$111.4 million) - Prices are redetermined at intervals throughout the life of a contract. Final obligation for contracts must await negotiations on agreed target-ceiling formulae. In most large contracts, the rewards and penalties of multiple incentives (cost, performance and schedule) cannot be determined and obligated prior to the end of the fiscal year. Funds are reserved for these purposes when upward adjustments seem likely; however, obligation does not occur until a formal redetermination has been agreed upon and the contract amended. Unobligated funds at year end result.

c. Definitization of Contracts (\$158.8 million) - Procurements of complex systems and large material orders may occasionally be initiated under letter contracts. The letter contract generates a partial obligation of the total program value with the balance remaining committed but unobligated pending definitization and negotiation of the detailed contract terms. These actions can carry over the end of a fiscal year and result in unobligated funds.

3. Full Funding Policy - This policy, enunciated in DoD Directive 7200.4 (October 30, 1969) provides that adequate appropriations and funds must be available in a given fiscal year for obligation, committed or set aside in a reserve amount in an aggregate amount sufficient to complete the procurement of a specified number of end items and advance procurement for approved programs. Unobligated balances at the end of a fiscal year are a consequence of this policy and accrue in the following categories:

a. Delayed/Revised Program Release (\$268.3 million) - Adjustments in quantities or specifications of other equipment to meet changing situations or to exploit engineering improvements generally require prior approval of reprogramming requests which can delay program release and direction until well into the fiscal year, thus delaying the obligation of funds by the end of the fiscal year. Also, approved and funded programs are sometimes delayed/undirected beyond 30 September pending decision on an aspect of the program that has arisen requiring resolution before proceeding.

b. Engineering Changes (\$164.7 million) - Based on prior experience with systems of like nature and complexities, provision is made in procurement programs, as a percentage of the estimated cost of the item, to cover engineering improvements and design changes which will occur as a result of manufacturing experience or Air Force requirements. Engineering changes are not definitive requirements known in advance and they cannot be obligated until the change is authorized and directed. These changes occur throughout the life of the production contract and result in unobligated balances.